



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

April 26, 2013

In response, refer to:
2012/03768

Alessandro Amaglio
Regional Environmental Officer
Department of Homeland Security
Federal Emergency Management Agency Region IX
1111 Broadway, Suite 1200
Oakland, California 94607

Dear Mr. Amaglio:

Thank you for your letter of September 4, 2012, requesting initiation of consultation with NOAA's National Marine Fisheries Service (NMFS) pursuant to section 7 of the Endangered Species Act (ESA) for the U.S. Department of Homeland Security, Federal Emergency Management Agency's (FEMA) proposed Hazardous Fire Risk Reduction Project-East Bay Hills, California. FEMA proposes to provide federal financial assistance to the City of Oakland, the University of California Berkeley, and the East Bay Regional Park District (EBRPD) (collectively, Sub-applicants) to implement hazardous fire risk reduction projects in the East Bay Hills within Alameda and Contra Costa counties, California. Funding will be provided by FEMA through the Pre-Disaster Mitigation (PDM) Program and the Hazard Mitigation Grant Program (HMGP), and directed to the Sub-applicants through the California Emergency Management Agency.

NMFS has reviewed the information provided with your September 4, 2012, letter. Additional information regarding this project was provided to NMFS via letter dated December 10, 2012, and via electronic mail messages and telephone conversations occurring between September 2012, and March 2013. Based on the wildfire hazard characteristics of the East Bay Hills, FEMA has concluded that a need exists to reduce hazardous fire risk in portions of Alameda and Contra Costa Counties, California. FEMA proposes to provide financial assistance to the Sub-applicants through the PDM Program and the HGMP to reduce or eliminate the risk of loss of life, and damage to vulnerable structures by reducing existing vegetative sources of wildfire fuels.

Proposed activities to reduce hazardous fire risk consists of: (1) hand and mechanized felling, thinning, and pruning of trees, understory, and shrubs; and (2) chemical (herbicide) vegetation



control. Work will be performed with chain saws, trucks, chippers, and mechanized feller-bunchers (a tracked vehicle, that mechanically grasps the standing tree, cuts it with a hydraulically powered chain saw, and lifts the tree into bunches for skidding). Felled and cleared vegetation less than 24 inches diameter at breast height may be chipped and spread on-site to a depth of 4 to 6 inches over a maximum of 20-percent of the treatment area. Larger removed vegetation will be either hauled off-site for proper disposal, or left on-site to provide erosion control and/or habitat for wildlife. Herbicide application will be by direct application to cut-stumps or foliar application (by hand sprayer) to re-sprouted stumps.

The Sub-applicants will minimize impacts by adhering to best management practices related to herbicide application, and utilizing measures to control project-related erosion, contaminant spills, and pollution. The proposed projects have incorporated the following measures:

Erosion control measures include:

- retention of stumps and/or root systems until vegetation has become reestablished;
- storm drain protection;
- use of chipped biomass (removed vegetation) and whole removed vegetation to create sediment traps; and
- stabilization of all entrances and exits, and cleaning of streets to control erosion and sediment discharges.

Pollution control measures include:

- limiting fueling to designated disturbed/developed area where spills can be immediately contained;
- avoiding storage of hazardous materials within 500 feet of any pond or drainage;
- avoiding crossing of drainage areas with mechanical equipment while running or standing water is present;
- siting of residue piles (*i.e.*, sawdust, field chippings, *etc.*) away from drainages where runoff may wash residue into streams or wetlands.

Herbicide control measures include:

- limiting applications to late summer/fall periods;
- prohibiting application within 60-feet of surface water bodies;
- prohibiting foliar application when there is the potential for drift into surface waters;
- prohibiting application when wind speeds exceed 10-mph, or within 24 hours of a predicted rain event; and
- prohibiting use of herbicides known to be highly toxic to aquatic species (*e.g.*, Garlon® 4 Ultra) within areas with the potential for runoff or drift to surface water bodies.

Within the project's action area, two creeks, Wildcat Creek and San Leandro Creek, are known to contain suitable habitat for *Oncorhynchus mykiss* and may contain remnants of an anadromous run of steelhead. No in-stream work is proposed within reaches of Wildcat Creek and San Leandro Creek accessible to anadromous steelhead. However, EBRPD proposes vegetation removal and herbicide control at three sites upslope from stream reaches accessible to steelhead. The three sites near Wildcat and San Leandro creeks are described as:

WC005 - A 44.3 acre area located approximately 300-feet north of Wildcat Creek along the northwest edge of Wildcat Canyon Park, east of the adjacent urban area, and generally bounded by Wildcat Canyon Parkway to the south, ridgeline topography to the east, and urban and suburban land uses to the west and north.

WC009, WC010, and WC011 - Contiguous project areas located along the western edge of Wildcat Canyon Park, approximately 1000-feet upslope from Wildcat Creek. These areas extend approximately 1.75 miles, total approximately 56 acres, and are generally directly east of the ridgeline trending along the eastern edge of adjacent suburban area.

LC004 – A 2.1 acre area located within the hillside northwest of Lake Chabot Dam, generally north of Estudillo Avenue, and approximately 1000-feet upslope from San Leandro Creek.

FEMA has determined that the proposed project is not likely to adversely affect threatened Central California Coast (CCC) steelhead and designated critical habitat, and requested NMFS' concurrence with this determination.

Available information indicates that threatened CCC steelhead may occur in the project area. Wildcat Creek historically supported a run of steelhead (*i.e.*, anadromous form of *O. mykiss*), but current passage impediments throughout the watershed may now prohibit anadromy. Recent fisheries assessments conducted by EBRPD have found a small population of *O. mykiss* in Wildcat Creek downstream of the action area (Wise *et al.* 2007). However, information suggests these fish likely originated from plantings of coastal anadromous stock in 1983 (Leidy *et al.* 2005). Further information is needed to confirm the presence or absence of an anadromous run of threatened CCC steelhead (*O. mykiss*) in Wildcat Creek. Wildcat Creek is not designated as critical habitat for CCC steelhead or any other species under the jurisdiction of NMFS.

San Leandro Creek historically supported a large run of steelhead, and Dr. W.P. Gibbons, founder of the California Academy of Sciences described and named this species based on fish specimens taken from the San Leandro Creek drainage in 1855 (Leidy *et al.* 2005). The construction of Chabot Reservoir in 1874-75 on San Leandro Creek at a site approximately six miles upstream of San Francisco Bay completely blocked steelhead from access to the upper watershed, and the current anadromous population is limited to the lowermost 6 miles of creek. San Leandro Creek is not designated as critical habitat for threatened CCC steelhead or any other species under the jurisdiction of NMFS.

The life history of steelhead is summarized in Busby *et al.* (1996). These anadromous salmonids spend some time in both fresh- and saltwater. The older juvenile and adult life stages occur in the ocean, until the adults ascend freshwater streams to spawn. Eggs (laid in gravel nests called redds), alevins (gravel dwelling hatchlings), fry (juveniles newly emerged from stream gravels), and young juveniles all rear in freshwater until the juveniles become large enough to migrate to the ocean to finish rearing and maturing to adults. Their migrations generally take place in the winter and spring months. Adult steelhead enter freshwater for their upstream migration to

spawn in natal streams between December and March. Juvenile steelhead migrate downstream from their natal streams to San Francisco Bay and subsequently to the ocean between February and May.

NMFS has evaluated the proposed project for potential adverse effects to threatened CCC steelhead. Although no work or equipment will contact the active channel of either Wildcat or San Leandro creeks in reaches that are accessible to CCC steelhead, upslope activities have the potential to introduce sediment, herbicides, and other project related contaminants into the stream.

Sediment may affect fish by a variety of mechanisms. High concentrations of suspended sediment can disrupt normal feeding behavior and efficiency (Cordone and Kelley 1961, Bjornn *et al.* 1977, Berg and Northcote 1985), reduce growth rates (Crouse *et al.* 1981), and increase plasma cortisol levels (Servizi and Martens 1992). High turbidity concentrations can reduce dissolved oxygen in the water column, result in reduced respiratory functions, reduce tolerance to diseases, and can also cause fish mortality (Sigler *et al.* 1984, Berg and Northcote 1985, Gregory and Northcote 1993, Velagic 1995, Waters 1995).

Herbicides, depending on chemical type and exposure concentration, may result in effects to steelhead that range from direct sub-lethal to lethal effects. The lethality of pesticides are reported as the median lethal concentration (LC₅₀), the statistically-derived concentration sufficient to kill 50 percent of the test population. Survival of individual fish is typically measured by incidences of death following 96 hour (96-hr) exposures. For the herbicides proposed for use in this project (Garlon® 4 Ultra [triclopyr], Stalker® 9 [imazapyr], and Roundup® [glyphosate]), toxicities range from relatively low toxicity (96-hr LC₅₀ of 38 ppm for *O. mykiss* exposed to glyphosate) to highly toxic on an acute basis (96-hr LC₅₀ of 0.984 ppm for *O. mykiss* exposed to Garlon® 4). Exposures to these herbicides may effect CCC steelhead in the form direct mortality or changes in growth rates and reduction of reproductive success.

Other project related contaminants that may be introduced to surface waters include oils and similar substances from construction equipment. These substances can contain a wide variety of polynuclear aromatic hydrocarbons (PAHs), and metals. PAHs can alter salmonid egg hatching rates and reduce egg survival as well as harm the benthic organisms that are a salmonid food source (Eisler 2000). Some of the effects that metals can have on salmonids are: immobilization and impaired locomotion, reduced growth, reduced reproduction, genetic damage, tumors and lesions, developmental abnormalities, behavior changes (avoidance), and impairment of olfactory and brain functions (Eisler 2000).

To avoid and minimize potential impacts to waterways in the project area, Sub-applicants have included measures to minimize the effects of erosion, herbicides, and other project related contaminants. Soil erosion will be minimized by retaining stumps and root masses when possible, or through the placement of wood chips and cut vegetation on the ground over bare soils. These measures are expected to minimize erosion and associated instream turbidity sufficiently that associated effects are expected to be insignificant and discountable.

In Wildcat and San Leandro creeks, herbicide treatments will be limited to vegetation in areas at least 300 feet from the stream. Considering this distance and restrictions that prevent spraying during periods of wind, it is extremely unlikely that chemicals applied by maintenance crews will travel to areas that may affect steelhead. Herbicide application will also be restricted to dry periods (*i.e.*, application prohibited within 24 hours of predicted rain event) which is expected to avoid the transport of herbicides with storm runoff. In the event of an unexpected, un-forecasted rain event, the project measures limiting herbicide applications to distances greater than 300 feet from Wildcat and San Leandro creeks, and precluding herbicide application during a rain event, are expected to limit any herbicide conveyance to the creek sufficiently that any associated effects to steelhead would be expected to be insignificant and discountable.

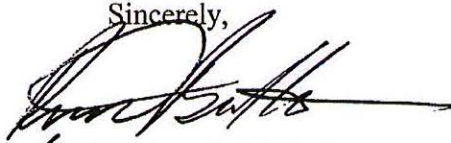
Stormwater runoff will be collected with drains to avoid the formation of rills and gullies. To avoid the discharge of contaminants to streams, stockpiles of materials and storing of equipment will be located in areas at least 500 feet away from waterways. These measures are expected to avoid the discharge of contaminants to Wildcat and San Leandro creeks, and minimize post-project soil erosion such that any associated effects to steelhead would be expected to be insignificant and discountable.

Given the above, NMFS has concluded that the potential sediment, herbicides, and other project related contaminant effects to steelhead associated with this project are expected to be insignificant and discountable.

Based on the best available information, NMFS concurs with FEMA's determination that the above project is not likely to adversely affect threatened CCC steelhead or designated critical habitat. This concludes consultation in accordance with 50 CFR 402.13(a) for the proposed Hazardous Fire Risk Reduction Project-East Bay Hills, California. However, further consultation may be required if: (1) new information reveals effects of the project that may affect listed species or critical habitat in a manner or to an extent not previously considered; (2) current project plans change in a manner that causes an effect to listed species or critical habitat in a manner not previously considered; or (3) a new species is listed or critical habitat designated that may be affected by the action.

If you have questions concerning these comments, please contact Darren Howe at (707) 575-3152.

Sincerely,



for Rodney R. McInnis
Regional Administrator

cc: Brendan A. Murphy, Mather, CA
Kirby Everhart, California Emergency Management Agency, Mather, CA
Copy to ARN file: 151422SWR2011SR00324

Literature Cited

- Berg, L., and T.G. Northcote. 1985. Changes in territorial, gill-flaring, and feeding behavior in juvenile coho salmon (*Oncorhynchus kisutch*) following short-term pulses of suspended sediment. *Canadian Journal of Fisheries and Aquatic Sciences* 42:1410-1417.
- Bjornn, T.C., M.A. Brusven, M.P. Molnau, J.H. Milligan, R.A. Klamt, E. Chacho, and C. Schaye. 1977. Transport of granitic sediment in streams and its effect on insects and fish. University of Idaho, Forest, Wildlife, and Range Experiment Station, Bulletin 17, Moscow, Idaho.
- Busby, P.J., T.C. Wainwright, G.J. Bryant, L. Lierheimer, R.S. Waples, F.W. Waknitz, and I.V. Lagomarsino. 1996. Status review of West Coast steelhead from Washington, Idaho, Oregon and California. United States Department of Commerce, National Oceanic and Atmospheric Administration Technical Memorandum NMFS-NWFSC-27. 261 pages.
- Cordone, A.J., and D.W. Kelley. 1961. The influences of inorganic sediment on the aquatic life of streams. *California Fish and Game* 47:189-228.
- Crouse, M.R., C.A. Callahan, K.W. Malueg, and S.E. Dominguez. 1981. Effects of fine sediments on growth of juvenile coho salmon in laboratory streams. *Transactions of the American Fisheries Society* 110:281-286.
- Eisler, R. 2000. Handbook of Chemical Risk Assessment: Health Hazards to Humans, Plants, and Animals. Volume 1, Metals. Lewis Press, Boca Raton, FL.
- Gregory, R.S., and T.G. Northcote. 1993. Surface, planktonic, and benthic foraging by juvenile Chinook salmon (*Oncorhynchus tshawytscha*) in turbid laboratory conditions. *Canadian Journal of Fisheries and Aquatic Sciences* 50:233-240.
- Leidy R.A., G.S. Becker, and B.N. Harvey. 2005. Historical distribution and current status of steelhead/rainbow trout (*Oncorhynchus mykiss*) in streams of the San Francisco Estuary, California. Oakland, CA: Center for Ecosystem Management and Restoration.
- Servizi, J.A., and D.W. Martens. 1992. Sublethal responses of coho salmon (*Oncorhynchus kisutch*) to suspended sediments. *Canadian Journal of Fisheries and Aquatic Sciences* 49:1389-1395.
- Sigler, J.W., T.C. Bjornn, and F.H. Everest. 1984. Effects of chronic turbidity on density and growth of steelhead and coho salmon. *Transactions of the American Fisheries Society* 113:142-150.
- Velagic, E. 1995. Turbidity study: a literature review. Prepared for the Delta Planning Branch, California Department of Water Resources by Centers for Water and Wildland Resources, University of California, Davis.

Waters, T. F. 1995. *Sediment in Streams: Sources, Biological Effects, and Control*. American Fisheries Society Monograph 7. 249 pages.

Wise S., P. Alexander, and G. Matt. 2007. *Fisheries habitat inventory & assessment for lower Wildcat Creek (unpublished)*. Prepared for the Urban Creeks Council. East Bay Regional Park District.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846



In Reply Refer To:
81420-2010-F-0849-3

Ms. Nancy Ward
Federal Emergency Management Agency
Department of Homeland Security
Region IX
1111 Broadway, Suite 1200
Oakland, California 94607-4052

Subject: Biological Opinion for the Proposed Federal Emergency Management Agency (FEMA) Hazardous Fire Risk Reduction Project in the East Bay Hills of Alameda and Contra Costa Counties, California (HMGP 1731-16-34, PDM-PJ-09-CA-2005-003, PDM-PJ-09-CA-2005-011, and PDM-PJ-09-CA-2006-004)

Dear Ms. Ward:

This is in response to your September 4, 2012 letter, requesting formal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed FEMA Hazardous Fire Risk Reduction Project (proposed project) in the East Bay Hills of western Alameda and western Contra Costa Counties, California. Your request was received on September 5, 2012. At issue are the potential effects of the proposed project on the threatened California red-legged frog (*Rana draytonii*), threatened Alameda whipsnake (*Masticophis lateralis euryxanthus*) and its designated critical habitat, and threatened pallid manzanita (*Arctostaphylos pallida*). Critical habitat has been designated for the California red-legged frog but does not occur within the action area for the proposed project. This biological opinion is issued under the authority of the Endangered Species Act, as amended (16 U.S.C. 1531 *et seq.*) (Act).

The proposed project involves FEMA funding 4 grants for fuels and vegetation management over about a 3,373-acre area (including interconnected parcel described in the *East Bay Regional Park District Wildfire Hazard Reduction and Resource Management Plan* (WHRRMP) (LSA Associates, Inc. 2009)) along about 25 miles of the wildland-urban interface in the East Bay Hills from Lake Chabot Regional Park at the southern extent north to Point Pinole Regional Park in the City of Richmond at the northern extent. East Bay Regional Park District (EBRPD), University of California-Berkeley (UCB), and the City of Oakland (Oakland) (collectively referred to as the applicants) have applied, in a total of four applications, to FEMA, through the California Emergency Management Agency (Cal EMA), for Federal financial assistance to implement hazardous fire risk reduction projects in the East Bay Hills. The funding would be

provided under the Pre-Disaster Mitigation (PDM) Program and the Hazard Mitigation Grant Program (HMGP) for grant application numbers HMGP 1731-16-34, PDM-PJ-09-CA-2005-003, PDM-PJ-09-CA-2005-011, and PDM-PJ-09-CA-2006-004.

The goal of the proposed project is to reduce fuel loads to prevent fire hazards to property and life. Elements that would be implemented as part of the proposed project include vegetation management, various treatment methods, maintenance activities, and monitoring. Other individual projects which are adjacent to or in close proximity of the proposed project have been identified. These projects are part of the WHRRMP (LSA Associates, Inc. 2009). The WHRRMP serves as guidelines for ongoing vegetation management activities in EBRPD parklands to reduce fire risk in the East Bay Hills utilizing similar design elements as the proposed project.

EBRPD developed the WHRRMP to guide ongoing vegetation management activities on EBRPD park lands along the wildland-urban interface to reduce the likelihood of a catastrophic, wind-driven wildfire, such as the 1991 Oakland Hills fire. The WHRRMP is one of a number of EBRPD projects funded through the passing of Measure CC in Alameda and Contra Costa counties by voters that would support fuel management activities that have been ongoing for 72 years and largely funded by various fire hazard mitigation grants under FEMA.

The WHRRMP identifies over 3,000 acres of parklands to be treated for various levels of hazardous fuel conditions. The areas would be treated and maintained for a period of 5-10 years using a variation of five treatment methods: hand labor, mechanical treatment, chemical treatment, prescribed burning, and grazing. The areas that would be treated under the WHRRMP include parcels within parklands adjacent to treatment areas identified in the proposed project. Therefore, while the proposed project and the WHRRMP are designed to have independent utility, the success of the efforts for each would rely on each other. Thus, implementation of the WHRRMP is considered interrelated with or interdependent to the proposed project.

The Service concurs that the proposed project is not likely to adversely affect the endangered Presidio clarkia (*Clarkia franciscana*) based on the following: (1) the Presidio clarkia is not known to occur within the action area for the proposed project; (2) EBRPD will conduct protocol-level surveys for the Presidio clarkia prior to disturbing suitable serpentine grassland habitat for this species and will maintain a 50-foot buffer from any individual Presidio clarkia plants; (3) EBRPD will minimize the potential for the introduction of invasive plant species into suitable habitat for the Presidio clarkia by implementing a Service-approved invasive plant species control plan; and (4) the proposed project is likely to benefit the Presidio clarkia by removing shrubs and non-native trees encroaching upon suitable serpentine grassland habitat for the listed plant.

This document represents the Service's biological opinion on the effects of the proposed project on the California red-legged frog, Alameda whipsnake and its designated critical habitat, and the pallid manzanita. The following sources of information were used to develop this biological opinion: (1) the December 2012 and January 2013 (revised) *Hazardous Fire Risk Reduction Biological Assessment, East Bay Hills, California* prepared by FEMA, Oakland, California (FEMA 2012, 2013); (2) the July 2009 EBRPD WHRRMP prepared by LSA Associates, Inc.

(<http://www.ebparks.org/stewardship/fuelsplan/eir>, LSA Associates, Inc. 2009); (3) various discussions and correspondence among the Service, FEMA, Cal EMA, U.S. Department of Homeland Security, National Oceanic and Atmospheric Administration/National Marine Fisheries Service (NMFS), Oakland, UCB, EBRPD, URS Corporation, CDM Smith, and California Department of Fish and Wildlife (CDFW); (4) the January and February 2013 Draft Mitigation and Monitoring Plans (MMPs) prepared by each applicant (UCB 2013, Oakland 2013, and EBRPD 2013); (5) the January 2013 *Draft East Bay Regional Park District Pallid Manzanita Management Plan* prepared by ESA, Oakland, California (ESA 2013); (6) site visits to the proposed project area on February 17, 2011, March 9, 2011, and November 2, 2011; and (7) other information available to the Service.

Consultation History

June 11, 2010	The Service received from FEMA a letter requesting the Service's participation as a cooperating agency on the Environmental Impact Statement for the proposed project.
July 27, 2010	The Service sent to FEMA a letter agreeing that the Service would participate as a cooperating agency on the Environmental Impact Statement for the proposed project.
December 2010 – May 2013	The Service attended weekly conference calls and quarterly meetings with FEMA, NMFS, Oakland, UCB, EBRPD, Cal EMA, and the Department of Homeland Security discussing the proposed project.
February 17, 2011	The Service attended a site visit with FEMA, EBRPD, UCB, and URS to UCB's proposed treatment areas at Strawberry and Claremont canyons.
March 2, 2011	The Service sent a letter to FEMA commenting on the development of the Environmental Impact Statement for the proposed project.
March 9, 2011	The Service attended a site visit with FEMA, EBRPD, CDFW, and URS to some of EBRPD's proposed treatment areas.
March 16, 2011	The Service received from FEMA responses to the Service's comments on the development of the Environmental Impact Statement for the proposed project.
March 29, 2011	The Service provided FEMA comments on the Draft MMPs submitted by the applicants.
June 7, 2011	The Service attended a meeting with FEMA, the U.S. Department of Homeland Security, Cal EMA, Oakland, EBRPD, and UCB where FEMA agreed to include in the formal consultation for the proposed project the interconnected actions in the action area that will be implemented as part of the EBRPD WHRRMP (LSA Associates, Inc. 2009).

- August 30, 2011 The Service provided FEMA comments on the spreadsheet developed by FEMA and URS summarizing the proposed vegetation management activities within each treatment area for the proposed project.
- November 2, 2011 The Service attended a site visit with FEMA, EBRPD, CDFW, URS, and Swaim Biological, Inc. to some of EBRPD's proposed treatment areas.
- July 16, 2012 The Service received from FEMA the Draft Biological Assessment for the proposed project.
- September 5, 2012 The Service received from FEMA the revised Biological Assessment for the proposed project and the request to initiate formal consultation. In the letter, FEMA determined that the proposed project is likely to adversely affect California red-legged frog and Alameda whipsnake but not likely to adversely affect pallid manzanita, Presidio clarkia, or designated critical habitat for the Alameda whipsnake.
- October 1, 2012 The Service submitted to FEMA via electronic mail comments on the revised Biological Assessment for the proposed project.
- November 6, 2012 The Service met with FEMA, NMFS, U.S. Department of Homeland Security, CDM Smith, and the applicants to discuss the best management practices (BMPs) that would be implemented during herbicide use for the proposed project.
- November 13, 2012 The Service submitted to FEMA via electronic mail comments on the applicants' revised MMPs.
- November 16, 2012 The Service met with FEMA, NMFS, U.S. Department of Homeland Security, CDM Smith, and the applicants to discuss avoidance and minimization measures and compensation for the proposed project.
- December 10, 2012 The Service received from FEMA the Final Biological Assessment for the proposed project. Based on comments from the Service, FEMA changed their initial determination from "not likely to adversely affect" to "likely to adversely affect" pallid manzanita and designated critical habitat for the Alameda whipsnake.
- February 11, 2013 The Service received from FEMA the January 2013 revised Biological Assessment containing the revised estimates of habitat disturbance and creation in the proposed project, the revised Draft MMPs, and the Draft EBRPD Pallid Manzanita Management Plan.
- April 1, 2013 The Service received from FEMA the revised estimates of habitat disturbance and creation in Oakland's proposed North Hills-Skyline project area.

BIOLOGICAL OPINION

Description of the Proposed Project

The proposed project consists of FEMA funding four grant applications submitted to Cal EMA by UCB, Oakland, and EBRPD (UCB's PDM-PJ-09-CA-2005-003, UCB's PDM-PJ-09-CA-2005-011, Oakland's PDM-PJ-09-CA-2006-004, and EBRPD's HMGP 1731-16-34). The grant applications include several vegetation management projects intended to reduce the wildfire risk to the built environment in applicant-identified areas of the East Bay Hills in the wildland-urban interface of western Alameda and Contra Costa Counties, California. The grant applications and summary of the extent of the proposed project area are summarized in Table 1 below. Maps of the proposed project areas are enclosed in Appendix A of this biological opinion.

As shown in Table 1 below, UCB's grant applications apply to Strawberry Canyon and Claremont Canyon (PDM-PJ-09-CA-2005-003 and PDM-PJ-09-CA-2005-011). Oakland's grant application (PDM-PJ-09-CA-2006-004) applies to six projects in the East Bay Hills on property owned by Oakland, UCB, and EBRPD. The projects covered by Oakland's grant include: Oakland's North Hills-Skyline Project and Caldecott Tunnel Project; UCB's Frowning Ridge Project; and EBRPD's Tilden-Grizzly Peak Boulevard (Blvd.) Project, Sibley Island Project, and Claremont Canyon-Stonewall Project. The native understory would be protected while exotic trees would be removed and the cambium and stumps of eucalyptus (*Eucalyptus* species) and acacia (*Acacia* species) would be mechanically or chemically treated with herbicide to prevent re-sprouting. Felled trees would be either: (1) chipped or lopped and scattered on the project site, and logs retained as a component of sediment/erosion control measures and to contribute to wildlife habitat and long-term soil productivity; (2) removed from the site to prevent contribution to excessive fuel buildup and future difficulty of control; or (3) combinations of these, as appropriate. Follow-up treatment of re-sprouts would be conducted annually for long-term maintenance by removing re-sprouts from the site to prevent contribution to excessive fuel buildup and future difficulty of control, or, as appropriate, combinations of these. Cut brush, tree branches, and tops may be piled for later disposal by burning under prescribed and permitted conditions. Seedlings emerging from the latent seed stock in the project area would be managed over time to prevent re-colonization of these invasive species.

UCB

UCB has two PDM grant applications included in the proposed project (PDM-PJ-09-CA-2005-11 and PDM-PJ-09-2005-003). The two grant applications would treat a project area totaling 99.2 acres including 56.43 acres at Strawberry Canyon and 42.81 acres at Claremont Canyon. In addition, UCB would treat a project area totaling 185.08 acres at Frowning Ridge using funds from Oakland's grant application (PDM-PJ-09-CA-2006-004). The project areas would be treated to remove exotic pyrophytic and invasive species (eucalyptus, pine, and French broom) to reduce fire hazard, and decrease the continuity of the fuel bed and flammability characteristics of the shrubfields by developing a mosaic of vegetation types. In some areas, removal of eucalyptus stands would result in conversion to oak-bay woodland, currently present in the understory. The proposed actions for the UCB treatment projects are described in the following subsections.

Table 1. Applicants, Application Numbers, and Acreage for the Proposed Hazardous Fire Risk Reduction Projects.

Project Area	Acres¹
<i>Oakland</i> <i>(PDM-PJ-09-CA-2006-004)</i>	
North Hills-Skyline-Oakland	68.34
Caldecott Tunnel-Oakland	53.62
Frowning Ridge-UCB	185.18
Tilden-Grizzly Peak Blvd.- EBRPD	34.28
Sibley Island-EBRPD	3.92
Claremont Canyon-Stonewall-EBRPD	13.65
<i>Subtotal</i>	<i>359.0</i>
<i>UCB</i> <i>(PDM-PJ-09-2005-011)</i> <i>(PDM-PJ-09-CA-2005-003)</i>	
Strawberry Canyon	56.34
Claremont Canyon	42.81
<i>Subtotal</i>	<i>99.1</i>
<i>EBRPD</i> <i>(HMGP 1731-16-34)</i>	
Sobrante Ridge Regional Preserve	4.05
Wildcat Canyon Regional Park	65.60
Tilden Regional Park	97.70
Claremont Canyon Regional Preserve	21.56
Sibley Volcanic Regional Preserve	43.61
Huckleberry Botanic Regional Preserve	17.75
Redwood Regional Park	58.33
Leona Canyon Regional Open Space Preserve	4.58
Anthony Chabot Regional Park	199.99
Lake Chabot Regional Park	4.79
Miller-Knox Regional Shoreline ²	22.23 ²
<i>Subtotal</i>	<i>540.2¹</i>
TOTAL	<i>998.3¹</i>

¹ The total project area in this table does not include the interconnected activities proposed by EBRPD in the WHRRMP (LSA Associates, Inc. 2009) and summarized in Table 2 that will be covered under this biological opinion.

² Although Miller-Knox Regional Shoreline is part of FEMA's proposed project, this project area is outside of the range of the California red-legged frog, Alameda whipsnake, and pallid manzanita, and, therefore, is not included in the action area for this biological opinion.

Vegetation Management

While UCB would be conducting selective eradication of exotic species (*e.g.*, eucalyptus, Monterey pine, and acacia), native and exotic woody shrubs, grasses and forbs would be monitored during the implementation and maintenance phases to exclude exotic species in favor of native species; therefore, suppressing succession of non-native invasive species, including species listed in the California Invasive Plant Council (*i.e.*, broom). Revegetation of treated areas would be fostered as part of the initial project via natural recruitment and maintenance. Treatment methods include hand tools, power tools, chemical control, and/or heavy equipment. Target trees would be cut by hand fellers and/or mechanized feller-buncher. Hand felling involves a pair of workers using chainsaws and wedges to directionally fell the tree in a manner that allows easy processing. The feller-buncher is a tracked vehicle, with a self-leveling cab, that mechanically grasps the standing tree, cuts it with a hydraulically powered chainsaw, and lifts the tree into bunches for skidding. The feller-buncher is limited to slopes of less than approximately 45 degrees.

Treatment Methods

To prevent re-sprouting, an herbicide solution would be applied by a qualified licensed pest control applicator to the cambium layer of the freshly cut tree stump within a few minutes of felling. In the maintenance phase, cut stubble or foliar application (by hand sprayer) would be made to coppiced (re-sprouted) stumps. The herbicide mixture would likely consist of a combination of Garlon 4 Ultra (triclopyr), Stalker (imazapyr), and/or RoundUp (glyphosate) in a solution of methylated seed oil, water, or other product as indicated and acceptable by the product label, and marking dye (*e.g.*, Hi-Light).

Trees within 50 feet of watercourses would be removed by hand felling only; no mechanized equipment is intended to be used for either removal or mastication in this 50-foot buffer. Except where more stringent herbicide application restrictions apply, UCB would implement chemical applications per the California Department of Pesticide Regulation (CDPR) pesticide guidance adjacent to water features. Within the stream buffer, cut stump application of approved herbicides would be applied within 60 minutes of felling. The areas chemically treated would include areas up to the ordinary high water mark of ephemeral streams; however, no trees would be treated within 50 feet of standing or running water or within 24 hours of a rain event.

Felled trees up to approximately 24 inches in diameter at breast height would be hauled by rubber-tired or tracked skidders along paths/skid trails, to landings in the project area. Nine landings exist adjacent to fire trails or paved roads in the UCB sections of the project area. Equipment would be staged, fueled, and maintained at these landings while contractors are mobilized. Additional landings may be created when the distance from a tree patch to an existing landing exceeds 1,000 feet. However, all material stockpiling and staging areas would be located in existing right-of-ways or at designated disturbed/developed areas. When possible, UCB would use landings and skid trails from previous loggings instead of constructing new ones. The project may also use a high-lead cable system to retrieve logs to the landing without the use of rubber-tired or tracked skidders.

At the landings, trees would be chipped using a grapple fed chipper or a tracked chipper. Trees would be fed into the chippers whole and pulled through the masticating blades by means of a conveyor belt and feed wheel. Alternatively, the tracked chipper may be driven to downed trees on moderate slopes, rather than having the trees first moved to a landing area. The wood chips from the chippers are expected to be one to four inches in size. Retained chips would be scattered on the site with an average depth ranging from four to 24 inches, depending upon site slope, proximity to watercourses, and viability of deposition from the chute of the chipper. The areal coverage of wood chips is not expected to exceed 20 percent of the project site (if a tracked chipper is used) and would be less than 15 percent if chipping is confined to roadways and landings.

A greater depth of chips (not to exceed 24 inches) would be used for the sediment trap to increase both the length of time the traps function and the amount of sediment that can be retained. Chips spread over uneven terrain (such as in natural depressions or around stumps) may also have a greater depth when the finished surface is raked to follow the general contour of the slope.

Chips could also be used to create skid roads in lieu of cutting into the soil because the mechanical skidders can travel atop the level chip bed, thus avoiding excavation and soil disturbance in many locations. When the chips decompose (at an estimated rate of four to seven inches per year), the contour of the slope is expected to reappear as it existed prior to logging, with less evidence of skid road creation and a more natural-appearing landscape.

Larger trees (greater than 24 inches diameter at breast height) would be lopped and scattered after felling. The lop-and-scatter method would also be used when it is impractical to skid a tree to the chipper, such as when trees are growing at a substantial distance from the main grove or when trees are up or down a steep slope. In these cases, the downed tree would be cut by chainsaws such that all portions of the tree would come into contact with the ground or within 24 inches of it. Typically, the tops are extensively cut and the main trunk is cut into 20- to 30-foot lengths. Some logs would be placed so that they help control sediment and erosion or support wildlife habitat.

Maintenance

All cut tree stumps would receive semiannual follow-up treatment of herbicides (Garlon 4 Ultra, Stalker, or RoundUp) on any emerging stump sprouts. Eucalyptus seedlings emerging from the latent seed stock in the project area would be managed over time to prevent re-colonization of the invasive species. Semiannual follow-up treatments would involve a low volume foliar spray mix applied to any re-sprouted foliage after the re-sprout reaches three feet in height but before it reaches six feet in height. Follow-up treatments may also include a basal bark application or the re-cutting of the sprout and treatment to the cut surface. In some re-sprout and seedling applications, RoundUp may be used in combination with Stalker in a foliar application. The herbicide applications are rotated for best impact in the growing season in which the application occurs. Follow-up efforts required for successful eradication of all eucalyptus re-sprouts and seedlings are anticipated to be in the range of seven to 10 years. Erosion control BMPs, as

identified by the San Francisco Bay Regional Water Quality Control Board, would be implemented to control erosion during and after vegetation removal.

The frequency of maintenance treatment is correlated with the effectiveness of the initial herbicide treatment. The coppiced stumps would be treated one or two times each year until the tree is killed. Stumps are generally killed after the initial treatment subsequent to felling. Trees surviving the initial treatment are typically killed within two or three follow-up treatments. Seedling germination is highly variable, dependent upon rainfall, temperature, chip depth, overstory canopy, etc. Seedlings are expected to be treated continuously throughout the year when the seedling is small and vulnerable (on a monthly basis). Noxious weeds would be targeted for control but not extirpation. In addition, though not a target species for extirpation, poison oak would be treated and controlled by foliar or cut stubble methods during the 10-year maintenance period to satisfy California Division of Occupational Safety and Health worker safety guidelines.

Monitoring

The monitoring plan for the UCB portion of the project implementation would be conducted at least two times per year for 10 years (UCB 2013). The protocol for monitoring would involve the Fire Program manager or his/her designee and/or consultants to walk within the treated areas to inspect for control of the target species (*e.g.*, eucalyptus, pine, and French broom). Such observations would be timed to occur at least twice prior to and after contract removal work, involving control of re-sprouting eucalyptus and acacia stems or seedlings of target species.

The areas would also be monitored from a distance using photographic stations previously identified. The photographs would be taken from permanent locations for each habitat type. Photographs would be taken within the project area to capture floral and faunal colonization in addition to assessing the natural recruitment/expansion of native floral communities.

Strawberry Canyon

The Strawberry Canyon portion of the proposed project (PDM-PJ-09-CA-2005-011) would consist of the selective removal of non-native vegetation such as eucalyptus (*Eucalyptus globulus* and *E. camaldulensis*), Monterey pine, and acacia species from within approximately 56.34 acres of Strawberry Canyon. The vegetation management strategy at this project area is to allow the forest to convert from the existing eucalyptus-dominated, non-native canopy to a native forest of California bay laurel, oak, big-leaf maple, California buckeye, California hazelnut, and other native tree and shrub species that currently exist beneath the canopy.

The proposed project at Strawberry Canyon would include removing approximately 10,000 stems of eucalyptus, pine, and acacia trees. The trees would be cut by hand fellers and/or the mechanized feller-buncher. The project area would be accessed through existing roads and would utilize approximately nine landings. Cutting would begin along the northern project area and would proceed south. Work contracts may be issued for more than one contiguous area, for example, 5-acre portions of cutting adjacent to Grizzly Peak Blvd. in the first year. Subsequent cut blocks would be contiguous to those already completed, each with a clear path to the extant

landing areas. The project duration is anticipated to be 24 to 36 months, with 20 to 40 weeks of actual vegetation removal work. Work is estimated to be conducted in August through November to avoid the wet season and avian nesting and fledging seasons. Work may be conducted during the winter months (weather permitting), but activities would not be performed on days with a 40 percent or greater chance of rain in areas where California red-legged frogs could occur, unless exclusion fencing has been installed and the biological monitor has determined that no California red-legged frogs are in the work area. In addition, ground disturbing activities that could collapse burrows would not occur within suitable habitat for the Alameda whipsnake during the hibernation period (November – March).

Claremont Canyon

The Claremont Canyon portion of the proposed project (PDM-PJ-09-CA-2005-003) is very similar to the Strawberry Canyon portion. The exceptions are that Claremont Canyon is predominantly dominated by eucalyptus and has very little Monterey pine and acacia. The three non-native tree species would be removed from a 42.81-acre area. The vegetation management strategy and project implementation for Claremont Canyon is the same as for Strawberry Canyon, including vegetation removal practices, chemical application, and in-place biomass deposition (woodchips/lop and scatter debris).

The proposed project at Claremont Canyon would involve removing approximately 12,000 stems of primarily eucalyptus but also some pine and acacia trees. The project may involve temporary closures of Claremont Avenue to allow for cutting and skidding of trees that are close to the roadway. The trees would be cut by hand fellers and/or the mechanized feller-buncher. Three temporary access roads are anticipated to be required at this project area. The three roads total approximately 2,600 feet in length and 12 feet in width and would be constructed within eucalyptus dominated forest. The roads would primarily follow existing logging roads created during work done in 1974–1975 when the site was last cleared, but would be restored after use to achieve hydrologic stability and serve as access paths for work crews during the 7-10 years of maintenance. It is estimated that earth moving would occur at the ends of each trail and at the switchbacks or where the path must be widened to safely handle the necessary logging equipment. Five landings exist adjacent to fire trails or paved roads in the project area.

The duration of project implementation is anticipated to be 24 to 36 months, with 20 to 35 weeks of actual vegetation removal work. Work is estimated to be conducted in August through November to avoid the wet season and avian nesting and fledging seasons. Work may be conducted during the winter months (weather permitting) but activities would not be performed on days with a 40 percent or greater chance of rain in areas where California red-legged frog could occur, unless exclusion fencing has been installed and the biological monitor has determined that no California red-legged frogs are in the work area. Work would not be performed after a heavy rain or when the project area is unsuitably wet for logging operations. In addition, ground disturbing activities that could collapse burrows would not occur within suitable habitat for the Alameda whipsnake during the hibernation period (November – March).

Frowning Ridge

The Frowning Ridge portion of the proposed project (PDM-PJ-09-CA-2006-004) would consist of the selective removal of non-native vegetation such as eucalyptus, Monterey pine, and acacia from within approximately 185.08 acres of two canyons. The revegetation strategy for this project area is to allow the vegetation to convert from the existing eucalyptus-dominated, non-native canopy to a native forest of California bay laurel, oak, and other native grass and shrub species that currently exist beneath the canopy.

The project would involve removing approximately 24,000 stems of eucalyptus and pine trees with an estimated average height of over 100 feet and stem sizes of 2 to 36 inches diameter at breast height. The trees would be cut by hand fellers and/or the mechanized feller-buncher. The implementation of the proposed project at this project area may involve the closure of Grizzly Peak Blvd. for a few hours at a time to allow for the cutting and skidding of trees that grow close to the roadway. The Upper Jordan Fire Trail, an unimproved road on UCB land for pedestrian and emergency vehicle use, would be closed to the public as necessary during logging. Temporary access roads may be required. UCB would coordinate with local fire departments to permit emergency access or alternative access to the land served, as needed. The duration of project implementation is anticipated to be 20 to 35 weeks. Work is estimated to be conducted in August through November to avoid the wet season and avian nesting and fledging seasons. Work may be conducted during the winter months (weather permitting) but activities would not be performed on days with a 40 percent or greater chance of rain in areas where California red-legged frog could occur, unless exclusion fencing has been installed and the biological monitor has determined that no California red-legged frogs are in the work area. In addition, ground disturbing activities that could collapse burrows would not occur within suitable habitat for the Alameda whipsnake during the hibernation period (November – March).

Oakland

Oakland's grant application (PDM-PJ-09-CA-2006-004) includes six areas in which work would be completed by three property owners (Oakland, UCB, and EBRPD) (Table 1). The project areas include Oakland's North Hills-Skyline and Caldecott Tunnel-Ballfields projects (described below); UCB's Frowning Ridge project (described previously under the *UCB* section); and EBRPD's Tilden-Grizzly Peak Blvd., Sibley Island, and Claremont Canyon-Stonewall projects (described later under the *EBRPD* section).

Because Oakland is funding vegetation management in parcels owned by UCB and EBRPD through a portion of its grant, the methods for vegetation management, treatment, maintenance, and monitoring in those project areas would be implemented in the same manner and in conjunction with each corresponding applicant's grant-funded activities. The proposed actions for Oakland's projects include an area totaling 122.0 acres (North Hills-Skyline is 68.34 acres and Caldecott Tunnel-Ballfields is 53.62 acres). The proposed action for these project areas is discussed in the following subsections, whereas the proposed actions that would be implemented by UCB and EBRPD are described under its corresponding applicant.

Vegetation Management

In the Oakland parcels, the two project areas have distinctly different patterns of vegetation warranting different management. However, both have stands of eucalyptus that will be treated in a similar manner. In the northern portion of the Caldecott Tunnel project area, a canopy of re-sprouted eucalyptus and non-native pine and acacia trees produce high levels of flammable debris that preclude an understory of vegetation. Other portions are comprised of oak/bay woodlands, mesic north coastal scrub, and a large disturbed and developed area in the middle of the project area.

The vegetation management strategy promotes a conversion from a eucalyptus-dominated canopy to annual grassland and eventually to north coastal scrub. Treatments are limited to the area of eucalyptus. Target trees would be cut by hand fellers and/or a mechanized feller-buncher. Hand felling involves a pair of workers using chainsaws and wedges to directionally fell the tree in a manner that allows easy processing. The feller-buncher is a tracked vehicle, with a self-leveling cab, that mechanically grasps the standing tree, cuts it with a hydraulically powered chainsaw, and lifts the tree into bunches for skidding. The feller-buncher is limited to slopes of less than approximately 45 degrees. In the southern portion of the North Hills-Skyline project area, eucalyptus stands will be removed to release an emerging native forest of California bay, oak, maple, buckeye, and hazelnut, which produce less fuel loads.

The North Hills-Skyline project area is dominated by north coastal scrub that has scattered Monterey pine trees. These trees threaten to convert the scrub habitat to pine; therefore, vegetation management will be to remove those invasive exotic trees. One of the two long-range goals for these two project areas is to eradicate non-native, invasive and fire prone species (eucalyptus, Monterey pine, and acacia), and control plant species listed as noxious by the California Invasive Plant Council. The protection of the native species and ongoing management after project completion would ensure a successful conversion to a natural habitat that would lessen the risk of fire hazards.

The other long-range goal is to establish a fuel break along the western edge of Grizzly Peak Blvd., for a length of 3,660 feet and width of 100 feet. Within 100 feet of Grizzly Peak Blvd., Oakland will remove all Monterey pine trees and chip cut material. Oak and bay trees in this area would be limbed. Bays within 10 feet of oak canopies will be cut to help prevent the spread of sudden oak death. Shrubs under trees will be removed. All dead material will be cut and chipped. All shrubs will be removed within the first 30 feet of Grizzly Peak Blvd. Within the next 30 feet (30 to 60 feet from the road edge), up to 70 percent of the shrub cover would be thinned creating approximately 50-foot-diameter patches of shrubs (shrub islands) spaced about 50 feet apart. The outer 40 feet of the fuel break (60 to 100 feet from the road edge) would not be treated.

Treatment Method

During the project implementation, the native understory trees and shrubs would be protected, while the exotic trees would be removed and eucalyptus and acacia stump cambium chemically treated with herbicide to prevent re-sprouting. Felled eucalyptus, Monterey pine, and acacia

would be removed, chipped, or lopped and scattered on the project site. Logs would be placed and retained as a component of the sediment/erosion control measures and/or to serve as habitat to support a variety of wildlife species.

Eucalyptus trees and pines would be removed by logging contractors using methods consistent with the California Forest Practices Rules, and as specified in the Timber Harvest Plan that will be prepared for the sites. The Timber Harvest Plan will be prepared by Oakland and UCB to fulfill the California Environmental Quality Act requirements. The Timber Harvest Plan will be prepared by a registered licensed forester and will contain detailed information on the timber operations.

The site would be accessed from various pullouts along Grizzly Peak Blvd., Tunnel Road, and Skyline Blvd. Because access to the site is feasible from the pullouts, staging areas would not be necessary. Any pines or eucalyptus not reachable from the road would be hand felled and retained, lopped, and scattered onsite.

Trees would be cut using directional hand held chainsaws. The larger tree trunks would be stripped of their limbs, skidded, and removed by truck. Limbs and tree trunks smaller than 24 inches diameter at breast height would be chipped and left onsite to a depth of 4 to 24 inches, depending on slope, proximity to watercourses and viability of deposition from the chute of the chipper employed. The areal coverage of the wood chips is not to exceed 20 percent of the project site and would be less than 10 percent if chipping is confined to the roadways and landings. During logging, BMPs will be implemented to minimize the impacts to any native understory plants, habitats, and the disturbance of the soil and slopes. The project may also use a high-lead cable system to retrieve logs to the landing without the use of rubber-tired or tracked skidders.

Except where more stringent herbicide application restrictions apply, treatments will be consistent with the Oakland Creek Ordinance. Based on this ordinance, trees within 50 feet of watercourses would be removed by hand felling only; no mechanized equipment is intended to be used for either removal or mastication in this 50-foot buffer. Oakland would implement chemical applications per the CDPR pesticide guidance adjacent to water features. Within the stream buffer, cut stump application of approved herbicides would be applied within 60 minutes of felling. The areas chemically treated would include areas up to the ordinary high water mark of ephemeral streams; however, no trees would be treated within 60 feet of standing or running water or within 24 hours of a rain event.

To suppress potential eucalyptus and acacia re-sprouts, all cut stump cambium would be chemically treated with a combination of Garlon 4 Ultra (triclopyr), Stalker (imazapyr), and/or RoundUp (glyphosate), a colorant, and an approved carrying agent such as methylated seed oil, water, or other product as indicated acceptable by the project label. All cut re-sprouts and new seedlings would be hand-pulled or receive semiannual follow-up treatment of herbicides (Garlon 4 Ultra, Stalker, or RoundUp) to ensure the permanent elimination from the project area. Noxious weeds would be targeted for control, but not extirpated, consistent with performance criteria. In addition, though not a target species for extirpation, poison oak would be treated and suppressed by foliar or cut stubble methods during the 10-year maintenance period to satisfy

California Division of Occupational Safety and Health worker safety guidelines. The use of herbicide would be applied in accordance with current approved label instructions and CDPR procedures and regulations.

In addition, a 60-foot buffer would be established around surface waters where there would be no foliar application of herbicides. Herbicides would be applied directly to stumps. In these areas, as well as areas greater than 60 feet from surface waters but where there is potential for herbicides to reach aquatic habitats via runoff or drift, only aquatic-safe formulations of herbicides would be used (*e.g.*, Garlon 3A), and use of the more toxic Garlon 4 Ultra would not be allowed. In addition, herbicides would not be applied within 24 hours of predicted rain events (40 percent or greater chance for rainfall) or if wind speeds are greater than 10 miles per hour or less than 2 miles per hour, to reduce the potential for runoff or drift of herbicides into surface water bodies.

Treatments required to install a fuelbreak will employ hand labor to prune the lower branches of trees, and either move cut material to be chipped or lop and scatter cut material. Mechanical equipment may be used to cut grass and shrubs within reach of the road.

The implementation of treatments for Oakland's projects will adhere to Oakland's Noise and Tree Protection Ordinances, Section 17.120.050 and Chapter 12.26, respectively, of Oakland's Municipal Code and Oakland's Creek Protection, Storm Water Management and Discharge Control Ordinance (Chapter 13.16) of the City's Municipal Code.

Maintenance

Maintenance and invasive species control of restored areas would occur for 10 years after initial project implementation is completed. Restoration of disturbed areas would focus on promoting native vegetation succession and improving species habitat through the encouragement of natural recruitment. Noxious plants would be prevented from colonizing the sites by means of chemical, mechanical, or manual removal and control.

Non-native invasive plant management strategies would be used in the project areas after the initial treatment is complete and would then be sustained through the biological inspections process. During the first three years of maintenance, non-native invasive plant management activities are expected to be bimonthly throughout the year. As part of the adaptive management plan, non-native invasive plant management actions would be determined by a qualified biologist familiar with invasive plant life cycles and control. Inspections would be conducted throughout the year. Non-native invasive plant inspection would coincide with other vegetation monitoring activities where applicable.

Monitoring

The progress of the project implementation would be monitored at least one time per year for 10 years. The protocol for monitoring would involve Oakland's project representative or his/her designee and/or Service- and/or NMFS-approved biological consultants to walk within the removal areas to inspect for control of the target species (*e.g.*, pine, eucalyptus, French broom).

Monitoring would include an assessment of the natural recruitment and expansion of native floral communities in relation to the vegetation management goals and would be timed to coincide with the optimal periods for identification of performance metrics (Oakland 2013). Monitoring would include photographic documentation at the macro level for each project site and habitat type. Photographs would be taken within the project area to capture floral composition and monitor the success of the vegetation goals (Oakland 2013).

North Hills-Skyline

The 68.34-acre North Hills-Skyline project area includes eucalyptus, pine, and brush along the south side of State Route 24 and west of Grizzly Peak Blvd. Hazardous fuel reduction on this site would extend the fuel break created by existing projects with UCB and the EBRPD. The long-range goal would be to eradicate French broom, eucalyptus, and Monterey pines across the entire ridgeline and establish a 3,660-foot long by 100-foot-wide ridgeline fuel break along Grizzly Peak Blvd. Within the first 30 feet from the edge of the road, all of the vegetation would be removed. Within the next 30 feet (30 to 60 feet from the road edge), up to 70 percent of the shrub cover would be thinned creating approximately 50-foot-diameter patches of shrubs (shrub islands) spaced about 50 feet apart. Oak-bay trees in this area would be limbed. The outer 40 feet of the fuel break (60 to 100 feet from the road edge) would not be treated. Oakland will also create about 10.45 acres of foraging/dispersal habitat and 8.5 acres of core scrub habitat for the Alameda whipsnake within the North Hills-Skyline project area by removing non-native trees (including about 90 large Monterey pines) and converting to grassland, oak woodland, and shrub habitats. The project implementation is expected to take approximately 36 months with 20-40 weeks of removal work.

Access to the site would be from various pullouts along Grizzly Peak Blvd., Tunnel Road, and Skyline Blvd. All pines and eucalyptus trees not reachable from the road will be hand felled, and retained, lopped and scattered, or chipped. Mechanized (feller-buncher) equipment would be used from roads only to cut and place trees in locations that can be cut into pieces that are easily moved. No skid trails will be used. Hand labor will be used away from roads or in areas of slope greater than 35 percent.

Caldecott Tunnel

The 53.62-acre Caldecott Tunnel project area is located adjacent to State Route 24, Tunnel Road, and Skyline Blvd. Previous eucalyptus and pine removal on Oakland lands have occurred on the northern half of this project area. Vegetation management at this location would be executed in a similar manner as in the eucalyptus stand in the North Hills-Skyline treatment area, with mechanized (feller-buncher) equipment to be used from roads only and hand labor in areas away from roads at slopes greater than 35 percent. Existing access routes will be used to remove eucalyptus; no new access routes are anticipated. Three landing sites are anticipated and would be located in areas of previous disturbance. The project implementation is expected to take approximately 36 months with 20-40 weeks of removal work.

EBRPD

EBRPD's grant application (HMGP 1731-16-34) involves the treatment of 540.7 acres throughout 11 regional parks in the East Bay Hills of western Alameda County and western Contra Costa County, California: Sobrante Regional Preserve, Wildcat Canyon Regional Park, Tilden Regional Park, Claremont Canyon Regional Preserve, Sibley Volcanic Regional Preserve, Huckleberry Botanic Regional Preserve, Redwood Regional Park, Leona Canyon Regional Open Space Preserve, Anthony Chabot Regional Park, Lake Chabot Regional Park, and Miller-Knox Regional Shoreline (Table 1). EBRPD would treat an additional three project areas totaling 51.9 acres using funds from Oakland's grant application (PDM-PJ-09-CA-2006-004): Tilden-Grizzly Peak Blvd., Sibley Island, and Claremont Canyon-Stonewall (Table 1). The proposed project will be implemented in 14 EBRPD regional parks and/or preserves, which are further delineated as recommended treatment areas (RTA). The priority of the proposed project within EBRPD is to reduce fuel load and sources by suppressing the density of undesirable invasive plant species within the disturbed treatment areas. Such actions would take place through implementation and long term maintenance of tree and brush removal (mechanical and hand), herbicide treatment, and although not funded by FEMA, animal grazing and pile burning.

Each RTA was evaluated by EBRPD's fire marshal to identify the treatment methods needed to meet vegetation management goals, as described below. In general, most eucalyptus stands would be thinned with a target goal of 50 percent canopy cover, and most non-native coniferous stands would be removed. Depending on location, the scrub/shrub vegetation classes would be thinned, resulting in a less dense shrub cover and conversion from a closed canopy shrub stand to a more open-canopied shrub stand. Shrub "islands" would be created through mosaic thinning or patch retention thinning resulting in a total canopy cover of between 30 and 50 percent shrubs and 50 to 70 percent grassy openings. The shrub "islands" would be approximately 50 feet in diameter and spaced 50 feet apart with grassy openings between the islands (i.e., shrubs within the "islands" would not be thinned). "Islands" would be in natural appearance and include specimens of variable age classes.

Vegetation Management

The majority of the wildfire hazard reduction would focus on removing non-native invasive species of trees and shrubs, such as eucalyptus (*Eucalyptus globulus* and *E. glaucus*), Monterey pine, acacia species, and French broom. Additionally, selective removal and/or reduction of native shrubs, such as coyote brush and sage, would be implemented to prevent additional fuel sources for fire.

Native forests, such as oak-bay woodland, that are present onsite would be protected and promoted through the reduction of undesirable forested areas dominated by eucalyptus, pine and/or acacia plantations. Removal of these species or thinning of plantations to promote established understory native tree species is the priority during project implementation. Reduction of downed woody fuels within oak-bay woodlands, or reducing the density of branches low to the ground by "limbing up" trees, would focus on maintaining healthy stands and reducing the available fuels in the event of a wildfire in this habitat. In treatment areas where oaks and bays are overly dense, these trees may be thinned, favoring retention of healthy, larger oaks and bays

to foster the health, vigor, and fire resilience of the residual stand. Native redwood forests would not be targeted for any removal or reduction, but would be protected during operations in treatment areas within which they occur.

Brush habitats would be thinned to reduce the amount and continuity of standing fuels and flame length, reduce invasive undesirable woody species, and allow for additional native species diversity within the stands. Brush habitat would be maintained as viable species habitat, increasing the quality of the habitat where possible by removing invasive species, and connecting existing brush habitat with viable wildlife corridors.

Perennial and annual grasses would be managed to maintain open grassland habitat, reduce brush encroachment, increase native species diversity, reduce fuel loads, and maintain travel corridors for native wildlife species. All aquatic, wetland, and riparian habitat would be managed to maintain, protect, and encourage the expansion of these habitats (where feasible) to the greatest extent. Measures to prevent erosion or sedimentation into these habitats would be deployed in all cases where these habitats occur in or near project sites.

Treatment Methods

Treatment prescriptions for EBRPD RTAs are developed in order to achieve the vegetation management goals following guidance under the WHRRMP (LSA Associates, Inc. 2009). The guidance recommends selective thinning of areas dominated by non-native invasive species that contribute to the existing fuel load. Thinning would be conducted to achieve a target canopy cover of 50 percent. Eucalyptus, Monterey pine, and acacia trees would be targeted to reduce the density of stems per acre, remove entire groves, and/or maintain established mature trees in a setting that reduces the amount of standing and dead fuels by creating widely spaced larger diameter trees. Trees would be felled or pruned to remove lower limbs, downed woody litter would be removed from under trees, and stumps and seedlings would be treated to prevent re-sprouting.

In most cases, understory vegetation of desirable species would be protected and promoted to replace eucalyptus plantations over time. Logs would be placed and retained as a component of the sediment/erosion control measures to improve wildlife habitat and to provide for long-term soil productivity. Trees would be removed from the sites or in limited cases, chipped and left onsite. If left onsite, the wood chips generated would be left at a depth of four to six inches, with an aerial cover of no more than 20 percent of the project site, and no more than 10 percent on roadways and landings. In addition, although not funded under the FEMA HMGP grant program, pile burning may be used under prescribed and permitted conditions to dispose of some of the cut woody material.

During tree felling operations, stumps of eucalyptus and acacia species would be treated using a cut stump treatment. The herbicide application would include a combination of either Roundup or Garlon 4 Ultra, a colorant, and an approved carrier agent, such as Hasten oil, water, or other product as indicated acceptable by the product label. In the maintenance phase, cut stubble or foliar application (by hand sprayer) would be made to coppiced (re-sprouted) stumps. Poison oak may be selectively treated to allow passage along maintenance trails, but would not be

targeted for extirpation, and would instead be suppressed during the maintenance phase for worker safety, per the California Occupational Safety and Health Administration's guidelines.

Except where more stringent herbicide application restrictions apply, trees within 50 feet of the high water mark of permanent or perennial watercourses would be removed by hand felling only; no mechanized equipment would enter this 50-foot buffer for either removal or mastication. Felled material within the buffer may be removed by end-lining with cables and winches attached to mechanized equipment stationed outside the buffer. EBRPD would implement chemical applications per the label instructions and CDPR pesticide guidance adjacent to water features. Within the stream buffer, cut stump application of approved herbicides would be applied within 60 minutes of felling. The areas chemically treated would include areas up to the ordinary high water mark of standing or flowing water; trees would not be treated within 24 hours of a rain event.

Seedlings of eucalyptus, Monterey pine, or acacia would be hand-pulled or chemically treated, as determined by the size of growth. Seedlings too difficult to pull would be treated by foliar treatment if they are three to six feet in height. Seedlings over six feet in height would be cut to within 18 inches of grade and be treated using a cut stubble treatment of herbicide. Noxious weeds would be treated by foliar method or cut stump stubble treatment if drift would be likely to impact non-targeted species. Erosion control BMPs and general avoidance and minimization measures would be implemented to control erosion during and after vegetation removal.

Maintenance

Existing undesirable species would be targeted initially during the first year following project implementation. Each initial treatment area would be assessed by qualified personnel (with expertise in botany, wildlife, storm water, etc.) prior to treatment activities to inform treatment prescriptions and protective measures for special status species, sensitive and desirable habitat, and the potential for habitat enhancements.

Frequency of maintenance treatment is a function of effectiveness of initial treatment. The coppiced stumps would be treated up to two times each year until the stump is eradicated (on average, stumps are eradicated within two treatments). Seedling germination is highly variable, dependent upon rainfall, temperature, chip depth, overstory canopy, etc. It is expected that seedlings would be treated up to twice a year in order to control the seedling when it is small and vulnerable.

Follow-up treatment of re-sprouts would be conducted annually for long-term maintenance. Additionally, eucalyptus seedlings emerging from the latent seed stock in the project area would be managed over time to prevent re-colonization of this invasive species. Experience has demonstrated that most seed stock of pine and eucalyptus is exhausted within five to seven years of felling, provided that no mature trees of the species remain. Thus, extirpation (99.9 percent control) would be expected within seven years if all of the mature eucalyptus were removed from EBRPD project areas. However, since EBRPD proposes to thin eucalyptus forests instead of eradicating them, the extirpation of eucalyptus from the project areas is unlikely. Also there is always the possibility of seeds migrating onto the site via watercourses, gravity, animal vectors,

or wind, thus the target species may continue to manifest sporadically until all trees in a region are extirpated.

Monitoring

EBRPD is committed to monitoring the vegetation management and recovery as part of their long-range monitoring and maintenance plan as outlined in their WHRRMP (LSA Associates, Inc. 2009) and their Draft MMP (EBRPD 2013), and any Service-approved revisions to the Draft MMP. A Treatment Assessment Form would be utilized to fully assess environmental characteristics (vegetative composition, wildlife habitat, bird nesting, hydrologic features, archaeological resources, etc.) for each initial treatment area and then later utilized to monitor the success of treatment.

Following initial fuels treatment, monitoring, maintenance and reporting would occur on an appropriate schedule for the ongoing achievement of vegetation management goals. Post-treatment monitoring would consider the environmental characteristics (erosion/soil stability, tree sprouting, resulting vegetative composition, invasive non-native plant species, wildlife habitat, special status species, etc.) to inform the ongoing management strategies to achieve desired vegetation management goals as described in the WHRRMP and MMP. Assessments would record the percent coverage of the treated site by desirable (native species habitat) and target non-desirable species (weeds, invasive plants, re-sprouted target plants). This information would be used to inform the adaptive management strategy and develop a prescription for further action on the site to attain the vegetation management goals identified in the WHRRMP and MMP.

The frequency by which a post-treatment area would be monitored over a 10-year monitoring period would be determined by specific site conditions after treatment and in accordance to an adaptive management process. Proposed frequency schedule would include monitoring at least annually for the first five years, and then once in years seven and 10. All information regarding pre- and post-treatment activities would be included in a WHRRMP database for future reference and development of adaptive management strategies.

Permanent photographic stations would be established to display the changes in vegetation cover and ephemeral stream channels after the initial fuels management treatment. Included within the annual assessment developed by the EBRPD, a representative photograph would be captured of the project site from a consistent location. Pre-treatment assessments would record the latitude and longitude and compass bearing of the photo. This photograph would be used in combination with other data on vegetation and habitat, as a guide to track recovery of an area towards the vegetation management goal.

Sobrante Ridge Regional Preserve

The Sobrante Ridge Regional Preserve portion of the project consists of 4.05 acres in RTA SO001, which is located on the western edge of the preserve. The area contains northern maritime chaparral, annual grassland, riparian woodland, oak-bay woodland/forest, and pallid manzanita. The vegetation management strategy for this project is to allow the forest to convert

to oak woodland and annual grassland. In areas where pallid manzanita occurs, EBRPD would comply with the Draft Minimization, Avoidance, and Compensation Measures for the pallid manzanita (Service *in litt.* September 12, 2012), which state “All shrubs and trees that are not a component of the maritime chaparral vegetation type within 20 feet of pallid manzanita plants and all shrubs or trees that are excessively shading pallid manzanita plants (i.e., pines, acacias, eucalyptus, oak, bay, madrone, etc.) will be cut and treated to reduce competition with pallid manzanitas and to reduce fuel loads.” Other measures described in the *Conservation Measures* section for pallid manzanita would be implemented.

EBRPD proposes to retain pallid manzanita plants and prune trees and other plants around the pallid manzanita to allow it to grow unimpeded. EBRPD also proposes to use hand labor in areas of pallid manzanita to limit ground disturbance and prevent mature oak canopy from being affected. The agency’s goal is to eliminate ladder fuels such as dead standing trees and low hanging limbs that may allow a fire to spread from the ground level to the crowns of trees, and to prune out dead branches, remove small pine, and French broom. In compliance with the Draft Minimization, Avoidance, and Compensation Measures for the pallid manzanita, “Herbicide use within 300 feet of pallid manzanitas will be applied through direct application to the stump only” (Service *in litt.* September 12, 2012). Herbicide will be applied to cut stumps of French broom using a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. Vegetation would be cleared to maintain defensible space around homes, which is a buffer where vegetation is removed or treated to slow the spread of wildfires towards structures. Approximately 50 percent of the cut material would be removed from the site, and the remaining material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions.

No new access roads would be required, and existing strategic fire roads will be used and will be returned to existing conditions. The duration of the implementation of the project is anticipated to take up to six months to complete.

Wildcat Canyon Regional Park

The Wildcat Canyon Regional Preserve portion of the project consists of 65.60 acres in the following five RTAs: WC003, WC004, WC009, WC010, and WC011. Because of the presence of steep slopes and mapped landslides, the potential for soil movement would likely preclude the use of heavy machinery. EBRPD would keep deep-rooted plants onsite where feasible to stabilize soil. Due to the existing seedbed, the potential for the spread of French broom is high if ground disturbance occurs. A mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be applied to control French broom. EBRPD would remove north coastal scrub and broom to speed succession to oak woodland and would prune trees according to the oak woodland performance standards as described in the EBRPD’s WHRRMP. Isolated stands of eucalyptus and pine trees would be thinned for a target canopy cover of 50 percent, and hazard trees would be removed. Hazard trees are trees that are identified by a qualified individual as having significant structural deficiencies caused by storm damage, disease, senescence, growth form, soil conditions or other factors, and contributing to a high potential for the tree to fall apart or topple over and hit targets such as trails, roads, power lines, structures, or other improvements. Material larger than six inches in diameter would be removed from the site (approximately 25 percent); all other

material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. Animal grazing and/or hand labor would be used to maintain the site.

The five RTAs associated with the Wildcat Canyon Regional Preserve portion of the project are as follows:

1. **RTA WC003.** RTA WC003 is a 1.67-acre area located at the northern end of the park and contains annual grassland and oak-bay woodland, but is dominated by coyote brush scrub. The vegetation management strategy for this RTA is to speed succession to oak woodland by removing shrubs that limit growing conditions for trees. Riparian plants (willows) are present in the RTA, and EBRPD would assess the area for possible aquatic features (riparian corridors and wetlands) located in this area.
 - a. All dead wood would be removed in willows, and lower branches would be pruned to retain willow thickets. EBRPD would retain coffeeberry and prune shrubs similar to trees to create defensible space. Trees would be pruned to remove limbs up to eight feet above ground, and smaller trees would be thinned out. As the willows are in a riparian habitat, where typically the fire danger is decreased, the removal of branches would be minimal. Since this area is suitable habitat for California red-legged frog, a biological monitor would be present during implementation of all treatment activities. In addition, all RTAs would be monitored at least annually as per the monitoring requirements defined in the WHRRMP and MMP. The Stewardship department may determine that there needs to be additional surveys and subsequent restoration to the site. Approximately 33 percent of the cut material would be scattered off-site, 33 percent of material would be chipped onsite, and 33 percent of the cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. Mechanical brushing equipment would be used in conjunction with hand labor in easily accessible areas. A mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye and/or hand labor would be used to reduce brush, with no foliar application in areas at least 60 feet from aquatic habitats. EBRPD proposes to use animal grazing and/or hand labor to maintain the site. No new access routes would be required. The project implementation is anticipated to take up to three months to complete.
2. **RTA WC004.** RTA WC004 is a 7.96-acre area located at the northern end of the park and contains California annual grassland, oak-bay woodland/forestland, northern coastal scrub (xeric), and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of annual grassland and north coastal scrub, scattered oaks, and eucalyptus.
 - a. Willows exist on the eastern edge of the southern portion of the RTA. Except for debris removal and pruning, treatments would be avoided where feasible within the willow thickets. To the east of nearby homes, the site would be maintained by annual grazing or mowing of grasslands using a front deck rotational mower mounted on a Bobcat. In areas where California red-legged frog or Alameda

whipsnake could occur, work would not commence until the biological monitor has determined that no California red-legged frogs or Alameda whipsnakes are in the work area.

- b. South of the water tank that is onsite, mowing would continue as a treatment option, as would pruning eucalyptus and removing short pines and small eucalyptus. Because of proximity to homes, all native trees on this site would be thinned and pruned to remove limbs up to approximately eight feet above ground. Approximately 25 percent of the cut woody material would be chipped and scattered near trails to a small depth depending upon site slope, proximity to watercourses, and viability of deposition from the chute of the chipper. The remaining cut woody material would be removed from the site. In areas of coastal scrub, mechanical brushing equipment would be used and a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be applied, if necessary, to limit invasion of French broom. No new access routes would be required. The project implementation is anticipated to take up to three months to complete.
3. **RTA WC009.** RTA WC009 is an 11.47-acre area located along the southwestern edge of the park and contains oak-bay woodland/forest, coastal scrub (mesic and xeric), riparian woodland, and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of emerging oak-bay woodland with an understory of ferns and oak litter (no understory shrubs), and separate patches of north coastal scrub. The management would be completed by removing all dead wood and pruning lower branches of willows according to performance standards. A mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be applied, if necessary, to limit invasion of French broom. All cut material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access routes would be required. The project implementation is anticipated to take up to three months to complete.
 4. **RTA WC010.** RTA WC010 is a 10.79-acre area located along the southwestern edge of the park that contains oak-bay woodland/forestland, coastal scrub (mesic and xeric), and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of oak woodland with willows and emerging oak woodland.
 - a. Due to the presence of steep topography and mapped landslides, the potential for soil movement will likely preclude use of heavy machinery. Deep-rooted plants would be kept onsite where feasible to stabilize soil. French broom would be controlled with the use of herbicides (Garlon 4 Ultra/Hasten) in a cut-stump method. Additionally, north coastal scrub and broom would be removed to speed succession to oak woodland. Trees would be pruned accordingly to oak-woodland performance standards. Isolated stands of eucalyptus and pine trees would be removed. Material over six inches in diameter would be removed from site; all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access routes would be

required. The project implementation is anticipated to take up to six months to complete.

5. **RTA WC011.** RTA WC011 is a 33.70-acre area located along the southwestern edge of the park. The RTA contains northern coastal scrub (mesic and xeric), oak-bay woodland/forestland, riparian woodland, California annual grassland, eucalyptus forest/plantation, and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of emerging and established oak woodland, separate areas of coastal scrub, and grasslands where no trees exist.
 - a. Due to the presence of steep slopes, high soil moisture and landslide history, the use of heavy machinery would be precluded; therefore, deep-rooted plants would be retained where feasible to stabilize soils. French broom would be controlled with the use of herbicides (Garlon 4 Ultra/Hasten) in a cut-stump method. Additionally, north coastal scrub and broom would be removed to speed succession to oak woodland. Trees would be pruned accordingly to oak-woodland performance standards. Thin isolated stands of eucalyptus and pine trees would be removed. Material over six inches in diameter would be removed from site; all other material would be piled and left onsite for later disposal by prescribed burning and fuel conditions. No new access routes would be required. The project implementation is anticipated to take up to one year to complete.

Tilden Regional Park

The Tilden Regional Park portion of the project consists of a 97.70-acre area in the following four RTAs: TI006, TI012, TI015, and TI022, as described below.

1. **RTA TI006.** RTA TI006 is a 3.97-acre area located at the northwestern end of the park. This RTA contains oak-bay woodland/forestland, eucalyptus forest/plantation, broom scrub, developed/disturbed/landscaped areas, and coyote brush scrub. The vegetation management strategy for this RTA is to create an environment of emerging oak-bay woodland.
 - a. Because of the presence of steep topography and mapped landslides at this location, the potential for soil movement would require hand labor instead of heavy machinery for the initial treatment. EBRPD would keep deep-rooted plants onsite where feasible to stabilize soil. The potential for French broom spread is high if ground disturbance occurs. EBRPD would remove and spray French broom, eucalyptus trees, and sprouts as well as north coastal scrub using a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. Trees would be pruned according to oak woodland performance standards (LSA Associates, Inc. 2009). Any willows would be retained, but dead wood would be removed and lower branches would be pruned. All cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access roads would be required. Duration of the project implementation is anticipated to take up to one year to complete.

2. **RTA TI012.** RTA TI0012 is a 41.65-acre area located at the southern end of the park and contains oak-bay woodland/forestland, eucalyptus forest/plantation, broom scrub, developed/disturbed/landscaped areas, and coyote brush scrub. The vegetation management strategy for this RTA is to thin the eucalyptus to promote the growth and succession of redwoods, oak-bay woodland, annual grassland, and north coastal scrub.
 - a. EBRPD proposes to reduce surface fuel volumes on the site by removing forest litter, dead bark, branches, small diameter trees, and understory shrubs. Eucalyptus would be thinned to approximately 25-foot spacing, and eucalyptus around developed oak-bay woodlands would be removed. Elsewhere on the site emphasis would be placed on removing small or unhealthy trees and trees with multiple stalks. Branches would be pruned and ladder fuels would be removed from pine, oak, eucalyptus, and fir. Material more than six inches in diameter would be removed from the site (approximately 25 percent); all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. French broom would be lopped and scattered and sprayed with a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. All treatment methods (mechanical, hand, grazing and herbicides) are proposed for managing the vegetation on this site. EBRPD would continue to mow and weed-eat behind homes. Animal grazing and/or hand labor would be used to maintain the site. No new access roads would be required. Duration of the project implementation is anticipated to take up to one year to complete.
3. **RTA TI015.** RTA TI015 is a 45.64-acre area located at the southern end of the park and contains oak-bay woodland/forestland, coyote brush scrub, developed/disturbed/landscaped, redwood forest, coastal scrub (xeric), non-native coniferous forest, and California annual grassland. The vegetation management strategy for this RTA is to create an environment of oak-bay woodland, redwood, and scattered north coastal scrub.
 - a. Pine, fir, and eucalyptus would be thinned in and around the tracks of the steam trains. All ladder fuels would be removed around the tracks and structures at the steam trains. Approximately 25 percent of the cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions; the remaining 75 percent would be removed. All treatment methods (mechanical, hand, grazing and herbicides) may be used when protective measures for the Little Steam Train and Corporation Yard are included. Conditions for western leatherwood would be enhanced. Animal grazing and/or hand labor would be used to maintain the site. Herbicides may be needed to help control any invasive species that follow initial treatment. No new access roads would be required. Duration of the project implementation is anticipated to take up to one year to complete.
4. **RTA TI022.** RTA TI022 is a 6.44-acre area located at the southern end of the park and contains coyote brush scrub, non-native coniferous forest, northern coastal scrub, developed/disturbed/landscaped areas, California annual grassland, and non-native

coniferous forest. The vegetation management strategy for this RTA is to create an environment of annual grassland and scattered pines with separate areas of coastal scrub.

- a. EBRPD considers the communication tower in this RTA to be vital infrastructure and would take into consideration the aesthetic value of the pines in blocking views of the tower. Branches up to 10 feet would be pruned and small diameter pine, oak, and bay would be removed. EBRPD would cut and spray 75 percent of the coyote brush and all of the French broom using a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. Approximately 75 percent of cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions; the remaining 25 percent would be removed. Mastication and mowing are proposed options for managing the vegetation on this site. Animal grazing and/or hand labor would be used to maintain the site. Herbicides, as described previously, may be needed to help control any invasive species. No new access roads would be required. Duration of the project implementation is anticipated to take up to six months to complete.

Claremont Canyon Regional Preserve

The Claremont Canyon Regional Preserve portion of the project consists of a 21.56-acre area in the following four RTAs: CC001, CC003, CC006, CC007, CC008, CC010, and CC012.

1. **RTA CC001.** RTA CC001 is a 2.28-acre area located at the western end of the preserve and contains eucalyptus, northern coastal scrub, oak-bay woodland, and developed/disturbed/landscape areas. The vegetation management strategy for this RTA is to create an environment of open eucalyptus stand with minimal understory, oak-bay woodland, and patches of north coastal scrub away from structures. Also, the goal is to create a fire-safe buffer of grass adjacent to residences, without eucalyptus.
 - a. EBRPD proposes to maintain a grassland buffer in low fuel condition above the homes. In addition, they would remove dead and downed debris, prune or thin low hanging oak and bay trees, remove all young pines, and cut and spray brush on the slope, leaving remnants of large, burned dead pines to provide for moisture retention and wildlife habitat. Eucalyptus would be thinned and hazardous or over-mature trees would be removed. A 200-foot grass buffer would be created above homes and non-native *Pittosporum* species would be removed. All cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. The cut stumps would be treated with a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. No new access roads would be required. Duration of the project implementation is anticipated to take up to six months to complete.
2. **RTA CC003.** RTA CC003 is a 2.74-acre area located along the northwestern edge of the preserve and contains coyote brush scrub and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of perennial and annual grasslands, and oak-bay woodland.

- a. EBRPD would remove pine trees on the ridgeline to prevent widespread distribution of embers. Hand labor would be used to reduce brush. Cut material more than six inches in diameter would be removed from site (approximately 25 percent); all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. EBRPD proposes to use a rotation of mechanical treatments of hand labor, grazing, and herbicides to control or reduce broom and or brush invasion. No new access roads would be required, though an unpaved strategic fire route will be cleared and maintained. Duration of the project implementation is anticipated to take up to one year to complete.
3. **RTA CC006.** RTA CC006 is a 3.34-acre area located at the southern edge of the preserve and contains oak-bay woodland/forestland and northern coastal scrub (xeric). The vegetation management strategy for this RTA is to create an environment of oak woodland with understory of oak, herbs and ferns, grasses, and short, scattered, or low-volume scrub.
 - a. EBRPD proposes to use animal grazing for initial and follow-up treatments. Animal grazing would be used during appropriate seasons to avoid effects to Alameda whipsnakes (although the vegetation treatment that results from grazing would have an effect on Alameda whipsnake habitat). EBRPD would also prune mature oaks after grazing and pile and leave them onsite for later disposal by burning under prescribed weather and fuel conditions and would implement measures described in the *Conservation Measures* to avoid effects to Alameda whipsnake. Mechanical treatment would not be used because of the steep slopes. Defensible space would be created above residences by removing brush. No new access roads would be required. Duration of the project implementation is anticipated to take up to six months to complete.
4. **RTA CC007.** This 1.72-acre area along the northwestern edge of the preserve contains coyote brush scrub and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of perennial and annual grasslands.
 - a. Invasive species are a concern at this RTA because of existing seedbed. EBRPD proposes to use chemical treatment and hand labor to reduce brush/grass. All cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. EBRPD proposes that successful treatment would require a carefully timed rotation of mechanical treatments of hand labor, grazing, and herbicide to control or reduce broom and or brush invasion. No new access roads would be required. Duration of the project implementation is anticipated to take up to three months to complete.
5. **RTA CC008.** RTA CC08 is a 3.72-acre area located at the south central area of the preserve and contains oak-bay woodland/forestland, developed/disturbed/landscaped areas, and coyote brush scrub. The vegetation management strategy for this RTA is to

create an environment of landscaping, scrub and oak woodlands, and to reduce the proportion of California bay saplings in the understory.

- a. EBRPD would use hand labor treatments to create and maintain spacing between shrubs and prune lower tree branches according to defensible space performance standards (LSA Associates, Inc. 2009). EBRPD would mow grasses and remove two-thirds of the small (less than four inches) bay trees in the understory. All cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. Animal grazing and/or hand labor would be used to maintain the site. No new access roads would be required, though an unpaved strategic fire route will be cleared and maintained. Duration of the project implementation is anticipated to take up to three months to complete.
6. **RTA CC010.** This 5.36-acre area is located at the south central area of the preserve and contains oak-bay woodland/forestland, coyote brush scrub, developed/disturbed/landscaped areas, and northern coastal scrub (xeric). The vegetation management strategy for this RTA is to create an environment of northern coastal scrub and oak woodland.
 - a. French broom and invasive plant species are a concern in this area. EBRPD would use animal grazing, mechanical treatment, or hand labor to remove woodland understory and reduce scrub between woodlands. Oak woodlands would be pruned to remove lower limbs, and two-thirds of the small bay trees and one-third of the medium-sized (four to eight inches in diameter) bay trees would be removed. EBRPD would thin eucalyptus and treat stumps with a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. Cut material more than six inches in diameter would be removed from the site (approximately 25 percent); all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access roads would be required, though an unpaved strategic fire route will be cleared and maintained. Duration of the project implementation is anticipated to take up to six months to complete.
 7. **RTA CC012.** This 2.40-acre area in the eastern edge of the preserve contains northern coastal scrub and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an area of scrub (no French broom or pines) and short-stature trees with low ember producing potential.
 - a. Spread of broom into disturbed ground is a concern for this area. EBRPD would consider spreading pine chips onsite to cover bare patches. EBRPD would remove and spray eucalyptus re-sprouts and brush (using a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye) before seed set. Mechanical or hand labor treatments would be used to remove pines; machinery would be used to grind smaller pines and leave material onsite. If removed using hand labor, whole trees would be hauled off-site. Approximately 50 percent of the cut material would be ground or chipped onsite, and 50 percent would be removed. One of EBRPD's goals is to maintain defensible space around communication tower and access

road. No new access roads would be required. Duration of the project implementation is anticipated to take up to three months to complete.

Sibley Volcanic Regional Preserve

The Sibley Volcanic Regional Preserve portion of the project consists of a 43.61-acre area in the following three RTAs: SR001, SR004, and SR005.

1. **RTA SR001.** RTA SR001 is a 7.88-acre area located at the northwestern edge of the preserve and contains oak-bay woodland/forestland, coniferous forest, coyote brush scrub, and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of oak-bay and Monterey pine with sparse understory.
 - a. Invasive species are a concern at this RTA because of the existing seedbed. EBRPD would remove understory shrubs, young pine, and low-hanging branches beneath mature pines, as well as all hazardous and structurally-weak mature pines. All treatment methods except mechanical (hand labor, grazing, and herbicides) may be used. Cut material more than six inches in diameter would be removed from site (approximately 25 percent); all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. One of EBRPD's goals is to maintain defensible space around the communication tower, access road, and behind the homes. Animal grazing and/or hand labor would be used to maintain the site. No new access roads would be required. Duration of the project implementation is anticipated to take up to three months to complete.
2. **RTA SR004.** RTA SR004 is a 12.94-acre area located in the western central portion of the preserve and contains oak-bay woodland/forest, northern coastal scrub (xeric), coyote brush scrub, and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of oak-bay woodland, scattered north coastal scrub, and annual grassland.
 - a. The presence of steep slopes on the site would preclude mechanical treatments except near roadways. EBRPD would remove shrubs near emerging oak-bay trees to speed succession to oak-bay woodland within 100 feet of the road. EBRPD would also cut and spray invasive broom (using a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye), prune up low-hanging branches, and remove dead and downed material. All cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. Animal grazing and/or hand labor would be used to maintain the site. No new access roads would be required. Duration of the project implementation is anticipated to take up to six months to complete.
3. **RTA SR005.** This 22.79-acre area is located in the southwestern edge of the preserve and contains coyote brush scrub and non-native coniferous forest. The vegetation

management strategy for this RTA is to create an environment of oak-bay woodland, scattered north coastal scrub, annual grassland, and riparian woodland. There is one pallid manzanita plant located within this RTA, which would require the use of hand labor and other measures described in the *Conservation Measures*.

- a. EBRPD would remove eucalyptus and pines within 100 feet of the ridgeline and remove hazard trees along roads and trails. Trees and other plants around pallid manzanita would be trimmed to allow it to grow unimpeded. All small-diameter eucalyptus and pine would be removed to eliminate the fuel ladder into mature pine overstory. A mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be applied to cut eucalyptus stumps. EBRPD would also cut and spray brush (using a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye) to provide defensible space. Cut material more than six inches in diameter would be removed from site (approximately 50 percent); all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. Animal grazing and/or hand labor would be used to maintain the site. No new access roads would be required. Duration of the project implementation is anticipated to take up to one year to complete.

Huckleberry Botanic Regional Preserve

The Huckleberry Botanic Regional Preserve portion of the project consists of a 17.76-acre area in the following in four RTAs: HP001, HP002, HP003, and HP004, as described below.

1. **RTA HP001.** This 1.71-acre area in the southwestern edge of the preserve and contains eucalyptus forest/plantation and northern coastal scrub. The vegetation management strategy for this RTA is to create an environment of oak-bay woodland near roads and thinned eucalyptus below in the areas that are currently eucalyptus.
 - a. Steep slopes at the site require erosion control measures for mechanical treatments. EBRPD would remove eucalyptus within 100 feet of the ridgeline and thin trees below the ridgeline to 25-foot spacing by selecting smaller trees, unhealthy trees, and trees with multiple trunks for removal. EBRPD would prune all retained trees to eight feet above ground. Surface fuel reduction would be emphasized in follow-on treatments. Mechanical treatment is proposed for tree removal, and all methods (mechanical, hand, grazing and herbicides) may be used for surface fuel reduction. A mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be used to control eucalyptus re-sprouting. Cut material more than six inches in diameter would be removed from site (approximately 50 percent); all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access roads would be required. Duration of the project implementation is anticipated to take up to six months to complete.
2. **RTA HP002.** This 13.62-acre area is located in the southwestern edge of the preserve and contains oak-bay woodland/forest, northern maritime chaparral, northern coastal

scrub, and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of oak-bay woodland with separate areas of scattered north coastal scrub to promote the expansion of pallid manzanita onsite.

- a. Presence of pallid manzanita requires hand labor treatments and other measures described in the *Conservation Measures*. EBRPD would remove non-manzanita shrubs to reduce fuel volume and would prune retained trees such that they do not shade pallid manzanita plants. All cut woody material would be piled and left onsite in areas away from pallid manzanita plants for later disposal by burning under prescribed weather and fuel conditions. A mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be used to treat broom. No new access roads would be required. Duration of the project implementation is anticipated to take up to six months to complete.
3. **RTA HP003.** RTA HP003 is a 1.12-acre area located in the southeastern edge of the preserve and contains northern maritime chaparral and pallid manzanita. The vegetation management strategy for this RTA is to create an environment of oak-bay woodland, pallid manzanita, and separate areas of scattered north coastal scrub.
 - a. Presence of pallid manzanita requires hand-labor treatments and other measures described in the *Conservation Measures*. EBRPD would remove non-manzanita shrubs to reduce fuel volume and would prune retained trees such that they do not shade pallid manzanita plants. All cut woody material would be piled and left onsite in areas away from pallid manzanita plants for later disposal by burning under prescribed weather and fuel conditions. A mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be used to treat broom. No new access roads would be required. Duration of the project implementation is anticipated to take up to three months to complete.
 4. **RTA HP004.** RTA HP004 is a 1.31-acre area located in the southeastern edge of the preserve and contains oak-bay woodland/forest, northern maritime chaparral, and develop/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of oak-bay woodland, pallid manzanita, and scattered north coastal scrub.
 - a. Potential presence of pallid manzanita requires hand-labor treatments and other measures described in the *Conservation Measures*. EBRPD would remove non-manzanita shrubs to reduce fuel volume and would prune retained trees. All cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. A mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be used to treat broom. No new access roads would be required. Duration of the project implementation is anticipated to take up to three months to complete.

Redwood Regional Park

The Redwood Regional Park portion of the project consists of a 58.33-acre area in the following eight RTAs: RD001, RD002, RD003, RD004, RD005a, RD005b, RD009, and RD011, as described below.

1. **RTA RD001.** This 0.23-acre area is located in the northeastern end of the park and contains coniferous forest and northern coastal scrub (xeric). The vegetation management strategy for this RTA is to create an environment of open Monterey pine stands with understory of pine litter, grassland, scattered low shrubs, and annual grasses.
 - a. EBRPD would remove small and unhealthy pines and pines with poor structural stability. EBRPD would maintain low fuel volume under Monterey pines above Phillips Loop Trail by thinning coastal scrub and cutting and spraying broom using a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. Cut material more than six inches in diameter would be removed from the site (approximately 50 percent), and all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.

2. **RTA RD002.** This 5.01-acre area is located in the northeastern end of the park and contains eucalyptus forest/plantation. The vegetation management strategy for this RTA is to thin the red gum eucalyptus understory and create an environment of oak-bay woodland.
 - a. Steep slopes would likely require additional mitigation measures for treatments using heavy machinery. EBRPD would remove eucalyptus within 100 feet of the ridgeline, thin trees below the ridgeline to 25-foot spacing by selecting for removal eucalyptus that are around developed oak-bay woodlands. Elsewhere, EBRPD would emphasize removal of small or unhealthy trees or trees with multiple stalks. Limbs of all retained trees would be pruned up to eight feet above ground. EBRPD would emphasize surface fuel reduction following initial treatment by removing forest litter, dead bark and branches, and understory shrubs. Cut material more than six inches in diameter would be removed from the site (approximately 50 percent). All other cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. Mechanical treatments are proposed for tree removal, and mechanical, hand, grazing and herbicide treatments may be used for surface fuel reduction and maintenance. No new access routes would be required. The project implementation is anticipated to take up to one year to complete.

3. **RTA RD003.** RTA RD003 is an 11.82-acre area located in the northeastern end of the park and contains eucalyptus forest/plantation, riparian woodland, coyote brush scrub, oak-bay woodland/forestland, redwood forest, and developed/disturbed/landscaped areas.

The vegetation management strategy for this RTA is to create an environment of red gum eucalyptus with a sparse understory and oak-bay woodland with willows.

- a. EBRPD would reduce shrubs beneath eucalyptus trees through grazing except in riparian areas. The dense tree spacing on the site is not conducive to mechanical treatment, and hand labor is proposed only along trails because of the large size of the treatment area. All cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. EBRPD would treat broom with a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. However, EBRPD would avoid treatments in all willow areas. No new access routes would be required. The project implementation is anticipated to take up to one year to complete.
4. **RTA RD004.** RTA RD004 is a 27.80-acre area located in the northeastern end of the park and contains non-native coniferous forest, oak-bay woodland/forestland, coyote brush scrub, developed/disturbed/landscaped areas, and eucalyptus forest/plantation. The vegetation management strategy for this RTA is to create an environment of annual grassland, with scattered Monterey pine and oak-bay woodland.
 - a. EBRPD would emphasize understory and surface fuel treatments by removing forest litter, dead bark and branches, and understory shrubs (primarily coyote brush, but may also include small patches of poison oak). All treatment methods may be used (grazing, hand, mechanical, and herbicides). EBRPD would remove structurally unsound, mature, or hazardous trees. Eucalyptus sprouts, re-sprouts, and broom would be cut and sprayed with a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. Low-hanging branches would be pruned. Cut material more than six inches in diameter would be removed from the site (approximately 50 percent), and all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. EBRPD would conduct pre-treatment surveys for the presence of Oakland Star tulip and western leatherwood, and any patches of these or other special-status plant species will be protected by flagging. Habitat would be enhanced for Oakland Star tulip and western leatherwood where appropriate. No new access routes would be required. The project implementation is anticipated to take up to two years to complete.
 5. **RTA RD005a.** This 1.10-acre area is located in the northeastern area of the park and contains eucalyptus forest/plantation. The vegetation management strategy for this RTA is to create an environment of annual grassland safety zone.
 - a. EBRPD would remove all eucalyptus trees within the RTA through the use of mechanical methods or hand labor. Material over six inches in diameter would be removed from the site (up to 50 percent). All of the material would be scattered below and outside of the RTA. Animal grazing, herbicide application, and/or hand labor would be used to maintain the site. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.

6. **RTA RD005b.** This 8.45-acre area is located in the northeastern area of the park and contains non-native coniferous forest, developed/disturbed/landscaped areas, redwood forest, and oak-bay woodland/forestland. The vegetation management strategy for this RTA is to create an environment of scattered Monterey pine, oak-bay woodland, annual grassland, and redwoods.
 - a. EBRPD's high priority for this RTA is to create and maintain defensible space around Chabot Space and Science Center. EBRPD would remove structurally unsound mature pine trees and pines above well-developed oak-bay woodlands. All retained trees would be pruned, and shrubs under trees would be removed. Young pines would be removed and shrub cover would be maintained at less than 30 percent cover. Approximately 50 percent of cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions, and the remaining material would be removed. Broom would be treated with a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. Animal grazing and/or hand labor would be used to maintain the site. No new access routes would be required. The project implementation is anticipated to take up to one year to complete.

7. **RTA RD009.** This 2.92-acre area is located in the east-central area of the park and contains developed/disturbed/landscaped areas, northern coastal scrub (xeric), and oak-bay woodland/forestland. The vegetation management strategy for this RTA is to create an environment of oak-bay woodland near roads, separate areas of coastal scrub, and successional grasslands under eucalyptus located further uphill.
 - a. EBRPD's goal is to create and maintain defensible space around the fire station and Piedmont Stables. EBRPD would remove eucalyptus and coyote brush to restore successional grasslands within 200 feet of the fire station or where feasible. EBRPD would also remove all shrubs and small trees under eucalyptus and oak-bay trees and prune trees to eight feet above ground. The eucalyptus groves would be thinned, and a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be applied to cut stumps. Approximately 50 percent of cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions, and the remainder of the cut material would be removed. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.

8. **RTA RD011.** This 1.02-acre area is located along the northeastern edge of the park and contains northern coastal scrub (xeric). The vegetation management strategy for this RTA is to create an environment of successional grasslands.
 - a. EBRPD would use mechanical treatment to cut brush. French broom control would also be conducted in this RTA, including herbicide treatment (using a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye), hand labor, and animal grazing to help maintain the site. All cut broom would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new

access routes would be required. The project implementation is anticipated to take up to three months to complete.

Leona Canyon Regional Open Space Preserve

The Leona Canyon Regional Open Space Preserve portion of the project consists of a 4.58-acre area in the RTA LE005. This RTA contains northern coastal scrub (xeric), coniferous forest, and oak-bay woodland/forestland. The vegetation management strategy for this RTA is to create an environment of perennial grasses, scattered coastal scrub, and oak-bay woodland.

Steep slopes and lack of access behind homes limit the use of mechanical equipment. Broom would be cut and sprayed with a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. All cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. Animal grazing and/or hand labor would be used to maintain the site. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.

Anthony Chabot Regional Park

The Anthony Chabot Regional Park portion of the project consists of a 200.0-acre area in the following nine RTAs: AC001, AC002, AC003, AC006, AC007, AC011, AC012, AC013, and AC014, as described below.

1. **RTA AC001.** RTA AC001 is a 4.32-acre area located at the northeastern end of the park and contains oak-bay woodland/forestland and northern coastal scrub (xeric). The vegetation management strategy for this RTA is to create an environment of oak woodland with herbaceous understory, patches of shrubs, and occasional eucalyptus trees and pines.
 - a. Steep slopes may preclude the use of machinery. EBRPD would use hand labor or animal grazing to remove understory shrubs for oak woodlands and to create grassy openings in shrub patches to reduce fuel volumes. EBRPD would cut and/or spray broom with a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. EBRPD would create defensible space by pruning lower branches of existing oak trees, mowing grass, and creating spaces between shrubs. EBRPD would maintain the site using hand labor and applying herbicides to control invasive species. All cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access routes would be required. The project implementation is anticipated to take up to three months to complete.
2. **RTA AC002.** RTA AC002 is a 2.48-acre area located at the northeastern end of the park and contains coniferous forest, developed/disturbed/landscaped areas, and northern coastal scrub. The vegetation management strategy for this RTA is to create an environment of mowed grass on the west, landscaping, and oak woodland to south.

- a. EBRPD would consider landscaping with fire-resistant plants. EBRPD would create defensible space according to performance standards (LSA Associates, Inc. 2009) by pruning lower branches of existing oak trees, mowing grass, and creating spaces between shrubs. Steep slopes may preclude the use of machinery. EBRPD would use hand labor or animal grazing to remove understory shrubs for oak woodlands and to create grassy openings in shrub patches to reduce fuel volumes. EBRPD would cut and/or spray broom with a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. All cut material would be removed. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.
3. **RTA AC003.** RTA AC003 is a 27.5-acre area located at the northeastern end of the park and contains coastal scrub (xeric) and oak-bay woodland/forestland. The vegetation management strategy for this RTA is to create an environment of oak woodland with herbaceous understory, and patches of shrubs in open grassland.
 - a. EBRPD would remove understory shrubs from oak woodland to limit torching potential and to provide more growing space for emerging trees. EBRPD would also create grassy openings in shrub patches and prune trees 100 to 150 feet below property boundaries to reduce total fuel volume. The isolated groves of eucalyptus and pine would be thinned, and hazard trees would be removed. An herbicide mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be used to control broom and eucalyptus re-sprouting. All treatment methods (mechanical, hand, grazing and herbicides) are acceptable for initial and follow-up treatment because of the wide range of terrain, access, and species distribution/composition. Approximately 50 percent of the cut woody material would be removed, and the remaining cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.
4. **RTA AC006.** RTA AC006 is a 25.52-acre area located along the western-central boundary of the park and contains coyote brush scrub, oak-bay woodland/forestland, coastal scrub (xeric), coniferous forest, eucalyptus forest/plantation, developed/disturbed/landscaped areas, and successional grassland. The vegetation management strategy for this RTA is to create an environment of oak-bay woodlands, scattered pines, and eucalyptus, all with minimal understory vegetation.
 - a. EBRPD would remove understory shrubs from oak woodland to limit torching potential and to provide more growing space for emerging trees. EBRPD would also create grassy openings in shrub patches and prune trees 100 to 150 feet below property boundaries to reduce total fuel volume. Isolated groves of eucalyptus and pine would be thinned, and hazard trees would be removed. An herbicide mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be used to control broom. All treatment methods are acceptable (mechanical, hand, grazing and herbicides) because of wide range of terrain, access, and species distribution/

composition. Cut material more than six inches in diameter would be removed from the site (approximately 25 percent); all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access routes would be required. The project implementation is anticipated to take up to one year to complete.

5. **RTA AC007.** RTA AC007 is an 8.44-acre area located along the western-central boundary of the park and contains developed/disturbed/landscaped areas, northern coastal scrub (xeric), California annual grassland, coniferous forest, and oak-bay woodland/forestland. The vegetation management strategy for this RTA is to create an environment of annual grassland in southern and western areas and oak woodland with understory of herbs and scattered north coastal scrub, redwood forest, and thinned eucalyptus in the eastern and northern area.
 - a. Steep slopes on the eastern side of this RTA limit the types of tree cutting and removal operations possible. EBRPD would use annual control and monitoring of invasive species using a hand-applied application of Garlon 4 Ultra, Hasten oil, and Hi-Light dye. On the eastern edge of the RTA, EBRPD would thin eucalyptus to minimize ember production and distribution and would also prune all trees retained. On the western side, EBRPD would use animal grazing to limit shrub encroachment and would apply a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye to control invasive species. The understory shrubs would be removed from the oak woodland to limit torching potential and provide more growing space for emerging trees. EBRPD would also create grassy openings in shrub patches and prune trees 100 to 150 feet below property boundaries to reduce total fuel volume. Isolated groves of eucalyptus and pine would be thinned and hazard trees would be removed. Herbicides would also be used to control broom. All treatment methods are acceptable (mechanical, hand, grazing, and herbicides) because of wide range of terrain, access, and species distribution/composition. Cut material more than six inches in diameter would be removed from the site (approximately 50 percent), and all other cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.
6. **RTA AC011.** RTA AC011 is a 26.15-acre area located in the southwestern area of the park and contains eucalyptus forest/plantation, coyote brush scrub, oak-bay woodland/forestland, developed/disturbed/landscaped areas, northern coastal scrub, and annual grassland. The vegetation management strategy for this RTA is to create an environment of mature eucalyptus stands, grassland with scattered shrubs in fuel breaks, and oak-bay woodlands.
 - a. Steep slopes at this RTA may preclude machinery or require specific logging techniques to minimize soil disturbance. EBRPD would create defensible space and access along trails and create vistas on strategic look outs. EBRPD would maintain and expand fuel breaks by thinning, using mechanical treatments, or

spraying according to performance standards (LSA Associates, Inc. 2009). In areas of well-developed native understory, EBRPD would remove eucalyptus from the overstory. Animal grazing and/or hand labor would be used to maintain the site. Cut material more than six inches in diameter would be removed from the site (approximately 33 percent), and all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.

7. **RTA AC012.** RTA AC012 is an 18.93-acre area located in the southwestern area of the park and contains coyote brush scrub, northern coastal scrub, successional grassland, and eucalyptus forest/plantation. The vegetation management strategy for this RTA is to create an environment of mature eucalyptus stands with grassland with scattered shrubs in fuel breaks and oak-bay woodland.
 - a. Steep slopes may preclude machinery or require specific logging techniques to minimize soil disturbance. EBRPD would thin eucalyptus and brush to expand the fuel break and remove all eucalyptus where oak-bay woodland understory is well developed. Animal grazing and/or hand labor would be used to maintain the site, and a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye would be applied. Cut material more than six inches in diameter would be removed from the site (approximately 33 percent), and all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. No new access routes would be required. The project implementation is anticipated to take up to one year to complete.
8. **RTA AC013.** RTA AC013 is a 16.85-acre area located at the southern end of the park and contains eucalyptus forest/plantation, California annual grassland, coyote brush scrub, and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of mature eucalyptus, mowed grass, and shrubs close to campgrounds and landscaping.
 - a. EBRPD would manage vegetation to allow screening for privacy in the campground. EBRPD's priority is to ensure public safety and the ability to evacuate campers and visitors in an emergency. EBRPD would thin selected areas of eucalyptus to reduce fuel volume and retain screening around the campground by establishing shrubs between campgrounds. EBRPD would select for retention the trees that provide screening and still avoid creation of ladder fuels. EBRPD would protect trees and areas used by great blue herons for rookery. Animal grazing would be used for the areas that are not in the campground. Cut material would be masticated or mulched onsite. Follow-up treatment would include animal grazing and herbicides (a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye). No new access routes would be required. Project implementation is anticipated to take up to six months to complete.

9. **RTA AC014.** RTA AC014 is a 92.55-acre area located at the southern end of the park and contains coyote brush scrub, California annual grassland, oak-bay woodland/forestland, coastal scrub (xeric), eucalyptus forest/plantation, and riparian woodland. The vegetation management strategy for this RTA is to create an environment of successional grassland with a mix of grass and shrubs.
 - a. EBRPD would install a safety zone for campers by alternating between grazing and mowing shrubs. EBRPD would also create a wildfire “refuge” or shelter-in-place area that is large enough to accommodate all park visitors/campers. No new access routes would be required. The project implementation is anticipated to take up to two years to complete.

Lake Chabot Regional Park

The Lake Chabot Regional Park portion of the project consists of a 4.79-acre area in RTA LC010. This RTA is located in the southeastern end of the park and contains California annual grassland, coyote brush scrub, and oak-bay woodland/forestland. The vegetation management strategy for this RTA is to create an environment of oak-bay woodland with minimal understory.

EBRPD would maintain minimal understory through animal grazing or hand labor treatments. Improved fire protection capability would be created according to performance standards (LSA Associates, Inc. 2009) (in particular, pruning lower branches of existing oak and bay trees, removing eucalyptus and pine, mowing grass, and creating spaces between shrubs). Approximately 50 percent of the cut woody material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions, and 50 percent would be removed. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.

Miller/Knox Regional Shoreline

The Miller/Knox Regional Shoreline portion of the project consists of a 22.23-acre area in the following five RTAs: MK001, MK002, MK003, MK004, and MK005. Since the Miller/Knox Regional Shoreline portion of the proposed project is outside of the range of federally listed species, it is not included in this biological opinion.

Tilden-Grizzly Peak Blvd.

The Tilden-Grizzly Peak Blvd. portion of the project consists of a 34.28-acre area in the following five RTAs: TI012, TI013, TI014, TI015 and TI016. These RTAs are located in the southwestern end of the Tilden-Regional Park, as described below.

1. **RTA TI012.** This 12.93-acre area contains eucalyptus forest/plantation, successional grassland, coniferous forest, oak-bay woodland/forestland, northern coastal scrub (mesic and xeric), coyote brush scrub, and developed/disturbed/landscaped. The vegetation strategy for this RTA is to create an environment of thinned eucalyptus, with redwood, oak-bay woodland, annual grassland, and north coastal scrub.

- a. EBRPD's goal is to reduce surface fuel volumes by removing forest litter, dead bark, small diameter trees and branches, and understory shrubs. EBRPD would thin eucalyptus to 25-foot spacing or less by selecting for removal the eucalyptus that are around developed oak-bay woodlands and by removing small or unhealthy trees or those with multiple stalks. No new access routes would be required. The project implementation is anticipated to take up to one year to complete.
2. **RTA TI013.** This 15.71-acre area contains oak-bay woodland/forestland, northern coastal scrub (xeric), coniferous forest, eucalyptus forest/plantation, California annual grassland, riparian woodland, and coyote brush scrub. The vegetation management strategy, proposed work, erosion control, and maintenance is the same as for TI012. No new access routes would be required. The project implementation is anticipated to take up to one year to complete.
3. **RTA TI014.** This 2.82-acre area contains eucalyptus forest, redwood forest, and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to reduce surface fuel volumes by removing forest litter, dead bark, small diameter trees and branches, and understory shrubs. Herbicides would be utilized to control eucalyptus re-sprouting. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.
4. **RTA TI015.** This 1.46-acre area contains eucalyptus forest, oak-bay woodland, and redwood forest. The vegetation management strategy for this RTA is to reduce surface fuel volumes by removing forest litter, dead bark, small diameter trees and branches, and understory shrubs. No new access routes would be required. The project implementation is anticipated to take up to three months to complete.
5. **RTA TI016.** This 1.36-acre area contains eucalyptus forest/plantation. The vegetation management strategy for this RTA is to create an environment of emerging oak-bay woodland and northern coastal scrub. EBRPD would remove eucalyptus and pine within 100 feet of the ridgeline. Because of the steep slopes and small size of the RTA, mechanical treatments may be precluded. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.

Sibley Island

The Sibley Island portion of the project is a 3.92-acre area in RTA SR003 located along the southwestern edge of the larger Sibley Volcanic Regional Preserve. This RTA contains successional grassland, developed/disturbed/landscaped areas, eucalyptus forest, northern coastal scrub, and oak-bay woodland. The vegetation management strategy for this RTA is to create an environment of annual grassland and scattered north coastal scrub.

EBRPD would remove eucalyptus on the western portion of Sibley Island to complete the fuel break. Cut stumps would be treated with a mixture of Garlon 4 Ultra, Hasten oil, and Hi-Light dye to control eucalyptus re-sprouting. Cut material would be chipped and redistributed to a

maximum depth of four inches onsite. All other cut material would be removed from the site completely (approximately 25 percent). EBRPD would reduce brush, leaving pockets of standing brush for habitat. EBRPD would use mowing and/or animal grazing to maintain the site. No new access routes would be required. The project implementation is anticipated to take up to six months to complete.

Claremont Canyon-Stonewall

The Claremont Canyon-Stonewall portion of the project is a 13.65-acre area in RTA CC001 located along the southwestern end of the larger Claremont Canyon Regional Preserve. This RTA contains eucalyptus forest/plantation, oak-bay woodland/forestland, California annual grassland, coyote brush scrub, and developed/disturbed/landscaped areas. The vegetation management strategy for this RTA is to create an environment of open eucalyptus stand with minimal understory, oak-bay woodland, and patches of north coastal scrub away from structures. In addition, EBRPD would create a fire-safe buffer of grass without eucalyptus above homes. EBRPD would thin the remaining eucalyptus to create a fuel break and maintain grassland in low-fuel condition above the homes. EBRPD would remove dead and downed debris smaller than eight inches in diameter and would prune or remove small oak and bay trees, remove all young pines and non-native *Pittosporum* species on the slope, and leave remnants of large, burned dead pines to provide for moisture retention and wildlife habitat. The site would be maintained to minimize the understory in the eucalyptus stands. No more than 25 percent of the cut material, with a six-inch maximum diameter, would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions. The other 75 percent of the cut material would be removed from the site. The cut woody material left onsite would later be disposed of by burning under prescribed weather and fuel conditions. EBRPD would use hand labor and/or animal grazing to maintain the site. No new access routes would be required. The project implementation is anticipated to take up to one year to complete.

Interconnected Parcels

A total 100 RTAs totaling about 2,375 acres located within 13 regional parks comprise the interconnected parcels from EBRPD's WHRRMP. The work to be completed for these 13 regional parks is described in the following subsections. Due to the similarities in design elements, proximity to each other, and overlap and wide distribution of federally listed species with potential to occur on the project areas, the potential effects to listed species are anticipated to be of the same nature and similar magnitude for the proposed project and the interconnected parcels from EBRPD's WHRRMP. There are no identified interconnected projects that would be implemented by Oakland or UCB. Table 2 below lists the EBRPD's interconnected parcels identified by regional park and RTA that are covered under this biological opinion. Maps of the interconnected parcels are enclosed in Appendix A.

Anthony Chabot Regional Park

Interconnected actions in Anthony Chabot Regional Park would be implemented within areas totaling 883.0 acres. Primary vegetation communities found in these areas are eucalyptus forest/plantation (78 percent). The next most prevalent vegetation communities are bay

Table 2. Interconnected Parcels within EBRPD's WHRRMP.

Park	Acres
Anthony Chabot	882.9
Claremont Canyon	130.4
Huckleberry	0.3
Kennedy Grove	15.2
Lake Chabot	96.7
Leona Canyon	60.5
Point Pinole Regional Recreation Area ¹	478.4 ¹
Redwood	105.2
Sibley Volcanic	118.4
Sobrante	14.3
Temescal	1.5
Tilden Regional Preserve	414.3
Wildcat Canyon	56.6
TOTAL	2374.76

¹ Although Point Pinole Regional Recreation Area is part of EBRPD's WHRRMP, this project area is outside of the range of federally listed species and thus is not included in the action area for this biological opinion.

woodland (6 percent) and successional grassland (4 percent). Vegetation management activities would generally entail removal and/or thinning of eucalyptus stands and brush to expand fuel breaks and create successional grassland. Steep slopes in some areas may preclude machinery or require specific logging techniques to minimize soil disturbance. Cut material more than six inches in diameter would be removed from the site (approximately 25 percent); all other material would be piled and left onsite for later disposal by burning under prescribed weather and fuel conditions.

Claremont Canyon Regional Preserve

Interconnected actions in Claremont Canyon Regional Preserve would be implemented within areas totaling 130.4 acres, primarily consisting of xeric coastal scrub (61 percent), oak-bay woodland/forest (14 percent), and coyote brush scrub (9 percent). Vegetation management activities would focus on creating an environment of northern coastal scrub and oak woodland, with removal and control of invasive species. Methods would include hand labor, pruning, mowing, and chipping.

Huckleberry Botanic Regional Preserve

Interconnected actions in Huckleberry Botanic Regional Preserve would be implemented within areas totaling 0.3 acre and consisting primarily of xeric coastal scrub (83 percent). Vegetation management would entail removal of non-manzanita shrubs to reduce fuel volume, and pruning of retained trees (consisting of oak and bay trees). Due to the presence of pallid manzanita in this area, hand labor would be used along with other measures described in the *Conservation Measures* section.

Kennedy Grove

Interconnected actions in Kennedy Grove would be implemented within areas totaling 15.2 acres, consisting primarily of eucalyptus forest/plantation (54 percent), oak-bay woodland/forest (18 percent), and developed/disturbed/landscaped (17 percent). Vegetation management in these areas would entail removal of bay and eucalyptus trees smaller than eight inches to prevent fire spread to eucalyptus canopies and removal of the accumulation of forest litter, with the main goal of protecting nearby structures from fire. Mechanical and hand labor would be used.

Lake Chabot Regional Park

Interconnected actions in Lake Chabot Regional Park would be implemented within areas totaling 96.7 acres, consisting primarily of eucalyptus forest/plantation (55 percent) and California annual grassland (26 percent). Vegetation management would entail removing eucalyptus to minimize ember production and distribution. All treatment methods for removal are possible, but large tree diameters may limit the use of feller-bunchers. The primary goal would be to reduce understory fuels and remove selected eucalyptus to enhance travel along the designated strategic fire route, selecting for removal a greater number of eucalyptus trees nearest the road. Steep slopes likely limit off-road mechanical treatments, but access for on-road treatments is good. Consideration of visual effects is important in this area because eucalyptus trees are a prominent ridgeline feature.

Leona Canyon Regional Open Space Preserve

Interconnected actions in Leona Canyon Regional Open Space Preserve would be implemented within areas totaling 60.5 acres, consisting of oak-bay woodland/forest (41 percent), xeric coastal scrub (30 percent), and successional grassland (22 percent). The vegetation management goal in this area is to reduce understory shrubs, particularly near structures. Steep slopes and dense tree stands may preclude mechanical treatments in some areas.

Point Pinole Regional Recreation Area

Interconnected actions in Point Pinole Regional Recreation Area would be implemented within areas totaling 478.4 acres, primarily consisting of coastal prairie (46 percent) and eucalyptus forest/plantation (43 percent). The primary vegetation management goal here is to minimize torching potential by limbing mature trees and removing eucalyptus trees smaller than eight inches in diameter. Methods would include prescribed burns in eucalyptus understory and open

grassland areas with revegetation of perennial shrub/grass mixes. Since the Point Pinole Regional Recreation Area is outside of the range of federally listed species, the vegetation management activities are not included in the action area for the proposed project and are not covered under this biological opinion.

Redwood Regional Park

Interconnected actions in Redwood Regional Park would be implemented within areas totaling 105.0 acres, consisting primarily of coniferous forest/plantation (34 percent), eucalyptus forest/plantation (33 percent), and oak-bay woodland/forest (13 percent). Vegetation management activities would include removal and/or pruning of eucalyptus trees and removal and/or thinning of shrubs. Mechanical and hand labor methods would be used.

Sibley Volcanic Regional Preserve

Interconnected actions in Sibley Volcanic Regional Preserve would be implemented within areas totaling 118.4 acres, consisting primarily of eucalyptus forest/plantation (53 percent), oak-bay woodland/forest (27 percent), and xeric coastal scrub (8 percent). Vegetation management would include removal of eucalyptus trees and reduction of shrubs. All treatment methods (including grazing) would be used, but steep slopes may preclude mechanical methods in some areas. Trees and shrubs would be removed around pallid manzanita plants where they occur, using hand labor and other measures described in the *Conservation Measures* section.

Sobrante Ridge Regional Preserve

Interconnected actions in Sobrante Ridge Regional Preserve would be implemented within areas totaling 14.3 acres, consisting primarily of oak-bay woodland/forest (59 percent) and California annual grassland (35 percent). The vegetation management goal in this area is to promote pallid manzanita by pruning trees and other plants near pallid manzanita plants. Hand labor would be used in areas of pallid manzanita along with other measures described in the *Conservation Measures* section.

Temescal Regional Recreation Area

Interconnected actions in Temescal Regional Recreation Area would be implemented within areas totaling 1.5 acres and consisting of developed/disturbed/landscaped (60 percent) and oak-bay woodland/forest (40 percent). The primary vegetation management goal is to create defensible space around Beach House. Hand labor would likely be used, but all treatment methods (except prescribed burns) are proposed.

Tilden Regional Park

Interconnected actions in Tilden Regional Park would be implemented within areas totaling 414.3 acres, consisting primarily of eucalyptus forest/plantation (58 percent), oak-bay woodland/forest (15 percent), and coniferous forest/plantation (6 percent). Vegetation management activities would include removing forest litter, dead bark, small diameter trees and

branches, and understory shrubs. Eucalyptus would be thinned to approximately 25-foot spacing, selecting for removal those eucalyptus around developed oak-bay woodlands. Pines and other coniferous trees would be removed or pruned in some areas. Invasive species would be removed and controlled. All treatment methods are possible, including prescribed burns in some areas. In areas where pallid manzanita occurs, trees and other plants near pallid manzanita plants would be pruned using hand labor, and other measures described in the *Conservation Measures* section would be implemented.

Wildcat Canyon Regional Park

Interconnected actions in Wildcat Canyon Regional Park would be implemented within areas totaling 56.6 acres, consisting primarily of eucalyptus forest/plantation (47 percent) and oak-bay woodland/forest (22 percent). Vegetation management activities would include thinning eucalyptus trees in patches to promote native grasses and scrub, removal of understory shrubs in some areas, removal of all decadent or hazardous pines, and removal of all large or leaning eucalyptus near homes. All treatment methods are possible, including prescribed burns in some areas.

Conservation Measures

To avoid and minimize the effects of the proposed project on the California red-legged frog, Alameda whipsnake, and pallid manzanita, the applicants would implement the conservation measures summarized below during vegetation management and follow-up maintenance activities. The conservation measures are organized in the following order: (1) general BMPs; (2) MMPs; (3) measures specific to herbicide application; (4) measures related to biological monitors; and (5) species specific measures.

BMPs

Standard BMPs would be implemented during operations to avoid and minimize adverse effects on the California red-legged frog, Alameda whipsnake, pallid manzanita, and biological resources. Species-specific BMPs for the protection of special status species are discussed in this section. These include guidelines for herbicide use developed by the CDPR and, where applicable, restrictions imposed by the injunction issued on October 20, 2006 by the U.S. District Court for the Northern District of California for the protection of the California red-legged frog (http://www.cdpr.ca.gov/docs/endspec/rl_frog/index.htm).

Standard BMPs include, but are not limited to:

1. The applicants would use existing strategic fire roads to the maximum extent possible. However, some temporary access routes and skid trails would be needed and would be anticipated to return to existing conditions within one year. The access routes would avoid scrub habitat, primary constituent elements for the designated critical habitat of the Alameda whipsnake, and stream and riparian habitats. New skid trails would be on firm, well-drained soils, and grades would typically be less than 15 percent. Where steep grades are unavoidable, grade breaking techniques and soil-stabilization practices would

be implemented. Temporary access routes may be constructed to extract downed materials. Detailed locations of skid directions and skid landings are available only for EPRPD's Claremont Canyon treatment area. Most of the work in other park areas would be conducted from existing roads and access points.

2. All material stockpiling and staging areas would be located within designated disturbed/developed areas that are outside of sensitive habitat areas as determined by the Service- and/or NMFS-approved biological monitor(s) and/or the Service/NMFS.
3. Project-related vehicles would observe a 15 mile-per-hour speed limit in all project areas, except on City or County roads, and State and Federal highways. Off-road traffic outside of designated project areas would be prohibited.
4. To avoid and/or minimize attracting predators to the site, all food-related trash items, such as wrappers, cans, bottles, and food scraps would be disposed of in a securely covered container. These containers would be emptied, and debris removed from the project site at the end of each working day.
5. The spread or introduction of exotic plant species would be reduced by minimizing soil disturbance to areas during and following fuel reduction treatments. Additionally, each area would be inspected for evidence of severe erosion as a result of vegetation management. If severe erosion is occurring at a site, only native plant seeds or stock shall be used for erosion control, unless otherwise approved by the Service. If necessary, fencing, signs, maintenance, access control, jute fabric, sediment traps, mulch, straw wattles (without plastic monofilament netting), vegetation management, exotic species control, or any other commonly used erosion control technique may be used to promote the ecological health of the sites.
6. BMPs, as identified by the San Francisco Bay Regional Water Quality Control Board, would be implemented to control erosion during and after vegetation removal. Erosion control BMPs would include, but are not limited to:
 - a. Leaving tree stumps and/or root systems in place until vegetation becomes re-established in logged areas.
 - b. Installing storm drain protection prior to vegetation management for project sites near storm drains.
 - c. Placing a deep bed of chips around tree stumps to allow mechanical skidders to travel above the chip bed.
 - d. Using chipped biomass, whole boles retained behind stumps, to create sediment traps roughly following the slope contours.

- e. Avoiding operation of heavy equipment on slopes steeper than 35 percent, and developing specific measures to minimize effects of erosion if such areas are unavoidable.
 - f. Stabilizing all construction entrances and exits to control erosion and sediment discharges from the sites.
 - g. Cleaning and maintaining streets and roads in such a manner as to prevent unauthorized non-stormwater discharges from reaching surface water or municipal separate stormwater sewer system (MS4) drainage systems.
 - h. Selecting mechanical treatments according to a site's topography, access, vegetation type, and potential for environmental impacts.
7. Vehicle and heavy equipment refueling and maintenance would only be permitted in designated disturbed/developed areas where accidental spills can be immediately contained. All project-related heavy equipment shall be regularly maintained to avoid fluid leaks (*e.g.*, gasoline, diesel fuel, hydraulic fluid). All leaking fluid shall be stopped or captured in a container until such time that the equipment can be immediately moved off-site and repaired. Storage of hazardous materials shall not occur within 500 feet of any pond or creek drainage. A plan shall be prepared for immediate containment and clean-up of hazardous material spills within or adjacent to each site. Further water quality BMPs include, but are not limited to:
- a. Avoiding crossing drainage areas with running or standing water with mechanical equipment while water is present.
 - b. Complying with National Pollutant Discharge Elimination System (NPDES) stormwater permitting requirements and preparing Stormwater Pollution Prevention Plans (SWPPP).
 - c. Applying herbicide to tree stumps and re-sprouts by hand during dry weather and low wind conditions.
 - d. Using hand-fellers for trees within 50 feet of a drainage channel; these trees would be felled perpendicular to the ephemeral drainage, and processing would be done by a skidder, if the skidder could safely handle stems at a 50-foot distance from drainage, otherwise, the trees would be lopped and scattered by hand fellers.
 - e. Locating landings to accommodate skidding distances of up to 1,000 feet; for landings near streams, residue piles, *i.e.* sawdust, field chipping, residue, etc., will be placed away from drainages where runoff may wash residue into streams or wetlands.

- f. Avoiding skidding across dry or running streams; when that is not possible, temporary crossings will be used during the dry season while ephemeral creeks are dry.
- g. Taking all necessary safeguards to prevent sedimentation into watercourses during all phases of construction.
- h. Avoiding operating mechanical equipment within the stream buffer zone and where such impact is unavoidable, employing standard BMPs to mitigate disturbance.

MMPs

MMPs have been drafted by each applicant for their treatment areas in coordination with permitting agencies, including (but not limited to) the Service, U.S. Army Corps of Engineers, San Francisco Bay Regional Water Quality Control Board, and CDFW (UCB 2013, Oakland 2013, EBRPD 2013). The purpose for the MMP is to provide treatment performance guidelines and resource protection for each vegetation type in order to achieve the goals and objectives that are critical to reducing potential hazards from wildfires in the project area. The MMPs would ensure that the implementation of the treatments would continue to reduce wildfire risk and promote species habitat by restoring native vegetation communities where applicable.

The MMPs would rely on recruitment of native vegetation into the areas where non-native trees have been removed from the overstory canopy. Hydroseeding may be used as an erosion control BMP but is not intended to serve as a floral introduction for the purpose of revegetation. Rather, hydroseeding would be used as an adaptive management technique in areas at risk of surface erosion from surface rainwater runoff or in some cases, in areas that fail to establish native vegetative cover under natural recruitment. Seed sources of native grasses, shrubs, and trees are regionally abundant and would be used to assist in the recovery of the areas towards the proposed vegetative goals.

The MMPs would include monitoring of vegetation management goals through assessing the succession of vegetation within each habitat type. Monitoring would be conducted annually, and the results would be addressed in an annual report, submitted to appropriate agencies, including the Service, by March 31 of each year. The reports would include a summary of the maintenance and monitoring activities, recovery, percent cover of federally listed species habitat, measures implemented at each site to aid in the recovery of the habitat towards the vegetation management goal outlined in the plan, and a summary of the proposed follow-up action for the upcoming year. The report would also include incidental observations of wildlife, comparative photos of the sites, assessment of vegetation criteria attained, and suggestions for future adaptive management. Photographic documentation would be conducted before and after implementation using established photo point stations and camera angles.

Service-approved habitat performance standards for the 10-year monitoring period will be developed by each applicant prior to project implementation. During the 10-year project monitoring period, should success criteria not be achieved at the projected rate, adaptive

management practices and additional measures would be implemented to improve progress towards the vegetation management goals. This could include more frequent maintenance projects, new methods or techniques for control, and higher performance objectives for successive years. The adaptive actions would be determined annually through an analysis of data collection and review of photographic documentation. Treatment areas may be assessed individually, and adaptive measures would be implemented to move towards attainment of the vegetation management goals identified for each treatment area. Non-native invasive control and native species revegetation success criteria are provided in each applicant's MMP along with measures to be taken if criteria are not met, and a discussion of the adaptive management process (UCB 2013, Oakland 2013, EBRPD 2013).

Herbicide Application

All rules, regulations, best practices and restrictions as imposed by the CDPR would be followed during herbicide application (<http://www.cdpr.ca.gov/>). In addition, all instructions, restrictions, use limitations, and disposal/spill remediation methods described on each herbicide label shall be followed. Also to be implemented, where applicable, are the specific restrictions imposed by the injunction issued on October 20, 2006, by the U.S. District Court for the Northern District of California for the protection of the California red-legged frog and associated habitats (http://www.cdpr.ca.gov/docs/endspec/rl_frog/index.htm).

The recommendation of a 60-foot no-use zone is the single exception to the general pesticide application guidelines presented by the CDPR referenced above. CDPR recommends implementation of a 100-foot no-use zone to protect surface waters. The recommended 60-foot no-use zone is based on information obtained from the website http://www.cdpr.ca.gov/docs/endspec/rl_frog/index.htm. This no-use zone was imposed over certain areas by the U.S. District Court for the Northern District of California. Some of these no-use zones intersect with the proposed project area and are intended for the protection of the California red-legged frog. California red-legged frog habitat may occur throughout the project area, and therefore, it is reasonable to apply similar conditions on herbicide application throughout the proposed project area. The implementation of the 60-foot no-use zone required for protection of the California red-legged frog is believed to be adequately protective of all aquatic receptors that may occur in project area surface waters, including special status species (*e.g.*, salmonid fish) and aquatic prey items important for the survival of special status species.

The key conditions related to herbicide application include:

1. A 60-foot buffer zone adjacent to standing or flowing water would be established within which there would be no foliar application of herbicides. Within the 60-foot buffer, as well as areas greater than 60 feet from surface waters but where there is potential for herbicides to reach aquatic habitats via runoff or drift, only aquatic-safe formulations of herbicides would be used (*e.g.*, Garlon 3A), and the more toxic Garlon 4 Ultra would not be used.
2. Herbicides will be applied directly to stumps, and foliar application will not be used in any areas subject to potential drift to surface water bodies. Stump

application of all herbicides would be conducted by a State of California Qualified Applicator or by staff under their supervision. Within the 60-foot stream buffer, cut stump application of approved herbicides would be applied within 60 minutes of felling. Although herbicide transport to surface waters is unexpected with the implementation of BMPs, the more toxic Garlon 4 Ultra herbicide will not be used in areas within 60 feet of standing or flowing water or with potential for runoff or drift to surface water bodies. In these areas only aquatic-safe formulations of herbicides would be used (*e.g.*, Garlon 3A).

3. Herbicides will not be applied within 24 hours of predicted rain events (40 percent chance or greater for rainfall) to reduce the potential for runoff of herbicides into surface water bodies.
4. Foliar application of herbicides or other spray application methods will not be applied when wind speeds exceed 10 miles per hour to reduce likelihood of drift into surface water bodies.
5. Additional conditions for the protection of pallid manzanita include conducting surveys for plants prior to herbicide application; the establishment of clearly marked protective buffers sufficient in size to ensure pallid manzanita plants are protected from spraying and spraying drift (at least 32.8 feet around each plant); and the avoidance of use of a fine spray, which is more prone to drift and is more toxic than larger droplets at low application rates.
6. Chemical treatment shall be conducted in accordance with a Service- and NMFS-approved treatment plan.
7. Contractors must have all necessary licensing by CDPR for herbicide application. Use of herbicides shall be consistent with label instructions and Material Safety Data Sheets documents shall be maintained.
8. Integrated Pest Management Approaches: Applicants would also use non-chemical methods such as hand pulling or chip deposition on seed stock to prevent seedling germination, thus reducing the need for herbicides.
9. A liquid herbicide would be applied to each cut tree stump within 60 minutes of felling; a typical tree requires 1 to 2 ounces of diluted solution, which must be applied to the cambium layer, directly beneath the bark. The cut stump formulation may be diluted or adjusted when, at the judgment of the project manager, the rate of material used may exceed the amount allowable per acre per year, by U.S. Environmental Protection Agency regulations.
10. Drift from foliar application will be avoided by implementing measures, such as avoiding windy days (*e.g.*, avoid spraying when wind speeds are more than 10 miles per hour) and using proper spraying techniques, and following all CDPR regulations. Herbicide would only be applied by hand during dry weather and low wind conditions, and a back sprayer

would be used to selectively apply herbicide to the young foliage of re-sprouted eucalyptus.

11. Herbicide applications would be rotated for best impact during the growing season. The lowest effective concentration needed for effectiveness would be used, typically specified as a range on the product label. Note that concentration is dependent on method of application: cut stump mixtures are more highly concentrated than foliar mixtures.
12. No herbicides would be intentionally applied to non-target species.
13. All containers would be labeled according to CDPR regulations.
14. All containers would be disposed of according to CDPR regulations.
15. All materials would be stored according to CDPR regulations.
16. All materials used would be recorded and reported per CDPR regulations.
17. Because the restrictions on use are so numerous and species/application dependent, the label instructions or CDPR website would be consulted for a complete (and evolving) set of use guidelines and restrictions.
18. The areas chemically treated would include areas up to the ordinary high water mark of ephemeral streams. Foliar application of herbicides would not occur within 60 feet of standing or flowing water. Only cut stump application of Service-approved herbicides (*e.g.*, Garlon 3A, Stalker, and Roundup, but not Garlon 4 Ultra) would occur within 60 feet of standing or flowing water.

Service-Approved Biological Monitor

As part of the effort to avoid and minimize potential effects to federally listed species and their habitats, a Service-approved biological monitor would be made available to be onsite and/or on-call during project implementation activities. The Service-approved biological monitor would adhere to the following measures:

1. At least 20 working days prior to the date that the project is initiated in the field, the applicant or project proponent shall submit the name(s) and credentials of biological monitors who would serve as the onsite project biological monitors to the Service for review and approval. The biological monitor(s) shall have demonstrated knowledge of the biology, ecology, and field experience identifying Alameda whipsnakes and California red-legged frogs, as well as botanical knowledge in regards to the pallid manzanita. No project activities shall begin until the applicant or project proponents have received written approval from the Service that the biological monitor(s) are qualified to conduct the work. Information included in a request for authorization as a Service-approved biological monitor should include, at a minimum: (1) relevant education; (2) relevant training on species identification, survey techniques, handling individuals of

different age classes, and handling of different life stages by a permitted biologist or recognized species expert authorized for such activities by the Service; (3) a summary of field experience conducting requested activities (to include project/research information); (4) a summary of biological opinions under which they were authorized to work with the listed species and at what level (such as construction monitoring versus handling), including the names and qualifications of persons under which the work was supervised as well as the amount of work experience on the actual project; (5) a list of Federal Recovery Permits [10(a)1(A)] held or under which are authorized to work with the species (to include permit number, authorized activities, and name of permit holder); and (6) any relevant professional references with contact information. The Service will provide written approval within 10 business days of receipt of the provided information.

2. The Service-approved biological monitor(s) shall be onsite during implementation of project activities that may result in take of federally listed species. Additionally, the biological monitor would be given the authority through communication with the project manager or their designee to stop any work that may result in take of the California red-legged frog, Alameda whipsnake, and/or other listed species. If the Service-approved biological monitor exercises this authority, the Service shall be notified by telephone and electronic mail within one (1) working day. The Service contact is the Coast Bay/Forest Foothills Division Chief, Endangered Species Program, at the Sacramento Fish and Wildlife Office at telephone (916) 414-6600.
3. The Service-approved biological monitor(s) would be onsite to monitor the initial vegetation removal and/or ground disturbance activities. The Service-approved biological monitor(s) shall perform a clearance survey for listed species immediately prior to the initial ground disturbance.
4. An employee education program on the federally listed species shall be completed prior to the date of initial groundbreaking or vegetation clearing (whichever date comes first) at the project. The program shall consist of a brief presentation by the Service-approved biological monitor(s) to explain threatened and endangered species issues to all contractors, their employees, and agency personnel involved in the implementation of the project. The program shall include a description of the federally listed species and their habitat needs; an explanation of the status of these species and their protection under the Act; associated consequences of non-compliance with this opinion; and a description of the measures being taken to reduce effects to these species during project implementation.
5. Based on training from the biological monitor, all contractors, their employees, and agency personnel involved in the implementation of the project will check for the presence of Alameda whipsnakes or California red-legged frogs next to stationary vehicles, prior to operating the vehicles. If found, the biological monitor will be contacted prior to operating the vehicle. The biological monitor will contact the Service immediately if an Alameda whipsnake or California red-legged frog is found, to determine necessary steps.

6. If the Service-approved biological monitor(s) observed either the Alameda whipsnake or California red-legged frog in the work area, they will stop work and move the Alameda whipsnake and California red-legged frog to a safe location within walking distance of the location where it was found; or if possible, the Alameda whipsnake or California red-legged frog would be allowed to disperse on its own. The individual animal would be monitored by the Service-approved biological monitor until it has been determined that it is not imperiled by predators or other dangers. Neither of these two listed species shall be moved to laboratories, holding facilities, or other facilities without the written authorization of the Service.
7. The Service-approved biological monitor(s) may use nets or their bare hands to capture California red-legged frogs at the project site. The Service-approved biological monitors(s) shall not use soaps, oils, creams, lotions, repellents, or solvents of any sort on their hands within two hours before and during periods when they are capturing and relocating the California red-legged frog or Alameda whipsnake. The Service-approved biological monitors(s) shall limit the duration of handling and captivity of individual California red-legged frogs and Alameda whipsnakes. The Service-approved biological monitor will minimize the potential for infecting California red-legged frogs with amphibian diseases when capturing and relocating these amphibians by implementing the measures in *The Declining Amphibian Task Force Fieldwork Code of Practice* (available at the Ventura Fish and Wildlife Office's website at http://www.fws.gov/ventura/species_information/protocols_guidelines/docs/DAFTA.pdf). While in captivity, individuals of the California red-legged frog shall be kept in a cool, moist, aerated environment, such as a bucket containing a damp sponge. Containers used for holding or transporting adults of the amphibian shall not contain any standing water. The Alameda whipsnake shall be placed in a pillowcase or similar container for transport to the release site.
8. If the Service-approved biological monitor exercises stop work authority, the Service would be notified by telephone and electronic mail within one working day. The Service-approved monitor shall be the contact for any employee or contractor who might inadvertently kill or injure a California red-legged frog and/or an Alameda whipsnake; or anyone who finds a dead, injured, or entrapped individual of these two listed species. The Service-approved biological monitor shall possess a working cellular telephone whose number would be provided to the Service.
9. Sensitive habitat areas, including Alameda whipsnake and California red-legged frog habitat, known populations of pallid manzanita, and wetlands shall be clearly indicated on the project plans. These plans would be submitted to the Service for review and approval prior to project implementation.
10. Following approval of plans identifying sensitive habitat by the Service, sensitive areas shall be delineated with high visibility, temporary, orange-colored fence at least four feet in height, flagging, or other barriers. These areas will be avoided under supervision of the biological monitor.

11. During work activities, ground burrows, holes, and tunnels that provide shelter for small animals will be avoided under supervision of the biological monitor.

Species-Specific Work Windows and Additional Measures

In coordination with the Service, work windows have been developed during which the proposed project would be implemented to avoid effects to the California red-legged frog and Alameda whipsnake. Minor vegetation removal activities using hand labor that are unlikely to injure California red-legged frogs or Alameda whipsnakes can be implemented during the course of the year with proper BMPs in place. Major ground disturbing activities and use of heavy machinery require consideration of appropriate work windows for each species, resulting in an open work window to occur between August 1 and November 30. This time frame would also address the work windows for avoiding nesting migratory birds (February-July), hibernating Alameda whipsnakes (November 1 - March 31), and would avoid the wet season for the California red-legged frog (October 15 – May 15). Although November 1 is typically the start of the wet season, the potential for injuring dispersing California red-legged frogs will be minimized by installing exclusion fencing prior to the start of the wet season and avoiding work in dispersal habitat on days with a 40 percent or greater chance for rainfall. Additionally, because Alameda whipsnakes begin hibernating in November, any activities that may crush burrows will be avoided by not allowing the use of heavy equipment within or near suitable Alameda whipsnake habitat from November 1 through March 31. Additional considerations for species and work windows are provided in the subsections below.

Additional Measures Specific to California Red-Legged Frog

1. To the extent practicable, treatment activities involving heavy equipment and or significant ground disturbance shall not occur between April 15 and August 1 within any areas determined to be suitable California red-legged frog breeding habitat (aquatic habitat plus a 60-foot linear buffer) or where the species is deemed present by the biological monitor, to avoid potential disturbance to breeding California red-legged frogs.
2. In areas where herbicides will be applied within 60 feet of the Ordinary High Water Mark of areas determined to be suitable California red-legged frog breeding habitat, only aquatic-safe formulations of herbicides (*e.g.*, Garlon 3A) will be used, and they will be applied only by brushing directly onto stumps. Herbicide use in these areas will be limited to August 1 to October 31 to avoid potential impacts to California red-legged frog tadpoles, egg masses, and dispersing adults. No foliar application of herbicides would occur within 60 feet of breeding habitat for the California red-legged frog or in any areas subject to potential drift to breeding habitat for the California red-legged frog. Species-specific BMPs for the protection of California red-legged frog and associated habitats are also discussed in Appendix E of the Biological Assessment (FEMA 2012), and these are based on application restrictions imposed by the injunction issued on October 20, 2006 by the U.S. District Court for the Northern District of California.
3. Exclusion fencing: In areas with potential or known occurrences of the California red-legged frog, exclusion fencing will be installed (prior to the start of the wet season) to

prevent the California red-legged frogs from entering an active vegetation treatment area. The exclusion fencing would consist of geotextile fabric with one-way exit funnels every 100 feet. The geotextile fabric would be ERTEC-E or equivalent as approved by the Service prior to installation. The lower portion of the fence would be buried to a depth of 4 to 6 inches, and the top of the fence would extend at least 36 inches above ground level. Shrubs within approximately 3 feet of the outside of the fence would be trimmed to prevent access via the shrubs over the fence. The fence would be secured to metal posts and/or wooden stakes to ensure it remains upright and does not fall over. Posts/stakes would be placed on the inner side of the fence to ensure Alameda whipsnakes do not enter the work site by climbing the posts/stakes. A Service-approved biological monitor would be onsite during installation of the fencing to relocate any listed species to outside the construction area. The biological monitor will survey the work area daily to ensure the fencing is secure and that no listed species are trapped inside or along the outside perimeter. The fencing would be continuously maintained until all construction activities are completed. After construction has been completed, the exclusion fencing would be removed.

Additional Measures Specific to Alameda Whipsnake

1. Treatment activities involving heavy equipment and or significant ground disturbance within any areas determined to be suitable Alameda whipsnake habitat would not occur between November 1 and March 31 to avoid potential disturbance to hibernating Alameda whipsnakes. Treatments involving hand crews, light mechanical equipment, or prescribed burning can be implemented during the course of the year with proper BMPs in place.
2. Exclusion fencing would be installed around all areas where heavy equipment is operated, including landing areas, access roads, and staging areas. Following project implementation, fencing will be removed. See details above on exclusion fencing.
3. Skid trails would be sited a minimum of 10 feet away from Alameda whipsnake core scrub habitat and rock outcrops.
4. Rock outcroppings and native shrubs within 50 feet of rock outcrops would be maintained and protected from vehicles using orange construction fencing.
5. Wood chips and landings would not be placed within 50 feet of rock outcrops.
6. EBRPD will develop, implement, and fund a Service-approved study of the effects of the proposed treatment activities (*e.g.*, shrub thinning) on the Alameda whipsnake.
7. EBRPD will compensate at a 2:1 ratio for the permanent loss of 193.1 acres of core scrub habitat for the Alameda whipsnake by purchasing, preserving, and managing in perpetuity under a conservation easement at least 386.2 acres of suitable core scrub habitat for the Alameda whipsnake at Service-approved location(s) within its designated critical habitat. The preserved habitat will be managed for the benefit of the Alameda

whipsnake under a Service-approved compensation plan with a long-term endowment to provide funding for management of these areas in perpetuity. Currently, EBRPD is considering purchasing and preserving in perpetuity under a conservation easement high quality core scrub habitat within an important dispersal corridor within Alameda whipsnake designated critical habitat Unit 6.

Avoidance Measures to be Implemented During Pile Burning

The following is a list of BMPs for pile burning that would be taken when burning piles at all sites with potential Alameda whipsnake habitat that are not isolated and are connected to known sites or quality sites with rock outcroppings:

1. Check for burrows before building piles. Avoid placing piles on large rodent burrows;
2. Light the pile from one end (generally the uphill side on slopes) to allow Alameda whipsnakes to escape, rather than lighting the whole pile at once;
3. Limit material in the pile to 4-inch diameter or less to limit heat penetration into the ground and provide short escape distance;
4. Pile burning would not occur within suitable Alameda whipsnake habitat during the hibernation season (November 1 – March 31).
5. No heavy equipment that could collapse burrows within suitable habitat for potential Alameda whipsnake would be used during the hibernation period (November 1 – March 31).

Additional Measures Specific to Pallid Manzanita

1. Prior to conducting activities within RTAs that support *Arctostaphylos* species, a Service-approved biologist familiar with identifying *Arctostaphylos* species and their hybrids, will train all project staff regarding habitat sensitivity, identification of pallid manzanitas and their hybrids, and these minimization, avoidance, and compensation measures.
2. No *Arctostaphylos* species, within any project area, will be removed without verification from the Service-approved biologist that the *Arctostaphylos* species in question is not a pallid manzanita.
3. No living pallid manzanitas, as determined by the Service-approved biologist and the presence of any photosynthesizing leaves, will be removed or damaged.
4. No pallid manzanita branches supporting photosynthesizing leaves will be cut, removed, or damaged.
5. All shrubs and trees that are not a component of the maritime chaparral vegetation type within 20 feet of pallid manzanita plants and all shrubs or trees that are excessively

shading pallid manzanita plants (*i.e.*, pines, acacias, eucalyptus, oak, bay, madrone, etc.) will be cut and treated to reduce competition with pallid manzanitas and to reduce fuel loads.

6. Prior to any fuel reduction activities within pallid manzanita stands, the stand will be surveyed for mature and seedling (less than five years of age) pallid manzanitas, except within 25 feet of where *Phytophthora cinnamomi* has been identified. All adults and seedlings will be flagged with high visibility flagging and avoided.
7. Herbicide use within 300 feet of pallid manzanitas will be applied through direct application to the stump only.
8. Goat grazing is prohibited within treatment areas containing pallid manzanitas.
9. EBRPD Pallid Manzanita Management Plan: Prior to implementing any activity within any RTA containing pallid manzanitas, EBRPD will develop a Service-approved long-term adaptive management plan for all stands of pallid manzanitas that occur on EBRPD lands (nearly 75 percent of pallid manzanita plants range-wide occur on EBRPD lands and thus will be covered under this management plan) (ESA 2013). The plan will be designed to ensure the long-term persistence of the pallid manzanita stands and to guide future management actions in and around this species including: (1) managing and expanding existing pallid manzanita stands in such a way as to maximize individual plant health, maintain species genetic integrity and diversity, and promote stand regeneration in perpetuity; (2) establishing or restoring additional pallid manzanita stands in areas that are not subject to fuel management or other incompatible uses; and (3) controlling the spread of the fungal pathogen, *P. cinnamomi*, within and between pallid manzanita stands. The general recommendations in the Draft EBRPD Pallid Manzanita Management Plan (ESA 2013) include: (1) updating and monitoring the status of pallid manzanita populations; (2) seed banking for all naturally occurring populations of pallid manzanita, focusing on representative genetic diversity; (3) recreational user and neighborhood education and outreach to minimize the spread of *P. cinnamomi*; (4) removal of non-native vegetation and other native vegetation that threaten to outcompete the pallid manzanita; (5) conducting studies and implementing measures to enhance germination of pallid manzanitas; (6) outplanting of propagated pallid manzanita plants and/or direct seeding; (7) conducting prescribed fire; and (8) controlling *P. cinnamomi*.

To reduce the spread of *P. cinnamomi* within the RTAs containing pallid manzanita plants, the following minimization and avoidance measures will be implemented:

1. Each year or prior to any wildfire hazard reduction activities within a watershed supporting pallid manzanitas, an appropriately timed survey of the site to be treated will be conducted by a qualified person approved by the Service to identify areas infected with *P. cinnamomi*.
2. Work within 100 feet of any area known to be infected with *P. cinnamomi* will be scheduled to occur after all other areas within 500 feet of the infection have been treated.

3. A specific ingress/egress route, that minimizes the potential spread of *P. cinnamomi*, will be identified by a Service-approved biologist when working within watersheds that support pallid manzanitas.
4. A wash station will be established at the ingress/egress location. Prior to entering or exiting the ingress/egress location, any potentially contaminated material will be removed from all boots, hand tools, clothing, and other equipment, then these items will be disinfected using 70 percent isopropanol (rubbing alcohol) or another Service-approved substance known to disinfect *P. cinnamomi* contaminated equipment.
5. All work within 300 feet or upslope of pallid manzanitas will be conducted using hand-tools only.
6. Vehicles are prohibited off of service-roads within 200 feet of pallid manzanitas.
7. No treatment activities, except for pile burning, will be conducted during the wet season (October 15 to May 15) within RTAs containing pallid manzanitas.
8. Pile burning will not occur within 100 feet of any area infected with *P. cinnamomi* during the wet season (October 15 to May 15).
9. Within watersheds that support pallid manzanitas, the transportation of wood, slash, and other debris will only be conducted under the guidance of a Service-approved biologist and in a manner that minimizes the potential spread of *P. cinnamomi*.
10. Prior to conducting any activities within watersheds that support pallid manzanitas, all personnel will attend an environmental awareness training session designed to inform workers about the long-term effects of *P. cinnamomi*, how it is spread, and these minimization and avoidance measures.

Action Area

The action area is defined in 50 CFR § 402.02, as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” For the purposes of the effects assessment, the action area encompasses all of the proposed project activities and interrelated and interdependent activities that may result in direct or indirect effects to federally listed species and designated critical habitat. In addition to the proposed project funded through the four FEMA grants identified in Table 1, FEMA has agreed to include in this formal consultation interconnected actions in the action area (Table 2) that will be implemented as part of EBRPD’s WHRRMP (LSA Associates, Inc. 2009), a 10-year monitoring plan, though Federal funding from FEMA will only be provided at this time to support a portion of the WHRRMP.

The effective action area for the proposed project is about 2,872 acres inclusive of the proposed project funded through the four FEMA grants (Table 1) and the interconnected EBRPD WHRRMP parcels (Table 2), but excluding the 22.2-acre Miller/Knox Regional Shoreline and

the 478.4-acre Point Pinole Regional Recreation Area project areas which are outside of the range of the California red-legged frog, Alameda whipsnake, and pallid manzanita. For the purposes of the effects assessment, the action area for the proposed project encompasses all areas that would be directly or indirectly affected from the implementation of the proposed project (project areas as defined in Tables 1 and 2 inclusive of access roads, staging and debris stockpiling sites), and the nearby lands that would be affected by the interconnected actions proposed in the WHRRMP. The action area also includes all streams and ponds within 500 feet downstream of proposed vegetation treatment areas that could be indirectly affected by increased turbidity and sedimentation. The action area also includes all pallid manzanita plants that occur on EBRPD lands (nearly 75 percent of all pallid manzanita plants range-wide) that will be covered under the Draft EBRPD Pallid Manzanita Management Plan (ESA 2013).

Analytical Framework for the Jeopardy Analysis

In accordance with policy and regulation, the jeopardy analyses in this biological opinion relies on four components: (1) the Status of the Species, which evaluates the range-wide conditions of the California red-legged frog, Alameda whipsnake, and pallid manzanita, the factors responsible for that condition, and their survival and recovery needs; (2) the Environmental Baseline, which evaluates the condition of these listed species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of these listed species; (3) the Effects of the Proposed Project, which determines the direct and indirect effects of the proposed Federal action and the effects of any interrelated or interdependent activities on the California red-legged frog, Alameda whipsnake, and pallid manzanita; and (4) Cumulative Effects, which evaluates the effects of future, non-Federal activities in the action area on these species.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the California red-legged frog's, Alameda whipsnake's, and pallid manzanita's current status, taking into account any cumulative effects, to determine if implementation of the proposed project is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of these listed species in the wild.

The jeopardy analyses in this biological opinion places an emphasis on consideration of the range-wide survival and recovery needs of the California red-legged frog, Alameda whipsnake, and pallid manzanita, and the role of the action area in the survival and recovery of the California red-legged frog, Alameda whipsnake, and pallid manzanita as the context for evaluating the significance of the effects of the proposed Federal action, taken together with cumulative effects, for purposes of making the jeopardy determination.

Adverse Modification Determination

This biological opinion does not rely on the regulatory definition of "destruction or adverse modification" of critical habitat at 50 CFR 402.02. Instead, we have relied upon the statutory provisions of the Act to complete the following analysis with respect to critical habitat.

In accordance with policy and regulation, the adverse modification analysis in this biological opinion relies on four components: (1) the Status of Critical Habitat, which evaluates the range-wide condition of critical habitat for the Alameda whipsnake in terms of primary constituent elements (PCE)s, the factors responsible for that condition, and the intended recovery function of the critical habitat at the provincial and range-wide scale; (2) the Environmental Baseline, which evaluates the condition of the critical habitat in the action area, the factors responsible for that condition, and the recovery role of the critical habitat in the action area; (3) the of the Proposed Project, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the PCEs and how that will influence the recovery role of affected critical habitat units and; (4) Cumulative Effects which evaluates the effects of future, non-Federal activities in the action area on the PCEs and how that will influence the recovery role of affected critical habitat units.

For purposes of the adverse modification determination, the effects of the proposed Federal action on the Alameda whipsnake critical habitat are evaluated in the context of the range-wide condition of the critical habitat at the provincial and range-wide scales, taking into account any cumulative effects, to determine if the critical habitat range-wide would remain functional (or would retain the current ability for the PCEs to be functionally established in areas of currently unsuitable but capable habitat) to serve its intended recovery role for the Alameda whipsnake.

The analysis in this biological opinion places an emphasis on using the intended range-wide recovery function of Alameda whipsnake critical habitat and the role of the action area relative to that intended function as the context for evaluating the significance of the effects of the proposed Federal action, taken together with cumulative effects, for purposes of making the adverse modification determination.

Status of the Species

California Red-Legged Frog

Listing Status: The California red-legged frog was listed as a threatened species on May 23, 1996 (61 FR 25813) (Service 1996). Critical habitat was designated for this species on April 13, 2006 (71 FR 19244) (Service 2006a) and revisions to the critical habitat designation were published on March 17, 2010 (75 FR 12816) (Service 2010a). At this time, the Service recognized the taxonomic change from *Rana aurora draytonii* to *Rana draytonii* (Shaffer *et al.* 2010). A Recovery Plan was published for the California red-legged frog on September 12, 2002 (Service 2002a).

Description: The California red-legged frog is the largest native frog in the western United States (Wright and Wright 1949), ranging from 1.5 to 5.1 inches in length (Stebbins 2003). The abdomen and hind legs of adults are largely red, while the back is characterized by small black flecks and larger irregular dark blotches with indistinct outlines on a brown, gray, olive, or reddish background color. Dorsal spots usually have light centers (Stebbins 2003), and dorsolateral folds are prominent on the back. Larvae (tadpoles) range from 0.6 to 3.1 inches in length, and the background color of the body is dark brown and yellow with darker spots (Storer 1925).

Distribution: The historic range of the California red-legged frog extended from the vicinity of Elk Creek in Mendocino County, California, along the coast inland to the vicinity of Redding in Shasta County, California, and southward to northwestern Baja California, Mexico (Fellers 2005; Jennings and Hayes 1985; Hayes and Krempels 1986). The species was historically documented in 46 counties but the taxa now remains in 238 streams or drainages within 23 counties, representing a loss of 70 percent of its former range (Service 2002a). California red-legged frogs are still locally abundant within portions of the San Francisco Bay Area and the Central California Coast. Isolated populations have been documented in the Sierra Nevada, northern Coast, and northern Transverse Ranges. The species is believed to be extirpated from the southern Transverse and Peninsular ranges, but is still present in Baja California, Mexico (CDFW 2012).

Status and Natural History: California red-legged frogs predominately inhabit permanent water sources such as streams, lakes, marshes, natural and manmade ponds, and ephemeral drainages in valley bottoms and foothills up to 4,921 feet in elevation (Jennings and Hayes 1994, Bulger *et al.* 2003, Stebbins 2003). However, they also inhabit ephemeral creeks, drainages and ponds with minimal riparian and emergent vegetation. California red-legged frogs breed from November to April, although earlier breeding records have been reported in southern localities. Breeding generally occurs in still or slow-moving water often associated with emergent vegetation, such as cattails, tules or overhanging willows (Storer 1925, Hayes and Jennings 1988). Female frogs deposit egg masses on emergent vegetation so that the egg mass floats on or near the surface of the water (Hayes and Miyamoto 1984).

Habitat includes nearly any area within 1-2 miles of a breeding site that stays moist and cool through the summer including vegetated areas with coyote brush, California blackberry thickets, and root masses associated with willow and California bay trees (Fellers 2005). Sheltering habitat for California red-legged frogs potentially includes all aquatic, riparian, and upland areas within the range of the species and includes any landscape feature that provides cover, such as animal burrows, boulders or rocks, organic debris such as downed trees or logs, and industrial debris. Agricultural features such as drains, watering troughs, spring boxes, abandoned sheds, or hay stacks may also be used. Incised stream channels with portions narrower and depths greater than 18 inches also may provide important summer sheltering habitat. Accessibility to sheltering habitat is essential for the survival of California red-legged frogs within a watershed, and can be a factor limiting frog population numbers and survival.

California red-legged frogs do not have a distinct breeding migration (Fellers 2005). Adults are often associated with permanent bodies of water. Some individuals remain at breeding sites year-round, while others disperse to neighboring water features. Dispersal distances are typically less than 0.5-mile, with a few individuals moving up to 1-2 miles (Fellers 2005). Movements are typically along riparian corridors, but some individuals, especially on rainy nights, move directly from one site to another through normally inhospitable habitats, such as heavily grazed pastures or oak-grassland savannas (Fellers 2005).

In a study of California red-legged frog terrestrial activity in a mesic area of the Santa Cruz Mountains, Bulger *et al.* (2003) categorized terrestrial use as migratory and non-migratory. The latter occurred from one to several days and was associated with precipitation events. Migratory

movements were characterized as the movement between aquatic sites and were most often associated with breeding activities. Bulger *et al.* (2003) reported that non-migrating frogs typically stayed within 200 feet of aquatic habitat 90 percent of the time and were most often associated with dense vegetative cover, i.e., California blackberry, poison oak and coyote brush. Dispersing frogs in northern Santa Cruz County traveled distances from 0.25-mile to more than 2 miles without apparent regard to topography, vegetation type, or riparian corridors (Bulger *et al.* 2003).

In a study of California red-legged frog terrestrial activity in a xeric environment in eastern Contra Costa County, Tatarian (2008) noted that a 57 percent majority of frogs fitted with radio transmitters in the Round Valley study area stayed at their breeding pools, whereas 43 percent moved into adjacent upland habitat or to other aquatic sites. This study reported a peak seasonal terrestrial movement occurring in the fall months associated with the first 0.2-inch of precipitation and tapering off into spring. Upland movement activities ranged from 3 to 233 feet, averaging 80 feet, and were associated with a variety of refugia including grass thatch, crevices, cow hoof prints, ground squirrel burrows at the base of trees or rocks, logs, and under man-made structures; others were associated with upland sites lacking refugia (Tatarian 2008). The majority of terrestrial movements lasted from 1 to 4 days; however, one adult female was reported to remain in upland habitat for 50 days (Tatarian 2008). Upland refugia closer to aquatic sites were used more often and were more commonly associated with areas exhibiting higher object cover, e.g., woody debris, rocks, and vegetative cover. Subterranean cover was not significantly different between occupied upland habitat and non-occupied upland habitat.

California red-legged frogs are often prolific breeders, laying their eggs during or shortly after large rainfall events in late winter and early spring (Hayes and Miyamoto 1984). Egg masses containing 2,000 to 5,000 eggs are attached to vegetation below the surface and hatch after 6 to 14 days (Storer 1925, Jennings and Hayes 1994). In coastal lagoons, the most significant mortality factor in the pre-hatching stage is water salinity (Jennings *et al.* 1992). Eggs exposed to salinity levels greater than 4.5 parts per thousand resulted in 100 percent mortality (Jennings and Hayes 1990). Increased siltation during the breeding season can cause asphyxiation of eggs and small larvae. Larvae undergo metamorphosis 3½ to 7 months following hatching and reach sexual maturity 2 to 3 years of age (Storer 1925; Wright and Wright 1949; Jennings and Hayes 1985, 1990, 1994). Of the various life stages, larvae probably experience the highest mortality rates, with less than 1 percent of eggs laid reaching metamorphosis (Jennings *et al.* 1992). California red-legged frogs may live 8 to 10 years (Jennings *et al.* 1992). Populations can fluctuate from year to year; favorable conditions allow the species to have extremely high rates of reproduction and thus produce large numbers of dispersing young and a concomitant increase in the number of occupied sites. In contrast, the animal may temporarily disappear from an area when conditions are stressful (e.g., during periods of drought, disease, etc.).

The diet of California red-legged frogs is highly variable; changing with the life history stage. The diet of the larval stage has been the least studied and is thought to be similar to that of other ranid frogs, which feed on algae, diatoms, and detritus (Fellers 2005; Kupferberg 1996a, 1996b, 1997). Hayes and Tennant (1985) analyzed the diets of California red-legged frogs from Cañada de la Gaviota in Santa Barbara County during the winter of 1981 and found invertebrates (comprising 42 taxa) to be the most common prey item consumed; however, they speculated that

this was opportunistic and varied based on prey availability. They ascertained that larger frogs consumed larger prey and were recorded to have preyed on Pacific chorus frog, three-spined stickleback and, to a limited extent, California mice, which were abundant at the study site (Hayes and Tennant 1985, Fellers 2005). Although larger vertebrate prey was consumed less frequently, it represented over half of the prey mass eaten by larger frogs suggesting that such prey may play an energetically important role in their diets (Hayes and Tennant 1985). Juvenile and subadult/adult frogs varied in their feeding activity periods; juveniles fed for longer periods throughout the day and night, while subadult/adults fed nocturnally (Hayes and Tennant 1985). Juveniles were significantly less successful at capturing prey and all life history stages exhibited poor prey discrimination, feeding on several inanimate objects that moved through their field of view (Hayes and Tennant 1985).

Recovery Plan: The Recovery Plan for the California red-legged frog identifies eight recovery units (Service 2002a). The establishment of these recovery units is based on the determination that various regional areas of the species' range are essential to its survival and recovery. These recovery units are delineated by major watershed boundaries as defined by U.S. Geological Survey hydrologic units and the limits of its range. The goal of the recovery plan is to protect the long-term viability of all extant populations within each recovery unit. Within each recovery unit, core areas have been delineated and represent contiguous areas of moderate to high California red-legged frog densities that are relatively free of exotic species such as bullfrogs. The goal of designating core areas is to protect metapopulations. Thus when combined with suitable dispersal habitat, will allow for the long term viability within existing populations. This management strategy identified within the Recovery Plan will allow for the recolonization of habitats within and adjacent to core areas that are naturally subjected to periodic localized extinctions, thus assuring the long-term survival and recovery of California red-legged frogs.

Threats: Habitat loss, non-native species introduction, and urban encroachment are the primary factors that have adversely affected the California red-legged frog throughout its range. Several researchers in central California have noted the decline and eventual local disappearance of California and northern red-legged frogs in systems supporting bullfrogs (Jennings and Hayes 1990; Twedt 1993), red swamp crayfish, signal crayfish, and several species of warm water fish including sunfish, goldfish, common carp, and mosquitofish (Moyle 1976; Barry 1992; Hunt 1993; Fisher and Schaffer 1996). This has been attributed to predation, competition, and reproduction interference. Twedt (1993) documented bullfrog predation of juvenile northern red-legged frogs, and suggested that bullfrogs could prey on subadult California red-legged frogs as well. Bullfrogs may also have a competitive advantage over California red-legged frogs. For instance, bullfrogs are larger and possess more generalized food habits (Bury and Whelan 1984). In addition, bullfrogs have an extended breeding season (Storer 1933) during which an individual female can produce as many as 20,000 eggs (Emlen 1977). Furthermore, bullfrog larvae are unpalatable to predatory fish (Kruse and Francis 1977). Bullfrogs also interfere with California red-legged frog reproduction by eating adult male California red-legged frogs. Both California and northern red-legged frogs have been observed in amplexus (mounted on) with both male and female bullfrogs (Jennings and Hayes 1990; Twedt 1993; Jennings 1993). Thus bullfrogs are able to prey upon and out-compete California red-legged frogs, especially in sub-optimal habitat.

The urbanization of land within and adjacent to California red-legged frog habitat has also affected the threatened amphibian. These declines are attributed to channelization of riparian areas, enclosure of the channels by urban development that blocks dispersal, and the introduction of predatory fishes and bullfrogs. Diseases may also pose a significant threat, although the specific effects of disease on the California red-legged frog are not known. Pathogens are suspected of causing global amphibian declines (Davidson *et al.* 2003). Chytridiomycosis and ranaviruses are a potential threat because these diseases have been found to adversely affect other amphibians, including the listed species (Davidson *et al.* 2003; Lips *et al.* 2006). Mao *et al.* (1999 cited in Fellers 2005) reported northern red-legged frogs infected with an iridovirus, which was also presented in sympatric threespine sticklebacks in northwestern California. Non-native species, such as bullfrogs and non-native tiger salamanders that live within the range of the California red-legged frog have been identified as potential carriers of these diseases (Garner *et al.* 2006). Humans can facilitate the spread of disease by encouraging the further introduction of non-native carriers and by acting as carriers themselves (i.e., contaminated boots, waders or fishing equipment). Human activities can also introduce stress by other means, such as habitat fragmentation, that results in the listed species being more susceptible to the effects of disease.

Alameda Whipsnake

The November 2002 *Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California* includes the Alameda whipsnake, pallid manzanita, and four species of concern (http://ecos.fws.gov/docs/recovery_plan/030407.pdf, Service 2002b). The draft recovery plan is currently being revised by the Service. For the current Status of the Species, refer to the *Alameda Whipsnake (Masticophis lateralis euryxanthus) 5-Year Review: Summary and Evaluation* (http://ecos.fws.gov/docs/five_year_review/doc3886.pdf, Service 2011).

Alameda Whipsnake Critical Habitat

On October 2, 2006, the final rule designating critical habitat for the Alameda whipsnake was published in the Federal Register (Service 2006b). When designating critical habitat, the Service is required to list the known PCEs together with the critical habitat description. Such physical and biological features include, but are not limited to, space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, rearing (or development) of offspring; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species (Service 2005).

The rule identifies approximately 154,834 acres within six critical habitat units based on three PCEs: (1) scrub/shrub communities with a mosaic of open and closed canopy; (2) woodland or annual grassland plant communities contiguous to lands containing PCE 1; and (3) lands containing rock outcrops, talus, and small mammal burrows within or adjacent to PCE 1 and PCE 2. The PCEs for the Alameda whipsnake are based on the current knowledge of the life history, biology, and ecology of the species and the requirements of the habitat necessary to sustain the essential life history functions of the subspecies. These three elements are further described as follows.

PCE 1: Scrub/shrub communities with a mosaic of open and closed canopy

This element is defined by scrub/shrub vegetation dominated by low to medium-stature woody shrubs with a mosaic of open and closed canopy as characterized by the chamise, chamise-eastwood manzanita, chaparral whitethorn, and interior live oak shrub vegetation series as identified in Sawyer and Keeler-Wolf (1995) and Mayer and Laudenslayer, Jr. (1988), occurring at elevations from sea level to approximately 3,850 feet. Such scrub/shrub vegetation within these series form a pattern of open and closed canopy which is used by the Alameda whipsnake to provide shelter from predators, temperature regulation by providing sunny and shady locations, prey-viewing opportunities, and nesting habitat and substrate. These features contribute to support a prey base consisting of western fence lizards and other prey species such as skinks, frogs, snakes, and birds.

PCE 2: Woodland or annual grassland plant communities contiguous to lands containing PCE 1

The vegetation series of this element are comprised of one or more of the following: blue oak, coast live oak, California bay, California buckeye, and California annual grassland vegetation series as identified in Sawyer and Keeler-Wolf (1995) and Mayer and Laudenslayer, Jr. (1988). This mosaic of vegetation supports a prey base consisting of western fence lizards and other prey species such as skinks, frogs, snakes, and birds and provides opportunities for: (1) foraging by allowing Alameda whipsnakes to come in contact with and visualize, track, and capture prey (especially western fence lizards along with other prey such as skinks, frogs, birds); (2) short and long distance dispersal within, between, or adjacent to areas containing essential features (i.e., PCE 1 or 3); and (3) contact with other Alameda whipsnakes for mating and reproduction.

PCE 3: Lands containing rock outcrops, talus, and small mammal burrows within or adjacent to PCE 1 and PCE 2

The areas within this element are used for retreats (shelter), hibernacula, foraging, dispersal, and provide additional prey population support functions.

Pallid Manzanita

The November 2002 *Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California* includes the pallid manzanita, Alameda whipsnake, and four species of concern (http://ecos.fws.gov/docs/recovery_plan/030407.pdf, Service 2002b). The draft recovery plan is currently being revised by the Service. For the current Status of the Species, refer to the *Arctostaphylos pallida (Pallid Manzanita) 5-Year Review: Summary and Evaluation* (http://ecos.fws.gov/docs/five_year_review/doc4105.pdf, Service 2010b). The November 2010 five-year review for the pallid manzanita recommended the uplisting of the status of the species to endangered due to the limited distribution of the pallid manzanita, severe plant health declines and death due to fungal diseases (e.g., *P. cinnamomi*), the loss of several colonies and decline of many others due to shading by native and non-native species and goat grazing, threats associated with wildfire fuel management, an overall lack of regeneration for more than 30 years, and the potential loss of its seed bank from too frequent a fire return interval caused by increased human ignition sources.

Currently, pallid manzanita occurs in several locations in the East Bay Hills in Contra Costa and Alameda Counties, California. The only large populations of pallid manzanita still known to exist are found at Huckleberry Ridge in Alameda and Contra Costa Counties and in Sobrante Ridge Regional Preserve in Contra Costa County. Other small, natural and planted populations occur on public and private land in Alameda and Contra Costa Counties. Habitat destruction and fragmentation from urbanization, introduction and spread of the fungal pathogen *P. cinnamomi*, fire suppression, herbicide spraying, competition with non-native plants, and hybridization with planted ornamental species of *Arctostaphylos* are the primary threats to pallid manzanita (Service 2010b).

Due to an overestimation in the number of plants at the two largest colonies and the loss and decline of several smaller colonies, the known number of pallid manzanita plants has decreased from as many as 4,986 at the time of listing in 1998 and the issuance of the draft recovery plan in 2002, to approximately 1,350 mature plants today. Three colonies have been extirpated (21 plants) and many other colonies have experienced declines (approximately 154 plants, excluding the two largest colonies), primarily due to shading from native and non-native plants and fungal pathogens. *P. cinnamomi* has been found to be infecting plants within the largest stand of pallid manzanita in Huckleberry Preserve (Service 2010b).

In 2006, sampling for the fungal pathogen *P. cinnamomi* was conducted by Phytosphere Research in Huckleberry Preserve in coordination with CDFW. Results indicated that *P. cinnamomi* is present in the soil, and as the affected area was on a steep slope near the top of the ridge, it is likely that the pathogen is also present downslope from the isolation site. The Sobrante Ridge population is not known to be afflicted with a root fungus and is the only colony of pallid manzanita that does not require immediate management attention to stimulate regeneration and remove native and non-native invasive plants (Service 2010b).

Environmental Baseline

Habitats within the Action Area

The vegetation communities that occur within the action area are described below. Table 3 below summarizes the acres of each vegetation community that occurs within the action area under the existing conditions and the future conditions after implementation of the proposed project.

California Annual Grasslands

California annual grasslands are scattered throughout the project area; large patches were identified in the Lake Chabot area. This community amounts to 127 acres in the action area. Dominant non-native invasive grasses include wild oats, rigput brome, hare barley, and annual fescues. Common non-native forbs observed include burclover, rose clover, and filarees. Non-native invasive forbs, such as fennel and Italian thistle are present in California annual grassland communities where soils have been disturbed. Scattered native grasses, including purple needlegrass, blue wild rye, and creeping wild rye, occur sparingly in this community in the project area. Native forbs present include California poppy, yarrow, clovers, and blue-eyed

Table 3. Vegetation Communities within the Action Area

Vegetation Community Type	Existing Vegetation (acres)	Future with Project¹ (acres)
Broom Scrub	7.66	0.00
California Annual Grassland	126.88	129.52
Coastal Scrub (mesic)	30.77	0.00
Coastal Scrub (xeric)	338.93	170.18
Coniferous Forest/Plantation	47.15	4.22
Coyote Brush Scrub	217.73	100.73
Developed/Disturbed/Landscaped	138.21	139.66
Eucalyptus Forest/Plantation	1,546.9	669.37
Freshwater Marsh	0.97	0.97
Non-Native Coniferous Forest	112.39	38.55
Northern Maritime Chaparral	4.31	1.37
Oak-Bay Woodland/Forest	440.63	547.93
Redwood Forest	28.20	28.20
Riparian Woodland	19.98	42.31
Serpentine Bunchgrass Prairie	0.08	0.08
Successional Grassland	91.84	1,279.3
TOTAL	3,152.63	3,152.39

¹ “Future with Project” acres are based on the estimates provided by the applicants of the acres of each habitat within the project area in the 10-year goal.

grass. Scattered native shrubs, primarily coyote brush, were also commonly observed in California annual grasslands; however, cover of shrubs is generally less than five percent in this community type. California annual grasslands within the action area provide suitable dispersal, upland refugia, and aestivation habitat for California red-legged frogs and suitable dispersal and foraging habitat for Alameda whipsnakes.

Coastal Scrub

Northern coastal scrub communities are characterized by relatively open to dense woody shrub cover and an absence of trees. Saplings of oak species, California bay, and Monterey pine trees are sometimes emerging from the shrub canopy cover, as found in the Oakland North Hills-Skyline project area. The action area consists of 370 acres of northern coastal scrub. Northern coastal scrub communities in the project area include 339 acres of xeric scrub (*i.e.*, dry) and 31 acres of mesic scrub (*i.e.*, moist). The project area is dominated by shrubs and forbs adapted to relatively xeric conditions. Coyote brush is the dominant shrub in xeric coastal scrub communities in the project area. Other shrub species present include California sagebrush, toyon, silver bush lupine, poison oak, black sage, and sticky monkey-flower. Scattered coast live oak, California bay, and Monterey pine trees also occur in this community. Non-native invasive species commonly observed in coastal scrub include French broom and fennel. French broom is prevalent in the northern coastal scrub communities of Anthony Chabot Regional Park and near Skyline High School.

Coastal scrub communities dominated by species adapted to more mesic (*i.e.*, moist) conditions are also present in the project area, although less common than xeric coastal scrub communities. The dominant plant species observed in mesic coastal scrub include California blackberry, thimbleberry, blue elderberry, and California hazelnut. Non-native invasive species in this community include poison hemlock, Italian thistle, and Himalayan blackberry. Scattered coast live oak and California bay, as well as madrone and bigleaf maple are also occasionally present in this community. This community is present in the project area along the Grizzly Peak Trail south in Tilden Regional Park and adjacent to the North Oakland Sports Center.

Coastal scrub communities within the action area provide suitable dispersal habitat for California red-legged frogs and core scrub habitat for Alameda whipsnakes. Maritime chaparral communities within the action area at Sobrante Ridge, Huckleberry Botanic Regional Preserve Redwood Regional Park, Tilden Regional Park, and Sibley Volcanic Regional Preserve support pallid manzanitas.

Coniferous Forest/Non-native Coniferous Forest

The coniferous forest community in the project area is dominated by Monterey pine, which is native only to San Mateo, Monterey, and San Luis Obispo counties and was planted in the East Bay Hills in the early 1900s. Similar to other woodland and forest communities, the understory is typically sparse, and the ground is covered mostly by pine needles. In more open canopied Monterey pine forests, native shrubs species such as California blackberry, coyote brush, and poison oak are common. Non-native species commonly observed in Monterey pine forests include erect veldt grass, fennel, and poison hemlock.

The coniferous forest community covers 159 acres of the action area including 47 acres of native and 112 acres of non-native coniferous forest areas. Mature groves of varying densities of Monterey pine occur throughout the project area, often with eucalyptus, coast live oak, and California bay trees. Near the Tilden Golf Course in Tilden Regional Park, Douglas-fir is a co-dominant species with Monterey pine, and near Skyline High School (near Redwood Regional Park), the forest community is a mix of Monterey pine and coast redwood. In parts of the project area such as in North Hills-Skyline, Sibley Volcanic Regional Preserve, and Tilden Regional Park, Monterey pines are present and appear to be colonizing areas of coastal scrub as Monterey pine plantations. It is in these areas that they are singled out as stands of non-native coniferous forest. Coniferous forest communities within the action area provide suitable dispersal habitat for California red-legged frogs. Alameda whipsnakes are unlikely to forage or disperse through coniferous forest communities within the action area.

Coyote Brush Scrub

Coyote brush scrub is a successional stage from grassland to scrub and commonly occurs where grazing or fire has been discontinued or suppressed. Coyote brush scrub is distinct from northern coastal scrub by the density of coyote brush and low cover of other shrubs species, such as California sagebrush and poison oak. In areas of dense coyote brush, little or no understory is present; however, herbaceous grass and forb species such as wild oats, blue wild rye, and bracken fern are along edges or in open areas. Non-native invasive species such as Italian thistle and French broom are also commonly present in disturbed areas in this community. Scattered trees, such as eucalyptus, California bay, and Monterey pine, were identified in coyote brush scrub communities. In the project area, this community ranges from relatively open stands of coyote brush in Anthony Chabot Regional Park to areas of almost pure stands of coyote brush along Grizzly Peak Blvd. Large stands of coyote brush scrub were identified near Tilden Regional Park south side of Grizzly Peak Road, Sibley Regional Park, Redwood Regional Park, Anthony Chabot Regional Park, and in the northwest corner of North Hills-Skyline. This community covers 218 acres in the action area. Coyote brush scrub within the action area provides suitable dispersal habitat for California red-legged frogs and suitable core scrub and foraging and dispersal habitat for Alameda whipsnakes.

Developed/Disturbed/Landscaped

Developed, disturbed, and landscaped areas consist of land developed for residential and urban use, including landscaped and maintained residential and parkland, as well as areas used for road and trail construction and maintenance. Vegetation in these areas is predominantly planted trees, shrubs, and non-native herbaceous species. A large variety of ornamental trees and shrubs were observed in this community.

The action area includes 138 acres of developed, disturbed, and landscaped areas, primarily of private residences; large buildings, structures, and parking lots, such as the Chabot Space and Science Center parking lot, the UCB Mathematical Sciences Research Institute Building, and public roads. Landscaped areas include maintained yards associated with private residences and planted or maintained areas associated with public or regional park buildings, such as the mowed grassland in the Chabot Riding Stable area of Anthony Chabot Regional Park. In addition,

maintained (*i.e.*, mowed) and/or landscaped recreational areas are present such as the mowed grass playing fields of the North Oakland Sports Complex.

Disturbed vegetation includes areas created by natural or human disturbance that may support early succession stages of adjacent habitats. Disturbed areas are often susceptible to invasion by non-native species, including weeds such as French broom, fennel, poison hemlock, and Italian thistle. Disturbed areas were identified in a variety of locations, including areas near new development, along road shoulders, or on hillsides, such as the hillsides along portions of Grizzly Peak Blvd.

Developed, disturbed, and landscaped areas do not provide suitable habitat for California red-legged frogs or Alameda whipsnakes, but these listed species may occasionally disperse through these areas to access more suitable habitat.

Eucalyptus Forest

Eucalyptus trees were introduced from Australia and were widely planted throughout the East Bay Hills in the early 1900s. Eucalyptus trees are capable of rapid growth and prolific reproduction. A rapid growth rate and the production of allelopathic oils, which inhibit establishment of other species, have helped eucalyptus forests invade large areas of the East Bay Hills. The action area consists of 1,547 acres of eucalyptus forest, the largest vegetation community onsite.

Eucalyptus stands in the project area range between young stands (*i.e.*, less than 40 years old) of recently colonized saplings to mature stands (*i.e.*, over 40 years old) including some stands that have never been logged. Blue-gum eucalyptus is the dominant species; however, red gum eucalyptus also occurs. Young stands of eucalyptus occur in Sibley Regional Park, in the Oakland Caldecott Tunnel project area, and near the UCB campus (*i.e.*, at Strawberry and Claremont Canyons) and consist of second-growth trees sprouting from the cut stumps of the originally planted trees. The understory of these young stands usually supports a more diverse mix of native and non-native shrubs and herbaceous plants when compared to those in the mature stands. Native species in this community include California blackberry, poison oak, toyon, and coyote brush; non-native invasive species include cotoneaster, French broom, Scotch broom, erect veldtgrass, and occasionally the non-native oblong spurge.

Mature eucalyptus forests characterized by a closed-canopy and sparse shrub and forb understory are present in Tilden Regional Park and Anthony Chabot Regional Park. The dense canopy and abundant litter results in an understory relatively devoid of vegetation; however, scattered individuals of poison oak, California blackberry, and non-native invasive English ivy were observed in these mature stands. Scattered coast live oak and California bay trees are present in both young and mature eucalyptus stands. Additionally, redwood trees are occasionally present in stands of eucalyptus such as along the Grizzly Peak Trail in Tilden Regional Park.

Eucalyptus forests within the action area provide low quality dispersal habitat for California red-legged frogs. Eucalyptus trees within the action area degrade the aquatic habitat for California red-legged frogs by altering hydrology and water chemistry. The high rates of transpiration by eucalyptus trees reduce the availability of surface water within the action area. The allelopathic

oils released from the litter of eucalyptus trees impair water quality within the action area and reduce the availability of suitable invertebrate prey species for the California red-legged frog. Alameda whipsnakes are unlikely to disperse or forage in eucalyptus forests within the action area. Eucalyptus forests within the action area threaten to displace suitable grassland, oak woodland, and core scrub habitat for the Alameda whipsnake.

Northern Maritime Chaparral

Northern maritime chaparral, also referred to as brittle-leaf-woolly leaf manzanita chaparral (Sawyer *et al.* 2008) is identified by the California Natural Diversity Database (CNDDDB) as a sensitive plant community based on its rarity rank by CDFW (CDFW 2012). Maritime chaparral is typically found on soils with extremely low water-holding capacity and is dominated by native shrubs species. Common shrubs identified in the project area include brittle-leaf manzanita, chinquapin, evergreen huckleberry, and sticky monkey-flower. Pallid manzanita is found in this community and was observed in Sobrante Ridge and Huckleberry Botanical Regional Preserves.

Northern maritime chaparral only amounts to 4.3 acres in the action area. Restricted to relatively dry areas, this community was observed only in Sobrante Ridge and Huckleberry Botanical Regional Preserves. Northern maritime chaparral in both locations is dominated by brittle-leaf and pallid manzanita. The understory of this community includes scattered wood fern and interior live oak saplings. However, evergreen huckleberry and chinquapin are present in the Huckleberry Botanic Regional Preserve. Scattered trees including interior live oak and coast live oak are also present in this community. Northern maritime chaparral within the action area provides suitable dispersal habitat for the California red-legged frog, core scrub habitat for the Alameda whipsnake, and habitat for the pallid manzanita.

Oak-Bay Woodland

The oak-bay woodland community consists of a mix of predominantly coast live oak and California bay trees. Other native trees found in this vegetation community in the project area include California buckeye, bigleaf maple, and madrone. Monterey pine and eucalyptus were also observed in oak-bay woodlands, such as along the Grizzly Peak Trail and the Tilden Golf Course in Tilden Regional Park and in Sibley Regional Park. Oak-bay woodlands total 441 acres in the action area and represent the second largest vegetation community identified in the project area.

In areas where a closed tree canopy exists, such as along Redwood Road in Redwood Regional Park, the understory is sparse and consists of species such as poison oak, woodfern, and swordfern. In oak-bay woodlands with a more open canopy, such as along Seaview Drive and in Anthony Chabot Regional Park, a greater diversity of shrubs and herbaceous plants are present in the understory. Native species observed in these more open oak-bay woodlands include California blackberry, coyote brush, California hazelnut, toyon, and currants. Herbaceous plants may include hound's-tongue, alumroot, starflower, and slim Solomon's seal. Non-native species found in oak-bay woodlands include forget-me-not, and non-native invasive species include Himalayan blackberry and fennel. Oak-bay woodland within the action area provides suitable

dispersal habitat for California red-legged frogs and suitable dispersal and foraging habitat for Alameda whipsnakes.

Redwood Forest

Coast redwood trees tend to be on shallow soils on north and east-facing slopes or in valley or canyon bottoms. In the project area, natural redwood forest exists in Redwood Regional Park and in small patches in Anthony Chabot Regional Park. Coast redwood has also been planted in Claremont and Tilden Regional Parks. The redwood forest community comprises 28 acres of the action area. Observed redwood forests typically consist of a closed canopy of coast redwood trees with few if any other tree species. However, California bay and Monterey pine are co-dominant trees in patches of redwood forest along Seaview Drive and near Piedmont Stables in Redwood Regional Park. Shrubs and herbaceous species are relatively sparse in the understory of closed canopy redwood forests. Wild ginger, western trillium, and violets are abundant herbs in the understory of some groves. Evergreen huckleberry, poison oak, ocean spray, California hazelnut, and California huckleberry are sparsely distributed in the project area. Redwood forests within the action area provide suitable dispersal habitat for California red-legged frogs. Alameda whipsnakes are unlikely to disperse or forage in redwood forests.

Riparian Woodland

Riparian woodland communities are located along streams and on the edges of seeps and ponds. Arroyo willow is the dominant species in this community in the project area. Scattered California bay and coast live oak trees were also identified adjacent to riparian woodland communities. California blackberry, thimbleberry, sword fern, blue gum eucalyptus, and poison oak are commonly found in the understory. The most common non-native species identified in the action area's riparian woodland communities are English ivy and poison hemlock. This vegetation community is sparse in the project area (a total of 20 acres were identified); the largest patch was identified along Redwood Creek in Redwood Regional Park. Riparian woodlands within the action area provide suitable dispersal, foraging, and non-breeding aquatic habitat for the California red-legged frogs. Pondered areas within riparian woodlands within the action area with suitable depths and hydroperiods may provide suitable breeding habitat for California red-legged frogs. Alameda whipsnakes may utilize riparian areas within the action area as dispersal corridors.

Successional Grassland

The successional grassland community is characterized by grassland areas that appear to be in the process of transitioning into shrub-dominated communities. Vegetation consists primarily of non-native annual grasses and forb species found in California annual grasslands but with a higher cover of shrub species, typically coyote brush, than typically occurs in California annual grassland communities. In some areas, fire suppression and cessation of livestock grazing in the East Bay Hills have resulted in the succession of California annual grasslands into coyote brush scrub and coastal scrub communities (Stromberg *et al.* 2007). Vegetation management practices, including clearing eucalyptus stands, have also produced areas of successional grassland as shrubs have recolonized the area.

The action area consists of 92 acres of successional grassland community. Although coyote brush is the dominant shrub, other species such as sticky monkey-flower, poison oak, and occasional immature coast live oak, California bay, and other saplings were also observed. A majority of the successional grassland community present in the project area is found in Anthony Chabot Regional Park and along the west side of Grizzly Peak Road on the opposite side of Tilden Regional Park. Successional grassland within the action area provides suitable dispersal, upland refugia, and aestivation habitat for California red-legged frogs and suitable dispersal and foraging habitat for Alameda whipsnakes.

Riverine and Lacustrine Features

Riverine features in the action area and vicinity include several unnamed intermittent drainages. There are five perennial creeks in the project area: Wildcat, Strawberry, Claremont, San Leandro, and Redwood Creeks. The source of Wildcat Creek is in the southernmost section of the Tilden Regional Park project area. From its source, the creek runs northwest for more than 10 miles, parallels portions of the project area in Tilden and Wildcat Canyon Regional Parks, and eventually drains into San Pablo Bay. Strawberry and Claremont Creeks originate in the action area in Strawberry Canyon and Claremont Canyon Regional Preserve, respectively. These creeks run westward from the project area and become channelized and are diverted in culverts underground through the cities of Berkeley and Oakland before draining into San Francisco Bay. The source of San Leandro Creek is adjacent to the action area in Sibley Volcanic Regional Preserve. From its source, San Leandro Creek flows southeast to the Upper San Leandro Reservoir, runs through Anthony Chabot Regional Park before it becomes Lake Chabot, and finally drains into Arrowhead Marsh at San Leandro Bay. Redwood Creek begins in the action area in Redwood Regional Park and is a tributary to San Leandro Creek at the Upper San Leandro Reservoir.

Wildcat Creek is located in Wildcat Canyon Regional Park and Tilden Regional Park. Wildcat Creek flows northwest through the valley between the Berkeley Hills and San Pablo Ridge and passes through the City of San Pablo where it enters San Pablo Bay. A concrete lined culvert beneath a K-Mart parking lot and a California Department of Transportation maintained drop structure at Interstate 80 restrict steelhead access to the lower creek, but these barriers may be passable during some flows. Two EBRPD-managed dams in the creek's upper watershed form Jewel Lake and Lake Anza and block all upstream steelhead migration.

San Leandro Creek is downstream of Lake Chabot in Anthony Chabot Regional Park. The construction of the Chabot Reservoir created barriers to steelhead migration in this creek that have existed since 1874 and include the Upper San Leandro Reservoir and four-foot concrete weir, located 0.3 mile upstream from Interstate 80.

Other than Lake Chabot, there are limited lacustrine features in the action area and vicinity. Two small reservoirs along Wildcat Creek in Tilden Regional Park (Lake Anza and Jewel Lake) are the only pond-like features in the project vicinity. Lake Anza is the larger reservoir and is open for swimming. Four larger reservoirs are within a five-mile radius of the action area: Briones Reservoir, San Pablo Reservoir, and the Upper San Leandro Reservoir. Lake Chabot is the only major reservoir close to the action area.

Rivers, streams, ponds, and lacustrine features within the action area provide suitable dispersal and non-breeding aquatic habitat for California red-legged frogs. A few of these areas within the action area that have suitable depths and hydroperiods may provide suitable breeding habitat for California red-legged frogs.

Wetlands

The 2010 National Wetland Inventory data indicate that there are some potential small wetland features along Wildcat Creek in the action area (Service 2010c). Vegetation and hydrology observed during vegetation mapping further suggest that other small wetlands may occur in the action area. These wetlands are mapped as riparian woodland and are associated with the five perennial creeks in the project area: Wildcat, Strawberry, Claremont, San Leandro, and Redwood Creeks, as well as other unnamed drainages, seeps, and ponds.

California Red-Legged Frog

The action area is located within the recovery plan's South and East San Francisco Bay Recovery Unit for the California red-legged frog (Service 2002a). The recovery status for this recovery unit is considered high due to many existing populations and many areas with high habitat suitability (Service 2002a). Threats to California red-legged frogs within this recovery unit include cattle grazing and/or dairies; non-native species; urbanization; and water management, diversions, and reservoirs. The action area is not located within a core area for the California red-legged frog. The nearest core area is the East San Francisco Bay Core Area which occurs within 0.25 mile of EBRPD's project areas at Lake Chabot Regional Park (Service 2002a). The core area is important for the recovery of the California red-legged frog due to it currently be occupied, being a source population, and for connectivity to other populations of California red-legged frogs. The conservation needs identified within the recovery plan for the East San Francisco Bay Core Area include: protecting existing populations; controlling non-native predators; studying effects of grazing in riparian corridors, ponds and uplands (*e.g.*, on EBRPD lands); reducing impacts associated with livestock grazing; protecting habitat connectivity; minimizing effects of recreation and off-road vehicle use (*e.g.*, Corral Hollow watershed); avoiding and reducing impacts of urbanization; and protecting habitat buffers from nearby urbanization (Service 2002a).

The action area does not overlap any designated critical habitat units; however, unit CCS-1 (Berkeley Hills) is less than two miles east of the Sobrante Ridge Regional Preserve portion of the action area (Service 2010a). Critical habitat unit units ALA-1A (Dublin Canyon) and ALA-1B (Cook Canyon) are about four miles southeast of the Anthony Chabot Regional Park portions of the action area (Service 2010a).

Based on the CNDDDB (CDFW 2012), there are no known occurrences of the California red-legged frog within the action area. There are 22 reported CNDDDB occurrences within five miles of the action area. Of these occurrences, four are located within two miles, a distance that the species has been documented dispersing to locate breeding habitat (Service 2002a). All of these occurrences are presumed to be extant (currently present), and most were recorded within the last 10 years. It is likely that there are additional occurrences that have not been documented. The

EBRPD has conducted surveys for California red-legged frogs in aquatic habitats in its parks and report occurrences of the species in Sobrante Ridge Regional Preserve (Bobzien and DiDonato 2007). EBRPD surveys are included in the CNDDDB.

The following four CNDDDB occurrences of the California red-legged frog are within two miles of the action area (CDFW 2012):

1. Sibley Volcanic Regional Preserve, RTA SR002B: one CNDDDB occurrence along a stream approximately 250 feet from the action area;
2. Kennedy Grove, RTA KG002: one CNDDDB occurrence along a stream approximately 650 feet from the action area;
3. Sobrante Ridge Regional Preserve: one CNDDDB occurrence along a stream approximately 4,400 feet from the action area; and
4. Tilden Regional Park: one CNDDDB occurrence at a pond approximately 6,000 feet away from the action area.

California red-legged frogs are known to occur near the action area and have the potential to occur in suitable habitat within the action area. As described above, there are four CNDDDB occurrences within the distance that the species has been documented dispersing, and portions of the action area contain suitable upland, dispersal, and non-breeding aquatic habitat (Table 4).

California red-legged frog habitat in the action area includes both aquatic/riparian habitat and upland dispersal habitat. Since there are no known breeding occurrences within the action area or ponds suitable for California red-legged frog breeding, aquatic/riparian habitat within the action area is considered non-breeding habitat. To identify non-breeding aquatic/riparian habitat, the existing vegetation base layer intersected with the U.S. Geological Survey National Hydrography Dataset (NHD) line surface hydrology shapefile was used to identify stream channels in the action area (<http://nhd.usgs.gov/>). The NHD is a comprehensive set of digital spatial data that contains information about naturally occurring and constructed bodies of water, natural and artificial paths of water flows, and related hydrographic entities. Both ephemeral and perennial streams are included as surface water hydrology. A 50-foot buffer along the NHD line was established to identify the spatial extent of potential California red-legged frog non-breeding aquatic/riparian areas in the action area. There are about 72.8 acres of potential non-breeding riparian/aquatic habitat (non-developed areas within 50 feet of NHD line surface hydrology) within the action area for the proposed and interconnected projects including about 20 acres of identified riparian woodland (Table 3).

To determine suitable upland dispersal habitat, a 500-foot buffer along the NHD line was established, since California red-legged frogs are unlikely to be in areas more than 500 feet from aquatic habitat unless they are dispersing between breeding areas on rainy days. Since major ground disturbing work and use of heavy equipment would not occur during the wet season or on rainy days (unless exclusion fencing is installed prior to the start of the wet season), the 500-foot

Table 4. California Red-legged Frog Suitable Habitat in the Action Area.

Park	Action Type	Acres of Suitable Habitat¹	Acres of Unsuitable Habitat²
Claremont Canyon	Proposed	31.26	0.29
	Interconnected	0.00	0.00
Frowning Ridge	Proposed	77.86	0.61
	Interconnected	0.00	0.00
Tilden-Grizzly Peak Blvd.	Proposed	0.12	0.01
	Interconnected	0.00	0.00
Sobrante	Proposed	0.96	0.00
	Interconnected	11.54	0.39
Tilden Park	Proposed	15.04	1.90
	Interconnected	131.50	17.34
Wildcat Canyon	Proposed	0.00	0.00
	Interconnected	37.43	5.35
Kennedy Grove	Proposed	0.00	0.00
	Interconnected	13.04	2.63
Anthony Chabot	Proposed	77.64	2.20
	Interconnected	169.56	0.00
Claremont Canyon-EBRPD	Proposed	11.45	0.80
	Interconnected	23.99	0.03
Huckleberry	Proposed	17.75	0.24
	Interconnected	0.32	0.00
Lake Chabot	Proposed	0.00	0.00
	Interconnected	4.19	0.00
Leona Canyon	Proposed	0.00	0.00
	Interconnected	2.97	0.00
Redwood	Proposed	12.93	2.19
	Interconnected	30.81	1.89
Sibley Volcanic	Proposed	11.73	0.02
	Interconnected	15.49	0.00
TOTAL	Proposed	256.7	8.3
	Interconnected	440.8	27.6

¹ Areas of suitable habitat for the California red-legged frog considered in this table are any non-developed habitats within 500 feet of U.S. Geological Survey National Hydrography Dataset (NHD) line surface hydrology. If a park is not listed, then no suitable habitat was identified.

² Areas of unsuitable habitat for the California red-legged frog considered in this table are any areas more than 500 feet of NHD line surface hydrology and all developed areas.

buffer was considered appropriate for determining upland habitat areas where California red-legged frogs may be encountered during proposed project activities.

Of the 22 parks/parcels evaluated, 14 contain existing California red-legged frog suitable habitat. The parks/parcels with California red-legged frog suitable habitat are shown in Table 4 above. There are about 697.5 acres of suitable habitat for the California red-legged frog within 500 feet of NHD line surface hydrology including about 72.8 acres of potential non-breeding riparian/aquatic habitat (areas within 50 feet of NHD line surface hydrology).

Alameda Whipsnake

Draft Recovery Plan

The draft recovery plan for the Alameda whipsnake (Service 2002b) established draft recovery units (units 1 thru 5) to correspond to each of the five populations of Alameda whipsnake. In addition, two draft recovery units (units 6 and 7) were established to correspond to corridors that best provide habitat linkage between the five populations. The action area for the proposed project overlaps with draft recovery Unit 1 (Tilden-Briones), Unit 2 (Oakland-Las Trampas), and Unit 6 (Caldecott Tunnel Corridor) (Service 2002b).

Recovery Unit 1 (Tilden-Briones)

The Tilden-Briones Recovery Unit (Unit 1) has 60.4 percent of its land in open space or conservation status. These lands include EBRPD's Sobrante Ridge, Kennedy Grove, Wildcat Canyon, Tilden Regional Park, and Briones Regional Park; and East Bay Municipal Utility District's San Pablo Reservoir and Watershed, Briones Watershed, and Pinole Watershed. The recovery goal for this recovery unit is that a minimum of three Alameda whipsnake populations should have protection in perpetuity. Essential for connectivity with Recovery Unit 2 will be protection of the area between Tilden Regional Park and the Caldecott Tunnel Corridor (Recovery Unit 6) properties of East Bay Municipal Utility District (Siesta Valley) and UCB. Land management for this recovery unit should include specific management for Alameda whipsnake and its habitat, including but not limited to addressing eucalyptus and French broom encroachment into chaparral/scrub habitats, limiting feral cat populations, implementing appropriate grazing management, promoting connectivity over the Caldecott Tunnel Corridor to the Oakland-Las Trampas Recovery Unit, and coordinating with fire management jurisdictions/agencies (Service 2002b).

Recovery Unit 2 (Oakland-Las Trampas)

The Oakland-Las Trampas Recovery Unit (Unit 2) has developmental pressures around its entire perimeter. Within the recovery unit, 44.6 percent of the land is in open space or conservation status. These lands include EBRPD's Roberts Recreation Area, Redwood Regional Park, Leona Open Space, Anthony and Lake Chabot Regional Parks along the east side of the recovery unit, Las Trampas Regional Wilderness and Machado and Bishop Ranch Land Banks on the west side of the recovery unit, and Cull Canyon Regional Recreation Area at the southern end of the recovery unit; East Bay Municipal Utility District's Upper San Leandro Reservoir and Watershed (approximately in the middle of the recovery unit) and the somewhat isolated Lafayette Reservoir and Watershed; and lands owned by Oakland, including Joaquin Miller Park and Oakland Zoo on the west side of the recovery unit. The recovery goal for this recovery unit

is that a minimum of four populations of Alameda whipsnakes should be provided protection in perpetuity. Areas essential for connectivity should include the areas between known and yet to be identified populations. In the north, where the recovery unit narrows to the Caldecott Tunnel Corridor (Recovery Unit 6), either Redwood Regional Park or Gudde Ridge to the east might provide connectivity between the San Leandro Watershed population and Recovery Unit 6. Along the interface of this recovery unit with Hayward-Pleasanton Ridge (Recovery Unit 3), optimal areas for connectivity also need to be identified and preserved.

Land management for this recovery unit should include specific management for Alameda whipsnake and its habitat, including but not limited to addressing eucalyptus and French broom encroachment into chaparral/scrub habitats (particularly on the west side of the Oakland Hills), limiting feral cat populations, implementing appropriate grazing management, promoting connectivity over the Caldecott Tunnel Corridor to the Tilden-Briones Recovery Unit and with the Hayward-Pleasanton Ridge Recovery Unit, and coordinating with fire management jurisdictions/agencies. Fire management plans should be coordinated between the land management agencies and should maximize habitat enhancement for Alameda whipsnake.

Recovery Unit 6 (Caldecott Tunnel Corridor)

Some lands in this corridor are in open space, including lands owned by UCB; Lawrence Berkeley National Laboratory (within the University lands); California Department of Transportation; EBRPD's Claremont Canyon Regional Park, Sibley Volcanic Preserve, and Huckleberry Botanic Preserve; and East Bay Municipal Utility District's Siesta Valley Watershed and Gateway Watershed. However, private lands in the Caldecott Tunnel area provide essential connectivity between Recovery Units 1 and 2.

To ensure connectivity between Recovery Units 1 and 2, a significant portion of the above mentioned lands would need to be protected in perpetuity, and strategically situated private landowners would need to participate in management, restoration, and/or protection programs designed to benefit the Alameda whipsnake. Surveys, mapping and assessment will determine site-specific actions.

The cities of Berkeley and Oakland, as well as the landowners mentioned above, should have land management plans that address human activity impacts, including eucalyptus and French broom encroachment into chaparral/scrub habitats, increased predation, and fuels management. Continuing cooperation between landowners and State and Federal staff should occur in designing any vegetation management activities within this corridor.

Occurrences within the Action Area

There are 70 CNDDDB occurrences of Alameda whipsnake in the action area and vicinity (CNDDDB, CDFW 2012). The CNDDDB classifies Alameda whipsnake occurrence data as sensitive so only a limited amount of information, including date and U.S. Geological Survey 7.5-minute quadrangle location, is available for these occurrences, and the exact location of occurrences is not provided. However, there are location-specific occurrences of the species

reported in the EBRPD WHRRMP Environmental Impact Report, including two occurrences in or immediately adjacent to the action area (LSA Associates, Inc. 2009).

The most recent occurrences (n=14) of Alameda whipsnake in the action area were recorded in 2004 in the Frowning Ridge parcel (CNDDDB, CDFW 2012). Additional Alameda whipsnake occurrences were recorded by Karen Swaim in the Frowning Ridge parcel (n=1) and Tilden Regional Park (n=1) (LSA Associates, Inc. 2009).

Suitable Habitat within the Action Area

The Alameda whipsnake is known to occur in portions of the action area and has the potential to occur in other parts of the action area where suitable habitat with elements to support the species are present. For the effects analysis, suitable core scrub habitat for the Alameda whipsnake is defined as: (1) all coastal scrub (xeric), coyote brush scrub, and/or maritime chaparral habitat areas greater than 0.5 acre in size; and (2) coastal scrub (xeric), coyote brush scrub, and/or maritime chaparral habitat areas greater than 0.2 acre in size that are within 50 feet of coastal scrub (xeric), coyote brush scrub, and/or maritime chaparral habitat areas greater than 0.5 acre in size and adjacent to foraging/dispersal habitat. Suitable foraging/dispersal habitat for the Alameda whipsnake is defined as oak woodland, grassland, and riparian woodland habitats that are contiguous with core scrub habitat. The acres of suitable Alameda whipsnake habitat within the action area are summarized for each applicant by park in Table 5 below. Of the 22 parks/parcels evaluated, 15 contain existing suitable Alameda whipsnake habitat. Miller/Knox Shoreline and Point Pinole Regional Park are outside of the range of the Alameda whipsnake, and, therefore, are not included in Table 5. There are about 1,056.8 acres of suitable Alameda whipsnake habitat within the action area including about 535.4 acres of core scrub habitat and 521.4 acres of foraging/dispersal habitat. The remaining 1,753.4 acres within the action area are unsuitable for Alameda whipsnakes primarily because they are dominated by non-native trees like eucalyptus and Monterey pine, or they are developed. UCB proposed treatment areas contain a total of about 61.9 acres of core scrub habitat, 32.5 acres of foraging/dispersal habitat, and 189.9 acres of unsuitable habitat. Oakland proposed treatment areas contain a total of about 50.5 acres of core scrub habitat, 13.7 acres of foraging/dispersal habitat, and 57.8 acres of unsuitable habitat. EBRPD proposed and interconnected treatment areas contain a total of about 422.9 acres of core scrub habitat, 475.2 acres of foraging/dispersal habitat, and 1,505.7 acres of unsuitable habitat.

Table 5. Suitable Habitat for Alameda Whipsnake in the Action Area

Applicant	Park ¹	Core Scrub (acres)	Foraging/ Dispersal (acres)	Unsuitable (acres)
UCB	Strawberry Canyon	1.38	0.00	54.95
	Claremont Canyon	7.12	1.56	34.13
	Frowning Ridge-UCB	53.44	30.96	100.78
	UCB TOTAL	61.94	32.52	189.86
Oakland	Caldecott Tunnel-Oakland	4.26	12.79	36.57
	North Hills Skyline-Oakland	46.25	0.90	21.19
	Oakland TOTAL	50.51	13.69	57.76
EBRPD (Proposed and Interconnected)	Anthony Chabot	173.00	96.53	750.72
	Claremont Canyon	99.41	39.16	13.38
	Claremont Canyon-Stonewall	0.75	2.88	10.03
	Huckleberry	3.72	11.55	2.80
	Kennedy Grove	0.83	2.71	11.67
	Lake Chabot	4.43	29.75	67.32
	Leona Canyon	25.76	37.97	1.34
	Redwood	15.73	27.7	120.38
	Sibley-Triangle and Island	0.92	2.09	0.91
	Sibley Volcanic	17.81	59.23	84.99
	Sobrante Ridge	0.64	11.74	5.99
	Temescal	0.00	0.62	0.92
	Tilden-Grizzly Peak	6.55	7.22	20.51
	Tilden Regional Preserve	45.10	103.05	363.86
	Wildcat Canyon	28.29	42.96	50.91
EBRPD TOTAL	422.94	475.16	1505.73	
TOTAL	TOTAL	535.39	521.37	1753.35

¹ Miller/Knox Regional Shoreline and Point Pinole Regional Recreation Area are outside the range of the Alameda whipsnake and therefore not included.

Alameda Whipsnake Critical Habitat

Unit 1: Tilden-Briones

Alameda whipsnake designated critical habitat Unit 1 (Tilden-Briones) covers 34,119 acres in Alameda and Contra Costa counties, California. Unit 1 is bordered approximately by State Highway 4 and the cities of Pinole, Hercules, and Martinez to the north; by State Highway 24 and the City of Orinda Village to the south; Interstate 80 and the cities of Berkeley, El Cerrito, and Richmond, to the west; and Interstate 680 and the City of Pleasant Hill to the east. The south end of Unit 1 abuts Unit 6. Land ownership within the unit includes approximately 8,108 acres of EBRPD lands, 15 acres of State land, and the remaining 25,997 acres under private ownership. The unit contains a complex mosaic of grassland with woody scrub vegetation of several types (PCE 1 and PCE 2), as well as rock outcrops or other talus features (PCE 3)

distributed throughout the unit with little habitat fragmentation. Alameda whipsnake records occur within the unit and are uniformly distributed throughout the unit (Swaim 2005a). The dates of Alameda whipsnake records span a time period from before the subspecies' listing to after the time of listing (1986 to present). Habitat fragmentation is minimal. Very limited development has occurred within the unit, with the exception of a few structures presumably associated with livestock management. The distribution of essential features throughout the unit and low fragmentation allows Alameda whipsnakes to utilize and freely disperse within the unit, making the overall population less vulnerable to local extirpation which could result from fire, landslide, or some other natural event (*e.g.*, drought, disease) (Service 2006b).

The unit is designated critical habitat because it contains features essential to the conservation of the Alameda whipsnake, is currently occupied, and represents the northwestern portion of the subspecies' range and one of five population centers. The special management actions that may be required within the unit include prescribed burns and management of grazing activities. Additional special management actions that may be required for this unit include management of trespass, unauthorized trail construction, dumping, and/or feral animals, and other activities or situations associated with the urban or recreational interface (Service 2006b).

Unit 2: Oakland-Las Trampas

Alameda whipsnake designated critical habitat Unit 2 (Oakland-Las Trampas) covers 24,436 acres in Alameda and Contra Costa counties, California. Unit 2 is located south of State Route 24, north of Interstate 580, east of State Route 13, and west of Interstate 680 and the cities of Danville, San Ramon, and Dublin. The north edge of Unit 2 abuts Unit 6. Land ownership includes 4,386 acres of EBRPD and East Bay Municipal Utilities District lands and 20,050 acres under private ownership (Service 2006b).

Unit 2 contains a range of vegetation (PCE 1 and PCE 2), soil types, and rocky features (PCE 3) essential to the conservation of the subspecies, supports viable Alameda whipsnake populations, and has minimal development such as roads and structures (Swaim 2005). Areas with development or reduced soil and vegetation characteristics have not been included in the critical habitat for this unit. Unit 2 essential features that contain more dense woodland habitat may be subject to special management considerations, such as prescribed burns, to improve the habitat quality and enhance the potential for Alameda whipsnake movement between units. Additional special management actions that may be required throughout this unit include management of trespass, unauthorized trail construction, dumping, and/or feral animals, and other activities or situations associated with the urban or recreational interface (Service 2006b).

Alameda whipsnake occurrences have been documented by multiple records within the unit as well as adjacent to the unit (Swaim 2005). Dispersal of Alameda whipsnakes between Units 2 and 1 is possible only through Unit 6, and impediments to such movement do not appear to be present. Unit 2 is included in the critical habitat because it contains features essential to the conservation of the Alameda whipsnake, is currently occupied by the subspecies, and represents the central distribution of Alameda whipsnake and one of the five population centers (Service 2006b).

Unit 6: Caldecott Tunnel

Alameda whipsnake designated critical habitat Unit 6 (Caldecott Tunnel) covers 4,151 acres in Alameda and Contra Costa counties, California. This critical habitat unit lies between Units 1 and 2, along the Alameda and Contra Costa county lines. Land ownership within this unit includes 265 acres of EBRPD lands, 720 acres of State, and 3,166 acres in private lands. The unit is bounded by dense urban development to the east and west. However, the vegetation and soil types that are known to support Alameda whipsnake are dominant throughout the unit (PCEs 1, 2, 3). About eight Alameda whipsnake records are known from the unit between 1990 and 2002 (Swaim 2005). Special management considerations in this unit include possible consolidation of existing roads, or limiting additional road construction in order to preserve a corridor function in this unit as a consequence of the restricted width of the unit and the current presence of a moderate number of roads. Prescribed burns may also be required to maintain the habitat. The unit is included in designated critical habitat because it contains features essential to the conservation of the Alameda whipsnake, is currently occupied, and represents the last remaining habitat connecting Unit 1 and Unit 2, which are two of the five population centers for the subspecies. Maintaining connectivity between units allows for dispersal between units for the subspecies and allows for genetic exchange among all three units (Service 2006b).

Critical Habitat within the Action Area

Of the 22 parks/parcels within the action area, 15 contain Alameda whipsnake designated critical habitat. The acres of designated critical habitat and PCEs within the action area are summarized in Table 6 below for each applicant by park and critical habitat unit. A total of about 1,348.75 acres of designated critical habitat occurs within the action area: 611.72 acres within Unit 1, 106.25 acres within Unit 2, and 630.78 acres within Unit 6. Thus, the action area covers 2 percent of Unit 1, 0.4 percent of Unit 2, and 15 percent of Unit 6.

For the effects analysis, suitable core scrub habitat (PCE 1) for the Alameda whipsnake is defined as: (1) all coastal scrub (xeric), coyote brush scrub, and/or maritime chaparral habitat areas greater than 0.5 acre in size; and (2) coastal scrub (xeric), coyote brush scrub, and/or maritime chaparral habitat areas greater than 0.2 acre in size that are within 50 feet of coastal scrub (xeric), coyote brush scrub, and/or maritime chaparral habitat areas greater than 0.5 acre in size and adjacent to foraging/dispersal habitat. Suitable foraging/dispersal habitat (PCE 2) for the Alameda whipsnake is defined as oak woodland, grassland, and riparian woodland habitats that are contiguous with core scrub habitat.

UCB: Strawberry Canyon, Claremont Canyon, and Frowning Ridge

A total of about 10.31 acres of UCB's proposed treatment area at Strawberry Canyon occur within designated critical habitat Unit 1. Habitats within UCB's proposed treatment area within critical habitat Unit 1 at Strawberry Canyon consist of 1.02 acres of core scrub (PCE 1) and 9.29 acres of unsuitable habitat dominated by eucalyptus without any PCEs. There is no suitable foraging/dispersal habitat (PCE 2) within UCB's proposed treatment area within designated critical habitat Unit 1 (Table 6). There is no data on the availability of rock outcrops (PCE 3) within the action area.

Table 6. Alameda Whipsnake Designated Critical Habitat in the Action Area

Applicant	Park	Critical Habitat Unit	Total Acres within Critical Habitat	Existing Conditions (acres)		
				PCE 1	PCE 2	Acres without PCEs
UCB	Strawberry Canyon	1	10.31	1.02	0.00	9.29
		6	13.15	0.37	0.00	12.78
	Claremont Canyon	6	42.81	7.12	1.56	34.12
	Frowning Ridge	1	9.87	2.44	4.05	3.38
		6	174.36	50.74	26.75	96.87
Oakland	North Hills-Skyline	6	62.09	43.21	0.00	18.88
EBRPD	Anthony Chabot	2	16.16	8.19	6.58	1.39
	Claremont Canyon	6	145.06	96.25	37.11	11.7
	Claremont Canyon-Stonewall	6	11.85	0.75	2.88	8.22
	Huckleberry	2	1.62	0.00	1.16	0.46
		6	16.34	3.71	10.35	2.28
	Kennedy Grove	1	14.77	0.83	2.45	11.49
	Redwood	2	88.47	7.84	6.74	73.85
	Sibley Island	6	3.84	0.92	2.03	0.89
	Sibley Volcanic Regional Preserve	6	161.28	17.75	59.03	84.5
	Tilden Regional Preserve	1	447.11	42.28	81.19	323.64
	Tilden-Grizzly Peak Blvd.	1	34.15	6.42	7.22	20.51
Wildcat Canyon	1	95.51	24.42	31.63	39.46	
TOTAL	TOTAL	1	77.41	126.54	407.77	77.41
	TOTAL	2	16.03	14.48	75.7	16.03
	TOTAL	6	220.82	139.71	270.24	220.82

A total of about 13.51 acres of UCB's proposed treatment area at Strawberry Canyon occur within designated critical habitat Unit 6. Habitats within UCB's proposed treatment area within critical habitat Unit 6 at Strawberry Canyon consist of 0.37 acre of PCE 1 and 12.78 acres of unsuitable habitat dominated by eucalyptus and other non-native trees without any PCEs. There is no suitable PCE 2 within UCB's proposed treatment area at Strawberry Canyon within designated critical habitat Unit 6 (Table 6). There is no data on the availability of PCE 3 within the action area.

A total of about 42.81 acres of UCB's proposed treatment area at Claremont Canyon occur within designated critical habitat Unit 6. Habitats within UCB's proposed treatment area within critical habitat Unit 6 at Claremont Canyon consist of 7.12 acres of PCE 1, 1.56 acres of PCE 2, and 34.12 acres of unsuitable habitat dominated by eucalyptus and other non-native trees without any PCEs (Table 6). There is no data on the availability of PCE 3 within the action area.

A total of about 9.87 acres of UCB's proposed treatment area at Frowning Ridge occur within designated critical habitat Unit 1. Habitats within UCB's proposed treatment area within critical habitat Unit 1 at Frowning Ridge consist of 2.44 acres of PCE 1, 4.05 acres of PCE 2, and 3.38 acres of unsuitable habitat dominated by eucalyptus without any PCEs (Table 6). There is no data on the availability of rock outcrops (PCE 3) within the action area.

A total of about 174.36 acres of UCB's proposed treatment area at Frowning Ridge occur within designated critical habitat Unit 6. Habitats within UCB's proposed treatment area within critical habitat Unit 6 at Frowning Ridge consist of 50.74 acres of PCE 1, 26.75 acres of PCE 2, and 96.87 acres of unsuitable habitat dominated by eucalyptus and other non-native trees without any PCEs (Table 6). There is no data on the availability of PCE 3 within the action area.

Oakland: North Hills-Skyline

A total of about 62.09 acres of Oakland's proposed treatment area at North Hills-Skyline occur within designated critical habitat Unit 6. Habitats within Oakland's proposed treatment area within critical habitat Unit 6 at North Hills-Skyline consist of 43.21 acres of PCE 1 and 18.88 acres of unsuitable habitat dominated by eucalyptus, Monterey pine, and other non-native trees without any PCEs (Table 6). There is no suitable PCE 2 within Oakland's proposed treatment area at North Hills-Skyline within designated critical habitat Unit 6 (Table 6). There is no data on the availability of PCE 3 within the action area. About 90 large Monterey pines cover about 8.5 acres within the shrub matrix at North Hills-Skyline; these pines and other trees within the area threaten to take over the PCE 1 at North Hills-Skyline.

EBRPD: WHRRMP Treatment Areas

A total of about 591.54 acres of EBRPD's WHRRMP treatment areas occur within designated critical habitat Unit 1 at Kennedy Grove, Tilden Regional Preserve, Tilden-Grizzly Peak Blvd., and Wildcat Canyon regional parks. Habitats within EBRPD's treatment areas within critical habitat Unit 1 consist of 73.95 acres of PCE 1, 122.29 acres of PCE 2, and 395.10 acres of unsuitable habitat dominated by eucalyptus and other non-native trees without any PCEs (Table 6). There is no data on the availability of PCE 3 within the action area.

A total of about 106.25 acres of EBRPD's treatment areas occur within designated critical habitat Unit 2 at Anthony Chabot, Huckleberry, and Redwood regional parks. Habitats within EBRPD's proposed and interconnected treatment areas within critical habitat Unit 2 consist of 16.03 acres of PCE 1, 14.48 acres of PCE 2, and 75.70 acres of unsuitable habitat dominated by eucalyptus and other non-native trees without any PCEs (Table 6). There is no data on the availability of PCE 3 within the action area.

A total of about 338.37 acres of EBRPD's treatment areas occur within designated critical habitat Unit 6 at Claremont Canyon, Claremont Canyon-Stonewall, Sibley Island, and Sibley Volcanic Regional Preserve. Habitats within EBRPD's proposed and interconnected treatment areas within critical habitat Unit 6 consist of 119.38 acres of PCE 1, 111.40 acres of PCE 2, and 107.59 acres of unsuitable habitat dominated by eucalyptus and other non-native trees without any PCEs (Table 6). There is no data on the availability of PCE 3 within the action area.

Pallid Manzanita

Several documented and observed CNDDDB occurrences of pallid manzanita occur in the action area within EBRPD's WHRRMP treatment areas (CDFW 2012, ESA 2013). The two largest known populations of the species occur in Sobrante Ridge Regional Preserve and Huckleberry Botanic Regional Preserve, including portions of the action area. A census of pallid manzanita occurring on EBRPD lands was conducted in 2004 by EBRPD biologists, during which each individual plant's location and canopy radius was mapped (Service 2010b). Huckleberry Preserve had 747 mature plants and 176 seedlings that occupied 20 acres, and Sobrante Ridge had 454 mature plants that occupied 9 acres. Together, the two largest colonies represent 89 percent of the total number of mature pallid manzanita plants in existence. Satellite colonies of the Huckleberry Preserve colony occur on other properties managed by EBRPD, including Sibley Volcanic Regional Preserve and Redwood Regional Park. In addition, a single naturalized population occurs near the Tilden Park Botanical Garden in Contra Costa County (Service 2010b). In addition, it is likely that viable seed banks exist within the action area, and the proposed treatment activities may stimulate germination. Therefore, this species is known to occur in parts of the action area and may occur in other areas with suitable habitat. There are no known occurrences of the pallid manzanita within UCB and Oakland's proposed treatment areas.

Additional information on known occurrences of pallid manzanita was obtained from an EBRPD wildfire hazard reduction stewardship resources site assessment, completed in February 2012 and the Draft EBRPD Pallid Manzanita Management Plan (ESA 2013). Of the 22 parks/parcels evaluated, 5 contain known occurrences of pallid manzanita, as shown in Table 7 below. There are 1.3 acres of occupied pallid manzanita habitat within the action area in EBRPD WHRRMP treatment areas. The largest population occurs at Huckleberry Preserve and is known to be infected with *P. cinnamomi*. There is an estimated total of 656 pallid manzanita plants within EBRPD's proposed WHRRMP treatment areas including: 74 plants in Redwood Regional Park RTA RD001, 478 in Huckleberry Botanic Regional Preserve RTA HP002, 11 in Huckleberry Botanic Regional Preserve RTA HP002, 3 in Sibley Regional Volcanic Park RTA SR005, 12 in Tilden Regional Park RTA TI011, 8 in Tilden Regional Park RTA TI021, and 70 in Sobrante Ridge Regional Preserve RTA SO001. An additional 389 pallid manzanita plants occur on

Table 7. Acres of Occupied Pallid Manzanita Habitat within EBRPD WHRRMP Treatment Areas.

Park	Action Type	Acres
Huckleberry	Proposed	0.99
	Interconnected	0.00
Redwood	Proposed	0.00
	Interconnected	0.01
Sobrante	Proposed	0.16
	Interconnected	0.00
Tilden Park	Proposed	0.00
	Interconnected	0.08
Sibley Volcanic	Proposed	0.003
	Interconnected	0.00
Total	Proposed	1.20
	Interconnected	0.10

EBRPD lands within the proposed Draft EBRPD Pallid Manzanita Management Plan area (ESA 2013). An additional 431 pallid manzanita plants occur on private lands adjacent to but outside of EBRPD’s proposed WHRRMP treatment areas and Draft EBRPD Pallid Manzanita Management Plan area (ESA 2013). Summarized below are the occurrences of pallid manzanita within EBRPD WHRRMP treatment areas followed by a discussion of pallid manzanita plants that occur on EBRPD lands outside of WHRRMP treatment areas but within the Draft EBRPD Pallid Manzanita Management Plan area.

EBRPD WHRRMP Treatment Areas

A total of about 656 pallid manzanita plants occur within 7 of EBRPD’s proposed WHRRMP treatment areas across 5 parks (ESA 2013). The status of the pallid manzanita within these treatment areas is summarized below.

Redwood Regional Park RTA RD001

Numerous non-native eucalyptus and Monterey pine have already been removed in this WHRRMP treatment area. Vegetation here consists of Monterey pine, eucalyptus forest/plantation, California annual grassland, oak-bay woodland/forest, xeric coastal scrub, broom scrub (non-native French broom), and developed, disturbed, and landscaped areas (ESA 2013). There are approximately 75 pallid manzanita plants in RTA RD001 including 3 mature plants and 72 seedlings.

Huckleberry Botanic Regional Preserve RTA HP002

Vegetation communities within this RTA include northern maritime chaparral and oak-bay woodland/forest. There are approximately 478 pallid manzanita plants in this treatment area including 301 mature plants and 177 seedlings. There are an additional 12 pallid manzanita plants located on EBRPD lands outside the treatment area and 326 mature pallid manzanita plants on immediately adjacent and contiguous private property.

Huckleberry Botanic Regional Preserve RTA HP003

Vegetation communities within this treatment area include northern maritime chaparral and oak/bay woodland/forest. There are approximately 11 mature pallid manzanita plants in the treatment area. There are an additional 96 mature pallid manzanita on the adjacent tennis club property.

Sibley Regional Volcanic Park RTA SR005

Vegetation communities within this treatment area include oak-bay woodland/forest, non-native coniferous forest, coyote brush scrub, several types of coastal scrub, California annual grassland, and developed, disturbed, and landscaped areas. As of 2004 there were 3 pallid manzanita plants at Sibley Regional Volcanic Park (ESA 2013). At the time observed these pallid manzanitas were of small to medium size, appeared to be of the same age, and were all in good condition but shaded by Monterey pines. It is possible these individuals were planted or they may have germinated after a disturbance, such as a fire or trail construction. There are historical collections from the vicinity of the “head of San Leandro Creek” (CDFW 2012); thus, there may have been a population of pallid manzanita in this general area historically.

Tilden Regional Park RTA TI011

Vegetation communities within this treatment area include oak-bay woodland/forest, xeric coastal scrub, non-native coniferous forest, redwood forest, riparian woodland, and developed/disturbed/landscaped areas. Pallid manzanita plants occur on a knoll at the western end of the treatment area. The Selby Trail runs through the population. Kanz (2004) reported 8 dead pallid manzanita plants at this site but that the remaining 12 were in very good to excellent condition. The pallid manzanita plants at this site were planted in the 1940s (CDFW 2012), and in 2004 there was no sign of regeneration occurring here (Kanz 2004). While this is a relatively open site, there are coast live oak, redwood, and bay trees within and around the periphery.

Tilden Regional Park RTA TI021

Vegetation communities within this treatment area include oak-bay woodland/forest, nonnative coniferous forest, and developed/disturbed/ landscaped areas. Pallid manzanita occur along Wildcat Canyon Road to the east and north of the Botanical Garden and were also planted in the 1940's (CDFW 2012.). Eight pallid manzanitas were documented within this treatment area by EBRPD in 2004. Kanz (2004) noted that five of these trees were shaded by oaks and several were in poor condition.

Sobrante Ridge Regional Preserve RTA SO001

Vegetation communities within this treatment area include northern maritime chaparral and oak-bay woodland/forest. The northern maritime chaparral here is dominated by pallid manzanita. There are an estimated 454 pallid manzanita plants in the Sobrante Ridge population. Eight plants are within a road easement on contiguous non-EBRPD lands, an estimated 70 plants are located within RTA SO001, and an estimated 376 plants are located on EBRPD lands outside the treatment area. Kanz (2004) noted that shading by native trees appeared to be an increasing threat to manzanitas at this site and that pallid manzanita along the trail had been recently pruned.

Draft EBRPD Pallid Manzanita Management Plan

The Draft EBRPD Pallid Manzanita Management Plan covers all pallid manzanita stands and habitat on EBRPD lands; thus the plan covers nearly 75 percent of all pallid manzanita plants range-wide (ESA 2013). The Draft EBRPD Pallid Manzanita Management Plan has the following goals: (1) manage and expand existing pallid manzanita stands in such a way as to maximize individual plant health, maintain species genetic integrity and diversity, and promote stand regeneration in perpetuity; (2) establish or restore additional pallid manzanita stands in areas that are not subject to fuel management or other incompatible uses; and (3) control the spread of the fungal pathogen, *P. cinnamomi*, within and between pallid manzanita stands. The occurrence of pallid manzanita within the Draft EBRPD Pallid Manzanita Management Plan area that overlaps with the EBRPD WHRRMP treatment areas is described above. An additional 389 pallid manzanita plants occur outside of EBRPD's WHRMMP treatment areas but within the Draft EBRPD Pallid Manzanita Management Plan area; the occurrence of these pallid manzanita plants is summarized below.

Redwood Regional Park RD001

A single mature pallid manzanita was located here in 2010 (ESA 2013). This plant, the easternmost stand on the East Ridge trail, and a stand to north on East Bay Municipal Utility District lands above Pinehurst Road may occur along a continuous cross ridge or divide, suggesting that suitable substrate exists for pallid manzanita in this area. Blue-gum eucalyptus and Monterey pine dominate the tree canopy in this area. There is likely a sparse understory due to the tree canopy.

Huckleberry Botanic Regional Preserve HU001

This area encompasses two knolls dominated by brittleleaf manzanita, but pallid manzanita also occurs on both knolls in areas that had been disturbed about a decade earlier. EBRPD's 2004 census found 12 mature pallid manzanita shrubs at these locations, 2 on the western knoll and 10 on the eastern knoll. Both knolls were characterized as "barrens" with little to no soil development where nothing but manzanita grows. The knolls appear to be surrounded by oak-bay woodland and coastal scrub and are accessible by old fire trails (ESA 2013).

Sobrante Ridge Regional Preserve SO001

The majority of the Sobrante Ridge population, an estimated 376 plants, occur within this area. The northern maritime chaparral here is dominated by pallid manzanita. A shrub oak was reported to make up about 15 percent of the shrub canopy and was observed to regenerate under the pallid manzanita canopy (ESA 2013).

Effects of the Proposed Project**California Red-Legged Frog****Direct Effects**

Any individual California red-legged frog within the treatment areas would be temporarily displaced or shelter-in place during treatment activities. Manual vegetation treatment methods would likely result in temporary harassment of California red-legged frogs by disrupting typical foraging and sheltering activities. California red-legged frogs could be injured or killed during high-impact activities involving the use of heavy equipment within suitable habitat. Any California red-legged frogs that are hiding or aestivating in any burrows that are collapsed by heavy equipment or along skid trails would be injured or killed. California red-legged frogs may also be killed by being run over by project-related traffic on roads and in staging areas near suitable habitat.

The potential for injury and mortality of California red-legged frogs would be minimized by implementation of the following avoidance and minimization measures: a Service-approved biologist will provide all contractors and their personnel training in the identification of the California red-legged frog and its habitats and the implementation of the avoidance and minimization measures; a Service-approved biologist will conduct pre-construction surveys of the work area and monitor work within suitable habitat for the California red-legged frog; contractors will minimize the use of heavy equipment during the wet season when California red-legged frogs are most likely to disperse through the action area; a Service-approved biologist will supervise the installation of temporary exclusion fencing around work areas during the wet season; and a Service-approved biologist will relocate any California red-legged frogs within the work area to safety outside of the work area. With implementation of the avoidance and minimization measures, the potential for injury and mortality of the California red-legged frog would be reduced; however, any California red-legged frogs captured and relocated may be stressed and more susceptible to predation.

Implementation of the project would also have a temporary adverse effect on suitable California red-legged frog habitat within the action area during work activities. Disturbance within suitable riparian habitat for the California red-legged frog would be limited to the removal of dead wood, wood debris, and non-native plant species; no living native riparian plant species would be removed. No aquatic breeding habitat for the California red-legged frog would be directly disturbed by the proposed project. However, removal of eucalyptus and other vegetation within California red-legged frog habitat may result in temporary adverse effects to water quality through increased sedimentation in nearby aquatic habitat from overland flow of rainwater over

disturbed soil areas. This would be more likely to occur in treatment areas where large-scale logging or road-building would be conducted, rather than areas only to be thinned. Runoff to streams or other aquatic habitat would also be more likely along steep slopes and less likely where there is a riparian vegetation buffer that stops or slows the overland flow.

The most vulnerable California red-legged frog life stages are eggs and tadpoles, because of the inability to move away from disturbances in their environment. Eggs and tadpoles downstream of vegetation treatment areas could be adversely affected by suspended sediment, which can cause suffocation. In addition, sedimentation downstream could result in reduced food availability for tadpoles if their food source (algae and diatoms) is affected. However, there are no known California red-legged frog breeding areas within the action area (including areas within 500 feet downstream), so direct effects to vulnerable life stages are not anticipated. Juvenile (post-metamorphic) and adult California red-legged frogs are likely to be able to move out of turbid areas but could experience effects from a decrease in food supply if macro-invertebrate populations decrease.

The applicants will minimize the potential for injury and mortality of the California red-legged frog and the degradation of aquatic habitat within the action area by implementing the following avoidance and minimization measures during implementation of the proposed and interconnected actions: (1) trees within 50 feet of watercourses would only be removed by hand felling to avoid disturbance of soils from mechanized equipment; (2) felled trees would be either chipped or lopped and scattered on the treatment areas, and in some cases logs would be retained as a component of sediment/erosion control measures; (3) work would be conducted in the fall (August-November), when vulnerable life stages of the California red-legged frog (tadpoles and egg masses) would not be present; and (4) the applicants will implement a Stormwater Pollution Prevention Plan, spill prevention plan, and other BMPs to minimize the potential for degradation of aquatic habitat within the action area. Additionally, the applicants will minimize the potential for injuring and killing dispersing California red-legged frogs during the wet season by avoiding the use of heavy equipment and major ground disturbing activities on days with a 40 percent or greater chance for rain unless exclusion fencing was installed around the work area prior to the start of the wet season.

California red-legged frogs could become entangled within silt fencing or exclusion fencing. Any California red-legged frogs entangled within silt fencing or exclusion fencing would likely desiccate, starve, or be killed by a predator. The Service-approved biologist will minimize the potential for the entangling, injury, and mortality of California red-legged frogs along silt fencing and exclusion fencing by using only Service-approved fencing material and daily inspecting both the inside and the outside of all fencing and relocating any California red-legged frogs that are entangled or trapped.

California red-legged frogs could become entangled if plastic monofilament netting were used for erosion control. Any California red-legged frogs entangled within plastic monofilament netting would likely desiccate, starve, or be killed by a predator. The applicants will avoid the potential for entangling California red-legged frogs by using natural/biodegradable erosion control measures (*i.e.*, straw wattles, jute, and hay bales) instead of plastic monofilament netting.

California red-legged frogs could be injured or killed if they were exposed to herbicides. Herbicide application will not be conducted within “no spray zones” within the action area imposed by the injunction issued on October 20, 2006, by the U.S. District Court for the Northern District of California for the protection of the California red-legged frog. “No spray zones” establish a buffer of 60 feet for ground applications and 200 feet for aerial applications from the edge of California red-legged frog aquatic and upland habitat (http://www.cdpr.ca.gov/docs/endspec/rl_frog/index.htm). The active ingredients for which the no-spray buffer zones apply include all three herbicides proposed for use: triclopyr (Garlon 4 Ultra), imazapyr (Stalker), and glyphosate (RoundUp). One designated “no spray zone” occurs in the action area at Huckleberry Preserve and Sibley Preserve. If the California red-legged frog did occur in this area, there would be no impacts related to herbicides since no application would occur.

An analysis of the potential for direct effects to the California red-legged frog from toxicity due to exposure to herbicides that would be applied within the action area (outside of designated California red-legged frog “no spray zones”) is provided in the Biological Assessment (Appendix E in FEMA 2012). Based on this analysis, adverse effects from direct contact or dietary exposures to sprayed herbicides are not anticipated with appropriate and careful application (*i.e.*, following recommended guidelines, especially those recommending against spraying in or near surface water bodies of the proposed herbicides (*e.g.*, Garlon 4 Ultra, Stalker, and Roundup)). Specific recommendations and BMPs for herbicide application to avoid toxicity effects to California red-legged frog are included in the *Conservation Measures* and summarized below: (1) foliar application of herbicides or other spray application methods would be prohibited within 60 feet of standing or flowing water; (2) only direct application of Service-approved herbicides safe for aquatic application (*e.g.*, Garlon 3A, Stalker, and Roundup, but not Garlon 4 Ultra) would be allowed to be applied to cut stumps within 60 feet of standing or flowing water; (3) no herbicide application would occur within 24 hours of a rain event or on days with a 40 percent chance or greater for rain; (4) foliar application of herbicides or other spray application methods will not be applied when wind speeds exceed 10 miles per hour to reduce likelihood of drift into surface water bodies; (5) herbicide application would be conducted by a State of California Qualified Applicator or by staff under their supervision; (6) no herbicides would be intentionally applied to non-target species; and (7) CDPH regulations will be followed for the labeling, application, storage, disposal, and transport of herbicides. Thus, the Service believes that with the implementation of the proposed BMPs and avoidance and minimization measures during herbicide application that the potential for injury and toxicity to California red-legged frogs or degradation of aquatic habitat will be minimized.

The Biological Assessment (Appendix E in FEMA 2012) also presents an analysis of the potential for toxicity from eucalyptus wood chips, which would be placed on the ground in many parts of the action area to control erosion. Findings indicate that short-term and localized effects on soil microbes, soil invertebrates, and terrestrial plant seedlings may result from exposure to fresh eucalyptus and possibly pine wood chips. Once aged, these chips are expected to be nonhazardous to soil associated organisms. Thus retaining wood chips onsite is expected to have no long-term adverse effects on California red-legged frogs.

The *Conservation Measures* section identifies the general avoidance and minimization measures and BMPs that would be implemented to avoid and minimize effects of the proposed project on

the California red-legged frog. These measures include: timing the proposed action to occur within the approved work windows for the species and avoiding vulnerable life stages; complying with all rules, regulations, best practices, and guidance by the CDPR for herbicide application; ensuring a Service-approved biological monitor oversees work activities; implementing general construction BMPs; and conducting vegetation management activities for habitat restoration. With all BMPs and avoidance measures in place, including species-specific avoidance and minimization measures, the Service expects adult California red-legged frog individuals to temporarily disperse out of the immediate work area and return upon completion of the initial treatment.

Tables 8 and 9 below provide information on the type and quantity of California red-legged frog habitat that would be disturbed or enhanced in the UCB and EBRPD parcels, respectively. All non-developed habitats within 50 feet of U.S. Geological Survey NHD line surface hydrology were considered to be potential non-breeding riparian/aquatic habitat for the California red-legged frog. There is no known breeding habitat for the California red-legged frog within the action area that would be directly disturbed by the proposed and interconnected project activities. All non-developed habitats more than 50 feet but less than 500 feet from U.S. Geological Survey NHD line surface hydrology were considered to be potential upland/dispersal habitat for the California red-legged frog. Although suitable California red-legged frog dispersal habitat also occurs within the action area more than 500 feet from U.S. Geological Survey NHD line surface hydrology, California red-legged frogs are only likely to disperse through these areas on rainy days when high-impact proposed project activities would be avoided unless surrounded by exclusion fencing; therefore, the Service believes that California red-legged frogs are not likely to be adversely affected by proposed and interconnected project activities within areas more than 500 feet from U.S. Geological Survey NHD line surface hydrology. Also, there would be no permanent loss of dispersal habitat for the California red-legged frog within these areas.

Adverse effects to California red-legged frog habitat would be short-term and temporary since BMPs and conservation measures such as the use of hand labor would be used in areas containing California red-legged frog habitat such that there would be less disturbance of soil and habitat (and less potential for injury/mortality). In addition, California red-legged frog upland habitat would be enhanced by the removal of eucalyptus and conversion to native plant species resulting in improved hydrology and water quality within the action area and a greater diversity and abundance of invertebrate prey species. Therefore, the majority of adverse effects to California red-legged frog habitat due to project implementation would be short-term and temporary.

UCB proposed treatment activities will result in the temporary disturbance of a total of 7.2 acres of potential non-breeding riparian/aquatic habitat (areas within 50 feet of NHD line surface hydrology) and 101.9 acres of upland/dispersal habitat (areas between 50 feet and 500 feet from NHD line surface hydrology) for the California red-legged frog. UCB will enhance a total of 2.9 acres of non-breeding riparian/aquatic habitat and 35.8 acres of upland/dispersal habitat by removing non-native eucalyptus and restoring with native plant species (Table 8).

Table 8. California Red-Legged Frog Habitat Disturbance and Enhancement (UCB Claremont Canyon (PDM-PJ-09-CA-2005-11) and Frowning Ridge (PDM-PJ-09-CA-2006-004))

Park	Habitat Type	Short-term Temporary¹ Disturbance (acres)	Enhancement/Eucalyptus Removal² (acres)
Claremont Canyon	Riparian/Aquatic ³	1.61	0.85
	Upland/Dispersal ⁴	29.64	21.80
	Unsuitable ⁵	0.27	0.00
Frowning Ridge	Riparian/Aquatic ³	5.60	2.04
	Upland/Dispersal ⁴	72.26	13.99
	Unsuitable	0.61	0.00
TOTAL	Riparian/Aquatic³	7.2	2.9
	Upland/Dispersal⁴	101.9	35.8
	Unsuitable⁵	0.9	0.0

¹ Short-term temporary = habitat anticipated to return to pre-project conditions or better in less than one year of the initial disturbance with implementation of BMPs and conservation measures including hand labor.

² Acres of California red-legged frog habitat enhanced by the removal of eucalyptus and conversion to native plant species.

³ Riparian/Aquatic = habitat within 50 feet of NHD line surface hydrology.

⁴ Upland/Dispersal habitat = habitat between 50 and 500 feet from NHD line surface hydrology.

⁵ Unsuitable habitat = developed/landscaped areas

EBRPD treatment activities will result in the temporary disturbance of a total of 65.6 acres of potential non-breeding riparian/aquatic habitat and 453.1 acres of upland/dispersal habitat for the California red-legged frog. EBRPD will enhance a total of 17.1 acres of non-breeding riparian/aquatic habitat and 132.5 acres of upland/dispersal habitat by removing or thinning non-native eucalyptus and restoring with native plant species (Table 9).

The potential for adverse effects to California red-legged frog individuals within the action area exists when work is being conducted in areas that provide suitable habitat for any life stages of the species. The level of effect on the California red-legged frog depends on the activity and type of equipment used. Low-impacts activities such as mowing, hand removal of vegetation, and herbicide application within suitable habitat for California red-legged frogs may temporarily displace California red-legged frogs and disrupt feeding and sheltering activities; however, no California red-legged frogs are likely to be injured or killed during these low-impact activities. High-impact activities involving the use or staging of heavy machinery (*e.g.*, eucalyptus removal) within suitable habitat for the California red-legged frog, however, may crush California red-legged frogs resulting in their injury or mortality. Tables 10, 11, and 12 below summarize for each applicant the acres over which low-impact and high-impact activities

Table 9. California Red-Legged Frog Habitat Disturbance and Enhancement (EBRPD (HMGP 1731-16-34), Tilden-Grizzly-Peak (PDM-PJ-09-CA-2006-004), and Interconnected Actions)

Park	Habitat Type ³	Short-term Temporary ¹ Disturbance (acres)	Enhancement/ Eucalyptus Removal ² (acres)
Anthony Chabot	Riparian/aquatic	7.88	5.95
	Upland/Dispersal	169.56	71.45
	Unsuitable	2.2	0.00
Claremont Canyon	Upland/Dispersal	35.44	1.92
	Unsuitable	0.83	0.00
Huckleberry	Upland/Dispersal	18.07	0.45
	Unsuitable	0.24	0.00
Kennedy Grove	Riparian/aquatic	3.52	0.96
	Upland/Dispersal	9.52	2.46
	Unsuitable	2.63	0.00
Lake Chabot	Upland/Dispersal	4.19	2.09
Leona Canyon	Upland/Dispersal	2.97	0.00
Redwood	Riparian/aquatic	41.5	8.55
	Upland/Dispersal	2.25	0.56
	Unsuitable	1.9	0.00
Sibley Volcanic	Upland/Dispersal	27.22	3.04
	Unsuitable	0.02	0.00
Sobrante Ridge	Upland/Dispersal	12.5	0.00
	Unsuitable	0.39	0.00
Tilden Park (including Grizzly Peak)	Riparian/aquatic	6.92	1.60
	Upland/Dispersal	139.74	43.6
	Unsuitable	17.04	0.00
Wildcat Canyon	Riparian/aquatic	5.75	0.03
	Upland/Dispersal	31.68	6.98
	Unsuitable	4.85	0.00
Total	Riparian/aquatic	65.6	17.1
	Upland/Dispersal	453.1	132.5
	Unsuitable	30.1	0.00

¹ Short-term temporary = habitat anticipated to return to pre-project conditions or better in less than one year of the initial disturbance with implementation of BMPs and conservation measures including hand labor.

² Acres of California red-legged frog habitat enhanced by the removal of eucalyptus and conversion to native plant species.

³ Habitat Type: Riparian/Aquatic = habitat within 50 feet of the NHD line surface hydrology; Upland/Dispersal habitat = habitat between 50 and 500 feet from NHD line surface hydrology.

will occur within suitable California red-legged frog habitat during initial vegetation management activities and follow-up maintenance over the 10-year period.

UCB high-impact activities involving the use and staging of heavy equipment at Claremont Canyon and Frowning Ridge may result in the injury or mortality of California red-legged frogs within a total of 54.7 acres of suitable habitat (Table 10). UCB high- and low-impact activities over 93.7 acres of suitable habitat may temporarily displace California red-legged frogs and disrupt feeding and sheltering activities during initial treatment activities. UCB follow-up vegetation management activities may also temporarily displace California red-legged frogs and disrupt feeding and sheltering activities over 93.7 acres of suitable habitat for between 3 and 6 days annually over the 10-year period at Claremont Canyon and Frowning Ridge (Table 10).

Injury or mortality of California red-legged frogs is unlikely to occur within EBRPD project areas because no heavy equipment would be used within suitable habitat for the California red-legged frog; however, there is the potential that an individual California red-legged frog could be injured or killed by project-related traffic or equipment when dispersing through work and staging areas. EBRPD treatment activities may temporarily displace California red-legged frogs and disrupt feeding and sheltering activities over 588.3 acres of suitable habitat during initial treatment activities (Table 11). EBRPD follow-up vegetation management activities may temporarily displace California red-legged frogs and disrupt feeding and sheltering activities over 588.3 acres of suitable habitat for between 1 and 25 days annually over the 10-year period (Table 11).

The proposed project activities in Oakland project areas (and other areas more than 500 feet from NHD line surface hydrology) are not likely to injure or kill California red-legged frogs or disrupt feeding and sheltering activities because: California red-legged frogs are only likely to disperse through these areas during rainy days; and the potential for injuring any dispersing California red-legged frogs in these areas would be minimized by avoiding work on days with a 40 percent chance or greater for rain unless exclusion fencing was installed around the work areas prior to the start of the wet season.

Since the proposed project will not result in the permanent removal of any suitable habitat for the California red-legged frog, effects to California red-legged frogs in the form of habitat modification are expected to be discountable. The overall effects of the treatment actions on the California red-legged frog are summarized in Table 12 below.

Indirect Effects

Indirect effects to the California red-legged frog could occur through loss of aquatic habitat through sedimentation if it occurs in the long-term. Long-term effects to benthic habitats (*e.g.*, filling of interstitial spaces in aquatic sediments) could result in changes to food resources, as benthic habitats are utilized by many types of invertebrates serving as prey. As described above, BMPs would be implemented to avoid or minimize erosion from disturbed soil areas. Long-term vegetation management and monitoring would include measures for long-term erosion control. Therefore, indirect effects from long-term sedimentation in aquatic habitat would be discountable.

Table 10. UCB Low- and High-Impact Activities within California Red-Legged Frog Habitat (UCB Claremont Canyon (PDM-PJ-09-CA-2005-11) and Frowning Ridge (PDM-PJ-09-CA-2006-004))

Park	Initial Project Implementation		Follow-up Maintenance	
	Low-impact Activities ¹ (acres)	High-impact Activities ² (acres)	Low-impact Activities ¹	
			Acres	Days of Maintenance/Year ³
Claremont Canyon	8.32	22.65	30.96	3.10
Frowning Ridge	30.72	32.06	62.78	6.28
TOTAL	39.0	54.7	93.7	9.4

¹ Acres of low-impact activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) within suitable California red-legged frog habitat.

² Acres of high-impact activities (*e.g.*, use or staging of heavy machinery such as for eucalyptus removal) within suitable California red-legged frog habitat.

³ On average, the level of effort for maintenance is equivalent to one day of work per 10 acres per year. The results were rounded to the nearest 0.1 day. Maintenance activities include hand crews, pile burning, weed whipping, and stump spraying, over the 10-year permit period.

Based on the analysis provided in the Biological Assessment (Appendix E in FEMA 2012), indirect effects due to bioaccumulation of herbicides in dietary items (*e.g.*, algae, detritus, terrestrial invertebrates, and small vertebrates) is not expected to be significant based on chemical properties (*e.g.*, log K_{ow} , solubility, sorption potential, and environmental persistence). In addition, none of the known inactive or secondary ingredients of the commercial mixtures (*e.g.*, kerosene, surfactants) have significant bioaccumulation potential.

Potential Beneficial Effects

Vegetation management goals of the applicants include the removal of invasive plant species and/or selective thinning. Following implementation of the proposed project, long-term vegetation management activities would be conducted to control or eliminate invasive plant species. This would result in beneficial effects to the California red-legged frog through the establishment and/or enhancement of upland/dispersal habitat and riparian habitat. California red-legged frogs would also benefit from eucalyptus removal by removing a source of phytochemicals that impairs water quality and affects invertebrate prey communities. Removal of eucalyptus would also benefit California red-legged frogs by increasing the amount of time that aquatic habitats within the action area remain wet. UCB will enhance a total of 2.9 acres of non-breeding riparian/aquatic habitat and 35.8 acres of upland/dispersal habitat for the California red-legged frog by removing non-native eucalyptus and restoring with native plant species (Table 8). EBRPD will enhance a total of 17.1 acres of non-breeding riparian/aquatic habitat and 132.5 acres of upland/dispersal habitat for the California red-legged frog by removing or thinning stands of non-native eucalyptus and restoring with native plant species (Table 9).

Table 11. EBRPD Low- and High-Impact Activities within California Red-Legged Frog Habitat (EBRPD (HMGP 1731-16-34), EBRPD Tilden-Grizzly-Peak (PDM-PJ-09-CA-2006-004), and Interconnected WHRRMP Actions)

Park	Initial Project Implementation		Follow-up Maintenance	
	Low-impact Activities ¹ (acres)	High-impact Activities ² (acres)	Low-impact Activities ¹ (acres)	
			Acres	Days of Maintenance/Year ³
Anthony Chabot	247.20	0.00	247.20	24.72
Claremont Canyon	35.44	0.00	35.44	3.55
Huckleberry	18.07	0.00	18.07	1.80
Kennedy Grove	13.04	0.00	13.04	1.30
Lake Chabot	4.19	0.00	4.19	0.42
Leona Canyon	2.97	0.00	2.97	0.30
Redwood	43.74	0.00	43.74	4.37
Sibley Volcanic	27.23	0.00	27.23	2.72
Sobrante	12.50	0.00	12.50	1.25
Tilden Park (including Grizzly Peak)	146.65	0.00	146.65	14.65
Wildcat	37.43	0.00	37.43	3.74
TOTAL	588.3	0.0	588.3	58.9

¹ Acres of low-impact activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) within suitable California red-legged frog habitat.

² Acres of high-impact activities (*e.g.*, use or staging of heavy machinery such as for eucalyptus removal) within suitable California red-legged frog habitat.

³ On average, the level of effort for maintenance is equivalent to one day of work per 10 acres per year. The results were rounded to the nearest 0.1 day. Maintenance activities include hand crews, pile burning, weed whipping, and stump spraying, over the 10-year permit period.

Table 12. Summary of Effects to California Red-Legged Frogs from Proposed and Interconnected Actions

Applicant	Non-Breeding Riparian/Aquatic ¹ (acres)		Upland/Dispersal ² (acres)		Low- and High-impact Activities (acres)		
	Temporary ³ Disturbance	Enhanced/Eucalyptus Removal ⁴	Temporary ³ Disturbance	Enhanced/Eucalyptus Removal ⁴	Low-impact Activities (Initial) ⁵	Low-impact Activities (Follow-up Maintenance) ⁶	High-impact Activities ⁷
UCB ⁸	7.2	2.9	101.9	35.8	39.0	93.7	54.7
EBRPD ⁹	65.6	17.1	453.1	132.5	588.3	588.3	0.0
TOTAL	72.8	20.0	555.0	168.3	627.3	682.0	54.7

¹ Non-Breeding Riparian/Aquatic = habitat within 50 feet of the NHD line

² Upland/Dispersal habitat = non-developed habitats between 50 and 500 feet from the NHD line

³ Temporary disturbance = habitat anticipated to return to pre-project conditions or better in less than one year of the initial disturbance with implementation of BMPs and conservation measures including hand labor.

⁴ Acres of California red-legged frog habitat enhanced by the removal of eucalyptus and conversion to native plant species.

⁵ Acres of low-impact activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) within suitable California red-legged frog habitat during initial vegetation treatment.

⁶ Acres of low-impact activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) within suitable California red-legged frog habitat during follow-up maintenance activities over the 10-year period.

⁷ Acres of high-impact activities (*e.g.*, use or staging of heavy machinery such as for eucalyptus removal) within suitable California red-legged frog habitat.

⁸ UCB Claremont Canyon (PDM-PJ-09-CA-2005-11) and Frowning Ridge (PDM-PJ-09-CA-2006-004)

⁹ EBRPD (HMGP 1731-16-34), EBRPD Tilden-Grizzly-Peak (PDM-PJ-09-CA-2006-004), and Interconnected WHRRMP Actions

EBRPD's preservation in perpetuity of at least 386.2 acres of core scrub habitat for the Alameda whipsnake may also benefit the California red-legged frog by preserving upland/dispersal habitat for the California red-legged frog within the South and East San Francisco Bay Recovery Unit; however, it is not known at this time if the preserved habitat would be near any suitable aquatic habitat for the California red-legged frog.

Alameda Whipsnake

Any individual Alameda whipsnake within the treatment areas would be temporarily displaced or would shelter-in place within rocky outcrops and burrows during treatment activities. Manual vegetation treatment methods would likely result in the temporary disturbance of Alameda whipsnake breeding, feeding, and sheltering. The use of heavy machinery for vegetation treatment would have the potential to injure and/or kill Alameda whipsnakes by running over them or by collapsing burrows where the Alameda whipsnake may be hiding or hibernating. Alameda whipsnakes may also be killed by being run over by project-related traffic on roads and in staging areas near suitable habitat.

The potential for injury and mortality of Alameda whipsnakes would be minimized by implementation of the following avoidance and minimization measures: a Service-approved biologist will provide all contractors and their personnel training in the identification of the Alameda whipsnake and its habitats and the implementation of the avoidance and minimization measures; a Service-approved biologist will conduct pre-construction surveys of the work area and monitor work within suitable habitat for the Alameda whipsnake; treatment activities involving heavy equipment and/or significant ground disturbance within any areas determined to be suitable Alameda whipsnake habitat would not occur between November 1 and March 31 to avoid collapsing burrows where Alameda whipsnakes may be hibernating; a Service-approved biologist will supervise the installation of temporary exclusion fencing around areas where heavy equipment is operated, including landing areas, access roads, and staging areas; a Service-approved biologist will relocate any Alameda whipsnakes within the work area to safety outside of the work area. With implementation of the avoidance and minimization measures, the potential for injury and mortality of the Alameda whipsnake would be reduced; however, any Alameda whipsnakes captured and relocated may be stressed and more susceptible to predation.

Alameda whipsnakes could become entangled within silt fencing or exclusion fencing. Any Alameda whipsnakes entangled within fencing would likely starve or be killed by a predator. The Service-approved biologist will minimize the potential for the injury and mortality of Alameda whipsnakes along silt fencing and exclusion fencing by using only Service-approved fencing material and daily inspecting both the inside and the outside of all fencing and relocating any Alameda whipsnakes that are trapped.

Alameda whipsnakes could become entangled if plastic monofilament netting were used for erosion control. Any Alameda whipsnakes entangled within plastic monofilament netting would likely starve or be killed by a predator. The applicants will avoid the potential for entangling Alameda whipsnakes by using natural/biodegradable erosion control measures (i.e., straw wattles, jute, and hay bales) instead of plastic monofilament netting.

The applicants will minimize the disturbance of Alameda whipsnake core scrub habitat and rock outcrops by implementing the following: rock outcroppings and native shrubs within 50 feet of rock outcrops would be maintained and protected from vehicles using orange construction fencing; skid trails would be sited a minimum of 10 feet away from core Alameda whipsnake scrub habitat and rock outcrops; and wood chips and landings would not be placed within 50 feet of rock outcrops. With all BMPs and avoidance measures in place, including species-specific avoidance and minimization measures, individual Alameda whipsnakes would be expected to temporarily disperse out of the immediate work area and return upon completion of the initial treatment.

Alameda whipsnakes could be injured or killed if they were hiding or hibernating in brush piles during pile burning. Brush piles that are created during tree removal may attract Alameda whipsnakes. Fences around piles cannot guarantee that there will be no Alameda whipsnake use, and the fences are not feasible to maintain. It is unlikely biologists will find Alameda whipsnakes using piles as hibernacula. Alameda whipsnakes normally hibernate underground in rodent burrows where temperatures are maintained at a constant level. If piles are developed in areas where Alameda whipsnakes may occur, then there may be a chance that they could use the piles temporarily during their active period. Burning piles would produce heat that would transmit into the ground below for up to roughly six inches. The amount of heat transmitted is dependent on residence time (how long the fire burns in one spot and the volume of fuel in the pile). Depth of heat penetration is also dependent on soil moisture as moisture conducts the heat to greater depths, but also attenuates the temperature increases as the moisture needs to be driven off before the temperature can rise above 100 degrees Celsius. The applicants will minimize the potential for injuring or killing Alameda whipsnakes when pile burning by implementing BMPs including: avoiding placing piles on large rodent burrows where Alameda whipsnakes may be hiding or hibernating; lighting the pile from one end (generally the uphill side on slopes) to allow Alameda whipsnakes to escape, rather than lighting the whole pile at once; limiting heat penetration into the ground by limiting the size of material placed in the pile; and avoiding pile burning during the hibernation period for the Alameda whipsnake.

An analysis of the potential for direct effects to Alameda whipsnake from toxicity due to exposure to herbicides that would be applied within the action area is provided in Appendix E of the Biological Assessment (FEMA 2012). Based on this analysis, direct contact and dietary-related adverse effects to Alameda whipsnakes are not anticipated with appropriate and careful application of the proposed herbicides (*e.g.*, Garlon 4 Ultra, Stalker, and Roundup). The applicants will implement the specific recommendations for herbicide application included in the BMPs and the *Conservation Measures* of this biological opinion to avoid toxicity effects to Alameda whipsnakes. Based on the analysis provided in the Biological Assessment (Appendix E in FEMA 2012), indirect effects due to bioaccumulation of herbicides in prey items is not expected to be significant based on chemical properties (*e.g.*, log K_{ow} , solubility, sorption potential, and environmental persistence). In addition, none of the known inactive or secondary ingredients of the commercial mixtures (*e.g.*, kerosene, surfactants) has significant bioaccumulation potential.

Appendix E of the Biological Assessment (FEMA 2012) also presents an analysis of the potential for toxicity from eucalyptus wood chips, which would be placed on the ground in many

parts of the action area to control erosion. These findings suggest that short-term and localized effects on soil microbes, soil invertebrates, and terrestrial plant seedlings may result from exposure to fresh eucalyptus and possibly pine wood chips. Once aged, these chips are expected to be nonhazardous to soil associated organisms. Thus retaining wood chips onsite is not likely to injure or kill Alameda whipsnakes. Also Alameda whipsnakes are not expected to be harmed due to retaining wood chips onsite because the wood chips would not be placed in suitable habitat or near rocky outcrops for the Alameda whipsnake.

One of the goals of the proposed project is to reduce the cover of invasive plant species within the action area that pose a fire hazard (*e.g.*, eucalyptus, Monterey pine, French broom, acacia, etc.). However, vegetation removal activities may result in the introduction and spread of invasive plant species within suitable habitat for the Alameda whipsnake which would degrade the habitat for the Alameda whipsnake. The applicants will implement a 10-year Service-approved monitoring and adaptive management plan including the control of invasive plant species to ensure that sites where vegetation is removed or where wood chips are retained revegetate with native plant species. The Service-approved monitoring and adaptive management plans will include interim and final success criteria for the cover of native plant species and suitable Alameda whipsnake core scrub and foraging/dispersal habitat within the action area and contingency measures in case the success criteria are not being met. The applicants will remove and/or reduce the amount of invasive plant species within their parks and parcels. Vegetation management goals include the continued management to reduce or eliminate invasive plant species on their lands.

An analysis of Alameda whipsnake suitable habitat in consideration of habitat connectivity was conducted to determine the extent of potential effects to Alameda whipsnake habitat. Tables 13, 14, and 15 provide information on the type and quantity of habitat that would be disturbed, lost, enhanced, or created in the UCB, Oakland, and EBRPD parcels, respectively. The potential for adverse effects to Alameda whipsnake individuals within the action area exists when work is being conducted in areas that provide suitable habitat for this species (*i.e.*, shrublands, oak woodlands, grasslands, and riparian areas). The level of effect on the Alameda whipsnake depends on the activity and type of equipment used. Low-impact activities such as mowing, hand removal of vegetation, and herbicide application within suitable habitat for Alameda whipsnakes may temporarily displace Alameda whipsnakes and disrupt feeding, breeding, and sheltering activities; however, no Alameda whipsnakes are likely to be injured or killed during these low-impact activities. High-impact activities involving the use or staging of heavy machinery (*e.g.*, tree and shrub removal) within suitable habitat for the Alameda whipsnake, however, may crush Alameda whipsnakes or their burrows resulting in the injury or mortality of Alameda whipsnakes. Tables 16, 17, and 18 below summarize for each applicant the acres over which low-impact and high-impact activities will occur within suitable Alameda whipsnake habitat during initial vegetation management activities and follow-up maintenance over the 10-year period. The Service believes that the permanent removal of core scrub habitat within Oakland and EBRPD treatment areas due to shrub clearing and shrub thinning may decrease the carrying capacity for Alameda whipsnake populations within the action area. The effects of shrub clearing and shrub thinning on the Alameda whipsnake are discussed under the *EBRPD* section below. Table 19 summarizes the overall effects of the proposed project on the Alameda whipsnake.

Table 13. UCB Acres of Alameda Whipsnake Habitat Disturbed, Enhanced, and Created (UCB Strawberry Canyon, Claremont Canyon, and Frowning Ridge (PDM-PJ-09-2005-003, PDM-PJ-09-CA-2005-11, and PDM-PJ-09-CA-2006-004))

Park	Habitat Type	Existing	Treated ⁴	Untreated	Degraded Core ⁵	Loss of Core ⁶	Enhanced Habitat ⁷	Created Habitat ⁸	Treated Trees ⁹	Unchanged ¹⁰	Expected Future Total ¹¹
Strawberry Canyon	Core ¹	1.38	0.00	1.38	0.00	0.00	0.65	9.96	0.00	1.38	11.99
	Dispersal/Foraging ²	0.00	0.00	0.00	0.00	0.00	0.00	25.95	0.00	0.00	25.95
	Unsuitable ³	54.95	35.91	19.04	0.00	0.00	0.00	0.00	0.00	18.39	18.39
Claremont Canyon	Core ¹	7.12	0.00	7.12	0.00	0.00	0.27	9.35	0.00	7.12	16.74
	Dispersal/Foraging ²	1.56	0.00	1.56	0.00	0.00	0.00	24.10	0.00	1.56	25.66
	Unsuitable ³	34.13	23.56	0.56	0.00	0.00	0.00	0.11	0.00	0.29	0.4
Frowning Ridge	Core ¹	53.44	0.00	53.44	0.00	0.00	0.02	13.56	0.00	53.44	67.02
	Dispersal/Foraging ²	30.96	0.00	30.96	0.00	0.00	0.56	84.95	0.00	30.96	116.47
	Unsuitable ³	100.78	98.56	2.22	0.00	0.00	0.00	0.05	0.00	1.65	1.70
Total	Core¹	61.9	0.0	61.9	0.0	0.0	0.9	32.9	0.0	61.9	95.8
	Dispersal/Foraging²	32.5	0.0	32.5	0.0	0.0	0.6	135.0	0.0	32.5	168.1
	Unsuitable³	189.9	158.0	21.8	0.0	0.0	0.0	0.2	0.0	20.3	20.5

¹ Core Scrub = Coastal scrub, coyote brush scrub, and northern maritime coastal scrub

² Dispersal and Foraging = Oak-bay woodlands, riparian woodlands, California annual grasslands, and successional grasslands adjacent to core scrub

³ Unsuitable habitat = all other vegetation community types that do not meet the criteria for Alameda whipsnake core scrub and/or Alameda whipsnake dispersal and foraging areas

⁴ Treated shrub habitat is considered to result in 30 percent degraded core scrub habitat and 70 percent converted to dispersal/foraging habitat. Treated unsuitable habitats are typically the removal or thinning of non-native forest cover. Removal may result in the creation of core scrub habitat or the creation or enhancement of dispersal/foraging habitat. Thinning of non-

native forest habitat is assumed to result in no habitat benefit, and although the area treated would result in successional grasslands within a thinned non-native forest, these areas remain in the unsuitable classification. Treated dispersal/foraging habitat is typically the result of some thinning or removal of native forest cover that would result in more open grassland vegetation types. Treatment of dispersal/foraging habitat is generally assumed to result in no change in total dispersal/foraging habitat.

⁵ “Degraded” condition only results from the thinning of core scrub and is the amount of treated core scrub that would remain as shrub islands (assumed to be 30 percent of the amount treated). “Degraded” does not apply to dispersal/foraging or unsuitable habitats, and so those cells reflect zero acres.

⁶ “Loss” condition only results from the thinning or removal of core scrub and is the amount of the treated core scrub that would be converted to grassland habitat (generally assumed to be 70 percent of the amount treated although there are some areas where the removal is 100 percent). “Loss” does not apply to either dispersal/foraging or unsuitable habitat types. Acres of core habitat lost are also entered into the “dispersal/foraging enhanced” cell in the table.

⁷ The “enhancement” of a total of 0.9 acre of core scrub habitat in UCB treatment areas refers to the conversion of isolated, smaller non-core shrub patches under the existing conditions to larger shrub patches that are contiguous with core scrub habitat in the future condition due to core scrub habitat creation adjacent to these isolated, smaller shrub patches.

⁸ “Created Habitat” results from the removal of non-native forest cover that results in the creation of new core scrub habitat or new grassland or oak woodland habitat.

⁹ “Treated Trees” indicate the number of acres of non-native forest cover that is thinned and which does not result in a change in habitat category. Non-native forest cover is categorized as unsuitable habitat both before and after treatment although it may ultimately result in openings and enhanced dispersal/foraging habitat.

¹⁰ The “unchanged” column indicates the acres that are untreated and/or areas that do not change their habitat type category.

¹¹ “Expected Future Total” is the sum of the degraded, enhanced, created, treated trees, and unchanged columns. The “loss” column is not calculated into the total because acres of core habitat lost are also indicated in the acres of dispersal/foraging habitat enhanced.

Table 14. Oakland Acres of Alameda Whipsnake Habitat Disturbance and Creation (PDM-PJ-09-CA-2006-004)

Park	Habitat Type	Existing	Treated ⁴	Untreated	Degraded Core ⁵	Loss of Core ⁶	Enhanced Habitat ⁷	Created Habitat ⁸	Treated Trees ⁹	Unchanged	Expected Future Total ¹¹
Caldecott Tunnel	Core ¹	4.26	0	4.26	0	0	0	9.74	0	4.26	14
	Dispersal/Foraging ²	12.79	0	12.79	0	0	1.94	12.13	0	12.79	26.86
	Unsuitable ³	36.57	22.58	13.99	0	0	0	0.69	0	12.05	12.74
North Hills-Skyline	Core ¹	46.25	4.5	41.75	0.75	3.75	0	8.5	0	41.75	51
	Dispersal/Foraging ²	0.9	0	0.9	0	0	0.00 (3.75)	10.45	0	0.9	15.1
	Unsuitable ³	21.19	18.95	2.24	0	0	0	0	0	2.24	2.24
TOTAL	Core¹	50.5	4.5	46.0	0.8	3.8	0.0	18.2	0.0	46.0	65.0
	Dispersal/Foraging²	13.7	0.0	13.7	0.0	0.0	1.9 (3.8)	22.6	0.0	13.7	42.0
	Unsuitable³	57.8	41.5	16.2	0.0	0.0	0.0	0.7	0.0	143.0	15.0

¹ Core Scrub = Coastal scrub, coyote brush scrub, and northern maritime coastal scrub

² Dispersal and Foraging = Oak-bay woodlands, riparian woodlands, California annual grasslands, and successional grasslands adjacent to core scrub

³ Unsuitable habitat = all other vegetation community types that do not meet the criteria for Alameda whipsnake core scrub and/or Alameda whipsnake dispersal and foraging areas

⁴ Treated shrub habitat is considered to result in 30 percent degraded core scrub habitat and 70 percent converted to dispersal/foraging habitat. Treated unsuitable habitats are typically the removal or thinning of non-native forest cover. Removal may result in the creation of core scrub habitat or the creation or enhancement of dispersal/foraging habitat. Thinning of non-native forest habitat is assumed to result in no habitat benefit, and although the area treated would result in successional grasslands within a thinned non-native forest, these areas remain in the unsuitable classification. Treated dispersal/foraging habitat is typically the result of some thinning or removal of native forest cover that would result in more open grassland vegetation types. Treatment of dispersal/foraging habitat is generally assumed to result in no change in total dispersal/foraging habitat.

- ⁵ “Degraded” condition only results from the thinning of core scrub and is the amount of treated core scrub that would remain as shrub islands (assumed to be 30 percent of the amount treated). “Degraded” does not apply to dispersal/foraging or unsuitable habitats, and so those cells reflect zero acres.
- ⁶ “Loss” condition only results from the thinning or removal of core scrub and is the amount of the treated core scrub that would be converted to grass habitat (generally assumed to be 70 percent of the amount treated although there are some areas where the removal is 100 percent). “Loss” does not apply to either dispersal/foraging or unsuitable habitat types. Acres of core habitat lost are also entered into the “dispersal/foraging enhanced” cell in parentheses () in the table.
- ⁷ “Enhanced” foraging/dispersal habitat generally refers to increased habitat connectivity where newly created core scrub habitat is restored adjacent to previously isolated patches of oak woodland and grassland habitat. Instances where the “enhancement” of foraging/dispersal habitat are due to the removal of core scrub habitat and conversion to grassland are shown in parentheses () and are not considered to be a benefit to the Alameda whipsnake.
- ⁸ “Created Habitat” results from the removal of non-native forest cover that results in the creation of new core scrub habitat or new grassland or oak woodland habitat (note: “Created Habitat” does not include areas where eucalyptus forests are only thinned since 50 percent of the eucalyptus canopy would be retained in these areas).
- ⁹ “Treated Trees” indicate the number of acres of non-native forest cover that is thinned and which does not result in a change in habitat category. Non-native forest cover is categorized as unsuitable habitat both before and after treatment although it may ultimately result in openings and enhanced dispersal/foraging habitat.
- ¹⁰ The “unchanged” column indicates the acres that are untreated and/or areas that do not change their habitat type category.
- ¹¹ “Expected Future Total” is the sum of the degraded, enhanced, created, treated trees, and unchanged columns. The “loss” column is not calculated into the total because acres of core habitat lost are also indicated in the acres of dispersal/foraging habitat enhanced.

Table 15. EBRPD Acres of Alameda Whipsnake Habitat Disturbance and Creation (Proposed and Interconnected WHRRMP Actions)

Park	Habitat Type	Existing	Treated ⁴	Untreated	Degraded Core ⁵	Loss of Core ⁶	Enhanced Habitat ⁷	Created Habitat ⁸	Treated Trees ⁹	Unchanged ¹⁰	Expected Future Total ¹¹
Anthony Chabot	Core ¹	173.00	139.79	33.21	41.94	64.35	0.71	0.00	0.00	33.21	75.86
	Dispersal/Foraging ²	96.53	0.00	159.13	0.00	0.00	50.85 (64.35)	0.00	0.00	159.13	274.33
	Unsuitable ³	750.72	365.79	393.82	0.00	0.00	0.00	0.00	365.51	367.15	732.66
Claremont Canyon	Core ¹	99.41	72.29	27.17	21.69	50.60	0.03	0.00	0.00	27.13	48.85
	Dispersal/Foraging ²	39.16	0.00	39.16	0.00	0.00	0.14 (50.60)	5.90	0.00	39.16	95.80
	Unsuitable ³	13.38	6.85	6.53	0.00	0.00	0.00	0.95	0.00	6.36	7.31
Claremont-Stonewall	Core ¹	0.75	0.53	0.22	0.16	0.37	0.00	0.00	0.00	0.22	0.38
	Dispersal/Foraging ²	2.88	0.00	2.88	0.00	0.00	0.00 (0.37)	0.00	0.00	2.88	3.25
	Unsuitable ³	10.03	9.67	0.36	0.00	0.00	0.00	0.00	9.67	0.36	10.03
Huckleberry	Core ¹	3.72	2.41	1.32	0.72	1.69	0.73	0.00	0.00	1.32	2.77
	Dispersal/Foraging ²	11.55	0.00	11.55	0.00	0.00	0.00 (1.69)	0.00	0.00	11.55	13.24
	Unsuitable ³	2.80	1.83	0.97	0.00	0.00	0.00	0.00	1.83	0.24	2.07
Kennedy Grove	Core ¹	0.83	0.58	0.25	0.17	0.41	0.00	0.00	0.00	0.25	0.42
	Dispersal/Foraging ²	2.71	0.00	2.71	0.00	0.00	0.88 (0.41)	0.00	0.00	2.71	4.00
	Unsuitable ³	11.67	8.16	3.51	0.00	0.00	0.00	0.00	8.16	2.63	10.79
Lake Chabot	Core ¹	4.43	3.32	1.11	1.00	2.32	0.00	0.00	0.00	1.11	2.11
	Dispersal/Foraging ²	29.75	0.00	29.75	0.00	0.00	9.14 (2.32)	0.00	0.00	29.75	41.21
	Unsuitable ³	67.32	53.62	13.70	0.00	0.00	0.00	0.00	53.62	4.56	58.18

Park	Habitat Type	Existing	Treated₄	Untreated	Degraded Core⁵	Loss of Core⁶	Enhanced Habitat⁷	Created Habitat⁸	Treated Trees⁹	Unchanged¹⁰	Expected Future Total¹¹
Leona Canyon	Core ¹	25.76	18.02	7.74	5.41	12.61	0.00	0.00	0.00	7.74	13.15
	Dispersal/Foraging ²	37.97	0.00	37.97	0.00	0.00	0.50 (12.61)	0.43	0.00	37.97	51.51
	Unsuitable ³	1.34	0.75	0.59	0.00	0.00	0.00	0.00	0.00	0.41	0.41
Redwood	Core ¹	15.73	11.24	4.49	3.37	7.87	0.00	0.00	0.00	4.49	7.86
	Dispersal/Foraging ²	27.70	0.62	27.08	0.00	0.00	1.94 (7.87)	1.46	0.00	27.08	38.35
	Unsuitable ³	120.38	98.18	22.50	0.00	0.00	0.00	0.00	95.40	22.20	117.60
Sibley-Triangle and Island-EBRPD	Core ¹	0.92	0.65	0.27	0.20	0.45	0.00	0.00	0.00	0.27	0.47
	Dispersal/Foraging ²	2.09	0.00	2.09	0.00	0.00	0.47 (0.45)	0.41	0.00	2.09	3.42
	Unsuitable ³	0.91	0.41	0.50	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Sibley Volcanic	Core ¹	17.81	12.30	5.51	3.28	9.02	0.00	0.00	0.00	5.51	8.79
	Dispersal/Foraging ²	59.23	0.00	0.00	0.00	0.00	2.23 (9.02)	16.16	0.00	59.23	86.64
	Unsuitable ³	84.99	79.07	5.92	0.00	0.00	0.00	0.00	62.19	4.41	66.60
Sobrante Ridge	Core ¹	0.64	0.48	0.16	0.14	0.34	0.00	0.00	0.00	0.16	0.30
	Dispersal/Foraging ²	11.74	0.00	11.74	0.00	0.00	0.06 (0.34)	0.00	0.00	11.74	12.14
	Unsuitable ³	5.99	0.08	5.91	0.00	0.00	0.00	0.00	0.00	5.93	5.93
Temescal	Core ¹	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dispersal/Foraging ²	0.62	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.62	0.62
	Unsuitable ³	0.92	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.92	0.92

Park	Habitat Type	Existing	Treated ⁴	Untreated	Degraded Core ⁵	Loss of Core ⁶	Enhanced Habitat ⁷	Created Habitat ⁸	Treated Trees ⁹	Unchanged ¹⁰	Expected Future Total ¹¹
Tilden Regional Preserve	Core ¹	45.10	29.94	15.16	8.63	21.31	0.00	0.00	0.00	15.16	23.79
	Dispersal/Foraging ²	103.05	0.00	103.05	0.00	0.00	2.53 (21.31)	35.13	0.00	103.05	162.02
	Unsuitable ³	363.86	283.35	80.51	0.00	0.00	0.00	0.00	246.72	79.48	326.20
Tilden - Grizzly Peak Blvd.	Core ¹	6.55	4.60	1.95	1.38	3.22	0.00	0.00	0.00	1.95	3.33
	Dispersal/Foraging ²	7.22	0.00	7.22	0.00	0.00	0.00 (3.22)	0.45	0.00	7.22	10.89
	Unsuitable ³	20.51	14.62	5.89	0.00	0.00	0.00	0.00	13.81	6.25	20.06
Wildcat Canyon	Core ¹	28.29	26.41	1.88	7.92	18.49	0.00	0.00	0.00	1.88	9.80
	Dispersal/Foraging ²	42.96	0.22	12.21	0.00	0.00	0.52 (18.49)	2.36	0.00	42.96	64.33
	Unsuitable ³	50.91	30.03	20.88	0.00	0.00	0.00	0.00	26.98	21.05	48.03
Total	Core¹	422.9	322.6	100.4	96.0	193.1	1.5	0.0	0.0	100.4	197.9
	Dispersal/Foraging²	475.2	0.8	447.2	0.0	0.0	69.3 (193.1)	62.3	0.0	537.1	861.8
	Unsuitable³	1505.7	952.4	562.5	0.0	0.0	0.0	1.0	883.9	522.0	1406.8

¹ Core Scrub = Coastal scrub, coyote brush scrub, and northern maritime coastal scrub

² Dispersal and Foraging = Oak-bay woodlands, riparian woodlands, California annual grasslands, and successional grasslands adjacent to core scrub

³ Unsuitable habitat = all other vegetation community types that do not meet the criteria for Alameda whipsnake core scrub and/or Alameda whipsnake dispersal and foraging areas

⁴ Treated shrub habitat is considered to result in 30 percent degraded core scrub habitat and 70 percent converted to dispersal/foraging habitat. Treated unsuitable habitats are typically the removal or thinning of non-native forest cover. Removal may result in the creation of core scrub habitat or the creation or enhancement of dispersal/foraging habitat. Thinning of non-

native forest habitat is assumed to result in no habitat benefit, and although the area treated would result in successional grasslands within a thinned non-native forest, these areas remain in the unsuitable classification. Treated dispersal/foraging habitat is typically the result of some thinning or removal of native forest cover that would result in more open grassland vegetation types. Treatment of dispersal/foraging habitat is generally assumed to result in no change in total dispersal/foraging habitat.

⁵ “Degraded” condition only results from the thinning of core scrub and is the amount of treated core scrub that would remain as shrub islands (assumed to be 30 percent of the amount treated). “Degraded” does not apply to dispersal/foraging or unsuitable habitats, and so those cells reflect zero acres.

⁶ “Loss” condition only results from the thinning or removal of core scrub and is the amount of the treated core scrub that would be converted to grass habitat (generally assumed to be 70 percent of the amount treated although there are some areas where the removal is 100 percent). “Loss” does not apply to either dispersal/foraging or unsuitable habitat types. Acres of core habitat lost are also entered into the “dispersal/foraging enhanced” cell in parentheses () in the table.

⁷ “Enhanced” foraging/dispersal habitat generally refers to increased habitat connectivity where newly created foraging/dispersal habitat is restored adjacent to previously isolated patches of oak woodland and grassland habitat. Instances where the “enhancement” of foraging/dispersal habitat are due to the removal of core scrub habitat and conversion to grassland are shown in parentheses () and are not considered to be a benefit to the Alameda whipsnake.

⁸ “Created Habitat” results from the removal of non-native forest cover that results in the creation of new core scrub habitat or new grassland or oak woodland habitat (note: “Created Habitat” does not include areas where eucalyptus forests are only thinned since 50 percent of the eucalyptus canopy would be retained in these areas).

⁹ “Treated Trees” indicate the number of acres of non-native forest cover that is thinned and which does not result in a change in habitat category. Non-native forest cover is categorized as unsuitable habitat both before and after treatment although it may ultimately result in openings and enhanced dispersal/foraging habitat.

¹⁰ The “unchanged” column indicates the acres that are untreated and/or areas that do not change their habitat type category.

¹¹ “Expected Future Total” is the sum of the degraded, enhanced, created, treated trees, and unchanged columns. The “loss” column is not calculated into the total because acres of core habitat lost are also indicated in the acres of dispersal/foraging habitat enhanced.

Table 16. UCB Low- and High-Impact Activities within Alameda Whipsnake Habitat

Park	Initial Project Implementation		Follow-up Maintenance	
	Low-impact Activities ¹ (acres) ³	High-impact Activities ² (acres) ³	Low-impact Activities ¹	
			Acres ³	Days of Maintenance/ Year ⁴
Strawberry Canyon	0.0	0.0	37.9	3.8
Claremont Canyon	0.0	0.2	42.4	4.2
Frowning Ridge	0.0	0.1	183.5	18.3
TOTAL	0.0	0.3	263.8	26.3

¹ Acres of low-impact activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) within suitable Alameda whipsnake habitat.

² Acres of high-impact activities (*e.g.*, use or staging of heavy machinery such as for tree and shrub removal) within suitable Alameda whipsnake habitat.

³ Acres includes only the acres of suitable Alameda whipsnake habitat (core scrub and/or dispersal and foraging) identified under the existing conditions or in the future vegetation management goal.

⁴ On average, the level of effort for maintenance is equivalent to one day of work per 10 acres per year. The results were rounded to the nearest 0.1 day. Maintenance activities include hand crews, pile burning, weed whipping, and stump spraying, over the 10-year permit period.

Table 17. Oakland Low- and High-Impact Activities within Alameda Whipsnake Habitat

Park	Initial Project Implementation			Follow-up Maintenance	
	Low-impact Activities ¹ (acres) ⁴	Loss of Core Scrub ² (acres) ⁴	High-impact Activities ³ (acres) ⁴	Low-impact Activities ¹	
				Acres ⁴	Days of Maintenance/Year ⁵
Caldecott Tunnel	0.0	0.0	0.3	40.9	4.1
North Hills-Skyline	13.0	3.8	0.3	66.1	6.6
TOTAL	13.0	3.8	0.6	107.0	10.7

¹ Acres of low-impact activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) within suitable Alameda whipsnake habitat.

² Acres of core scrub habitat removed and converted to foraging/dispersal habitat.

³ Acres of high-impact activities (*e.g.*, use or staging of heavy machinery such as for tree and shrub removal) within suitable Alameda whipsnake habitat.

⁴ Acres includes only the acres of suitable Alameda whipsnake habitat (core scrub and/or dispersal and foraging) identified under the existing conditions or in the future vegetation management goal.

⁵ On average, the level of effort for maintenance is equivalent to one day of work per 10 acres per year. The results were rounded to the nearest 0.1 day. Maintenance activities include hand crews, pile burning, weed whipping, and stump spraying, over the 10-year permit period.

Table 18. EBRPD Low- and High-Impact Activities within Alameda Whipsnake Habitat (Proposed and Interconnected Actions)

Park	Initial Project Implementation			Follow-up Maintenance	
	Low-impact Activities ¹ (acres) ⁴	Loss of Core Scrub ² (acres) ⁴	High-impact Activities ³ (acres) ⁴	Low-impact Activities ¹	
				Acres	Days of Maintenance/Year ⁵
Anthony Chabot	139.8	64.4	104.9	349.3	35.0
Claremont Canyon	72.3	50.6	1.8	144.7	14.4
Claremont-Stonewall	0.5	0.4	0.0	3.6	0.4
Huckleberry	2.4	1.7	0.3	16.0	1.7
Kennedy Grove	0.6	0.4	0.8	4.4	0.4
Lake Chabot	3.4	2.3	9.0	43.3	4.4
Leona Canyon	18.0	12.6	0.0	64.7	6.5
Redwood	11.9	7.9	12.6	46.2	4.6
Sibley-Triangle and Island	0.7	0.5	0.0	3.9	0.4
Sibley Volcanic	12.3	9.0	11.7	95.4	9.5
Sobrante	0.5	0.3	0.3	12.4	1.2
Temescal	0.0	0.0	0.0	0.6	0.1
Tilden	29.9	21.3	49.5	185.8	18.6
Tilden-Grizzly Peak	4.6	3.2	0.0	14.2	1.4
Wildcat	26.6	18.5	5.6	74.1	7.5
TOTAL	323.5	193.1	196.5	1058.6	106.1

¹ Acres of low-impact activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) within suitable Alameda whipsnake habitat.

² Acres of core scrub habitat removed and converted to foraging/dispersal habitat.

³ Acres of high-impact activities (*e.g.*, use or staging of heavy machinery such as for tree and shrub removal) within suitable Alameda whipsnake habitat.

⁴ Acres includes only the acres of suitable Alameda whipsnake habitat (core scrub and/or dispersal and foraging) identified under the existing conditions or in the future vegetation management goal.

⁵ On average, the level of effort for maintenance is equivalent to one day of work per 10 acres per year. The results were rounded to the nearest 0.1 day. Maintenance activities include hand crews, pile burning, weed whipping, and stump spraying, over the 10-year permit period.

Table 19. Summary of Effects of FEMA East Bay Hills Project on Alameda Whipsnakes

Applicant	Temporary Disturbance ¹ (acres)		Core Scrub (acres)			Dispersal/Foraging (acres)		Low- and High-impact Activities (acres)		
	Core Scrub	Dispersal/Foraging	Loss ²	Degraded ³	Create ⁴	Create ⁵	Enhance ⁶	Initial Low-impact ⁷	Initial High-impact ⁸	Follow-up Low-impact ⁹
UCB ¹⁰	0.0	0.0	0.0	0.0	32.9	135.0	0.6	0.0	0.3	263.8
Oakland ¹¹	4.5	0.0	3.8	0.8	18.2	22.6	1.9 (3.8)	13.0	0.6	107.0
EBRPD ¹²	322.6	0.8	193.1	96.0	0.0	62.3	69.3 (193.1)	323.5	196.5	1058.6
TOTAL	327.1	0.8	196.9	96.8	51.1	219.9	71.8 (196.9)	336.5	197.4	1429.4

¹ Temporary Disturbance includes areas of suitable habitat that are treated in the initial project.

² Loss of core scrub results from the thinning or removal of core scrub and is the amount of the treated core scrub that would be converted to grass habitat (generally assumed to be 70 percent of the amount treated although there are some areas where the removal is 100 percent). Acres of core habitat lost are also entered in () into the “dispersal/foraging enhanced” cell in the table.

³ “Degraded” core scrub habitat refers to the fragmentation of core scrub habitat due to thinning of core scrub to create shrub islands. The remaining shrubs islands (assumed to be 30 percent of the amount treated) are referred to as a “degraded” core scrub habitat while the removal of core scrub habitat between the shrub islands (assumed to be 70 percent) is referred to as a “loss” of core scrub habitat.

⁴ “Created” core scrub habitat results from the removal of non-native forest cover that results in the creation of new core scrub habitat (note: does not include the “enhancement” of 0.9 acre of core scrub habitat in UCB treatment areas due to improved habitat connectivity from the connection of isolated shrub patches to larger core scrub patches).

⁵ “Created” dispersal/foraging habitat results from the removal of non-native forest cover that results in the creation of new scrub, grassland, or oak woodland habitat (note: “Created Habitat” does not include areas where eucalyptus forests are only thinned since 50 percent of the eucalyptus canopy would be retained in these areas).

⁶ “Enhanced” foraging/dispersal habitat generally refers to increased habitat connectivity where newly created foraging/dispersal or core scrub habitat is restored adjacent to previously isolated patches of oak woodland and grassland habitat. Instances where the “enhancement” of foraging/dispersal habitat are due to the removal of core scrub habitat and conversion to grassland are shown in parentheses () and are not considered a benefit to the Alameda whipsnake.

⁷ Acres of low-impact activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) within suitable Alameda whipsnake habitat during initial vegetation treatment.

⁸ Acres of high-impact activities (*e.g.*, use or staging of heavy machinery such as for tree and shrub removal) within suitable Alameda whipsnake habitat during initial vegetation treatment.

⁹ Acres of low-impact activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) within suitable Alameda whipsnake habitat during follow-up maintenance activities over the 10-year period.

¹⁰ UCB Strawberry Canyon, Claremont Canyon, and Frowning Ridge (PDM-PJ-09-2005-003, PDM-PJ-09-CA-2005-11, and PDM-PJ-09-CA-2006-004))

¹¹ Oakland Caldecott Tunnel and North Hills-Skyline (PDM-PJ-09-CA-2006-004)

¹² EBRPD PDM-PJ-09-CA-2006-004, HMGP 1731-16-34, and Interconnected WHRRMP Actions

UCB: Claremont Canyon, Strawberry Canyon, and Frowning Ridge

UCB initial treatment activities at Claremont Canyon, Strawberry Canyon, and Frowning Ridge would be limited to areas unsuitable for Alameda whipsnakes such as eucalyptus and other non-native forests. Therefore, no suitable Alameda whipsnake habitat would be disturbed during UCB initial treatment activities (Table 13). However, Alameda whipsnakes within a 0.2-acre area at Claremont Canyon and a 0.1-acre area at Frowning Ridge may be temporarily displaced or possibly injured or killed during the use of heavy machinery during UCB initial treatment activities adjacent to suitable habitat (Table 16). UCB treatment activities will result in the creation of about 32.9 acres of core scrub habitat for the Alameda whipsnake where non-native forests (primarily eucalyptus) are converted to core scrub habitat. UCB treatment activities will also result in the enhancement of about 0.9 acre of core scrub habitat for the Alameda whipsnake where smaller, isolated patches of non-core scrub habitat under the existing conditions are joined to larger core scrub patches post-treatment due to the creation of core scrub habitat adjacent to these isolated, smaller shrub patches. UCB treatment activities will also result in the creation of about 135.0 acres of foraging/dispersal habitat for the Alameda whipsnake due to the conversion of non-native forests to grassland or oak woodland (Table 13). UCB treatment activities will also enhance of about 0.6 acre of foraging/dispersal habitat for the Alameda whipsnake where smaller, isolated patches of grassland and oak woodland habitats under the existing conditions are joined to larger core scrub, grassland, and oak woodland habitats patches post-treatment due to the creation of suitable habitat adjacent to these isolated, smaller patches of grassland and oak woodland. UCB follow-up vegetation treatment and maintenance activities may result in the temporary displacement of Alameda whipsnakes and disruption of feeding, sheltering, and breeding activities over a total of 263.8 acres of restored habitat for the Alameda whipsnake at Strawberry Canyon, Claremont Canyon, and Frowning Ridge for between 4 and 18 days every year over the 10-year period (Table 16). UCB will minimize the level of adverse effects on Alameda whipsnakes during initial and follow-up vegetation treatment and maintenance activities by implementing the conservation measures and BMPs in this biological opinion. UCB will implement a 10-year Service-approved monitoring and adaptive management plan to ensure that the restored areas meet the interim and final success criteria for revegetating with native plant species and suitable Alameda whipsnake habitat.

Oakland: Caldecott Tunnel and North-Hills Skyline

Oakland will thin shrubs (removal of up to 70 percent of shrub cover with the remaining 30 percent of shrub cover retained in shrub islands) over about 4.5 acres of Alameda whipsnake core scrub habitat at North Hills-Skyline. This shrub thinning will result in the permanent loss of about 3.75 acres of core scrub habitat (in between the shrub islands) by converting to foraging/dispersal habitat (grassland) in between the shrub islands (Table 14). The Service believes that the quality of the remaining 0.75 acre of core scrub habitat (the retained shrub islands) will be degraded due to habitat fragmentation (see the discussion of the effects of shrub thinning in the *EBRPD* section below). However, Oakland will create about 18.2 acres of core scrub habitat for the Alameda whipsnake by removing non-native trees and converting to core scrub habitat (Table 14). Oakland will also enhance 1.9 acres of foraging/dispersal habitat for the Alameda whipsnake by connecting previously isolated patches of oak woodland and grassland habitat to newly created core scrub habitat. Oakland will also create 22.6 acres of

foraging/dispersal habitat for the Alameda whipsnake due to the removal of non-native trees and conversion to grassland and oak woodland habitats (Table 14).

Alameda whipsnakes within a 0.6-acre area will be temporarily displaced or possibly injured or killed during the use of heavy machinery within suitable habitat during Oakland initial treatment activities (Table 17). Low-impact initial treatment activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) may result in the temporary displacement of Alameda whipsnakes and disruption of feeding, sheltering, and breeding activities within 13.0 acres of suitable habitat. Follow-up vegetation treatment and maintenance activities may result in the temporary displacement of Alameda whipsnakes and disruption of feeding, sheltering, and breeding activities within a total of 107.0 acres of restored habitat for the Alameda whipsnake for between 4 and 7 days every year over the 10-year period (Table 17). Oakland will minimize effects to Alameda whipsnakes during initial and follow-up vegetation treatment and maintenance activities by implementing the conservation measures and BMPs in this biological opinion.

The Service believes the permanent removal of 3.75 acres of core scrub habitat due to shrub thinning and conversion to foraging/dispersal habitat may reduce the carrying capacity for Alameda whipsnakes within the action area. Oakland will minimize adverse effects to Alameda whipsnakes by converting about 18.2 acres of non-native forest to core scrub habitat. Oakland will implement a 10-year Service-approved monitoring and adaptive management plan to ensure that the restored areas meet the interim and final success criteria for revegetating with native plant species and suitable Alameda whipsnake habitat.

EBRPD: PDM-PJ-09-CA-2006-004, HMGP 1731-16-34, and Interconnected WHRRMP Projects

EBRPD will thin shrubs (removal of up to 70 percent of shrub cover with the remaining 30 percent of shrub cover retained in shrub islands) over 322.6 acres of Alameda whipsnake core scrub habitat. Shrub islands are to be approximately 50 feet in diameter and spaced 50 feet apart. This shrub thinning will result in the permanent loss of up to 193.1 acres of core scrub habitat (in between the shrub islands) by converting to foraging/dispersal habitat (grassland) in between the shrub islands (Table 15). EBRPD will compensate for the permanent loss of 193.1 acres of core scrub habitat by preserving in perpetuity and managing for the benefit of the Alameda whipsnake at least 386.2 acres of core scrub habitat for the Alameda whipsnake at a Service-approved location within designated critical habitat. Currently, EBRPD is proposing to purchase and preserve and manage in perpetuity at least 386.2 acres of core scrub habitat within an important Alameda whipsnake dispersal corridor within recovery unit 6. The preservation of habitat within recovery unit 6 is important because of its significance as a dispersal corridor for the Alameda whipsnake between recovery units 1 and 2. Although EBRPD's proposed project will result in a net loss of core scrub habitat within recovery units 1, 2, and 6, the Service believes that the preservation and management of 386.2 acres of core scrub habitat at a Service-approved location in recovery unit 6 will benefit the Alameda whipsnake by preserving in perpetuity an important dispersal corridor between recovery units 1 and 2. Maintaining connectivity between recovery units 1 and 2 allows for dispersal between units for the subspecies and allows for genetic exchange among all three units (Service 2006b). The preserved core scrub habitat will provide

breeding, feeding, or sheltering commensurate with or better than habitat lost as a result of the effects from the proposed project.

Currently, there is no relevant research data available to determine the overall effects of the proposed shrub thinning (removal of between 50 and 70 percent of shrub cover) and creation of the shrub island mosaic on the Alameda whipsnake. The Service believes that the quality of the remaining 96.0 acres of core scrub habitat (the retained shrub islands) will be degraded due to habitat fragmentation resulting in a reduction in the carrying capacity of the core scrub habitat for the Alameda whipsnake. However, there is the potential that the Alameda whipsnake could benefit from the opening up of the shrub canopy resulting in improved foraging, dispersal, and basking habitat for the Alameda whipsnake, especially if suitable rock outcrops are uncovered. EBRPD will develop, implement, and fund a Service-approved study evaluating the effects of the proposed shrub thinning on the Alameda whipsnake. The study will benefit the Alameda whipsnake in the long-term by providing EBRPD and other habitat managers guidance on how best to manage shrub habitat for the benefit of the Alameda whipsnake.

EBRPD will create about 62.3 acres of foraging/dispersal habitat for the Alameda whipsnake due to the removal of non-native trees and conversion to grassland and oak woodland habitats that are contiguous with core scrub habitat (Table 15). EBRPD will implement a 10-year Service-approved monitoring and adaptive management plan to ensure that the restored areas meet the interim and final success criteria for revegetating with native plant species and suitable Alameda whipsnake habitat. EBRPD will enhance about 69.3 acres of foraging/dispersal habitat for the Alameda whipsnake by connecting previously isolated patches of oak woodland and grassland habitat to core scrub habitat and newly created foraging/dispersal habitat (Table 15). EBRPD will also thin eucalyptus forests over about 800 acres. Since 50 percent of the eucalyptus canopy would be retained in these areas, the Service does not believe that any suitable Alameda whipsnake habitat will be created where eucalyptus forest is only thinned. However, there is the potential that some foraging/dispersal habitat could be enhanced where eucalyptus is removed adjacent to core scrub habitat for the Alameda whipsnake.

Alameda whipsnakes within a 196.5-acre area may be temporarily displaced or possibly injured or killed during the use of heavy machinery within suitable habitat during EBRPD initial treatment activities (Table 18). Low-impact initial treatment activities (*e.g.*, mowing, hand removal of vegetation, and herbicide application) may temporarily displace Alameda whipsnakes and disrupt feeding, sheltering, and breeding activities within 323.5 acres of suitable habitat. Follow-up vegetation treatment and maintenance activities may temporarily displace Alameda whipsnakes and disrupt feeding, sheltering, and breeding activities over a total of 1,058.6 acres of habitat for the Alameda whipsnake for between 1 and 35 days every year over the 10-year period (Table 18). EBRPD will minimize effects to Alameda whipsnakes during initial and follow-up vegetation treatment and maintenance activities by implementing the conservation measures and BMPs in this biological opinion.

The permanent removal of 193.1 acres of core scrub habitat due to shrub thinning and conversion to foraging/dispersal habitat may reduce the carrying capacity for Alameda whipsnakes within the action area. EBRPD will minimize effects to Alameda whipsnakes by preserving and managing in perpetuity at least 386.2 acres of core scrub habitat for the Alameda whipsnake at a

Service-approved location under a Service-approved compensation plan with a long-term endowment for managing the preserved habitat.

Summary

The conservation measures for the proposed project have been designed so that each applicant is responsible for the successful implementation of their own avoidance, minimization, restoration, and compensation measures and thus not dependent on the restoration and compensation being implemented by the other applicants. Therefore, any changes to the proposed project being implemented by one of the applicants would require reinitiation of formal consultation only on that applicant's portions of the proposed project and thus would not delay the implementation of the proposed project by the other applicants.

UCB will minimize the effects of their proposed vegetation management and fuels reduction projects at Strawberry Canyon, Claremont Canyon, and Frowning Ridge on the Alameda whipsnake by creating about 167.9 acres of suitable habitat for the Alameda whipsnake consisting of about 32.9 acres of core scrub habitat (Table 19). UCB will also enhance about 0.9 acre of core scrub habitat and 0.6 acre of foraging/dispersal habitat for the Alameda whipsnake by connecting previously isolated patches of habitat. Oakland will minimize the effects of their proposed vegetation management and fuels reduction projects at Caldecott Tunnel and North Hills-Skyline on the Alameda whipsnake by creating about 40.8 acres of suitable habitat for the Alameda whipsnake consisting of about 18.2 acres of core scrub habitat (Table 19). Oakland will also enhance about 1.9 acres of foraging/dispersal habitat for the Alameda whipsnake by connecting previously isolated patches of habitat. EBRPD will compensate for the effects of their proposed and interconnected vegetation management and fuels reduction projects on the Alameda whipsnake by preserving and managing in perpetuity at a Service-approved location at least 386.2 acres of core scrub habitat for the Alameda whipsnake at a Service-approved location. EBRPD will also create about 62.3 acres of foraging/dispersal habitat, enhance about 69.3 acres of foraging/dispersal habitat, and enhance about 1.5 acres of core scrub habitat by connecting previously isolated patches of habitat (Table 19).

Alameda Whipsnake Critical Habitat

The proposed and interconnected actions will result in the direct disturbance of designated critical habitat for the Alameda whipsnake within Units 1, 2, and 6 within the action area. Tables 20, 21, and 22 below summarize for each applicant how many acres of core scrub (PCE 1) and foraging/dispersal habitat (PCE 2) would be lost, enhanced, or created within each critical habitat unit. The conversion of non-native forest (*e.g.*, eucalyptus, Monterey pine, acacia) to primarily oak woodland and grassland habitat (PCE 2) and some core scrub habitat (PCE 1) in UCB and Oakland treatment areas will benefit Alameda whipsnake critical habitat by increasing the spatial extent of PCEs and increasing habitat connectivity. EBRPD's proposed thinning of eucalyptus forest is not likely to result in a significant increase in PCEs because 50 percent of the eucalyptus canopy cover would be retained in EBRPD treatment areas; however, there is the potential for PCEs to be enhanced where eucalyptus trees are removed adjacent to core scrub habitat.

Table 20. UCB Effects on Alameda Whipsnake Designated Critical Habitat (UCB Strawberry Canyon, Claremont Canyon, and Frowning Ridge (PDM-PJ-09-2005-003, PDM-PJ-09-CA-2005-11, and PDM-PJ-09-CA-2006-004))

Park	Critical Habitat Unit	Total Acres within Critical Habitat	Existing Conditions (acres)			Expected Future Conditions (acres)			Net Change (acres)		
			PCE 1	PCE 2	Acres without PCEs	PCE 1 ¹	PCE 2	Acres without PCEs	PCE 1	PCE 2	Acres without PCEs
Strawberry Canyon	1	10.31	1.02	0.00	9.29	2.35	3.40	4.56	+1.33	+3.40	-4.73
	6	13.15	0.37	0.00	12.78	3.36	7.66	2.13	+2.99	+7.66	-10.65
Claremont Canyon	6	42.81	7.12	1.56	34.12	15.34	27.06	0.40	+8.22	+25.50	-33.72
Frowning Ridge	1	9.87	2.44	4.05	3.38	2.77	6.50	0.60	+0.33	+2.45	-2.78
	6	174.36	50.74	26.75	96.87	61.93	111.71	0.72	+11.19	+84.96	-96.15
TOTAL ACRES	1	20.18	3.46	4.05	12.67	5.12	9.90	5.16	+1.66	+5.85	-7.51
	6	230.32	58.23	28.31	143.77	80.63	146.43	3.25	+22.40	+118.12	-140.52
	TOTAL	250.50	61.69	32.36	156.44	85.75	156.33	8.41	+24.06	+123.97	-148.03

¹ Expected future acres of PCE 1 are a weighted average of the untreated PCE 1 plus (PCE 1 created minus 15 percent)

Table 21. Oakland Effects on Alameda Whipsnake Designated Critical Habitat (PDM-PJ-09-CA-2006-004)

Park	Critical Habitat Unit	Total Acres within Critical Habitat	Existing Conditions (acres)			Expected Future Conditions (acres)			Net Change (acres)		
			PCE 1	PCE 2	Acres without PCEs	PCE 1 ¹	PCE 2	Acres without PCEs	PCE 1	PCE 2	Acres without PCEs
North Hills – Skyline	6	62.09	43.21	0.00	18.88	47.96	13.84	0.29	+4.75	+13.84	-18.59

¹ Expected acres of PCE 1 in North Hills-Skyline are a weighted average of the untreated PCE 1 plus (PCE 1 created minus 15 percent).

Table 22. Alameda Whipsnake Designated Critical Habitat (EBRPD (HMGP 1731-16-34) and Interconnected WHRRMP Actions)

Park	Critical Habitat Unit	Total Acres within Critical Habitat	Existing Conditions (acres)			Expected Future Conditions (acres)			Net Change (acres)		
			PCE 1	PCE 2	Acres without PCEs	PCE 1 ¹	PCE 2	Acres without PCEs	PCE 1	PCE 2	Acres without PCEs
Anthony Chabot	2	16.16	8.19	6.58	1.39	2.89	12.18	1.09	-5.30	+5.60	-0.30
Claremont Canyon	6	145.06	96.25	37.11	11.7	44.16	94.42	6.55	-52.09	+57.31	-5.15
Claremont Canyon-Stonewall	6	11.85	0.75	2.88	8.22	0.36	3.27	8.22	-0.39	+0.39	0.00
Huckleberry	2	1.62	0.00	1.16	0.46	0.01	1.31	0.30	+0.01	+0.15	-0.16
	6	16.34	3.71	10.35	2.28	2.14	12.19	2.01	-1.57	+1.84	-0.27
Kennedy Grove	1	14.77	0.83	2.45	11.49	0.4	3.66	10.71	-0.43	+1.21	-0.78
Redwood	2	88.47	7.84	6.74	73.85	3.78	12.61	72.04	-4.06	+5.87	-1.81
Sibley Island	6	3.84	0.92	2.03	0.89	0.44	3.39	0.01	-0.48	+1.36	-0.88
Sibley Volcanic Regional Preserve	6	161.28	17.75	59.03	84.5	8.28	86.37	66.63	-9.47	+27.34	-17.87
Tilden Regional	1	447.11	42.28	81.19	323.64	21.66	136.03	289.42	-20.62	+54.84	-34.22
Tilden-Grizzly Peak	1	34.15	6.42	7.22	20.51	3.06	11.03	20.06	-3.36	+3.81	-0.45
Wildcat Canyon	1	95.51	24.42	31.63	39.46	7.42	50.99	37.1	-17.00	+19.36	-2.36
TOTAL ACRES	1	591.54	73.95	122.49	395.10	32.54	201.71	357.29	-41.41	+79.22	-37.81
	2	106.25	16.03	14.48	75.70	6.68	26.10	73.43	-9.35	+11.62	-2.27
	6	322.03	115.67	101.05	105.31	53.24	187.45	81.41	-62.43	+86.40	-23.90
	TOTAL	1019.82	205.65	238.02	576.11	92.46	415.26	512.13	-113.19	+177.24	-63.98

¹ Expected acres of PCE 1 are equal to a weighted average of the untreated PCE 1 plus (30 percent of the treated PCE 1 minus 15 percent).

The retention of wood chips onsite will not directly affect the PCEs because the wood chips would not be placed within suitable habitat (PCE 1 or PCE 2) for the Alameda whipsnake and would be placed more than 50 feet from rocky outcrops (PCE 3). However, areas where vegetation is removed and wood chips are retained are likely to become covered with non-native invasive plant species (*e.g.*, French broom) which could act as a seed source for further spread of invasive plant species into adjacent areas with PCEs. This would result in a degradation of the PCEs within adjacent areas. The applicants will minimize the potential for degradation of PCEs due to the spread of invasive plant species by implementing a Service-approved 10-year monitoring and adaptive management plan with interim and final success criteria to ensure that the treatment areas revegetate with suitable native plant species and Alameda whipsnake habitat.

Oakland's and EBRPD's proposed core scrub habitat removal and shrub thinning (removal of up to 70 percent of shrub cover with the remaining 30 percent of shrub cover retained in 50-foot-diameter shrub islands that are spaced 50 feet apart) will result in a permanent loss of PCE 1 by converting to grassland (PCE 2) in between the shrub islands. Currently, there is no research data available to evaluate what effects the shrub thinning will have on Alameda whipsnakes. The Service believes that in areas where shrubs are thinned the quality of the remaining PCE 1 (the retained shrub islands) will be degraded due to habitat fragmentation resulting in a reduction in the carrying capacity of the core scrub habitat for the Alameda whipsnake. However, there is the potential that the Alameda whipsnake could receive some benefit from the opening up of the shrub canopy resulting in improved foraging, dispersal, and basking habitat for the Alameda whipsnake (PCE 2), especially if suitable rock outcrops (PCE 3) are uncovered. EBRPD will develop, implement, and fund a Service-approved study evaluating the effects of the proposed shrub thinning on the Alameda whipsnake. The study will benefit the Alameda whipsnake in the long-term by providing EBRPD and other habitat managers guidance on how best to manage shrub habitat for the benefit of the Alameda whipsnake. EBRPD will also compensate for the loss of 113.19 acres of PCE 1 within designated critical habitat by purchasing and preserving and managing in perpetuity under a conservation easement at least 386.2 acres of core scrub habitat for the Alameda whipsnake at a Service-approved location within designated critical habitat. Currently, EBRPD is considering purchasing and preserving in perpetuity core scrub habitat within critical habitat Unit 6. The preserved core scrub habitat will provide breeding, feeding, or sheltering commensurate with or better than habitat lost as a result of the effects from the proposed project. The effects of each applicant's proposed and interconnected treatment activities on the designated critical habitat for the Alameda whipsnake are summarized for each applicant in Tables 20, 21, and 22, and below.

UCB: Claremont Canyon, Strawberry Canyon, and Frowning Ridge

Unit 1

UCB initial treatment activities within Unit 1 would be limited to areas unsuitable for Alameda whipsnakes such as eucalyptus and other non-native forests. Therefore, none of the PCEs would be affected during UCB initial treatment activities. UCB treatment activities within Claremont Canyon, Strawberry Canyon, and Frowning Ridge will result in the creation of about 1.66 acres of PCE 1 and the creation of about 5.85 acres of PCE 2 within Alameda whipsnake designated

critical habitat Unit 1 due to the conversion of non-native forest to core scrub and foraging/dispersal habitat (oak woodland and grassland), respectively (Table 20).

Unit 6

UCB initial treatment activities within Unit 6 would be limited to areas unsuitable for Alameda whipsnakes such as eucalyptus and other non-native forests. Therefore, none of the PCEs would be affected during UCB initial treatment activities. UCB treatment activities within Claremont Canyon, Strawberry Canyon, and Frowning Ridge will result in the creation of about 22.40 acres of PCE 1 and the creation of about 118.12 acres of PCE 2 within Alameda whipsnake designated critical habitat Unit 6 due to the conversion of non-native forest to core scrub and foraging/dispersal habitat (oak woodland and grassland), respectively (Table 20).

Summary

UCB non-native forest removal activities will benefit designated critical habitat for the Alameda whipsnake by creating an additional 24.06 acres of PCE 1 and 123.97 acres of PCE 2 within designated critical habitat. The retention of wood chips onsite will not directly affect the PCEs because the wood chips would not be placed within suitable habitat (PCE 1 or PCE 2) for the Alameda whipsnake and would be placed more than 50 feet from rocky outcrops (PCE 3). UCB will minimize the potential for degradation of the PCEs due to the spread of invasive plant species by implementing a Service-approved 10-year monitoring and adaptive management plan with interim and final success criteria to ensure that the treatment areas revegetate with suitable native plant species and PCEs.

Oakland: North Hills-Skyline

Unit 6

Oakland will thin shrubs (removal of up to 70 percent of shrub cover with the remaining 30 percent of shrub cover retained in shrub islands) within Alameda whipsnake core scrub habitat within critical habitat Unit 6 at North-Hills Skyline. This shrub thinning will result in the permanent loss of about 3.75 acres of PCE 1 within Alameda whipsnake designated critical habitat Unit 6 by converting shrublands to grassland (PCE 2) in between the shrub islands. The Service believes that the quality of the remaining PCE 1 (the retained shrub islands) will be degraded due to habitat fragmentation resulting in a reduction in the carrying capacity of the core scrub habitat for the Alameda whipsnake (see the discussion of the effects of shrub thinning above). However, Oakland will create about 8.5 acres of PCE 1 within Alameda whipsnake designated critical habitat Unit 6 by removing at least 90 large Monterey pines and other non-native trees that occur within the shrub matrix and threaten to take over the PCE 1 at North-Hills Skyline. Thus, Oakland's proposed vegetation treatment activities will result in a net increase of 4.75 acres of PCE 1 within designated critical habitat Unit 6 at North-Hills Skyline (Table 21).

Oakland will create an additional 10.09 acres of PCE 2 within Alameda whipsnake designated critical habitat Unit 6 by removing non-native trees and converting to grassland and oak woodland habitat. Oakland will implement a Service-approved 10-year monitoring and adaptive

management plan with interim and final success criteria to ensure that the treatment areas revegetate with suitable native plant species and PCEs. Thus, Oakland activities will result in an increase in the total amount of PCE 2 within designated critical habitat Unit 6 by 13.84 acres (Table 21)

EBRPD: PDM-PJ-09-CA-2006-004, HMGP 1731-16-34, and Interconnected WHRRMP Actions

Unit 1

EBRPD will thin shrubs (removal of up to 70 percent of shrub cover with the remaining 30 percent of shrub cover retained in 50-foot-diameter shrub islands spaced 50 feet apart) within Alameda whipsnake core scrub habitat within critical habitat Unit 1. This shrub thinning will result in the permanent loss of 41.41 acres of PCE 1 within Alameda whipsnake designated critical habitat Unit 1 by converting shrublands to grassland (PCE 2) in between the shrub islands (Table 22). The Service believes that the quality of the remaining PCE 1 (the retained shrub islands) will be degraded due to habitat fragmentation. EBRPD will create an additional 37.81 acres of PCE 2 within Alameda whipsnake designated critical habitat Unit 1 by removing non-native trees and converting to grassland and oak woodland habitat (Table 22). Thus, EBRPD activities will result in an increase in the total amount of PCE 2 within designated critical habitat Unit 1 by 79.22 acres.

Unit 2

EBRPD will thin shrubs (removal of up to 70 percent of shrub cover with the remaining 30 percent of shrub cover retained in 50-foot-diameter shrub islands spaced 50 feet apart) within Alameda whipsnake core scrub habitat within critical habitat Unit 2. This shrub thinning will result in the permanent loss of 9.35 acres of PCE 1 within Alameda whipsnake designated critical habitat Unit 2 by converting shrublands to grassland (PCE 2) in between the shrub islands (Table 22). The Service believes that the quality of the remaining PCE 1 (the retained shrub islands) will be degraded due to habitat fragmentation. EBRPD will create an additional 2.27 acres of PCE 2 within Alameda whipsnake designated critical habitat Unit 2 by removing non-native trees and converting to grassland and oak woodland habitat (Table 22). Thus, EBRPD activities will result in an increase in the total amount of PCE 2 within designated critical habitat Unit 2 by 11.62 acres.

Unit 6

EBRPD will thin shrubs (removal of up to 70 percent of shrub cover with the remaining 30 percent of shrub cover retained in 50-foot-diameter shrub islands spaced 50 feet apart) within Alameda whipsnake core scrub habitat within critical habitat Unit 6. This shrub thinning will result in the permanent loss of 62.43 acres of PCE 1 within Alameda whipsnake designated critical habitat Unit 6 by converting shrublands to grassland (PCE 2) in between the shrub islands (Table 22). The Service believes that the quality of the remaining PCE 1 (the retained shrub islands) will be degraded due to habitat fragmentation. EBRPD will create an additional 23.90 acres of PCE 2 within Alameda whipsnake designated critical habitat Unit 6 by removing non-native trees and converting to grassland and oak woodland habitat (Table 22). Thus,

EBRPD activities will result in an increase in the total amount of PCE 2 within designated critical habitat Unit 6 by 86.40 acres.

Summary

Currently, there is no relevant research data available to determine the overall effects of the proposed shrub thinning and creation of the shrub island mosaic (removal of up to 70 percent of shrub cover with the remaining 30 percent of shrub cover retained in 50-foot-diameter shrub islands spaced 50 feet apart) on the Alameda whipsnake and its habitat. The Service believes that the quality of the remaining PCE 1 (the retained shrub islands) will be degraded due to habitat fragmentation resulting in a reduction in the carrying capacity of the core scrub habitat for the Alameda whipsnake. However, there is the potential that the Alameda whipsnake could benefit from the opening up of the shrub canopy resulting in improved foraging, dispersal, and basking habitat for the Alameda whipsnake (PCE 2), especially if suitable rock outcrops (PCE 3) are uncovered. EBRPD will develop, implement, and fund a Service-approved study evaluating the effects of the proposed shrub thinning on the Alameda whipsnake. The study will benefit the Alameda whipsnake in the long-term by providing EBRPD and other habitat managers guidance on how best to manage shrub habitat for the benefit of the Alameda whipsnake. EBRPD will also implement a Service-approved 10-year monitoring and adaptive management plan with interim and final success criteria to ensure that the treatment areas revegetate with suitable native plant species and PCEs.

EBRPD's proposed project will result in a decrease in the amount of PCE 1 within Alameda whipsnake designated critical habitat by 113.19 acres but an increase in the amount of PCE 2 within designated critical habitat by 177.24 acres (Table 22). EBRPD's proposed non-native forest removal activities will result in an increase in the total acres with one or more PCEs within designated critical habitat by 63.98 acres. EBRPD will compensate for the permanent loss of 113.19 acres of PCE 1 within designated critical habitat by preserving and managing in perpetuity at least 386.2 acres of core scrub habitat (PCE 1) for the Alameda whipsnake at a Service-approved location within designated critical habitat. Currently, EBRPD is proposing to preserve and manage in perpetuity at least 386.2 acres of PCE 1 within an important Alameda whipsnake dispersal corridor within designated critical habitat Unit 6. The Service designated critical habitat within Unit 6 because of its significance as a dispersal corridor for the Alameda whipsnake between Units 1 and 2. Although EBRPD's proposed project will result in a net loss of PCE 1 within designated critical habitat Units 1, 2, and 6, the Service believes that the preservation and management of at least 386.2 acres of PCE 1 at a Service-approved location in Unit 6 will benefit Alameda whipsnake critical habitat by preserving in perpetuity an important dispersal corridor between Units 1 and 2. Maintaining connectivity between Units 1 and 2 allows for dispersal between units for the subspecies and allows for genetic exchange among all three units (Service 2006b). The preserved PCE 1 will provide breeding, feeding, or sheltering commensurate with or better than habitat lost as a result of the effects from the proposed project.

Indirect Effects

Alameda whipsnake critical habitat could be degraded if the proposed and interconnected project activities resulted in an increase in invasive plant species within suitable habitat for the Alameda

whipsnake. The applicants will minimize the spread of invasive plant species by implementing a Service-approved 10-year monitoring and adaptive management plan with interim and final success criteria to ensure that treatment areas revegetate with suitable native plant species and PCEs. The complete removal of eucalyptus and other non-native trees on UCB and Oakland parcels would indirectly benefit Alameda whipsnake critical habitat by removing a continued seed source for encroachment of eucalyptus and non-native trees into Alameda whipsnake habitat. Thinning of eucalyptus by EBRPD may provide some minimal benefit to Alameda whipsnake critical habitat in the short-term; however, the remaining eucalyptus trees in the area would continue as a seed source and would likely encroach upon Alameda whipsnake critical habitat unless continuously maintained by herbicides and logging.

Pallid Manzanita

Direct and Indirect Effects

EBRPD's implementation of the proposed and interconnected WHRRMP actions may have temporary adverse effects on pallid manzanitas in the action area from direct disturbance to plants (*e.g.*, trampling, removal, or direct contact with heavy machinery) and alteration of 1.3 acres of suitable occupied habitat. Individual pallid manzanita plants could be injured or killed or if they were exposed to herbicides during treatment activities. Pallid manzanita plants could be indirectly affected by the introduction and spread of the fungal pathogen *P. cinnamomi* into existing stands. The introduction and spread of *P. cinnamomi* could extirpate whole stands of the pallid manzanita within the action area.

EBRPD will minimize the level of disturbance of pallid manzanitas, the potential for exposure to herbicides, and the potential for the introduction and spread of *P. cinnamomi* by implementing the BMPs and avoidance and minimization measures in the *Conservation Measures* section of the biological opinion including: (1) having a Service-approved biologist train all project staff, flag all pallid manzanita shrubs and seedlings for avoidance, and supervise all activities near pallid manzanita plants; (2) avoiding areal application of herbicides within 300 feet of pallid manzanita plants; (3) avoiding the removal of any living pallid manzanitas (as identified by the Service-approved biologist); (4) prohibiting goat grazing within treatment areas containing pallid manzanitas; (5) implementing measures to minimize the potential for the introduction and spread of *P. cinnamomi*; and (6) removing shrubs and trees that are not a component of the maritime chaparral vegetation type that are excessively shading pallid manzanita plants. Hand labor would be used in areas of pallid manzanita to limit ground disturbance, pile burning would only be conducted in areas where pallid manzanita plants or seeds do not occur, and several other protection measures would be implemented, as described in the *Conservation Measures* and above, to minimize effects to pallid manzanita. Trees and other plants around pallid manzanita plants would be pruned to allow pallid manzanita plants to grow unimpeded.

EBRPD will also minimize the potential for the introduction and spread of invasive plant species by monitoring all vegetation treatment areas and implementing a Service-approved MMP. The vegetation management goals of EBRPD, including the removal of invasive plant species, would enhance the existing suitable habitat for pallid manzanita. In addition, it is likely that viable pallid manzanita seed banks exist within the action area, and the proposed treatment activities

may stimulate the germination of pallid manzanita seedlings. Herbicide application associated with the proposed and interconnected actions is unlikely to affect the pallid manzanita because herbicides within 300 feet of pallid manzanitas would be applied through direct application to the stumps of exotic and invasive species only. Foliar application of herbicides or other spray application methods would be prohibited within 300 feet of pallid manzanitas.

In addition to the general BMPs described in the *Conservation Measures*, species specific avoidance measures would be taken to protect pallid manzanitas. The potential for introduction and spread of the fungal pathogen *P. cinnamomi* into existing stands of pallid manzanita would be minimized by implementing BMPs and measures specific to preventing the spread of plant pathogens (e.g., equipment and vehicle washings before and after vegetation management within areas of known pallid manzanita; restricting wet season activities; and having a Service-approved biologist onsite), as described above and in the *Conservation Measures*.

EBRPD will also minimize the effects of the proposed project on the pallid manzanita by implementing a Service-approved long-term adaptive management plan for all pallid manzanita stands that occur on EBRPD lands, not just those areas supporting pallid manzanita that lie within the action area for the WHRRMP and the wildland-urban interface (Draft EBRPD Pallid Manzanita Management Plan, ESA 2013). Since nearly 75 percent of the total range-wide population of the pallid manzanita occurs on EBRPD lands, the implementation of the long-term EBRPD Pallid Manzanita Management Plan will significantly contribute to the management, restoration, and recovery of the pallid manzanita. The EBRPD Pallid Manzanita Management Plan will utilize existing sources of information, management strategies, and proposals. These include the Alameda Manzanita Management Plan (Amme and Havlik 1987), the Chabot Pallid Manzanita Habitat Enhancement and Conservation Plan, the EBRPD WHRRMP (LSA Associates, Inc. 2009), Global Position System data, and Geographic Information Systems layers already developed by EBRPD.

The goals of the Draft EBRPD Pallid Manzanita Management Plan (ESA 2013) include: (1) managing and expanding existing pallid manzanita stands in such a way as to maximize individual plant health, maintain species genetic integrity and diversity, and promote stand regeneration in perpetuity; (2) establishing or restoring additional pallid manzanita stands in areas that are not subject to fuel management or other incompatible uses; and (3) controlling the spread of the fungal pathogen, *P. cinnamomi*, within and between pallid manzanita stands.

EBRPD proposes to achieve these goals by implementing the following general recommendations including: (1) updating and monitoring the status of pallid manzanita populations; (2) seed banking for all naturally occurring populations of pallid manzanita, focusing on representative genetic diversity; (3) recreational user and neighborhood education and outreach to minimize the spread of *P. cinnamomi*; (4) removing non-native vegetation and other vegetation that threaten to outcompete the pallid manzanita; (5) conducting studies and implementing measures to enhance germination of pallid manzanitas; (6) outplanting of propagated pallid manzanita plants and/or direct seeding; (7) conducting prescribed fire; and (8) controlling *P. cinnamomi* (ESA 2013). Additionally, EBRPD is proposing in the Draft EBRPD Pallid Manzanita Management Plan to minimize the potential for the introduction and spread of *P. cinnamomi* by educating trail users and adjacent homeowners; establishing wash stations at

trailheads; and decommission trails or seasonally closing trails through pallid manzanita stands. The EBRPD Pallid Manzanita Management Plan will be finalized and approved by the Service prior to EBRPD conducting any vegetation management activities within areas containing pallid manzanita (ESA 2013).

Cumulative Effects

Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed FEMA East Bay Hills Hazardous Fire Risk Reduction Project are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

A list of upcoming State and private projects in the action area that are reasonably certain to occur and that may contribute to cumulative effects on the California red-legged frog, Alameda whipsnake, Alameda whipsnake critical habitat, and pallid manzanita was acquired by FEMA. Several of the projects (Anthony Chabot and Tilden projects) would involve work in areas that are already developed and would be unlikely to have significant effects on habitat for the California red-legged frog, Alameda whipsnake, Alameda whipsnake critical habitat, and pallid manzanita. Projects at UCB and Claremont Canyon are not well defined with respect to their locations at this time, and they could have the potential to affect habitat for the California red-legged frog and Alameda whipsnake. However, potential UCB building expansion within habitat for the California red-legged frog and Alameda whipsnake (*e.g.*, the 100,000 square-foot expansion of existing facilities in the UCB Hill Campus Program Space Addition) would be highly constrained by the steep slopes that are present within the action area and would likely be limited to modest expansion of existing structures located in developed/disturbed areas that do not provide suitable habitat for listed species (FEMA 2012). A new staging area for access to Claremont Canyon could have the potential to affect habitat for the California red-legged frog and Alameda whipsnake, although it would represent a small area and would be located close to existing roads and infrastructure (FEMA 2012). Thus there would be no significant cumulative effects when other projects are considered. In addition, the projects listed above would be subject to State environmental compliance and permits and would be required to implement similar avoidance measures and BMPs to avoid or minimize impacts.

California Public Resources Code 4291

In January 2005, a new California state law (California Public Resources Code Section 4291) became effective that extended the defensible space clearance around homes and structures from 30 feet to 100 feet with the purpose of increasing the chances of a structure surviving a wildfire. Since nearly all pallid manzanita shrubs in one of the two major populations of pallid manzanita occur within the wildland-urban interface, compliance with California Public Resources Section 4291, on the part of EBRPD and private property owners combined, poses a significant threat to the species (ESA 2013). Over 40 percent of the Huckleberry Ridge pallid manzanita population occurs on private property; many of these are within the 100 foot defensible clearance space, and therefore, are threatened with removal by homeowners in the area complying with the law (ESA

2013). The removal of core scrub habitat by local and private property owners around homes and structures also threatens the Alameda whipsnake and its designated critical habitat.

Climate Change

The global average temperature has risen by approximately 0.6 degrees Centigrade during the 20th Century (International Panel on Climate Change [IPCC] 2001, 2007a, 2007b; Adger *et al.* 2007). There is an international scientific consensus that most of the warming observed has been caused by human activities (IPCC 2001, 2007a, 2007b; Adger *et al.* 2007), and that it is "very likely" that it is largely due to man-made emissions of carbon dioxide and other greenhouse gases (Adger *et al.* 2007). Ongoing climate change (Inkley *et al.* 2004; Adger *et al.* 2007; Kanter 2007) likely imperils the California red-legged frog, Alameda whipsnake, Alameda whipsnake critical habitat, and pallid manzanita and the resources necessary for their survival, since climate change threatens to disrupt annual weather patterns, it may result in a loss of their habitats and/or prey, and/or increased numbers of their predators, parasites, diseases, and non-native competitors. Where populations are isolated, a changing climate may result in local extinction, with range shifts precluded by lack of habitat.

Conclusion

After reviewing the current status of the California red-legged frog, the environmental baseline for the action area, the effects of the proposed project and the cumulative effects, it is the Service's biological opinion that the proposed FEMA East Bay Hills Hazardous Fire Risk Reduction Project, as described herein, is not likely to jeopardize the continued existence of this listed species. We base this conclusion on the following: (1) the implementation of the avoidance and minimization measures as described in the *Description of the Proposed Project* of this biological opinion would minimize the potential for injury and mortality of the California red-legged frog; (2) no suitable breeding habitat for the California red-legged frog would be disturbed; (3) the implementation of a stormwater pollution prevention plan, spill prevention plan, and BMPs for herbicide use would minimize the potential for injury to California red-legged frogs and degradation of aquatic habitat; and (4) the removal of non-native eucalyptus and conversion to native plant species would improve the quality of aquatic habitat and abundance of invertebrate prey for the California red-legged frog.

After reviewing the current status of the Alameda whipsnake, the environmental baseline for the action area, the effects of the proposed project and the cumulative effects, it is the Service's biological opinion that the proposed FEMA East Bay Hills Hazardous Fire Risk Reduction Project, as described herein, is not likely to jeopardize the continued existence of this listed species. We base this conclusion on the following: (1) the implementation of the avoidance and minimization measures as described in the *Description of the Proposed Project* of this biological opinion will minimize the potential for injury and mortality of the Alameda whipsnake; (2) UCB's non-native forest, acacia, and French broom removal activities will create 167.9 acres of suitable habitat for the Alameda whipsnake consisting of at least 32.9 acres of core scrub habitat; (3) Oakland's non-native forest, acacia, and French broom removal will create 40.8 acres of suitable habitat for the Alameda whipsnake consisting of at least 18.2 acres of core scrub habitat; (4) EBRPD will purchase, preserve, and manage in perpetuity under a conservation easement

with a long-term endowment at least 386.2 acres of core scrub habitat for the Alameda whipsnake at a Service-approved location; and (5) the applicants will ensure the treatment areas revegetate with suitable native plant species and habitat for the Alameda whipsnake by implementing a Service-approved 10-year monitoring and adaptive management plan with interim and final success criteria.

After reviewing the current status of Alameda whipsnake critical habitat, the environmental baseline for the action area, the effects of the proposed project and the cumulative effects, it is the Service's biological opinion that the proposed FEMA East Bay Hills Hazardous Fire Risk Reduction Project, as described herein, is not likely to result in the destruction or adverse modification of Alameda whipsnake critical habitat. We base this conclusion on the following: (1) UCB's non-native forest, acacia, and French broom removal activities will benefit designated critical habitat for the Alameda whipsnake by creating an additional 24.06 acres of PCE 1 and 123.97 acres of PCE 2 within designated critical habitat; (2) Oakland's non-native forest, acacia, and French broom removal activities will increase the total acres containing PCEs within designated critical habitat by about 18.59 acres including a net increase of 4.75 acres of PCE 1; (3) EBRPD will purchase, preserve, and manage in perpetuity under a conservation easement with a long-term endowment at least 386.2 acres of PCE 1 for the Alameda whipsnake at a Service-approved location within designated critical habitat; and (4) the applicants will ensure the treatment areas revegetate with suitable native plant species and PCEs by implementing a Service-approved 10-year monitoring and adaptive management plan with interim and final success criteria.

After reviewing the current status of the pallid manzanita, the environmental baseline for the action area, the effects of the proposed project and the cumulative effects, it is the Service's biological opinion that the proposed FEMA East Bay Hills Hazardous Fire Risk Reduction Project, as described herein, is not likely to jeopardize the continued existence of this listed species. We base this conclusion on the following: (1) the implementation of the avoidance and minimization measures and BMPs as described in the *Description of the Proposed Project* of this biological opinion will minimize the potential for disturbance of the pallid manzanita, the potential for its exposure to herbicides, and the potential for the spread of the fungal pathogen *P. cinnamomi*; (2) EBRPD will ensure the treatment areas revegetate with suitable native plant species by implementing a Service-approved 10-year monitoring and adaptive management plan with interim and final success criteria; and (3) EBRPD will develop and implement a Service-approved long-term adaptive management plan for all pallid manzanita populations that occur on EBRPD lands (nearly 75 percent of the total range-wide population of the pallid manzanita) which will contribute to the recovery of the pallid manzanita.

The conservation measures for the proposed project have been designed so that each applicant is responsible for the successful implementation of their own avoidance, minimization, restoration, and compensation measures and thus not dependent on the restoration and compensation being implemented by the other applicants. Therefore, any changes to the proposed project being implemented by one of the applicants would require reinitiation of formal consultation only on that applicant's portions of the proposed project and thus would not delay the implementation of the proposed project by the other applicants.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act, provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by FEMA so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, for the exemption in section 7(o)(2) to apply. FEMA has a continuing duty to regulate the activity covered by this incidental take statement. If FEMA (1) fails to assume and implement the terms and conditions or (2) fails to require the (applicant) to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, UCB, Oakland, and EBRPD must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR §402.14(i)(3)].

Sections 7(b)(4) and 7(o)(2) of the Act generally do not apply to listed plant species. However, limited protection of listed plants from take is provided to the extent that the Act prohibits the removal or reducing to possession of federally listed plants from areas under Federal jurisdiction; the malicious damage or destruction of any such species on such areas; and the removal, destruction or damage of such species in violation of state laws, including state criminal trespass law (16 USC 1538(a)(2)(B)).

Amount or Extent of Take

California Red-Legged Frog

The Service anticipates that incidental take of the California red-legged frog will be difficult to detect for the following reasons: their relatively small body size makes the finding of a dead specimen unlikely; the cryptic nature of the species; losses may be masked by seasonal fluctuations in numbers or other causes; and the species occurs in aquatic, riparian and upland habitats that makes it difficult to detect. Due to the difficulty in quantifying the number of California red-legged frogs that will be taken as a result of the proposed project, the Service is quantifying take incidental to the proposed project as the following for each of the applicants:

1. UCB: Claremont Canyon, Frowning Ridge, and Strawberry Canyon

- a. The harassment of all juvenile, subadult, and adult life history stages of the California red-legged frog within 93.7 acres of suitable non-breeding habitat disturbed during initial implementation of the proposed project by UCB at Claremont Canyon and Frowning Ridge.
- b. The harassment of all juvenile, subadult, and adult life history stages of the California red-legged frog within 93.7 acres of suitable non-breeding habitat during follow-up maintenance activities conducted by UCB over a 10-year period at Frowning Ridge.
- c. The injury or mortality of all juvenile, subadult, and adult life history stages of the California red-legged frog within 54.7 acres of suitable non-breeding habitat disturbed during high-impact activities (e.g., major ground disturbance and use of heavy equipment) by UCB at Claremont Canyon and Frowning Ridge.
- d. The injury or mortality of one (1) individual juvenile, subadult, or adult California red-legged frog in UCB project areas outside of the high-impact activity areas.
- e. The capture of all California red-legged frogs within the 285-acre action area for UCB's proposed project at Claremont Canyon, Frowning Ridge, and Strawberry Canyon.

2. Oakland: North Hills-Skyline and Caldecott Tunnel

- a. The harassment, injury, or mortality of one (1) individual juvenile, subadult, or adult California red-legged frog in Oakland's project areas at North Hills-Skyline and Caldecott Tunnel.
- b. The capture of all California red-legged frogs within the 122-acre action area in Oakland's project areas at North Hills-Skyline and Caldecott Tunnel.

3. EBRPD: PDM-PJ-09-CA-2006-004, HMGP 1731-16-34, and Interconnected WHRRMP Actions

- a. The harassment of all juvenile, subadult, and adult life history stages of the California red-legged frog within 588.3 acres of suitable habitat disturbed during initial implementation of the proposed and interconnected projects by EBRPD.
- b. The harassment of all juvenile, subadult, and adult life history stages of the California red-legged frog within 588.3 acres of suitable habitat during follow-up maintenance activities conducted by EBRPD over a 10-year period.
- c. The injury or mortality of one (1) individual juvenile, subadult, or adult California red-legged frog in EBRPD project areas.

- d. The capture of all California red-legged frogs within the 2,466-acre action area for EBRPD's proposed and interconnected project areas.

Alameda Whipsnake

The Service anticipates that incidental take of the Alameda whipsnake will be difficult to detect for the following reasons: the cryptic nature and behavior of the species; losses may be masked by seasonal fluctuations in numbers or other causes. Due to the difficulty in quantifying the number of Alameda whipsnakes that will be taken as a result of the proposed project, the Service is quantifying take incidental to the proposed project as the following:

1. UCB: Claremont Canyon, Strawberry Canyon, and Frowning Ridge

- a. The harassment, injury, or mortality of all Alameda whipsnakes within 0.3 acre disturbed during high-impact activities (e.g., major ground disturbance and use of heavy equipment) during initial implementation of the proposed project by UCB at Claremont Canyon and Frowning Ridge.
- b. The harassment of all Alameda whipsnakes within 263.8 acres of suitable habitat during follow-up maintenance activities conducted by UCB over a 10-year period at Claremont Canyon, Strawberry Canyon, and Frowning Ridge.
- c. The injury or mortality of one (1) individual Alameda whipsnake outside of the high-impact activity areas at Claremont Canyon, Strawberry Canyon, and Frowning Ridge.
- d. The capture of all Alameda whipsnakes within the 285-acre action area for UCB's proposed project at Claremont Canyon, Strawberry Canyon, and Frowning Ridge.

2. Oakland: North Hills-Skyline and Caldecott Tunnel

- a. The harassment of all Alameda whipsnakes within 13.6 acres of suitable habitat disturbed during initial implementation of the proposed project by Oakland at North Hills-Skyline and Caldecott Tunnel.
- b. The harassment of all Alameda whipsnakes within 107.0 acres of suitable habitat during follow-up maintenance activities conducted by Oakland over a 10-year period North Hills-Skyline and Caldecott Tunnel.
- c. The injury or mortality of all Alameda whipsnakes within 0.6 acre of suitable habitat disturbed during high-impact activities (e.g., major ground disturbance and use of heavy equipment) by Oakland at North Hills-Skyline and Caldecott Tunnel.
- d. The injury or mortality of one (1) individual Alameda whipsnake outside of the high-impact activity areas at North Hills-Skyline and Caldecott Tunnel.

- e. The harm of all Alameda whipsnakes within 3.8 acres of core scrub habitat permanently lost and converted to foraging/dispersal habitat due to shrub thinning conducted by Oakland at North Hills-Skyline.
 - f. The capture of all Alameda whipsnakes within the 122-acre action area for Oakland's proposed project at North Hills-Skyline and Caldecott Tunnel.
4. EBRPD: PDM-PJ-09-CA-2006-004, HMGP 1731-16-34, and Interconnected WHRRMP Actions
- a. The harassment of all Alameda whipsnakes within 520.0 acres of suitable habitat disturbed during initial implementation of the proposed and interconnected actions by EBRPD.
 - b. The harassment of all Alameda whipsnakes within 1,058.6 acres of suitable habitat during follow-up maintenance activities conducted by EBRPD over a 10-year period.
 - c. The injury or mortality of all Alameda whipsnakes within 196.5 acres of suitable habitat disturbed during high-impact activities (*e.g.*, major ground disturbance and use of heavy equipment) within EBRPD's proposed and interconnected project areas.
 - d. The injury or mortality of one (1) individual Alameda whipsnake outside of EBRPD high-impact activity areas.
 - e. The harm of all Alameda whipsnakes within 193.1 acres of core scrub habitat permanently lost and converted to foraging/dispersal habitat due to shrub thinning conducted within EBRPD's proposed and interconnected project areas.
 - f. The capture of all Alameda whipsnakes within the 2,466-acre action area for EBRPD's proposed and interconnected project areas.

Effect of the Take

In the accompanying biological opinion, the Service determined that the level of anticipated take is not likely to result in jeopardy to the California red-legged frog and Alameda whipsnake.

Reasonable and Prudent Measures

The Service has determined that the following reasonable and prudent measure is necessary and appropriate to minimize the effects of the proposed project on the California red-legged frog, Alameda whipsnake, and pallid manzanita:

1. FEMA through the applicants will implement the BMPs and Conservation Measures in the *Description of the Proposed Project* in this biological opinion.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, FEMA must ensure compliance with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are non-discretionary.

1. The following Terms and Conditions implement Reasonable and Prudent Measure Number One (1):
 - a. FEMA shall ensure that each applicant has a final Service-approved 10-year MMP prior to their initiation of the proposed project. The MMPs shall include interim and final success criteria for the cover of native and invasive plant species, the cover of suitable listed species habitat, and the decomposition of wood chips within all proposed treatment areas. FEMA shall ensure that the applicants develop and implement Service-approved contingency plans in case the interim and final success criteria are not achieved.
 - b. FEMA shall ensure that UCB creates at least 167 acres of suitable habitat for the Alameda whipsnake consisting of at least 32 acres of core scrub habitat.
 - c. FEMA shall ensure that Oakland creates at least 40 acres of suitable habitat for the Alameda whipsnake consisting of at least 18 acres of core scrub habitat.
 - d. FEMA shall ensure that EBRPD creates at least 62 acres of suitable habitat for the Alameda whipsnake.
 - e. FEMA shall ensure that EBRPD has a compensation plan finalized and approved by the Service for the purchase, preservation, and management in perpetuity of at least 386.2 acres of core scrub habitat for the Alameda whipsnake at a Service-approved location within its designated critical habitat prior to EBRPD initiating any vegetation management activities within Alameda whipsnake habitat. FEMA shall ensure that the conservation easement is recorded by EBRPD within nine months of EBRPD initiating the proposed project. FEMA shall ensure that the long-term endowment funding for the compensation areas will be in place within nine months of EBRPD initiating the proposed project. The endowment will be Service-approved and will provide funding for management of these areas in perpetuity.
 - f. FEMA shall ensure that EBRPD develops and initiates a Service-approved study analyzing the effects of the proposed shrub thinning on the Alameda whipsnake prior to the initiation of any vegetation management activities within Alameda whipsnake habitat.
 - g. FEMA shall ensure that EBRPD has a final Service-approved long-term management plan for all stands of the pallid manzanita that occur on EBRPD lands prior to the initiation of any vegetation management activities within areas that contain the pallid manzanita.

Reporting Requirements

The Service must be notified within 24 hours of the finding of any injured or dead California red-legged frog or Alameda whipsnake. Injured California red-legged frogs and Alameda whipsnakes shall be cared by a licensed veterinarian or other qualified person, such as the Service-approved biologist for the proposed action. Notification must include the date, time, and precise location of the specimen/incident, and any other pertinent information. Dead animals should be sealed in a zip lock bag containing a piece of paper indicating the location, date and time when it was found, and the name of the person who found it; and the bag should be frozen in a freezer in a secure location. The Service contact persons are Coast Bay/Forest Foothills Division Chief, Endangered Species Program, at the Sacramento Fish and Wildlife Office at telephone (916) 414-6600 and Resident Agent-in-Charge of the Service's Law Enforcement Division at telephone (916) 569-8444.

The applicant shall submit a post-construction compliance report prepared by the onsite biologist to the Sacramento Fish and Wildlife Office within sixty (60) calendar days of the date of the completion of construction activity. This report shall detail (i) dates that construction occurred; (ii) pertinent information concerning the success of the project in meeting the avoidance and minimization measures; (iii) an explanation of failure to meet such measures, if any; (iv) known project effects on the California red-legged frog and Alameda whipsnake, if any; (v) occurrences of incidental take of these listed species, if any; (vi) documentation of employee environmental education; and (vii) other pertinent information.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities that can be implemented to further the purposes of the Act, such as preservation of endangered species habitat, implementation of recovery actions, or development of information and databases.

1. FEMA, UCB, Oakland, and EBRPD should incorporate in their projects the creation of suitable aquatic breeding habitat for the California red-legged frog while eradicating non-native species such as bullfrogs, non-native fish, and non-native tiger salamanders that threaten this listed species.
2. FEMA, UCB, Oakland, and EBRPD should promote the eradication of non-native eucalyptus, Monterey pine, Monterey cypress, and French broom within and near suitable habitat for the Alameda whipsnake and Presidio clarkia.
3. FEMA, UCB, Oakland, and EBRPD should encourage or require the use of appropriate California native species in revegetation and habitat enhancement efforts.
4. FEMA, UCB, Oakland, and EBRPD should avoid the use of rodenticides in suitable habitat for the California red-legged frog and Alameda whipsnake and other listed species that rely on small mammals for creating burrows or as a prey source.

5. FEMA, UCB, Oakland, and EBRPD should manage scrub, grassland, and oak woodland habitats for the benefit of the Alameda whipsnake. EBRPD should re-route trails away from suitable Alameda whipsnake and pallid manzanita habitat.
6. FEMA and Oakland should develop and implement a Service-approved long-term management plan for the pallid manzanita similar to the one being developed by EBRPD.
7. EBRPD should acquire, preserve, and manage lands containing the pallid manzanita that are currently unprotected on private lands. EBRPD should educate and work with adjacent landowners to minimize the potential for the introduction and spread of *P. cinnamomi* into areas containing the pallid manzanita.
8. FEMA and Oakland should persuade private landowners in the Oakland Hills (e.g., Oakland Hills Tennis Club, Sunrise Assisted Living Facility, and the proposed Crestmont development) to monitor the Presidio clarkia subpopulations on their lands and control invasive species as required under their management plans that were developed during the California Environmental Quality Act process (e.g., Center for Biological Diversity 2007; Kanz *in litt.* 2009; EBRPD 2009; Oakland 2006).
9. FEMA and Oakland should increase education of Oakland road maintenance and vegetation and fire management teams in how to avoid and minimize impacts to the Presidio clarkia including delaying their activities (e.g., mowing and weed-whacking) in areas with Presidio clarkia (Chadbourne Way, Old Redwood Road, and Redwood Regional Park subpopulations) until after the Presidio clarkia have set seed (late summer, early fall). The Center for Biological Diversity, California Native Plant Society, and local residents have documented on multiple occasions in recent years vegetation management activities conducted by Oakland in the Crestmont neighborhood that resulted in the disturbance of Presidio clarkia plants within the Chadbourne Way, Kimberlin Heights Drive, Colgett Drive, Crestmont Drive, and Old Redwood Road subpopulations before the plants had released and dispersed their seeds (Kanz *in litt.* 2006; Augustine *in litt.* 2006; Baker *in litt.* 2009; Baker, pers. comm. 2009; Kanz, pers. comm. 2009; Naumovich, pers. comm. 2009).
10. FEMA and Oakland should persuade private landowners in the Oakland Hills (e.g., Colgett Drive, Kimberlin Heights Drive, and Crestmont Drive) to remove trees where they have been planted in suitable Presidio clarkia habitat as is being done at Redwood Regional Park and the San Francisco Presidio.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

REINITIATION—CLOSING STATEMENT

This concludes formal consultation on the proposed FEMA Hazardous Fire Risk Reduction Project in the East Bay Hills of Alameda and Contra Costa Counties, California. As provided in

50 CFR 402.16, reinitiating of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this biological opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must immediately cease, pending reinitiating.

If you have any questions regarding this biological opinion on the FEMA Hazardous Fire Risk Reduction Project in the East Bay Hills, please contact Joseph Terry, Senior Biologist, or Ryan Olah, Coast Bay/Forest Foothills Division Chief, at the letterhead address, electronic mail (Joseph_Terry@fws.gov; Ryan_Olah@fws.gov), or at telephone (916) 414-6600.

Sincerely,

Jan C. Knight
Acting Field Supervisor

Enclosure

cc:

Craig Weightman, California Department of Fish and Wildlife, Napa, California
Randi Adair, California Department of Fish and Wildlife, Napa, California
Darren Howe, National Marine Fisheries Service, Santa Rosa, California

LITERATURE CITED

- Adger, N., P. Aggarwal, S. Agrawala, J. Alcamo, A. Allali, O. Anisimov, N. Arnell, M. Boko, O. Canziani, T. Carter, G. Cassa, U. Confalonieri, R. Cruz, E. de Alba Alcaraz, W. Eastreling, C. Field, A. Fischlin, B. Fitzharris, C.G. Garcia, C. Hanson, H. Harasawa, K. Hennessy, S. Huq, R. Jones, L. K. Bogataj, D. Karoly, R. Klein, Z. Kundzewicz, M. Lal, R. Lasco, G. Love, X. Lu, G. Magrin, L.J. Mata, R. McLean, B. Menne, G. Midgley, N. Mimura, M.Q. Mirza, J. Moreno, L. Mortsch, I. Niang-Diop, R. Nichols, B. Novaky, L. Nurse, A. Nyon, M. Oppenheimer, J. Palutikof, M. Parry, A. Patwardhan, P. R. Lankao, C. Rosenzweig, S. Schneider, S. Semenov, J. Smith, J. Stone, J van Ypersele, D. Vaughan, C. Vogel, T. Wilbanks, P. Wong, S. Wu, and G. Yohe. 2007. Working Group II Contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report. Climate Change 2007: Climate Change Impacts, Adaptation and Vulnerability. Brussels, Belgium.
- Amme, D. and N. Havlik. 1987. Alameda manzanita management plan. Endangered Plant Project. California Department of Fish and Game. 37 pp.
- Barry, S.J. 1992. Letter to Marvin L. Plenert, Regional Director, U.S. Fish and Wildlife Service, Portland, Oregon, regarding proposed listing.
- Bobzien, S. and J.E. DiDonato. 2007. The Status of the California Tiger Salamander (*Ambystoma californiense*), California Red-legged Frog (*Rana draytonii*), Foothill Yellow-legged Frog (*Rana boylei*), and Other Aquatic Herpetofauna in the EBRPD, California. East Bay Regional Park District, Oakland, California
- Bulger, J.B., N.J. Scott Jr., and R.B. Seymour. 2003. Terrestrial activity and conservation of adult California red-legged frogs *Rana aurora draytonii* in coastal forests and grasslands. Biological Conservation 110:85-95.
- Bury, R.B. and J.A. Whelan. 1984. Ecology and Management of the Bullfrog. Fish and Wildlife Service/Resource Publication 155.
- California Department of Fish and Wildlife (CDFW). 2012. California Natural Diversity Database. RareFind version 3.1.1. March 31, 2012. Natural Heritage Division. Sacramento, California.
- Center for Biological Diversity. 2007. Development Disturbs Endangered Plant Habitat in Oakland Hills: Mitigation Measures for Development Project Ignored. Press Release. June 26, 2007. http://www.biologicaldiversity.org/news/press_releases/index2007.html. Accessed September 3, 2009.
- City of Oakland (Oakland). 2006. Final Environmental Impact Report for the Crestmont Project. City of Oakland Community and Economic Development Agency. October. <http://www.oaklandnet.com/government/ceda/revised/planningzoning/MajorProjectsSection/FEIRcomplete.pdf>. Accessed July 31, 2009.

- _____. 2013. Draft City of Oakland Mitigation and Monitoring Plan for PDMG-2006. February. Prepared for Federal Emergency Management Agency, Region IX, Oakland, California.
- Davidson, E.W., M. Parris, J.P. Collins, J.E. Longcore, A.P. Pessier, J. Brunner. 2003. Pathogenicity and Transmission of Chytridiomycosis in Tiger Salamanders (*Ambystoma tigrinum*). *Copeia* 2003(3):601–607.
- East Bay Regional Park District (EBRPD). 2009. Initial Study and Proposed Mitigated Negative Declaration for the Serpentine Prairie Restoration Plan, Redwood Regional Park, California. May 1, 2009. East Bay Regional Park District, Oakland, California. http://www.ebparcs.org/files/ISMND_SerpPrairieRestoration_web_final_05-01-09.pdf. Accessed on August 3, 2009.
- _____. 2013. Draft East Bay Regional Park District Monitoring and Maintenance Plan. January. Prepared by East Bay Regional Park District, Oakland, California, for Federal Emergency Management Agency, Region IX, Oakland, California.
- Emlen, S.T. 1977. “Double clutching” and its possible significance in the bullfrog. *Copeia* 1977(4):749-751.
- ESA. 2013. Draft East Bay Regional Park District Pallid Manzanita Management Plan. January. Prepared by ESA, Oakland, California, for East Bay Regional Park District, Oakland, California.
- Federal Emergency Management Agency (FEMA). 2012. Hazardous Fire Risk Reduction Biological Assessment, East Bay Hills, California. December. Federal Emergency Management Agency, Region IX, Oakland, California.
- _____. 2013. Revised Sections of the Hazardous Fire Risk Reduction Biological Assessment, East Bay Hills, California. January. Federal Emergency Management Agency Department of Homeland Security, Region IX, Oakland, California.
- Fellers, G. 2005. *Rana draytonii* Baird and Girard, 1852b California red-legged frog. Pages 552-554 in M. Lannoo (editor). Amphibian declines the conservation status of United States species. University of California Press. Berkeley, California.
- Fisher, R.N., and H.B. Schaffer. 1996. The Decline of Amphibians in California’s Great Central Valley. *Conservation Biology* 10(5):1387-1397.
- Garner, T.W.J., M.W. Perkins, P. Govindarajulu, D. Seglie, S. Walker, A.A. Cunningham, and M.C. Fisher. 2006. The emerging amphibian pathogen *Batrachochytrium dendrobatidis* globally infects introduced populations of the North American bullfrog, *Rana catesbeiana*. *Biol. Lett.* 2:455-459.

- Hayes, M.P., and M.R. Jennings. 1988. Habitat correlates of distribution of the California red-legged frog (*Rana aurora draytonii*) and the foothill yellow-legged frog (*Rana boylei*): implications for management. Pages 144-158 in R. Sarzo, K. E. Severson, and D. R. Patton (technical coordinators). Proceedings of the symposium on the management of amphibians, reptiles, and small mammals in North America. United States Department of Agriculture, Forest Service, Rocky Mountain Range and Experiment Station, Fort Collins, Colorado. General Technical Report (RM-166): 1-458.
- Hayes, M.P. and D.M. Krempels. 1986. Vocal sac variation among frogs of the genus *Rana* from western North America. *Copeia* 1986(4):927-936.
- Hayes, M.P. and M.M. Miyamoto. 1984. Biochemical, behavioral and body size differences between *Rana aurora aurora* and *R. a. draytonii*. *Copeia* 1984(4):1018-1022.
- Hayes, M.P., and M.R. Tennant. 1985. Diet and feeding behavior of the California red-legged frog, *Rana aurora draytonii* (Ranidae). *Southwestern Naturalist* 30(4): 601-605.
- Hunt, L. 1993. Letter to Marvin L. Plenert, Regional Director, U.S. Fish and Wildlife Service, Portland, Oregon, regarding proposed listing.
- ICF International. 2010. Eastern Alameda County Conservation Strategy. Final Draft. October. (ICF 00906.08.) San Jose, California. Prepared for the East Alameda County Conservation Strategy Steering Committee, Livermore, California. http://www.westcoast-conservation.org/documents/eaccs_covertoc_oct2010.pdf. Accessed July 10, 2012.
- Inkley, D.B., M.G. Anderson, A.R. Blaustein, V.R. Burkett, B. Felzer, B. Griffin, J. Price, and T.L. Root. 2004. Global climate change and wildlife in North America. Wildlife Society Technical Review 04-2.
- International Panel on Climate Change (IPCC). 2001. Climate Change 2001: The Scientific Basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change [Houghton, J.T., Y. Ding, D.J. Griggs, M. Noguer, P.J. van der Linden, X. Dai, K. Maskell, and C.A. Johnson (editors)]. Cambridge University Press, Cambridge, United Kingdom and New York, New York. 881 pp. <http://www.ipcc.ch/>. Accessed on September 25, 2009.
- _____. 2007a. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Core Writing Team, Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press, New York, New York, 996 pp. http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg1_report_the_physical_science_basis.htm. Accessed on September 25, 2009.

- _____. 2007b. Climate Change 2007: The Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Core Writing Team, R.K. Pachauri and A. Reisinger (eds.). IPCC, Geneva, Switzerland, 104 pp. http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm. Accessed on September 25, 2009.
- Jennings, M.R. 1993. Letter to Peter C. Sorensen, U.S. Fish and Wildlife Service, Sacramento, California.
- Jennings, M.R., and M.P. Hayes. 1985. Pre-1900 overharvest of California red-legged frogs (*Rana aurora draytonii*): The inducement for bullfrog (*Rana catesbeiana*) introduction. *Herpetological Review* 31(1):94-103.
- _____. 1990. Final report of the status of the California red-legged frog (*Rana aurora draytonii*) in the Pescadero Marsh Natural Preserve. Final report prepared for the California Department of Parks and Recreation, Sacramento, California, through Agreement (4-823-9018). Department of Herpetology, California Academy of Sciences, Golden Gate Park, San Francisco, California. 30 pages.
- _____. 1994. Amphibian and Reptile Species of Special Concern in California. Report prepared for the California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California. 255 pages.
- Jennings, M.R., M.P. Hayes, and D.C. Holland. 1992. A petition to the U.S. Fish and Wildlife Service to place the California red-legged frog (*Rana aurora draytonii*) and the western pond turtle (*Clemmys marmorata*) on the list of endangered and threatened wildlife and plants. 21 pages.
- Kanter, J. 2007. Scientists detail climate changes, Poles to Tropics. *New York Times*. April 10, 2007.
- Kanz, R.W. 2004. Status of pallid manzanita (*Arctostaphylos pallida*) in the Sausal Creek Watershed. Prepared for the Restoration Committee of the Friends of Sausal Creek.
- Kruse, K.C. and M.G. Francis. 1977. A predation deterrent in larvae of the bullfrog, *Rana catesbeiana*. *Transactions of the American Fisheries Society* 106(3):248-252.
- Kupferberg, S.J. 1996a. Hydrologic and geomorphic factors affecting conservation of a river-breeding frog (*Rana boylei*). *Ecological Applications* 6: 1322-1344.
- _____. 1996b. The ecology of native tadpoles (*Rana boylei* and *Hyla regilla*) and the impacts of invading bullfrogs (*Rana catesbeiana*) in a northern California river. PhD dissertation. University of California, Berkeley, California.
- _____. 1997. Bullfrog (*Rana catesbeiana*) Invasion of a California River: The Role of Larval Competition. *Ecology* 78(6):1736-1751.

- Lips, K.R., F. Brem, R. Brenes, J.D. Reeve, R.A. Alford, J. Voyles, C. Carey, L. Livo, A.P. Pessier, and J.P. Collins. 2006. Emerging infectious disease and the loss of biodiversity in a Neotropical amphibian community. *PNAS* 103(9):3165-3170.
- LSA Associates, Inc. 2009. East Bay Regional Park District Wildfire Hazard Reduction and Resource Management Plan Environmental Impact Report. July. East Bay Regional Park District, Oakland, California. <http://www.ebparks.org/stewardship/fuelsplan/eir>. Accessed on December 10, 2012.
- Mao, J., D.E. Green, G.M. Fellers, and V.G. Chincar. 1999. Molecular characterization of iridoviruses isolated from sympatric amphibians and fish. *Virus Research* 6: 45-52.
- Mayer, K.E., and W.F. Laudenslayer, Jr.. 1988. *A Guide to Wildlife Habitats of California*. California Department of Forestry and Fire Protection. Sacramento, California. 166 pages.
- Moyle, P.B. 1976. Fish Introductions in California: History and Impact on Native Fishes. *Biological Conservation* 9(1):101-118.
- Sawyer, J.O., and T. Keeler-Wolf. 1995. *A Manual of California Vegetation*. California Native Plant Society, Sacramento, California.
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2008. *A Manual of California Vegetation*, Second edition. California Native Plant Society. Sacramento, California.
- Shaffer, H.B., G.M. Fellers, S.R. Voss, C. Oliver, and G.B. Pauley. 2010. Species boundaries, phylogeography, and conservation genetics of the red-legged frog (*Rana aurora/draytonii*) complex. *Molecular ecology* 13: 2667-2677.
- Stebbins, R.C. 2003. *A Field Guide to Western Reptiles and Amphibians*. Houghton Mifflin Company, Boston, Massachusetts.
- Storer, T.I. 1925. A synopsis of the amphibia of California. *University of California Publications in Zoology* 27:1-1-342.
- _____. 1933. Frogs and their commercial use. *California Department of Fish and Game* 19(3)203-213.
- Stromberg, M.R., J.D. Corbin, and C.M. D'Antonio. 2007. *California Grasslands: Ecology and Management*. University of California Press. Berkeley, California.
- Swaim, C. 2005. Electronic Geographic Information Systems coverage of Alameda whipsnake records compiled from survey reports, museum records, and personal records. Dated September 9, 2005. Swaim Biological Incorporated, Livermore, California.

- Tatarian, P.J. 2008. Movement Patterns of California Red-Legged Frogs (*Rana draytonii*) in an Inland California Environment. *Herpetological Conservation and Biology* 3(2):155-169. November.
- Twedt, B. 1993. A comparative ecology of *Rana aurora* Baird and Girard and *Rana catesbeiana* Shaw at Freshwater Lagoon, Humboldt County, California. Unpublished. Master of Science thesis. Humboldt State University, Arcata, California. 53 pages plus appendix.
- University of California-Berkeley (UCB). 2013. Draft UC Berkeley Mitigation and Monitoring Plan: A Component of the East Bay Hills EIS, FEMA Region IX. January. Prepared for Federal Emergency Management Agency Department of Homeland Security, Region IX, Oakland, California.
- U.S. Fish and Wildlife Service (Service). 1996. Endangered and threatened wildlife and plants; determination of threatened status for the California Red-Legged Frog. **Federal Register** 61:25813-25833.
- _____. 2002a. Recovery Plan for the Red-legged Frog (*Rana aurora draytonii*). Portland, Oregon. 173 pages.
- _____. 2002b. Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California. November. Region 1, Portland, Oregon. xvi + 306 pp. http://ecos.fws.gov/docs/recovery_plans/2003/030407.pdf. Accessed on December 13, 2012.
- _____. 2005. Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Alameda Whipsnake, Proposed Rule. **Federal Register** 70: 60607-60656.
- _____. 2006a. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Red-Legged Frog, and Special Rule Exemption Associated With Final Listing for Existing Routine Ranching Activities; Final Rule. **Federal Register** 71: 19244-19346.
- _____. 2006b. Endangered and threatened wildlife and plants; designation of critical habitat for the Alameda whipsnake. Final Rule. **Federal Register** 71:58175-58231.
- _____. 2010a. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for California Red-Legged Frog; Final Rule. **Federal Register** 75: 12815-12959.
- _____. 2010b. *Arctostaphylos pallida* (pallid manzanita) 5-Year Review: Summary and Evaluation. November. Sacramento Fish and Wildlife Office, Sacramento, California. http://ecos.fws.gov/docs/five_year_review/doc4105.pdf. Accessed on December 13, 2012.

- _____. 2010c. National Wetlands Inventory website. Washington, D.C. <http://www.fws.gov/wetlands/>. Accessed in February 2010.
- _____. 2011. Alameda Whipsnake (*Masticophis lateralis euryxanthus*) 5-Year Review: Summary and Evaluation. September. Sacramento Fish and Wildlife Office, Sacramento, California. http://ecos.fws.gov/docs/five_year_review/doc3886.pdf. Accessed on December 10, 2012.
- Wright, A.H. and A.A. Wright. 1949. Handbook of frogs and toads of the United States and Canada. Comstock Publishing Company, Inc., Ithaca, New York. 640 pages.

***In Litt.* References**

- Augustine, Justin. 2006. Staff Attorney, Center for Biological Diversity. Letter addressed to Daniel Farrell, Fire Chief, City of Oakland Fire Department, Oakland, California, dated May 16, 2006. Subject: Vegetation management activities that harm Pallid manzanita, Presidio clarkia, most beautiful jewelflower, San Francisco popcorn-flower, and Alameda whipsnake. <http://www.biologicaldiversity.org/swcbd/PRESS/oakland-letter-5-16-06.pdf>. Accessed July 28, 2009.
- Baker, Laura. 2009. Conservation Committee Chair, East Bay Chapter of the California Native Plant Society (EBCNPS), Berkeley, California. Electronic mail addressed to Maryann Showers Botanist, California Department of Fish Game, Sacramento, California, dated July 6, 2009. Subject: Destruction of *Clarkia franciscana* on a median in Oakland Hills area due to mowing, gravel dumping, and grading.
- Kanz, Ralph. 2006. Local resident and member of Friends of Oakland's Endangered Species, Oakland, California. Letter addressed to Robert Merkamp, Planner, City of Oakland Community and Economic Development Agency, June 16, 2006. Subject: Comments on the Crestmont Project Draft Environmental Impact Statement. Letter included as an appendix in the Final Environmental Impact Report for the Crestmont Project (City of Oakland 2006b). <http://www.oaklandnet.com/government/ceda/revised/planningzoning/MajorProjectsSection/FEIRcomplete.pdf>. Accessed on July 31, 2009.
- Kanz, Ralph. 2009. Local resident and member of Friends of Oakland's Endangered Species, Oakland, California. Electronic mail addressed to Joseph Terry, Senior Biologist, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, dated August 11, 2009. Subject: History of and population estimates for Presidio clarkia in the Oakland Hills.
- U.S. Fish and Wildlife Service. 2012. Draft minimization, avoidance, and compensation measures for the pallid manzanita. Electronic mail message dated September 12, 2012, from Ben Solvesky, Sacramento Fish and Wildlife Office, Sacramento, California, to Alessandro Amaglio, Federal Emergency Management Agency, Region IX, Oakland, California.

Personal Communications

- Baker, Laura. 2009. Conservation Committee Chair, East Bay Chapter of the California Native Plant Society (EBCNPS), Berkeley, California. Telephone conversation with Joseph Terry, Senior Biologist, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, dated August 10, 2009. Subject: Threats to Presidio clarkia in the Oakland Hills.
- Kanz, Ralph. 2009. Local resident and member of Friends of Oakland's Endangered Species, Oakland, California. Telephone conversation with Joseph Terry, Senior Biologist, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, dated August 10, 2009. Subject: History of and population estimates for Presidio clarkia in the Oakland Hills.
- Naumovich, Lech. 2009. Conservation Analyst, East Bay Chapter of the California Native Plant Society (EBCNPS), California. Telephone conversation with Joseph Terry, Senior Biologist, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, dated August 10, 2009. Subject: Threats and status of Presidio clarkia subpopulations in the Oakland Hills.

Appendix A: Maps of the FEMA Hazardous Fire Risk Reduction Project Treatment Areas

Enclosure: Maps of treatment areas

CC Addresses:

Craig Weightman
California Department of Fish and Wildlife
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558

Randi Adair
California Department of Fish and Wildlife
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558

Darren Howe
National Marine Fisheries Service
Protected Resources Division
777 Sonoma Ave Rm 325
Santa Rosa, CA 95404

**Appendix A: Maps of FEMA Hazardous Fire Risk Reduction Project Treatment Areas in
the East Bay Hills, Contra Costa and Alameda Counties, California
(Figures copied from FEMA (2012))**

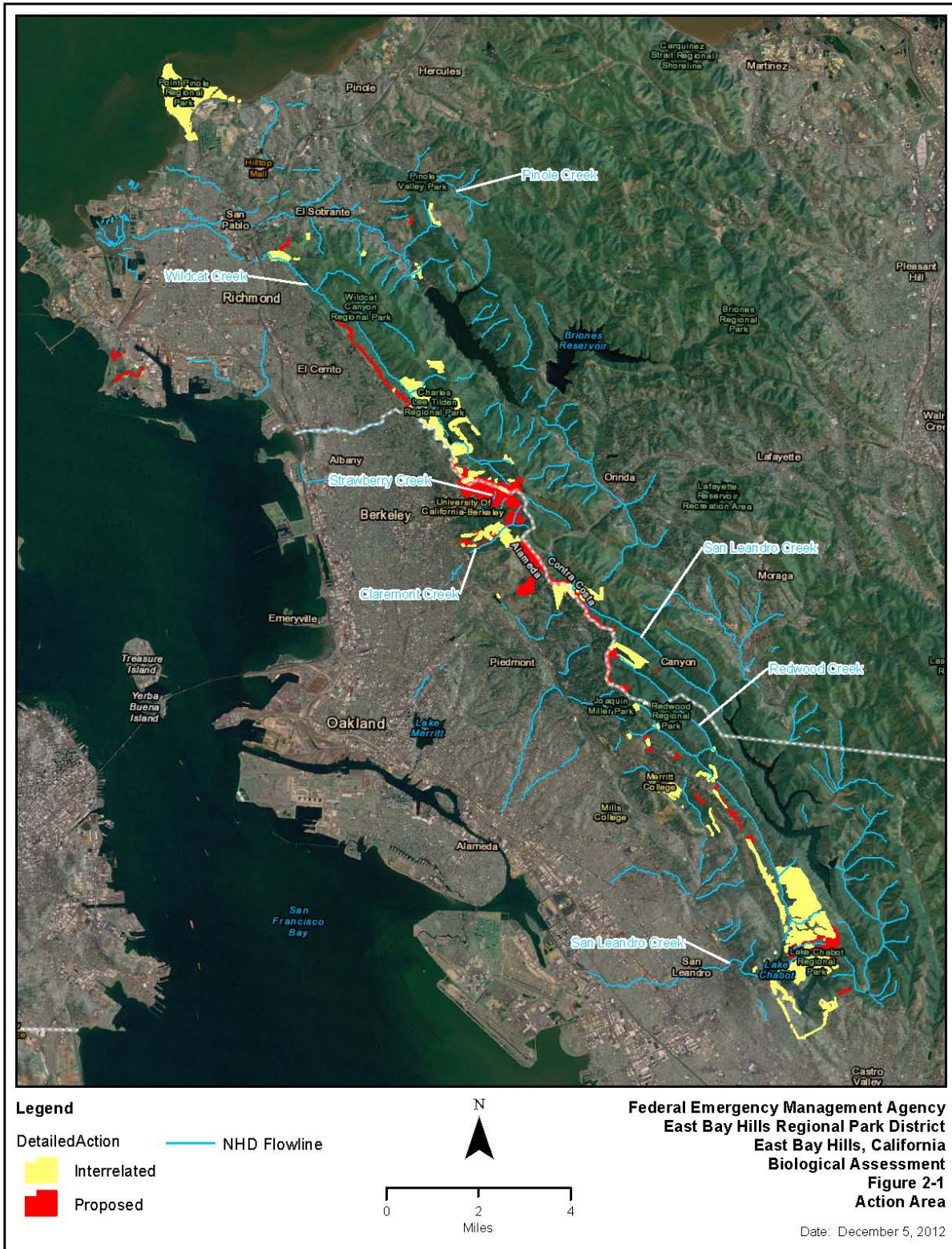


Figure 1. Action Area for the FEMA Hazardous Fire Risk Reduction Project in the East Bay Hills

EBRPD's grant application (HMGP 1731-16-34) involves the treatment of 540.7 acres throughout 11 regional parks in the East Bay Hills of western Alameda County and western Contra Costa County, California: Sobrante Regional Preserve, Wildcat Canyon Regional Park, Tilden Regional Park, Claremont Canyon Regional Preserve, Sibley Volcanic Regional Preserve, Huckleberry Botanic Regional Preserve, Redwood Regional Park, Leona Canyon Regional Open Space Preserve, Anthony Chabot Regional Park, Lake Chabot Regional Park, and Miller-Knox Regional Shoreline (Table 1). EBRPD would treat an additional three project areas totaling 51.9 acres using funds from Oakland's grant application (PDM-PJ-09-CA-2006-004): Tilden-Grizzly Peak Blvd., Sibley Island, and Claremont Canyon-Stonewall (Table 1). The proposed project will be implemented in 14 EBRPD regional parks and/or preserves, which are further delineated as recommended treatment areas (RTA).

Table 1. Applicants, Application Numbers, and Acreage for the Proposed Hazardous Fire Risk Reduction Projects.

Project Area	Acres⁽¹⁾
Oakland	
(PDM-PJ-09-CA-2006-004)	
North Hills-Skyline-Oakland	68.34
Caldecott Tunnel-Oakland	53.62
Frowning Ridge-UCB	185.18
Tilden-Grizzly Peak Blvd.- EBRPD	34.28
Sibley Island-EBRPD	3.92
Claremont Canyon-Stonewall-EBRPD	13.65
Subtotal	359.0
UCB	
(PDM-PJ-09-2005-011)	
(PDM-PJ-09-CA-2005-003)	
Strawberry Canyon	56.34
Claremont Canyon	42.81
Subtotal	99.1
EBRPD	
(HMGP 1731-16-34)	
Sobrante Ridge Regional Preserve	4.05
Wildcat Canyon Regional Park	65.60
Tilden Regional Park	97.70
Claremont Canyon Regional Preserve	21.56
Sibley Volcanic Regional Preserve	43.61
Huckleberry Botanic Regional Preserve	17.75
Redwood Regional Park	58.33
Leona Canyon Regional Open Space Preserve	4.58
Anthony Chabot Regional Park	199.99
Lake Chabot Regional Park	4.79
Miller-Knox Regional Shoreline ⁽²⁾	22.232
Subtotal	540.21
TOTAL	998.31

(1). The total project area in this table does not include the interconnected activities proposed by EBRPD in the WHRRMP (LSA Associates, Inc. 2009) and summarized in Table 2 that will be covered under this biological opinion.

(2). Although Miller-Knox Regional Shoreline is part of FEMA's proposed project, this project area is outside of the range of the California red-legged frog, Alameda whipsnake, and pallid manzanita, and, therefore, is not included in the action area for this biological opinion.

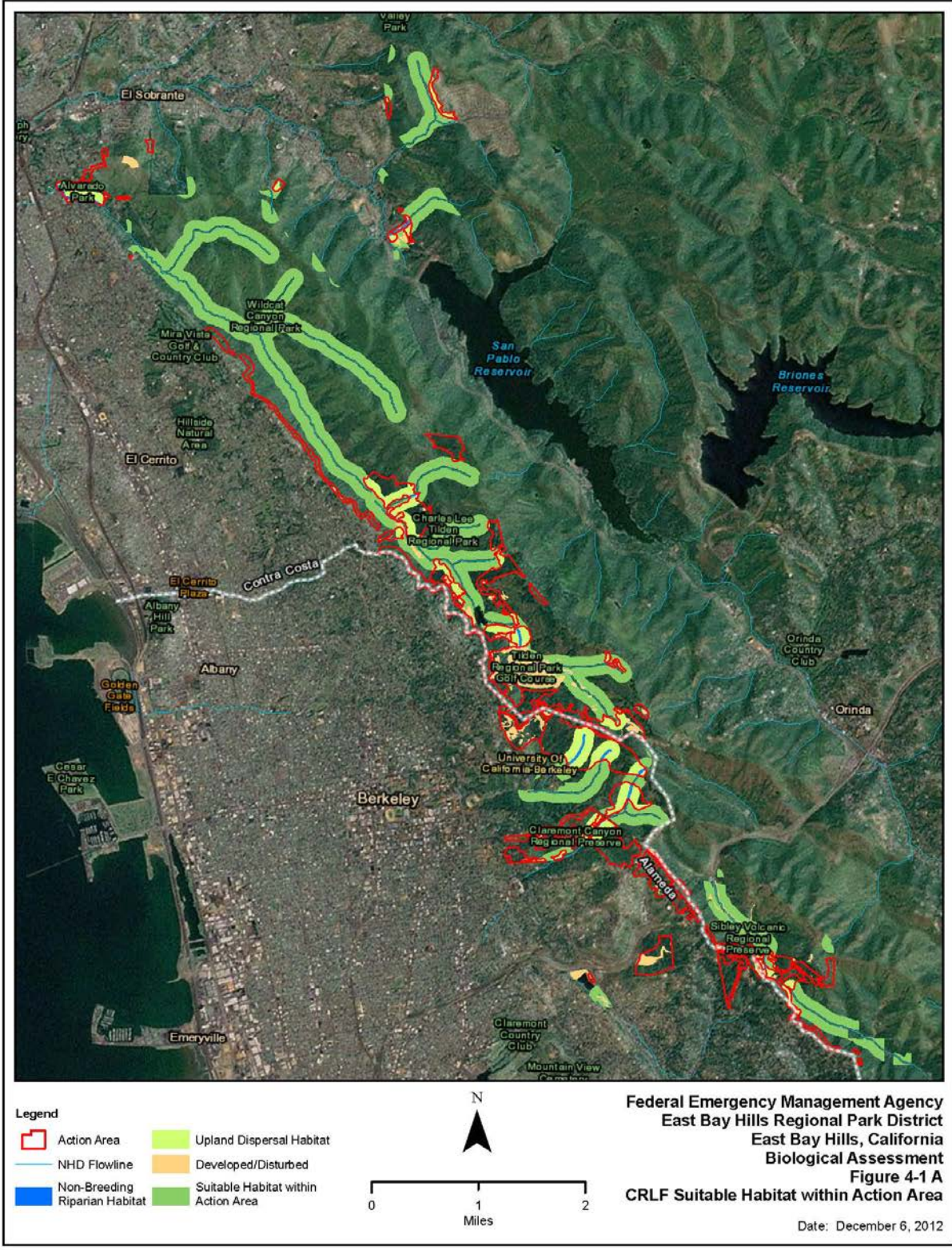


Figure 2A. California Red-Legged Frog Suitable Habitat in the Action Area

The action area is located within the recovery plan's South and East San Francisco Bay Recovery Unit for the California red-legged frog (Service 2002a). The recovery status for this recovery unit is considered high due to many existing populations and many areas with high habitat

suitability (Service 2002a). Threats to California red-legged frogs within this recovery unit include cattle grazing and/or dairies; non-native species; urbanization; and water management, diversions, and reservoirs. The action area is not located within a core area for the California red-legged frog. The nearest core area is the East San Francisco Bay Core Area which occurs within 0.25 mile of EBRPD's project areas at Lake Chabot Regional Park (Service 2002a). Of the 22 parks/parcels evaluated, 14 contain existing California red-legged frog suitable habitat. The parks/parcels with California red-legged frog suitable habitat are shown in Table 4 above. There are about 697.5 acres of suitable habitat for the California red-legged frog within 500 feet of NHD line surface hydrology including about 72.8 acres of potential non-breeding riparian/aquatic habitat (areas within 50 feet of NHD line surface hydrology).

Table 4. California Red-legged Frog Suitable Habitat in the Action Area.

Park	Action Type	Acres of Suitable Habitat¹	Acres of Unsuitable Habitat²
Claremont Canyon	Proposed	31.26	0.29
	Interconnected	0.00	0.00
Frowning Ridge	Proposed	77.86	0.61
	Interconnected	0.00	0.00
Tilden-Grizzly Peak Blvd.	Proposed	0.12	0.01
	Interconnected	0.00	0.00
Sobrante	Proposed	0.96	0.00
	Interconnected	11.54	0.39
Tilden Park	Proposed	15.04	1.90
	Interconnected	131.50	17.34
Wildcat Canyon	Proposed	0.00	0.00
	Interconnected	37.43	5.35
Kennedy Grove	Proposed	0.00	0.00
	Interconnected	13.04	2.63
Anthony Chabot	Proposed	77.64	2.20
	Interconnected	169.56	0.00
Claremont Canyon-EBRPD	Proposed	11.45	0.80
	Interconnected	23.99	0.03
Huckleberry	Proposed	17.75	0.24
	Interconnected	0.32	0.00
Lake Chabot	Proposed	0.00	0.00
	Interconnected	4.19	0.00
Leona Canyon	Proposed	0.00	0.00
	Interconnected	2.97	0.00
Redwood	Proposed	12.93	2.19
	Interconnected	30.81	1.89
Sibley Volcanic	Proposed	11.73	0.02
	Interconnected	15.49	0.00
TOTAL	Proposed	256.7	8.3
	Interconnected	440.8	27.6

(1) Areas of suitable habitat for the California red-legged frog considered in this table are any non-developed habitats within 500 feet of U.S. Geological Survey National Hydrography Dataset (NHD) line surface hydrology. If a park is not listed, then no suitable habitat was identified.

(2) Areas of unsuitable habitat for the California red-legged frog considered in this table are any areas more than 500 feet of NHD line surface hydrology and all developed areas.

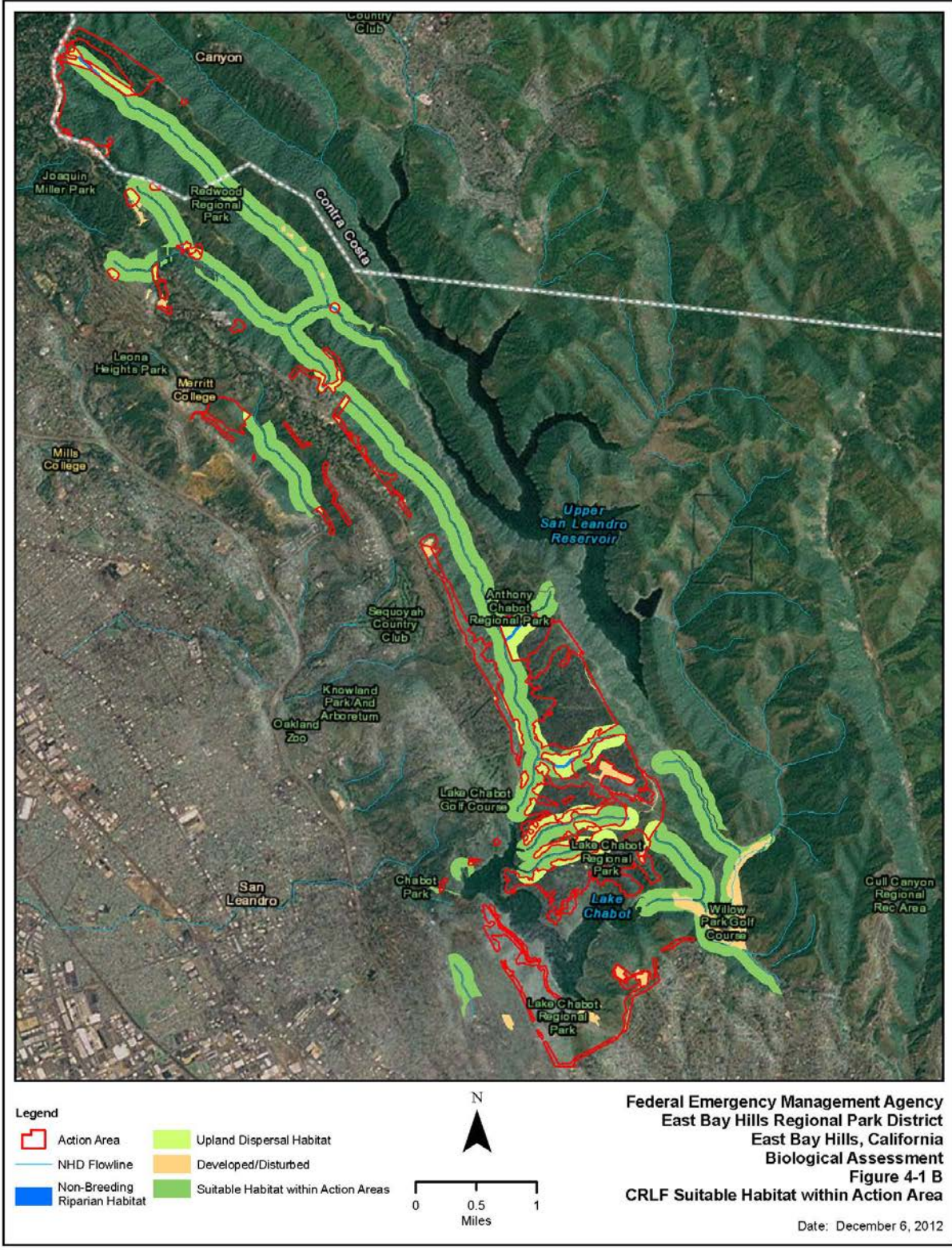


Figure 2B. California Red-Legged Frog Suitable Habitat in the Action Area

The action area is located within the recovery plan’s South and East San Francisco Bay Recovery Unit for the California red-legged frog (Service 2002a). The recovery status for this recovery unit is considered high due to many existing populations and many areas with high habitat

suitability (Service 2002a). Threats to California red-legged frogs within this recovery unit include cattle grazing and/or dairies; non-native species; urbanization; and water management, diversions, and reservoirs. The action area is not located within a core area for the California red-legged frog. The nearest core area is the East San Francisco Bay Core Area which occurs within 0.25 mile of EBRPD's project areas at Lake Chabot Regional Park (Service 2002a). Of the 22 parks/parcels evaluated, 14 contain existing California red-legged frog suitable habitat. The parks/parcels with California red-legged frog suitable habitat are shown in Table 4 above. There are about 697.5 acres of suitable habitat for the California red-legged frog within 500 feet of NHD line surface hydrology including about 72.8 acres of potential non-breeding riparian/aquatic habitat (areas within 50 feet of NHD line surface hydrology).

Table 4. California Red-legged Frog Suitable Habitat in the Action Area.

Park	Action Type	Acres of Suitable Habitat¹	Acres of Unsuitable Habitat²
Claremont Canyon	Proposed	31.26	0.29
	Interconnected	0.00	0.00
Frowning Ridge	Proposed	77.86	0.61
	Interconnected	0.00	0.00
Tilden-Grizzly Peak Blvd.	Proposed	0.12	0.01
	Interconnected	0.00	0.00
Sobrante	Proposed	0.96	0.00
	Interconnected	11.54	0.39
Tilden Park	Proposed	15.04	1.90
	Interconnected	131.50	17.34
Wildcat Canyon	Proposed	0.00	0.00
	Interconnected	37.43	5.35
Kennedy Grove	Proposed	0.00	0.00
	Interconnected	13.04	2.63
Anthony Chabot	Proposed	77.64	2.20
	Interconnected	169.56	0.00
Claremont Canyon-EBRPD	Proposed	11.45	0.80
	Interconnected	23.99	0.03
Huckleberry	Proposed	17.75	0.24
	Interconnected	0.32	0.00
Lake Chabot	Proposed	0.00	0.00
	Interconnected	4.19	0.00
Leona Canyon	Proposed	0.00	0.00
	Interconnected	2.97	0.00
Redwood	Proposed	12.93	2.19
	Interconnected	30.81	1.89
Sibley Volcanic	Proposed	11.73	0.02
	Interconnected	15.49	0.00
TOTAL	Proposed	256.7	8.3
	Interconnected	440.8	27.6

(1) Areas of suitable habitat for the California red-legged frog considered in this table are any non-developed habitats within 500 feet of U.S. Geological Survey National Hydrography Dataset (NHD) line surface hydrology. If a park is not listed, then no suitable habitat was identified.

(2) Areas of unsuitable habitat for the California red-legged frog considered in this table are any areas more than 500 feet of NHD line surface hydrology and all developed areas.

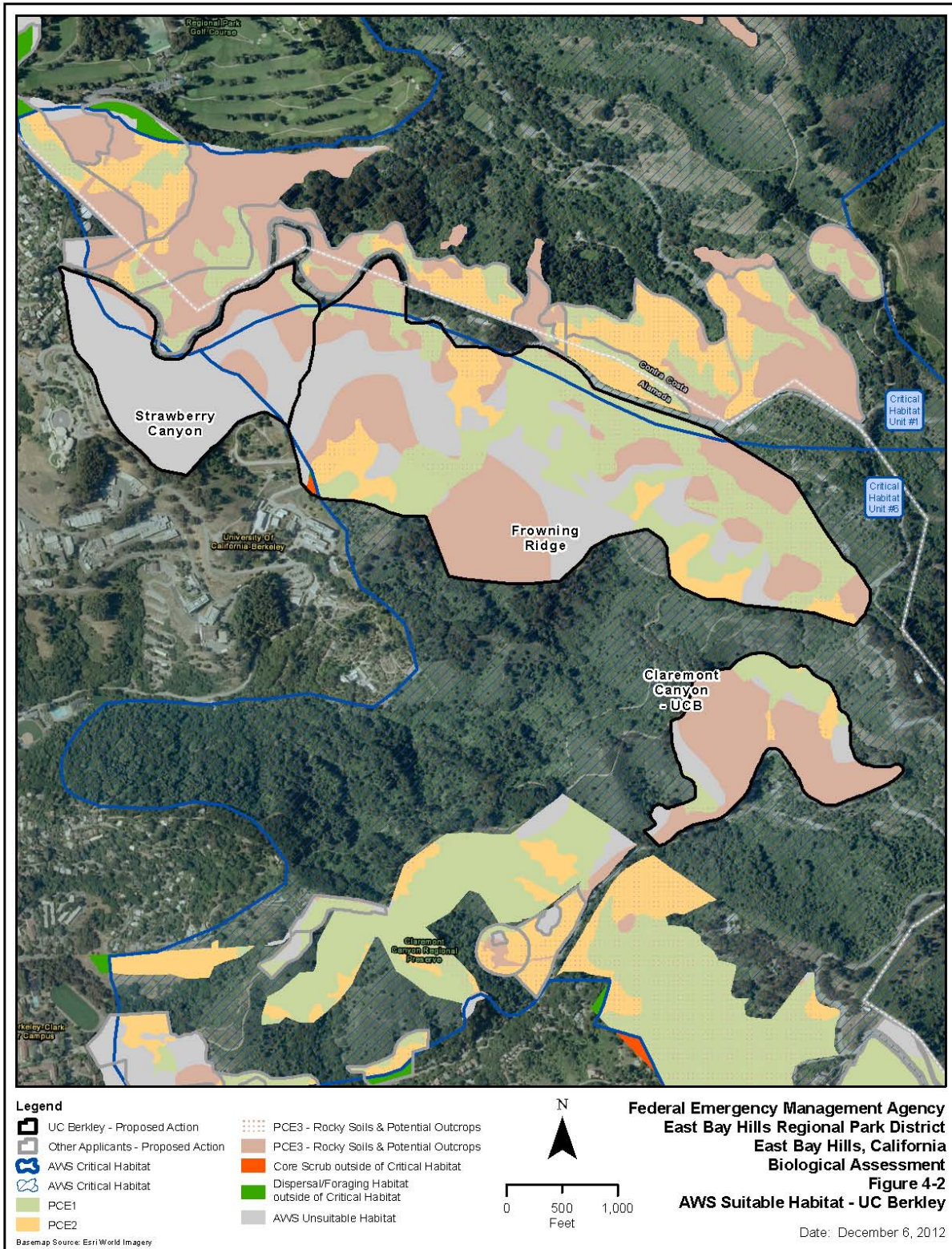


Figure 3. Alameda Whipsnake Suitable Habitat and PCEs (UCB)

UCB has two PDM grant applications included in the proposed project (PDM-PJ-09-CA-2005-11 and PDM-PJ-09-2005-003). The two grant applications would treat a project area totaling 99.2 acres including 56.43 acres at Strawberry Canyon and 42.81 acres at Claremont Canyon. In addition, UCB would treat a project area totaling 185.08 acres at Frowning Ridge using funds from Oakland's grant application (PDM PJ 09 CA 2006 004).

The Strawberry Canyon portion of the proposed project (PDM-PJ-09-CA-2005-011) would consist of the selective removal of non-native vegetation such as eucalyptus (*Eucalyptus globulus* and *E. camaldulensis*), Monterey pine, and acacia species from within approximately 56.34 acres of Strawberry Canyon.

The Claremont Canyon portion of the proposed project (PDM-PJ-09-CA-2005-003) is very similar to the Strawberry Canyon portion. The exceptions are that Claremont Canyon is predominantly dominated by eucalyptus and has very little Monterey pine and acacia. The three non-native tree species would be removed from a 42.81-acre area.

The Frowning Ridge portion of the proposed project (PDM-PJ-09-CA-2006-004) would consist of the selective removal of non-native vegetation such as eucalyptus, Monterey pine, and acacia from within approximately 185.08 acres of two canyons.

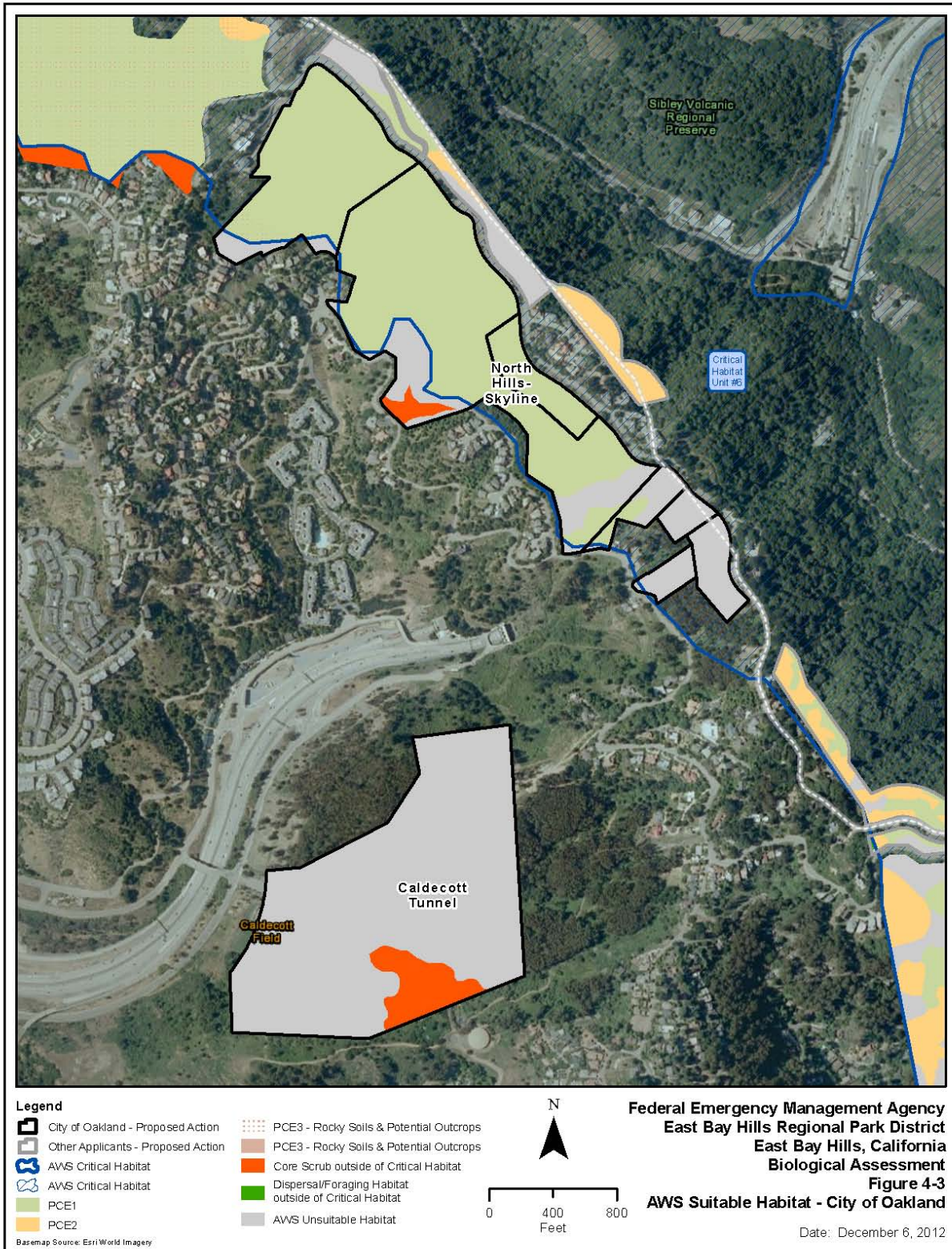


Figure 4. Alameda Whipsnake Suitable Habitat and PCEs (Oakland)

Oakland's grant application (PDM-PJ-09-CA-2006-004) includes six areas in which work would be completed by three property owners (Oakland, UCB, and EBRPD) (Table 1). The project areas include Oakland's North Hills-Skyline and Caldecott Tunnel-Ballfields projects (described below); UCB's Frowning Ridge project (described previously under the *UCB* section); and EBRPD's Tilden-Grizzly Peak Blvd., Sibley Island, and Claremont Canyon-Stonewall projects (described later under the *EBRPD* section).

The proposed actions for Oakland's projects include an area totaling 122.0 acres (North Hills-Skyline is 68.34 acres and Caldecott Tunnel-Ballfields is 53.62 acres).

The 68.34-acre North Hills-Skyline project area includes eucalyptus, pine, and brush along the south side of State Route 24 and west of Grizzly Peak Blvd.

The 53.62-acre Caldecott Tunnel project area is located adjacent to State Route 24, Tunnel Road, and Skyline Blvd.

.



Figure 5A. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 1).

The Sobrante Ridge Regional Preserve portion of the project consists of 4.05 acres in RTA SO001, which is located on the western edge of the preserve.

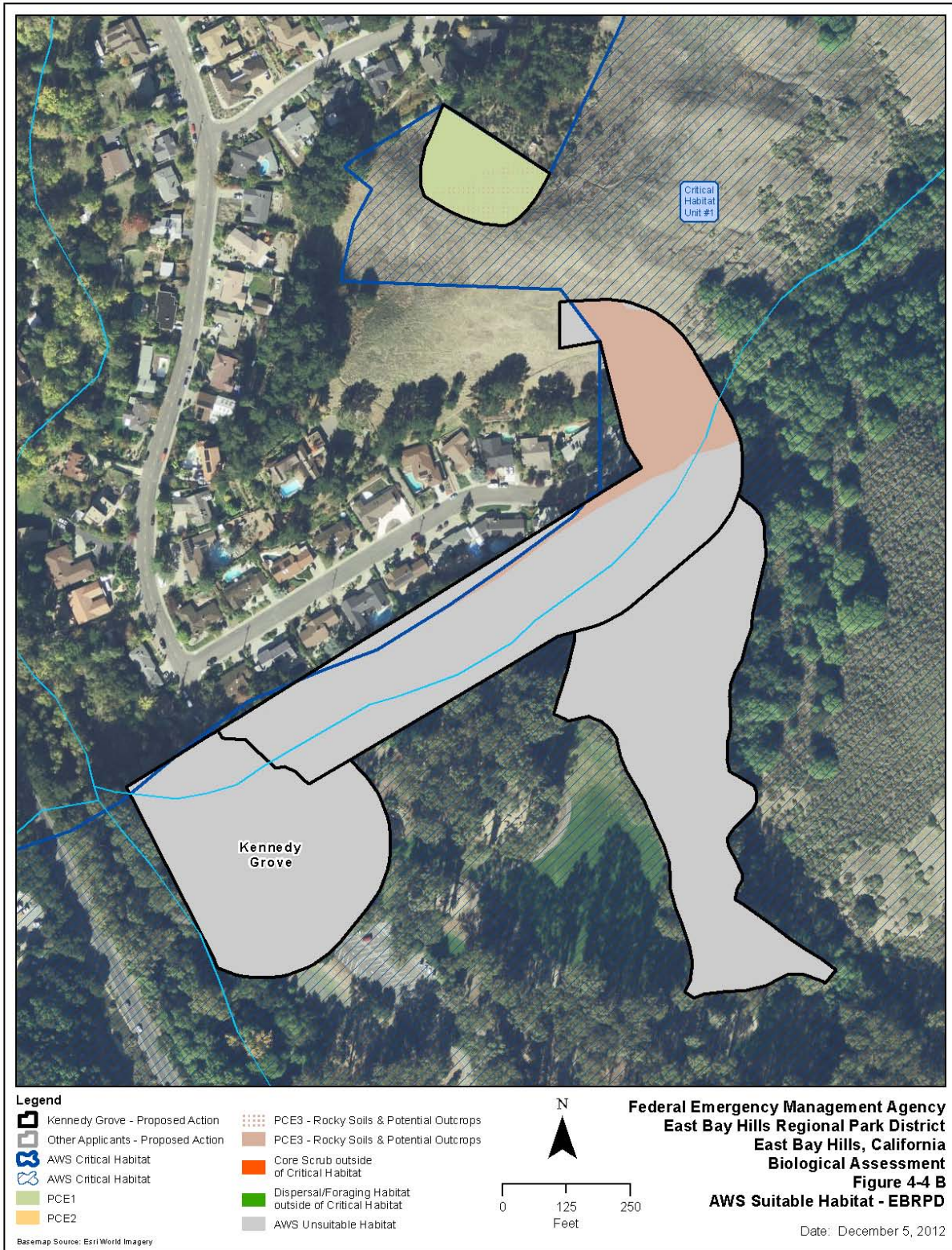


Figure 5B. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 2).

Interconnected actions in Kennedy Grove would be implemented within areas totaling 15.2 acres, consisting primarily of eucalyptus forest/plantation (54 percent), oak-bay woodland/forest (18 percent), and developed/disturbed/landscaped (17 percent).

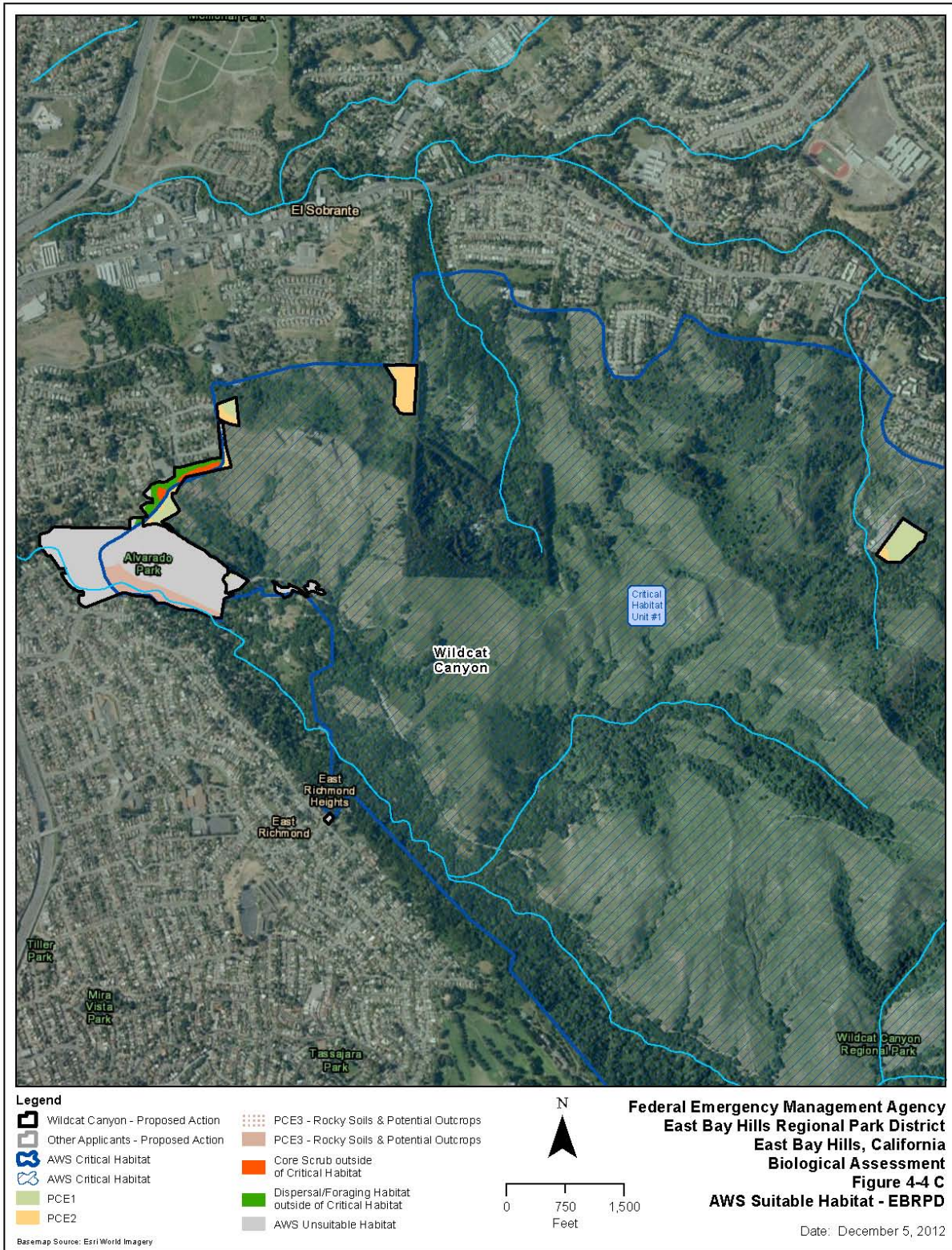


Figure 5C. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 3).

The Wildcat Canyon Regional Preserve portion of the project consists of 65.60 acres in the following five RTAs: WC003, WC004, WC009, WC010, and WC011.

RTA WC003. This is a 1.67-acre area located at the northern end of the park and contains annual grassland and oak-bay woodland, but is dominated by coyote brush scrub.

RTA WC004. This is a 7.96-acre area located at the northern end of the park and contains California annual grassland, oak-bay woodland/forestland, northern coastal scrub (xeric), and developed/disturbed/landscaped areas.

RTA WC009. This is an 11.47-acre area located along the southwestern edge of the park and contains oak-bay woodland/forest, coastal scrub (mesic and xeric), riparian woodland, and developed/disturbed/landscaped areas.

RTA WC010. This is a 10.79-acre area located along the southwestern edge of the park that contains oak-bay woodland/forestland, coastal scrub (mesic and xeric), and developed/disturbed/landscaped areas.

RTA WC011. This is a 33.70-acre area located along the southwestern edge of the park. The RTA contains northern coastal scrub (mesic and xeric), oak-bay woodland/forestland, riparian woodland, California annual grassland, eucalyptus forest/plantation, and developed/disturbed/landscaped areas.

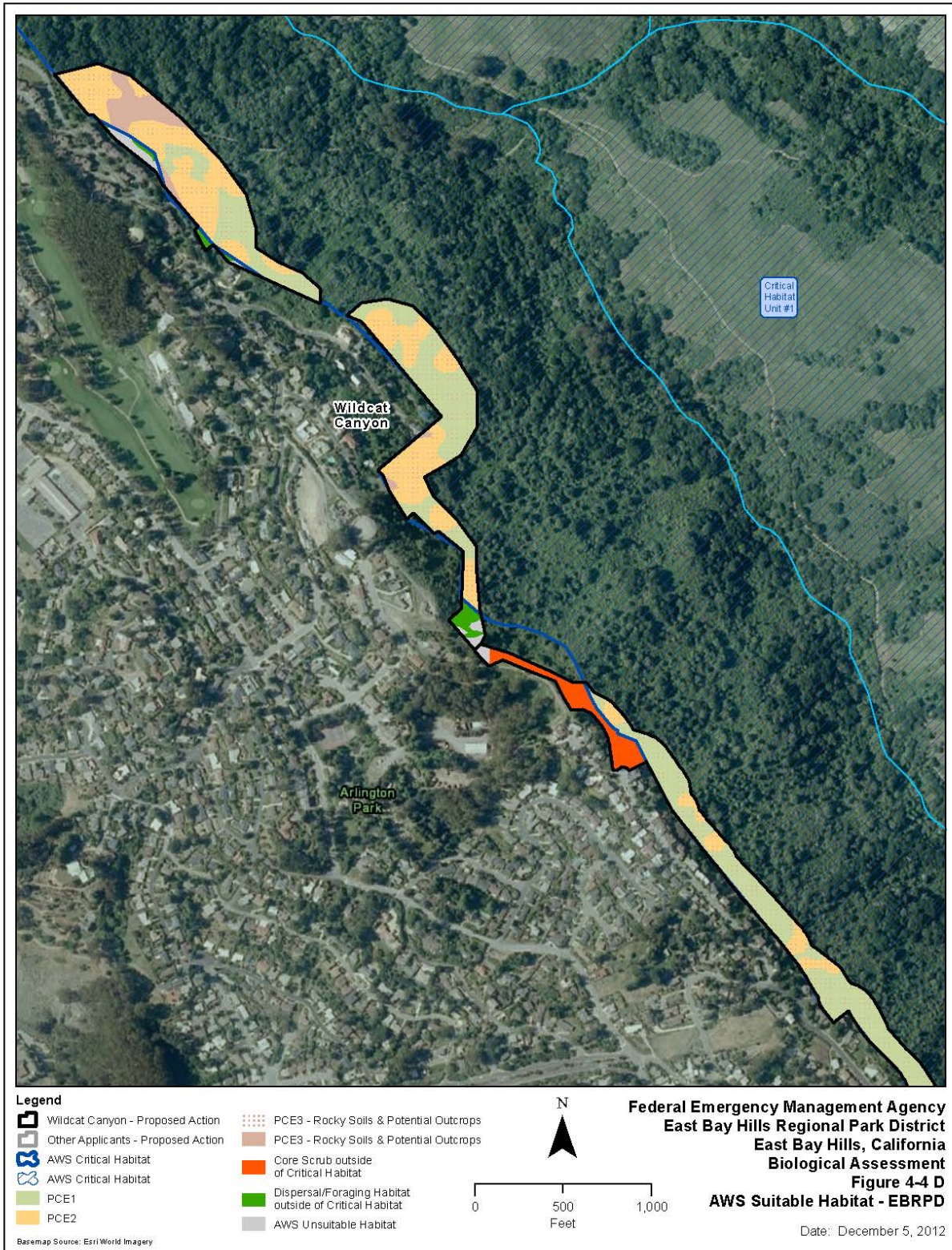


Figure 5D. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 4).

The Wildcat Canyon Regional Preserve portion of the project consists of 65.60 acres in the following five RTAs: WC003, WC004, WC009, WC010, and WC011.

RTA WC003. This is a 1.67-acre area located at the northern end of the park and contains annual grassland and oak-bay woodland, but is dominated by coyote brush scrub.

RTA WC004. This is a 7.96-acre area located at the northern end of the park and contains California annual grassland, oak-bay woodland/forestland, northern coastal scrub (xeric), and developed/disturbed/landscaped areas.

RTA WC009. This is an 11.47-acre area located along the southwestern edge of the park and contains oak-bay woodland/forest, coastal scrub (mesic and xeric), riparian woodland, and developed/disturbed/landscaped areas.

RTA WC010. This is a 10.79-acre area located along the southwestern edge of the park that contains oak-bay woodland/forestland, coastal scrub (mesic and xeric), and developed/disturbed/landscaped areas.

RTA WC011. This is a 33.70-acre area located along the southwestern edge of the park. The RTA contains northern coastal scrub (mesic and xeric), oak-bay woodland/forestland, riparian woodland, California annual grassland, eucalyptus forest/plantation, and developed/disturbed/landscaped areas.

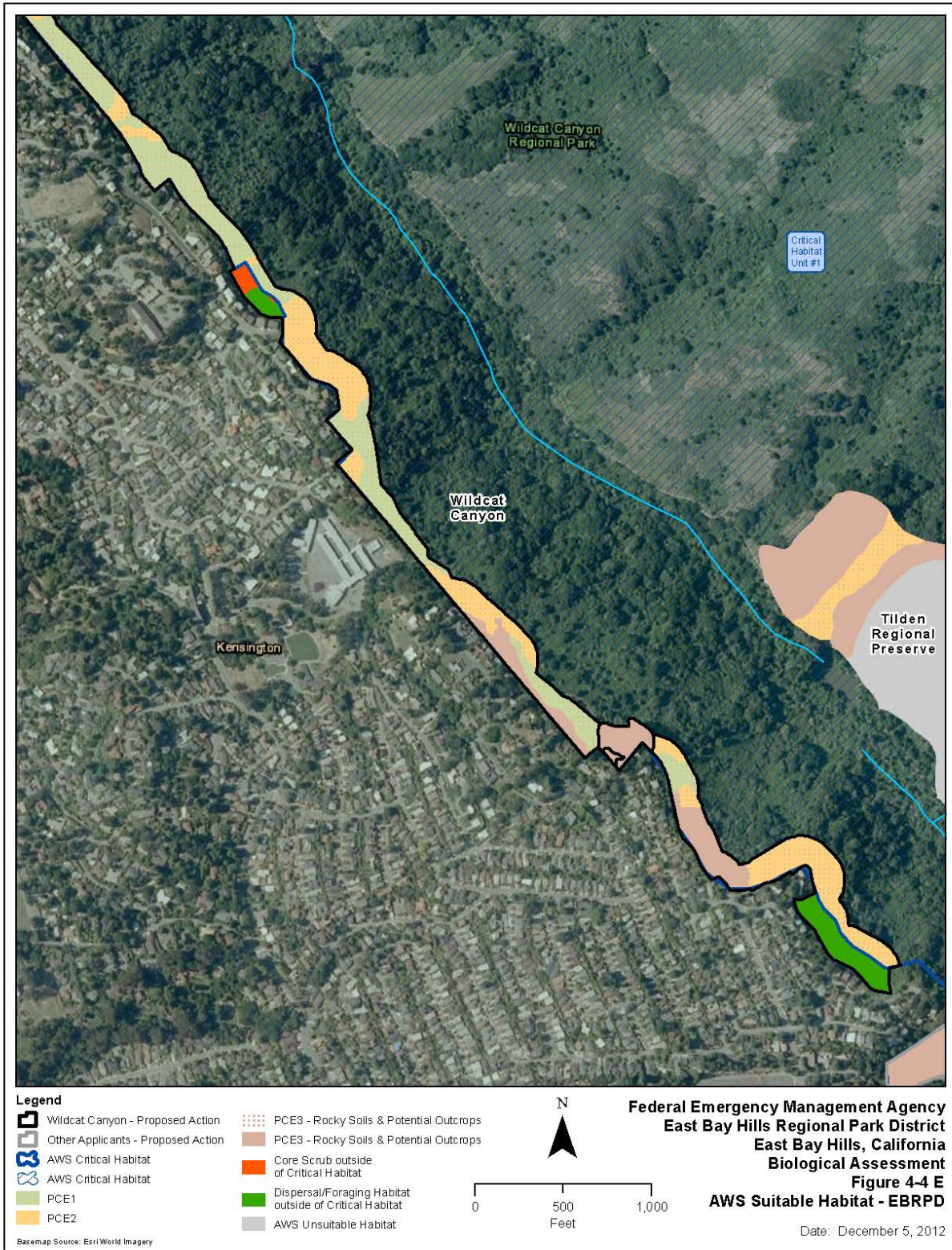


Figure 5E. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 5).

The Wildcat Canyon Regional Preserve portion of the project consists of 65.60 acres in the following five RTAs: WC003, WC004, WC009, WC010, and WC011.

RTA WC003. This is a 1.67-acre area located at the northern end of the park and contains annual grassland and oak-bay woodland, but is dominated by coyote brush scrub.

RTA WC004. This is a 7.96-acre area located at the northern end of the park and contains California annual grassland, oak-bay woodland/forestland, northern coastal scrub (xeric), and developed/disturbed/landscaped areas.

RTA WC009. This is an 11.47-acre area located along the southwestern edge of the park and contains oak-bay woodland/forest, coastal scrub (mesic and xeric), riparian woodland, and developed/disturbed/landscaped areas.

RTA WC010. This is a 10.79-acre area located along the southwestern edge of the park that contains oak-bay woodland/forestland, coastal scrub (mesic and xeric), and developed/disturbed/landscaped areas.

RTA WC011. This is a 33.70-acre area located along the southwestern edge of the park. The RTA contains northern coastal scrub (mesic and xeric), oak-bay woodland/forestland, riparian woodland, California annual grassland, eucalyptus forest/plantation, and developed/disturbed/landscaped areas.

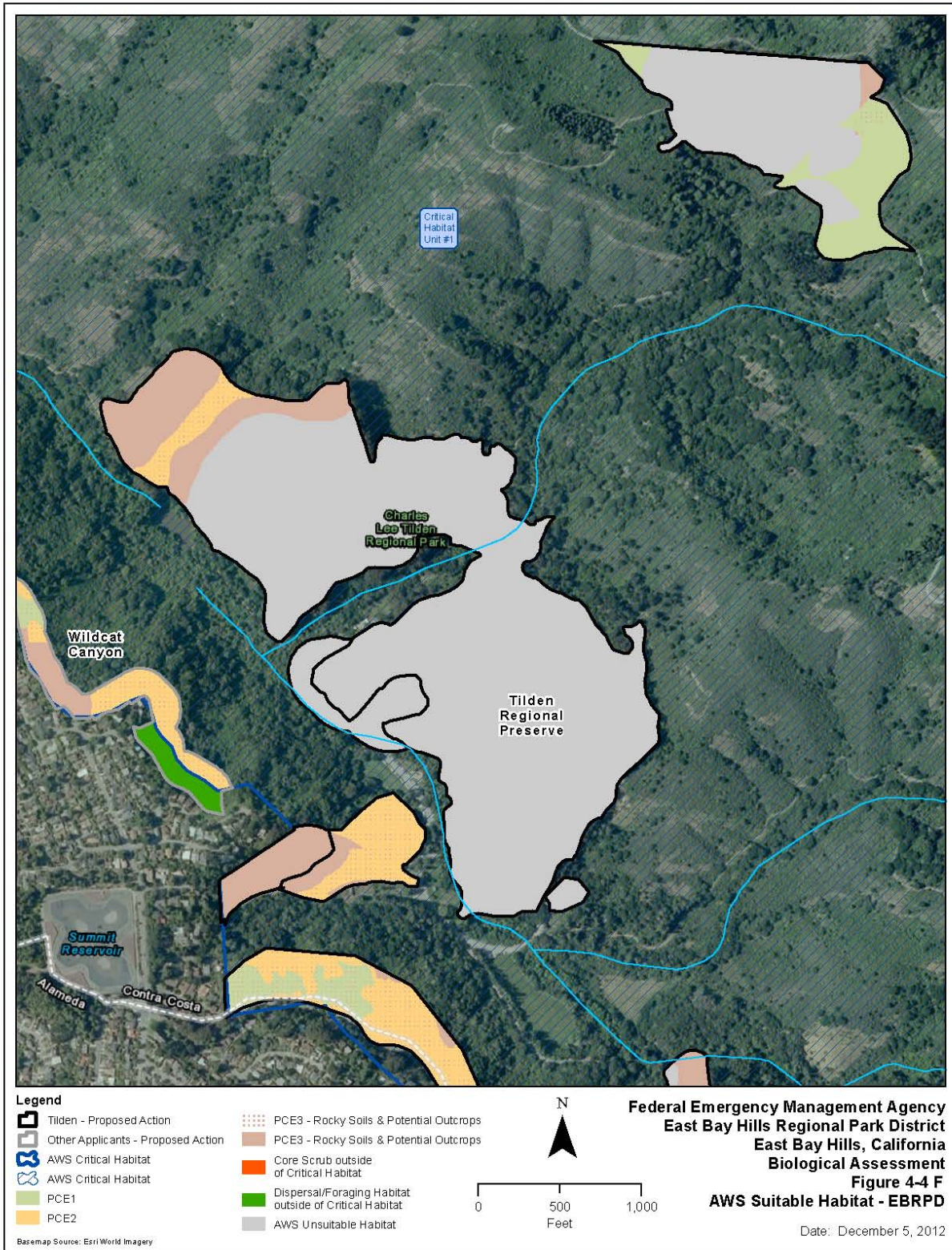


Figure 5F. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 6).

The Tilden Regional Park portion of the project consists of a 97.70-acre area in the following four RTAs: TI006, TI012, TI015, and TI022, as described below.

RTA TI006. This is a 3.97-acre area located at the northwestern end of the park. This RTA contains oak-bay woodland/forestland, eucalyptus forest/plantation, broom scrub, developed/disturbed/landscaped areas, and coyote brush scrub.

RTA TI0012. This is a 41.65-acre area located at the southern end of the park and contains oak-bay woodland/forestland, eucalyptus forest/plantation, broom scrub, developed/disturbed/landscaped areas, and coyote brush scrub.

RTA TI015. This is a 45.64-acre area located at the southern end of the park and contains oak-bay woodland/forestland, coyote brush scrub, developed/disturbed/ landscaped, redwood forest, coastal scrub (xeric), non-native coniferous forest, and California annual grassland.

RTA TI022. This is a 6.44-acre area located at the southern end of the park and contains coyote brush scrub, non-native coniferous forest, northern coastal scrub, developed/disturbed/landscaped areas, California annual grassland, and non-native coniferous forest.

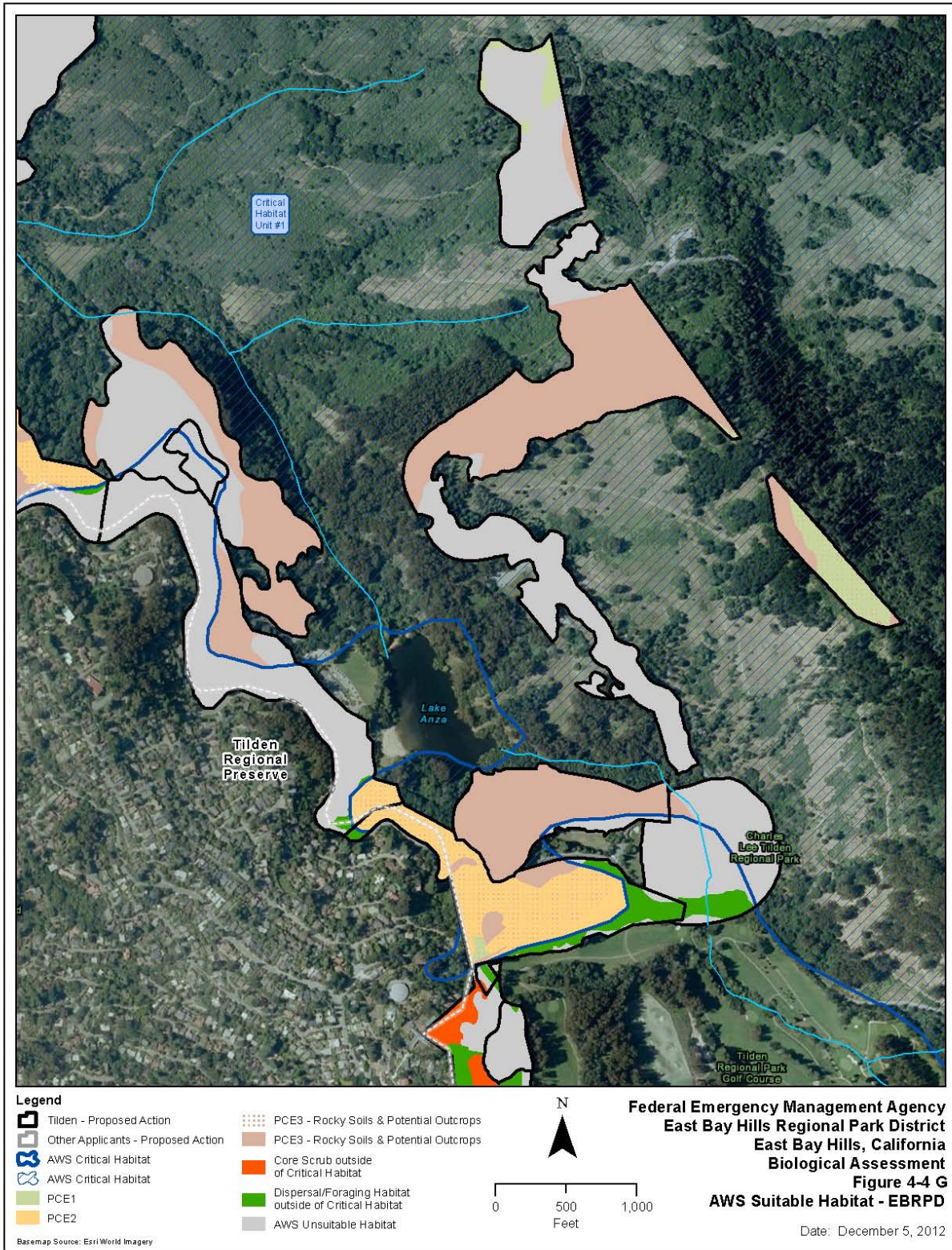


Figure 5G. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 7).

The Tilden Regional Park portion of the project consists of a 97.70-acre area in the following four RTAs: TI006, TI012, TI015, and TI022, as described below.

RTA TI006. This is a 3.97-acre area located at the northwestern end of the park. This RTA contains oak-bay woodland/forestland, eucalyptus forest/plantation, broom scrub, developed/disturbed/landscaped areas, and coyote brush scrub.

RTA TI0012. This is a 41.65-acre area located at the southern end of the park and contains oak-bay woodland/forestland, eucalyptus forest/plantation, broom scrub, developed/disturbed/landscaped areas, and coyote brush scrub.

RTA TI015. This is a 45.64-acre area located at the southern end of the park and contains oak-bay woodland/forestland, coyote brush scrub, developed/disturbed/ landscaped, redwood forest, coastal scrub (xeric), non-native coniferous forest, and California annual grassland.

RTA TI022. This is a 6.44-acre area located at the southern end of the park and contains coyote brush scrub, non-native coniferous forest, northern coastal scrub, developed/disturbed/landscaped areas, California annual grassland, and non-native coniferous forest.

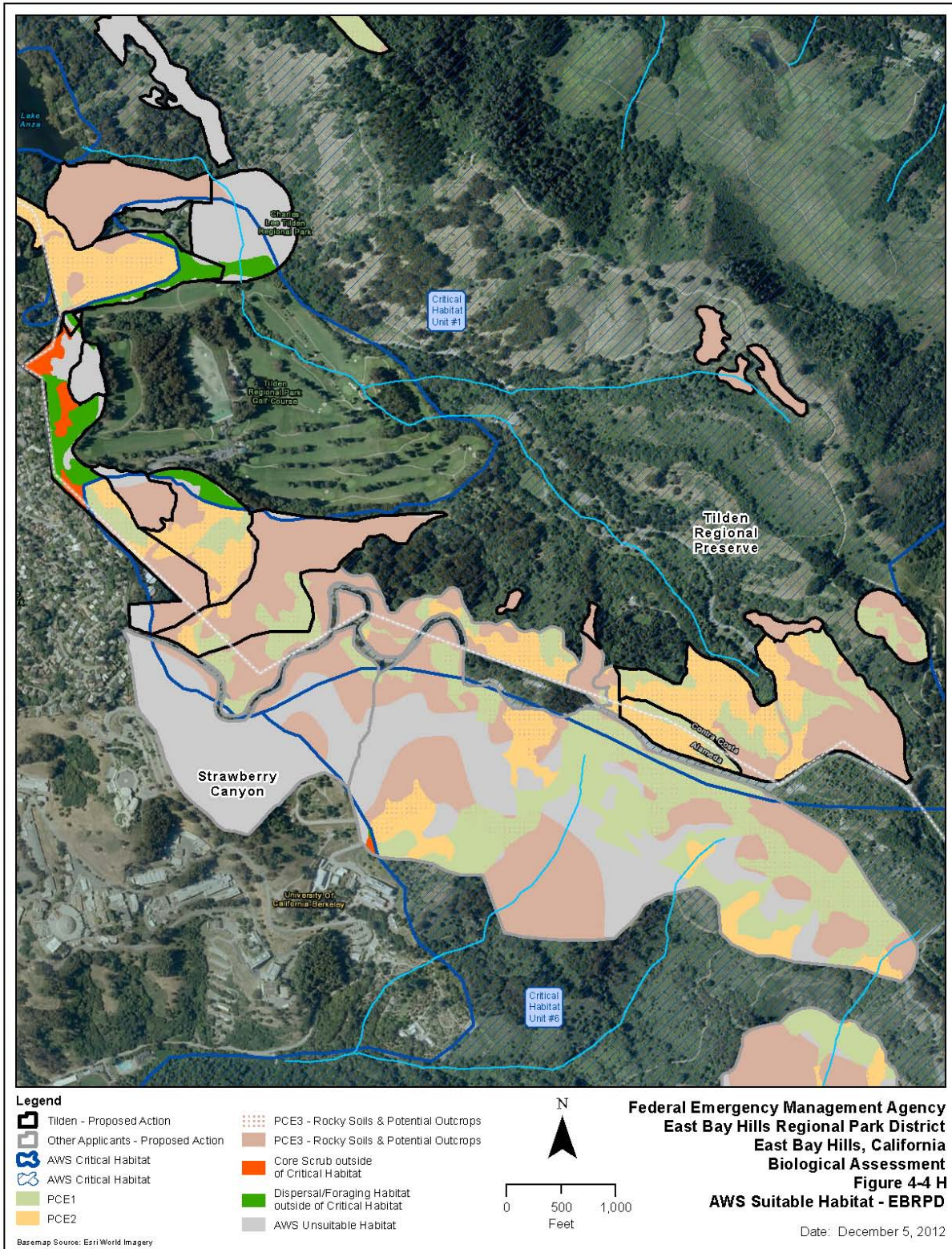


Figure 5H. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 8).

The Tilden Regional Park portion of the project consists of a 97.70-acre area in the following four RTAs: TI006, TI012, TI015, and TI022, as described below.

RTA TI006. This is a 3.97-acre area located at the northwestern end of the park. This RTA contains oak-bay woodland/forestland, eucalyptus forest/plantation, broom scrub, developed/disturbed/landscaped areas, and coyote brush scrub.

RTA TI0012. This is a 41.65-acre area located at the southern end of the park and contains oak-bay woodland/forestland, eucalyptus forest/plantation, broom scrub, developed/disturbed/landscaped areas, and coyote brush scrub.

RTA TI015. This is a 45.64-acre area located at the southern end of the park and contains oak-bay woodland/forestland, coyote brush scrub, developed/disturbed/ landscaped, redwood forest, coastal scrub (xeric), non-native coniferous forest, and California annual grassland.

RTA TI022. This is a 6.44-acre area located at the southern end of the park and contains coyote brush scrub, non-native coniferous forest, northern coastal scrub, developed/disturbed/landscaped areas, California annual grassland, and non-native coniferous forest.

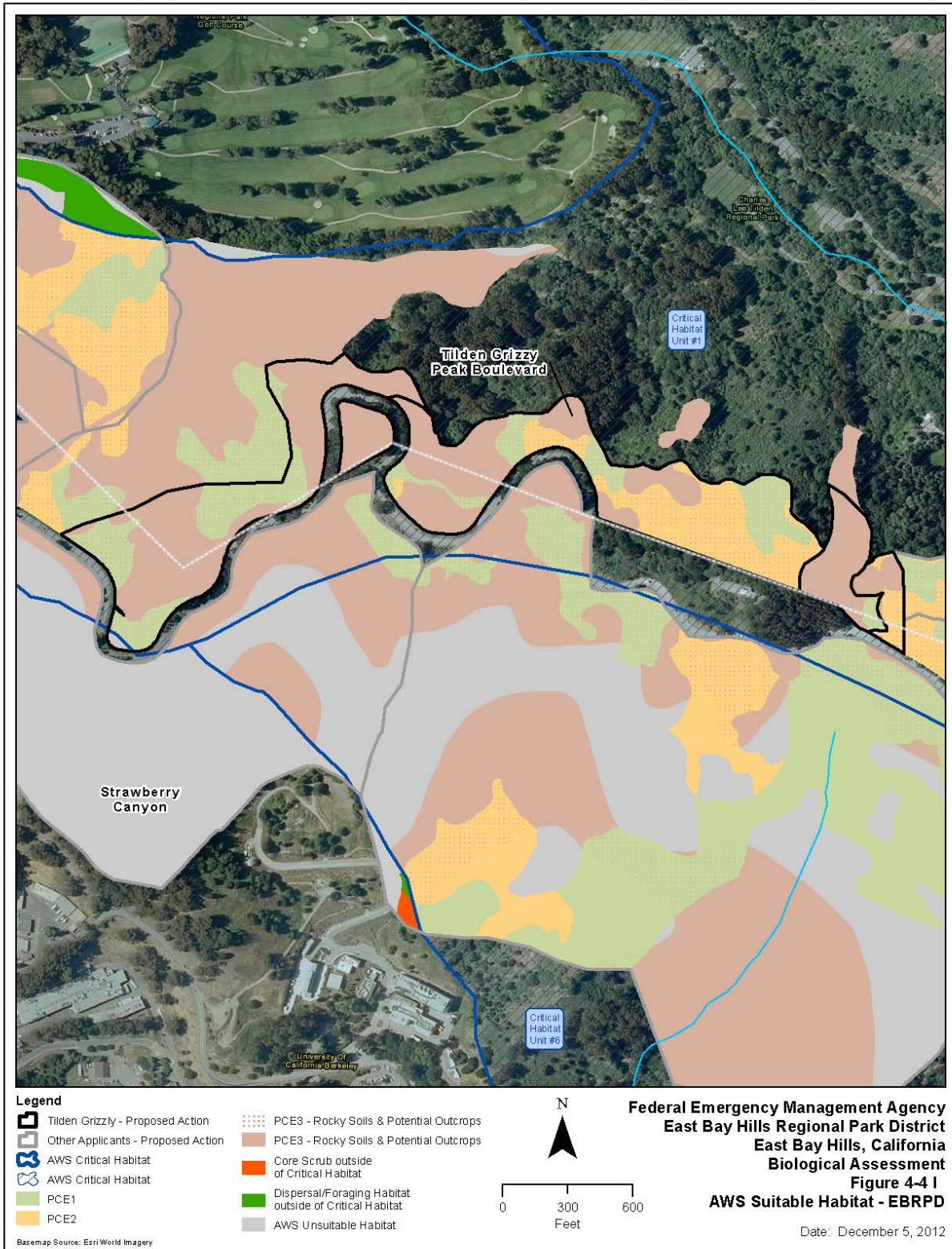


Figure 5I. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 9).

A total of about 13.51 acres of UCB's proposed treatment area at Strawberry Canyon occur within designated critical habitat Unit 6. Habitats within UCB's proposed treatment area within critical habitat Unit 6 at Strawberry Canyon consist of 0.37 acre of PCE 1 and 12.78 acres of unsuitable habitat dominated by eucalyptus and other non-native trees without any PCEs. There is no suitable PCE 2 within UCB's proposed treatment area at Strawberry Canyon within designated critical habitat Unit 6 (Table 6). There is no data on the availability of PCE 3 within the action area.

Table 6. Alameda Whipsnake Designated Critical Habitat in the Action Area

Applicant	Park	Critical Habitat Unit	Total Acres within Critical Habitat	Existing Conditions (acres)		
				PCE 1	PCE 2	Acres without PCEs
UCB	Strawberry Canyon	1	10.31	1.02	0.00	9.29
		6	13.15	0.37	0.00	12.78
	Claremont Canyon	6	42.81	7.12	1.56	34.12
	Frowning Ridge	1	9.87	2.44	4.05	3.38
6		174.36	50.74	26.75	96.87	
Oakland	North Hills-Skyline	6	62.09	43.21	0.00	18.88
EBRPD	Anthony Chabot	2	16.16	8.19	6.58	1.39
	Claremont Canyon	6	145.06	96.25	37.11	11.7
	Claremont Canyon-Stonewall	6	11.85	0.75	2.88	8.22
	Huckleberry	2	1.62	0.00	1.16	0.46
		6	16.34	3.71	10.35	2.28
	Kennedy Grove	1	14.77	0.83	2.45	11.49
	Redwood	2	88.47	7.84	6.74	73.85
	Sibley Island	6	3.84	0.92	2.03	0.89
	Sibley Volcanic Regional Preserve	6	161.28	17.75	59.03	84.5
	Tilden Regional Preserve	1	447.11	42.28	81.19	323.64
	Tilden-Grizzly Peak Blvd.	1	34.15	6.42	7.22	20.51
Wildcat Canyon	1	95.51	24.42	31.63	39.46	
TOTAL	TOTAL	1	77.41	126.54	407.77	77.41
	TOTAL	2	16.03	14.48	75.7	16.03
	TOTAL	6	220.82	139.71	270.24	220.82

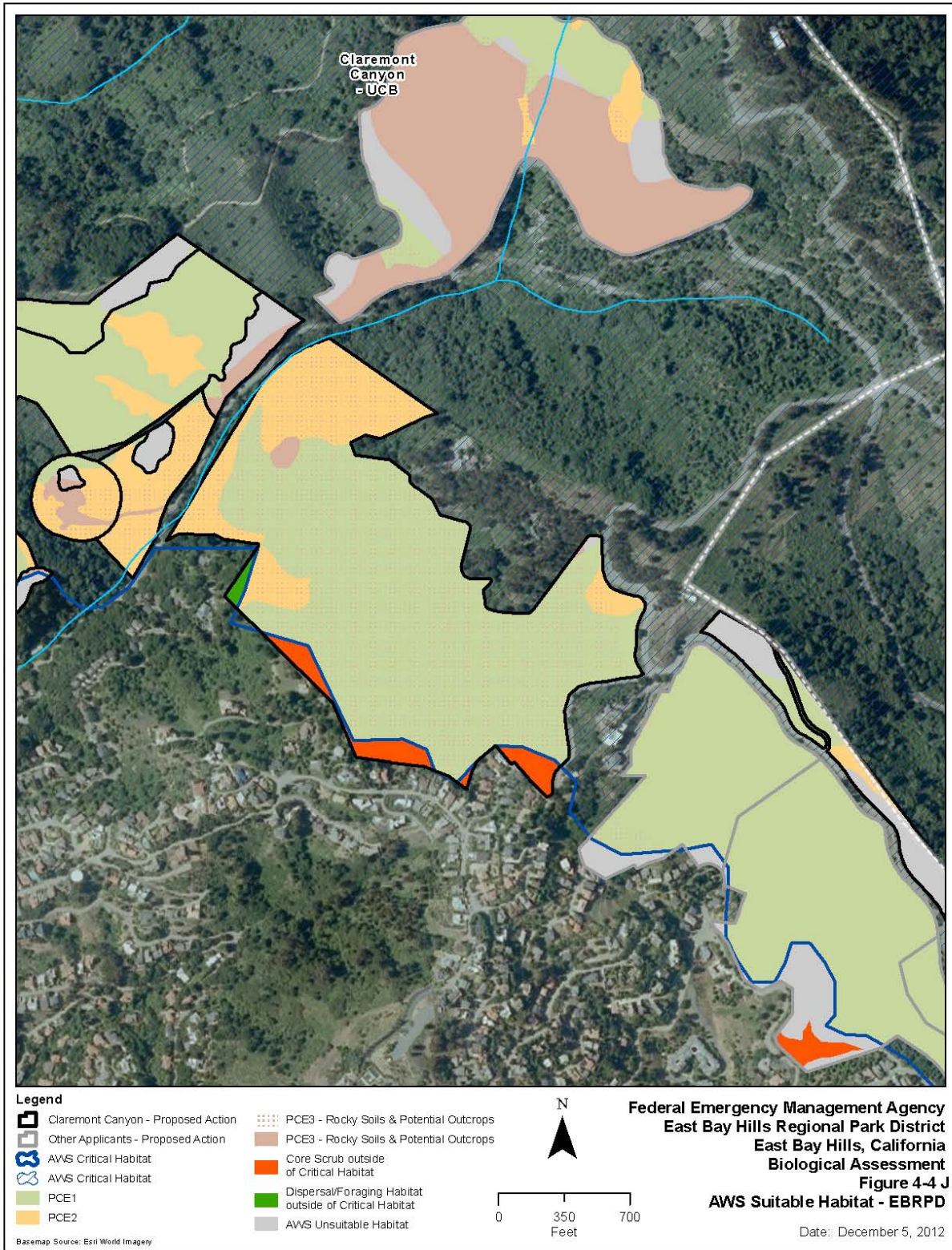


Figure 5J. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 10).

The Claremont Canyon Regional Preserve portion of the project consists of a 21.56-acre area in the following four RTAs: CC001, CC003, CC006, CC007, CC008, CC010, and CC012.

RTA CC001. This is a 2.28-acre area located at the western end of the preserve and contains eucalyptus, northern coastal scrub, oak-bay woodland, and developed/ disturbed/landscape areas.

RTA CC003. This is a 2.74-acre area located along the northwestern edge of the preserve and contains coyote brush scrub and developed/disturbed/landscaped areas.

RTA CC006. This is a 3.34-acre area located at the southern edge of the preserve and contains oak-bay woodland/forestland and northern coastal scrub (xeric).

RTA CC007. This is a 1.72-acre area along the northwestern edge of the preserve and contains coyote brush scrub and developed/disturbed/landscaped areas.

RTA CC008. This is a 3.72-acre area located at the south central area of the preserve and contains oak-bay woodland/forestland, developed/disturbed/landscaped areas, and coyote brush scrub.

RTA-CC010. This 5.36-acre area is located at the south central area of the preserve and contains oak-bay woodland/forestland, coyote brush scrub, developed/disturbed/ landscaped areas, and northern coastal scrub (xeric).

RTA-CC012. This 2.40-acre area in the eastern edge of the preserve contains northern coastal scrub and developed/disturbed/landscaped areas.

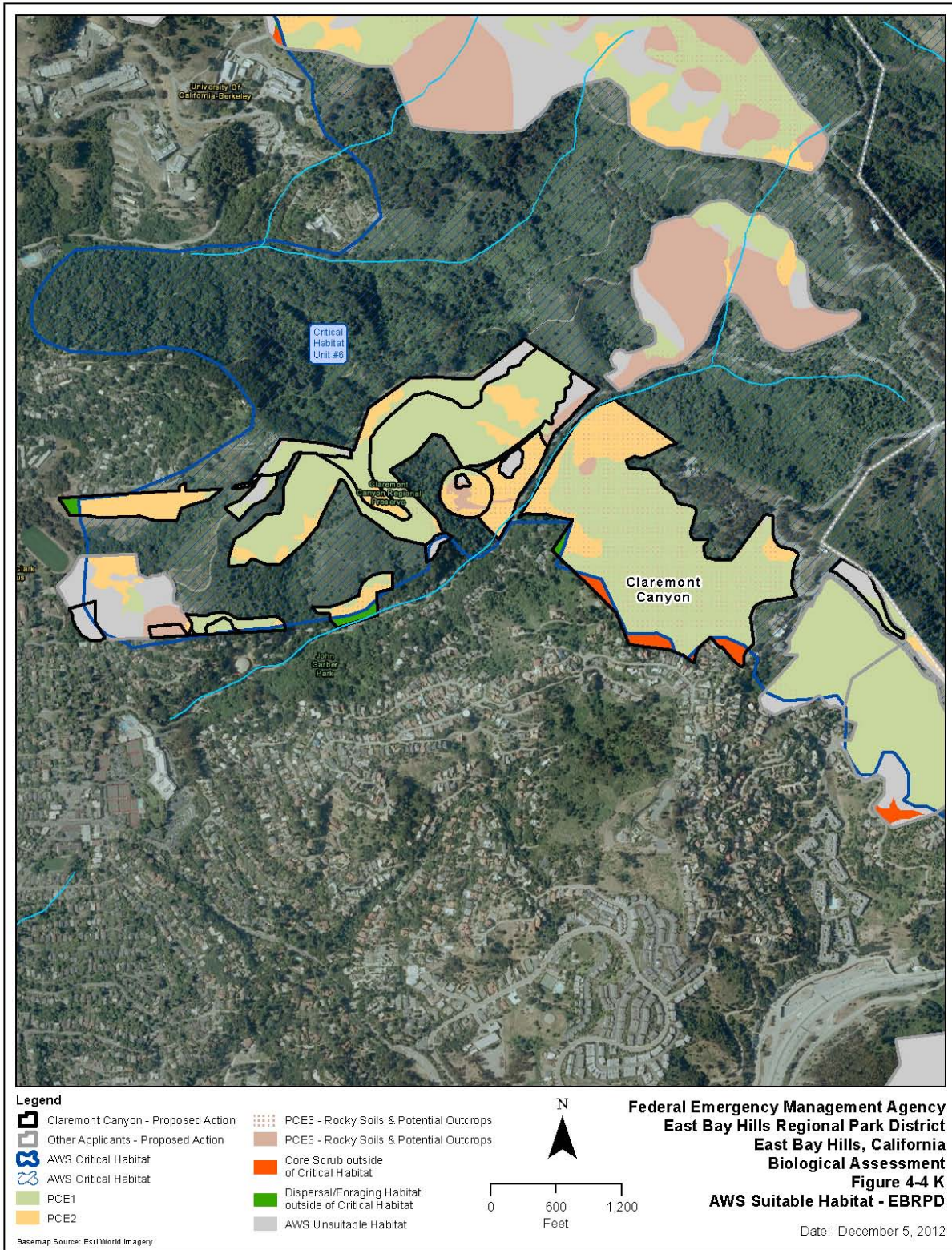


Figure 5K. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 11).

The Claremont Canyon Regional Preserve portion of the project consists of a 21.56-acre area in the following four RTAs: CC001, CC003, CC006, CC007, CC008, CC010, and CC012.

RTA CC001. This is a 2.28-acre area located at the western end of the preserve and contains eucalyptus, northern coastal scrub, oak-bay woodland, and developed/ disturbed/landscape areas.

RTA CC003. This is a 2.74-acre area located along the northwestern edge of the preserve and contains coyote brush scrub and developed/disturbed/landscaped areas.

RTA CC006. This is a 3.34-acre area located at the southern edge of the preserve and contains oak-bay woodland/forestland and northern coastal scrub (xeric).

RTA CC007. This is a 1.72-acre area along the northwestern edge of the preserve and contains coyote brush scrub and developed/disturbed/landscaped areas.

RTA CC008. This is a 3.72-acre area located at the south central area of the preserve and contains oak-bay woodland/forestland, developed/disturbed/landscaped areas, and coyote brush scrub.

RTA-CC010. This 5.36-acre area is located at the south central area of the preserve and contains oak-bay woodland/forestland, coyote brush scrub, developed/disturbed/ landscaped areas, and northern coastal scrub (xeric).

RTA-CC012. This 2.40-acre area in the eastern edge of the preserve contains northern coastal scrub and developed/disturbed/landscaped areas.

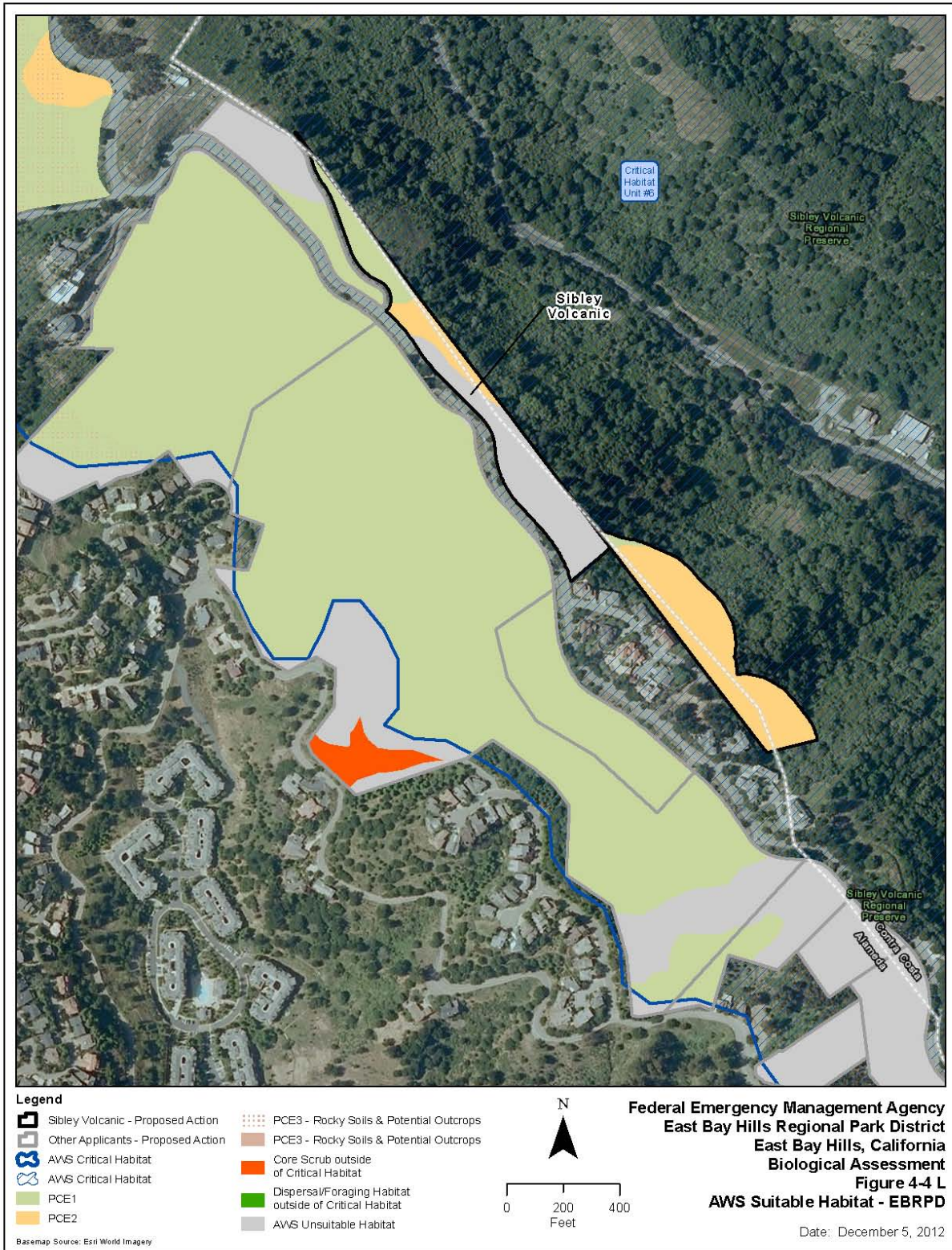


Figure 5L. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 12).

The Sibley Volcanic Regional Preserve portion of the project consists of a 43.61-acre area in the following three RTAs: SR001, SR004, and SR005.

RTA SR001. This is a 7.88-acre area located at the northwestern edge of the preserve and contains oak-bay woodland/forestland, coniferous forest, coyote brush scrub, and developed/disturbed/landscaped areas.

RTA SR004. This is a 12.94-acre area located in the western central portion of the preserve and contains oak-bay woodland/forest, northern coastal scrub (xeric), coyote brush scrub, and developed/disturbed/landscaped areas.

RTA SR005. This 22.79-acre area is located in the southwestern edge of the preserve and contains coyote brush scrub and non-native coniferous forest.

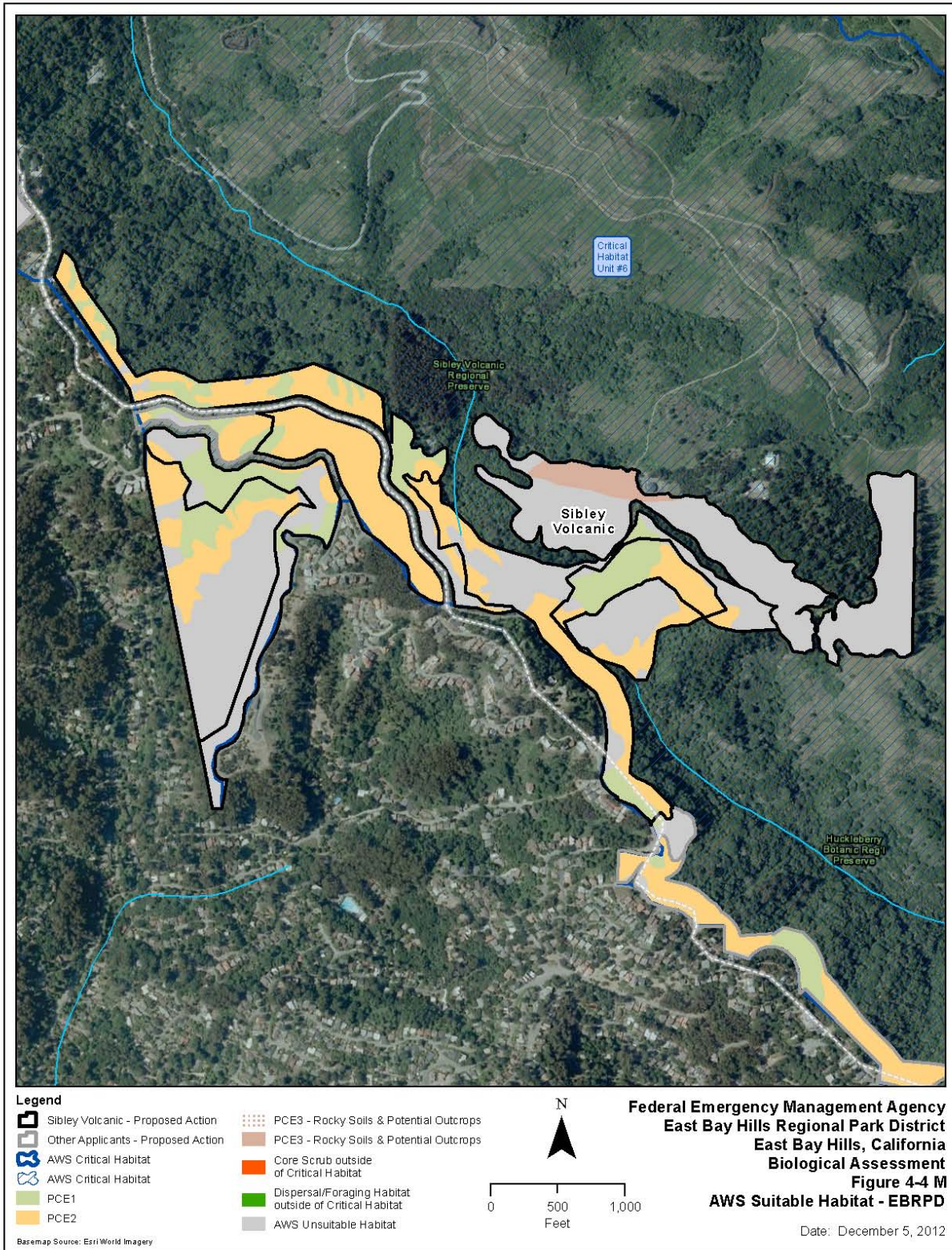


Figure 5M. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 13).

The Sibley Volcanic Regional Preserve portion of the project consists of a 43.61-acre area in the following three RTAs: SR001, SR004, and SR005.

RTA SR001. This is a 7.88-acre area located at the northwestern edge of the preserve and contains oak-bay woodland/forestland, coniferous forest, coyote brush scrub, and developed/disturbed/landscaped areas.

RTA SR004. This is a 12.94-acre area located in the western central portion of the preserve and contains oak-bay woodland/forest, northern coastal scrub (xeric), coyote brush scrub, and developed/disturbed/landscaped areas.

RTA SR005. This 22.79-acre area is located in the southwestern edge of the preserve and contains coyote brush scrub and non-native coniferous forest.

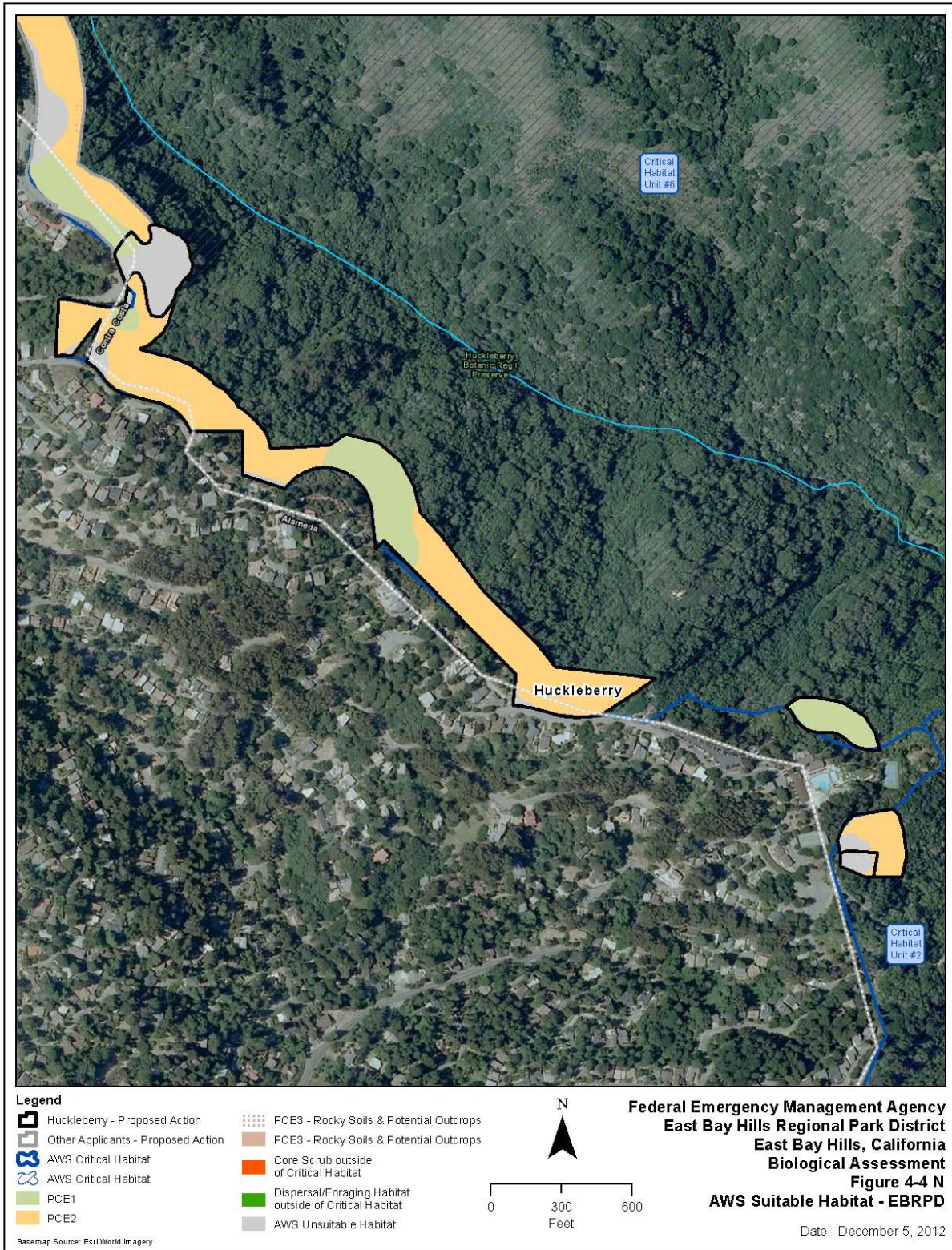


Figure 5N. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 14).

The Huckleberry Botanic Regional Preserve portion of the project consists of a 17.76-acre area in the following in four RTAs: HP001, HP002, HP003, and HP004, as described below.

RTA HP001. This 1.71-acre area in the southwestern edge of the preserve and contains eucalyptus forest/plantation and northern coastal scrub.

RTA HP002. This 13.62-acre area is located in the southwestern edge of the preserve and contains oak-bay woodland/forest, northern maritime chaparral, northern coastal scrub, and developed/disturbed/landscaped areas.

RTA HP003. This is a 1.12-acre area located in the southeastern edge of the preserve and contains northern maritime chaparral and pallid manzanita.

RTA HP004. This is a 1.31-acre area located in the southeastern edge of the preserve and contains oak-bay woodland/forest, northern maritime chaparral, and develop/disturbed/landscaped areas.

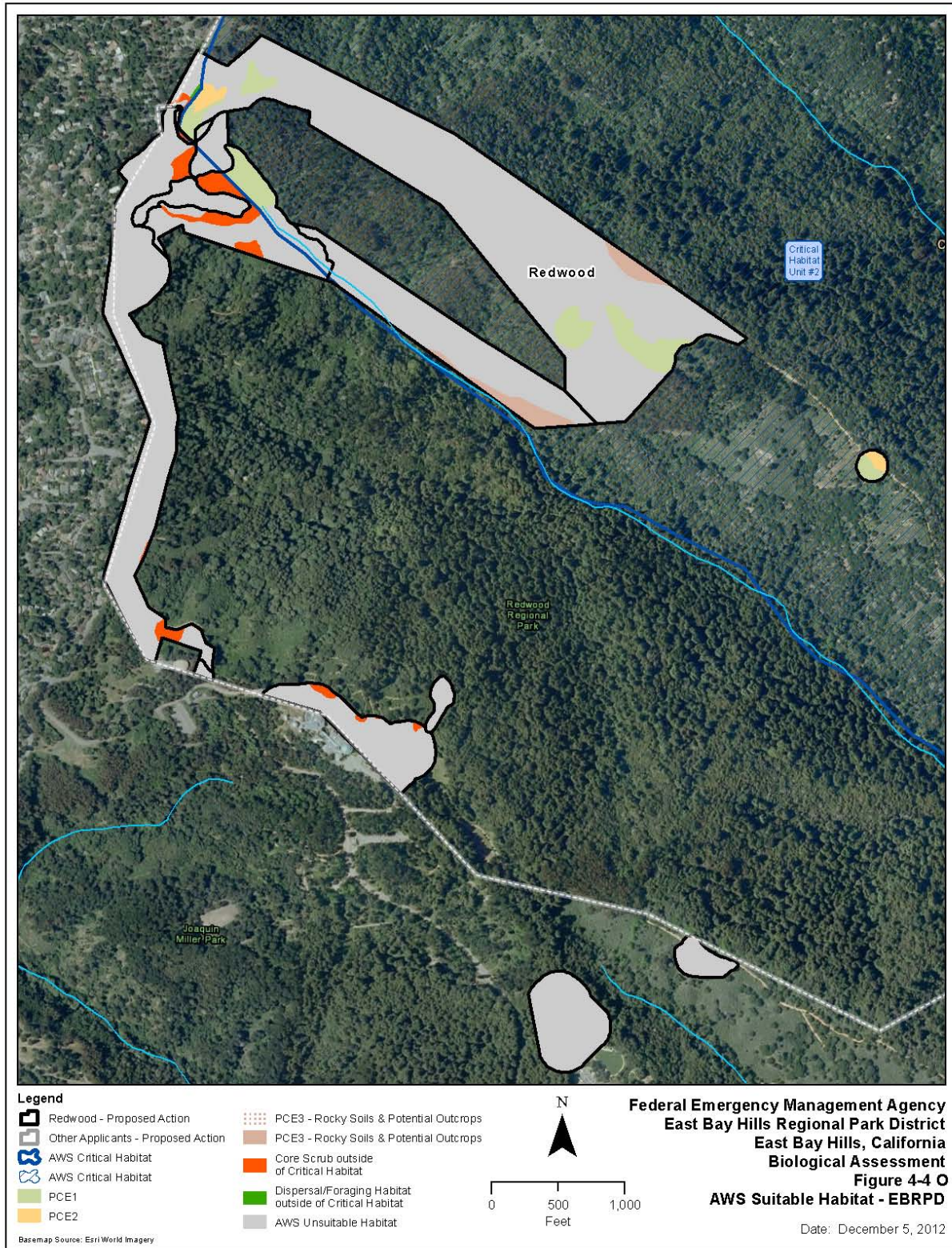


Figure 50. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 15).

The Redwood Regional Park portion of the project consists of a 58.33-acre area in the following eight RTAs: RD001, RD002, RD003, RD004, RD005a, RD005b, RD009, and RD011, as described below.

RTA RD001. This 0.23-acre area is located in the northeastern end of the park and contains coniferous forest and northern coastal scrub (xeric).

RTA RD002. This 5.01-acre area is located in the northeastern end of the park and contains eucalyptus forest/plantation.

RTA RD003. This is an 11.82-acre area located in the northeastern end of the park and contains eucalyptus forest/plantation, riparian woodland, coyote brush scrub, oak-bay woodland/forestland, redwood forest, and developed/disturbed/landscaped areas.

RTA RD004. This is a 27.80-acre area located in the northeastern end of the park and contains non-native coniferous forest, oak-bay woodland/forestland, coyote brush scrub, developed/disturbed/landscaped areas, and eucalyptus forest/plantation.

RTA RD005a. This 1.10-acre area is located in the northeastern area of the park and contains eucalyptus forest/plantation.

RTA RD005b. This 8.45-acre area is located in the northeastern area of the park and contains non-native coniferous forest, developed/disturbed/landscaped areas, redwood forest, and oak-bay woodland/forestland.

RTA RD009. This 2.92-acre area is located in the east-central area of the park and contains developed/disturbed/landscaped areas, northern coastal scrub (xeric), and oak-bay woodland/forestland.

RTA RD011. This 1.02-acre area is located along the northeastern edge of the park and contains northern coastal scrub (xeric).

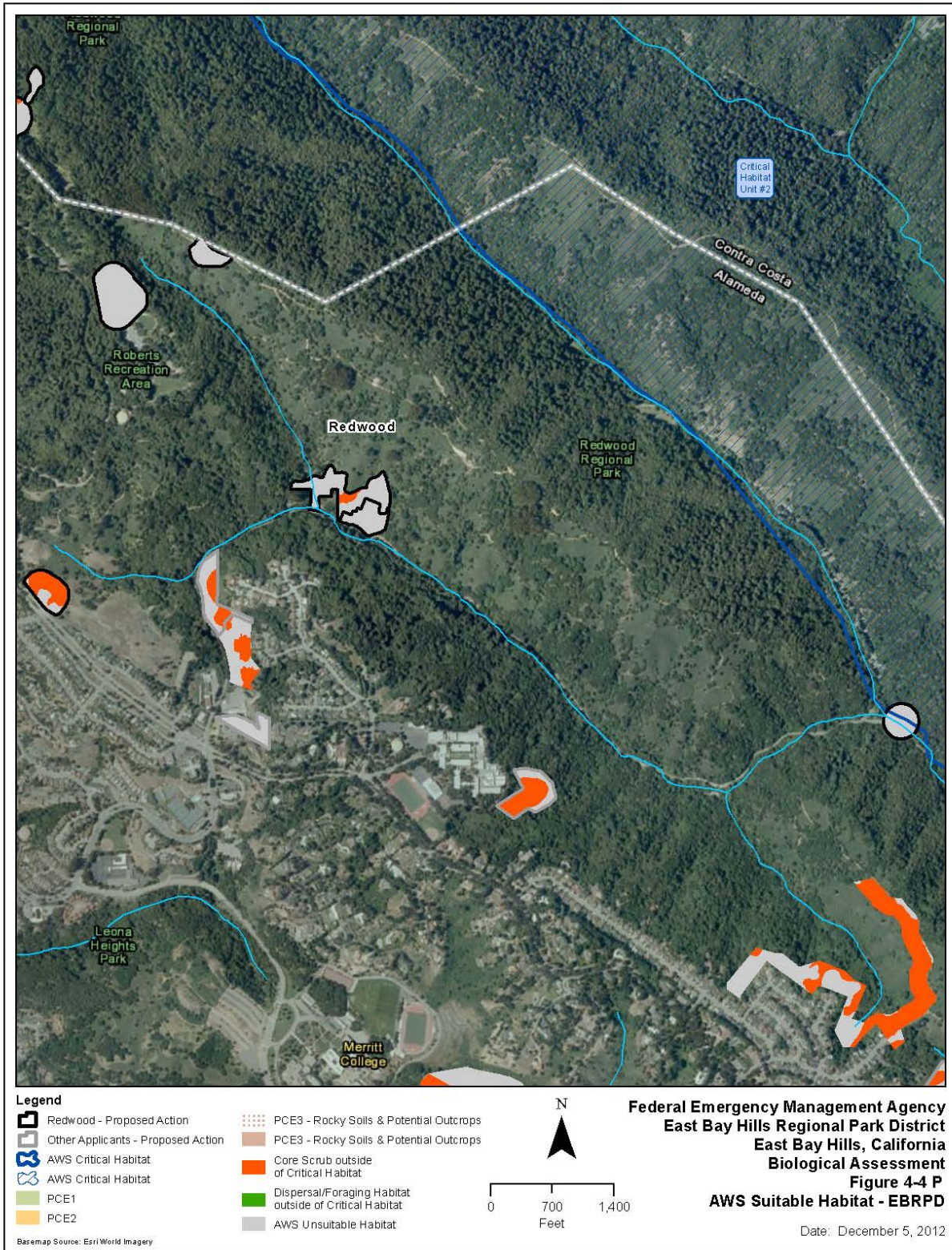


Figure 5P. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 16).

The Redwood Regional Park portion of the project consists of a 58.33-acre area in the following eight RTAs: RD001, RD002, RD003, RD004, RD005a, RD005b, RD009, and RD011, as described below.

RTA RD001. This 0.23-acre area is located in the northeastern end of the park and contains coniferous forest and northern coastal scrub (xeric).

RTA RD002. This 5.01-acre area is located in the northeastern end of the park and contains eucalyptus forest/plantation.

RTA RD003. This is an 11.82-acre area located in the northeastern end of the park and contains eucalyptus forest/plantation, riparian woodland, coyote brush scrub, oak-bay woodland/forestland, redwood forest, and developed/disturbed/landscaped areas.

RTA RD004. This is a 27.80-acre area located in the northeastern end of the park and contains non-native coniferous forest, oak-bay woodland/forestland, coyote brush scrub, developed/disturbed/landscaped areas, and eucalyptus forest/plantation.

RTA RD005a. This 1.10-acre area is located in the northeastern area of the park and contains eucalyptus forest/plantation.

RTA RD005b. This 8.45-acre area is located in the northeastern area of the park and contains non-native coniferous forest, developed/disturbed/landscaped areas, redwood forest, and oak-bay woodland/forestland.

RTA RD009. This 2.92-acre area is located in the east-central area of the park and contains developed/disturbed/landscaped areas, northern coastal scrub (xeric), and oak-bay woodland/forestland.

RTA RD011. This 1.02-acre area is located along the northeastern edge of the park and contains northern coastal scrub (xeric).

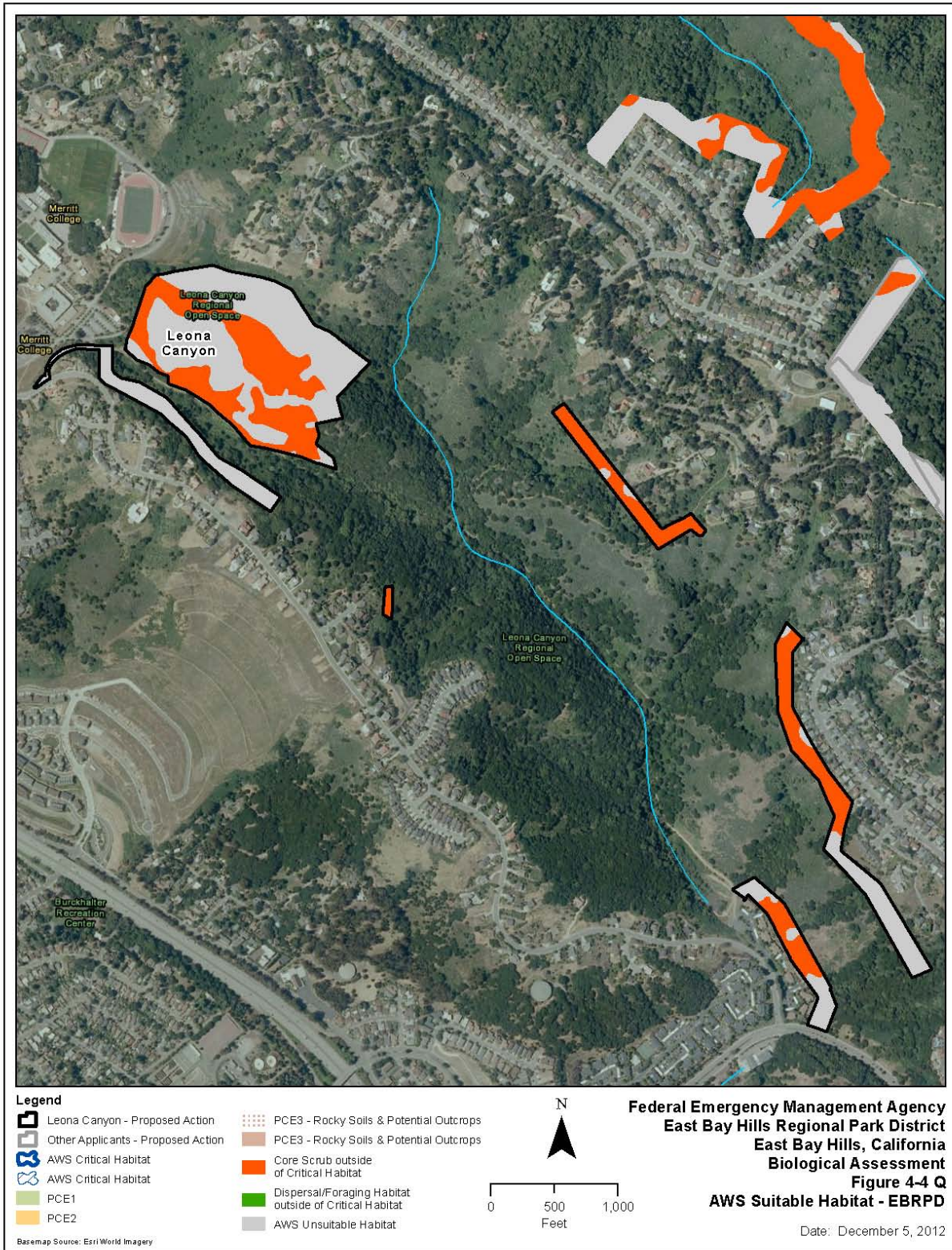


Figure 5Q. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 17).

The Leona Canyon Regional Open Space Preserve portion of the project consists of a 4.58-acre area in the RTA LE005. This RTA contains northern coastal scrub (xeric), coniferous forest, and oak-bay woodland/forestland.

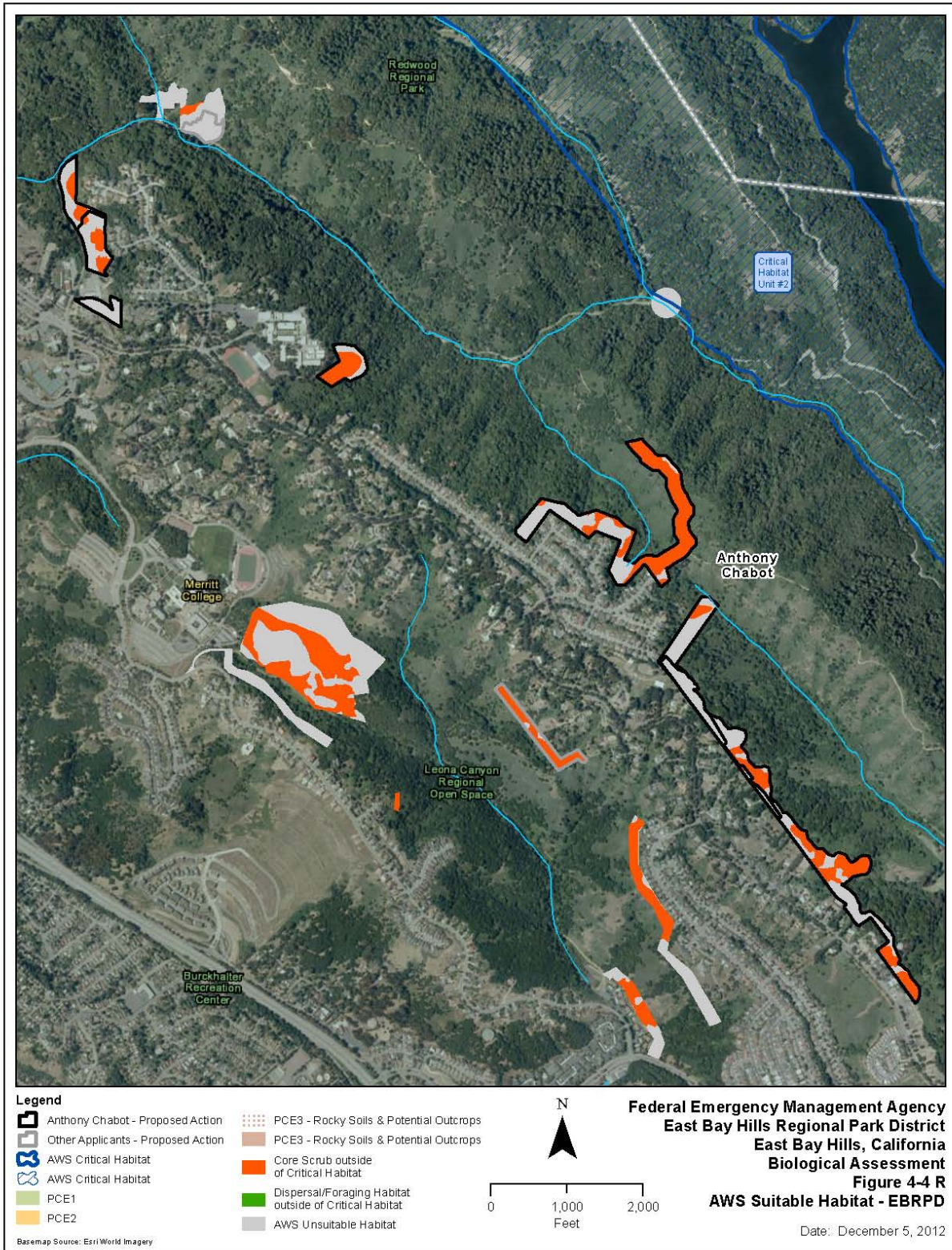


Figure 5R. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 18).

The Anthony Chabot Regional Park portion of the project consists of a 200.0-acre area in the following nine RTAs: AC001, AC002, AC003, AC006, AC007, AC011, AC012, AC013, and AC014, as described below.

RTA AC001. This is a 4.32-acre area located at the northeastern end of the park and contains oak-bay woodland/forestland and northern coastal scrub (xeric).

RTA AC002. This is a 2.48-acre area located at the northeastern end of the park and contains coniferous forest, developed/disturbed/landscaped areas, and northern coastal scrub.

RTA AC003. This is a 27.5-acre area located at the northeastern end of the park and contains coastal scrub (xeric) and oak-bay woodland/forestland.

RTA AC006. This is a 25.52-acre area located along the western-central boundary of the park and contains coyote brush scrub, oak-bay woodland/forestland, coastal scrub (xeric), coniferous forest, eucalyptus forest/plantation, developed/ disturbed/landscaped areas, and successional grassland.

RTA AC007. This is an 8.44-acre area located along the western-central boundary of the park and contains developed/disturbed/landscaped areas, northern coastal scrub (xeric), California annual grassland, coniferous forest, and oak-bay woodland/ forestland.

RTA AC011. This is a 26.15-acre area located in the southwestern area of the park and contains eucalyptus forest/plantation, coyote brush scrub, oak-bay woodland/ forestland, developed/disturbed/landscaped areas, northern coastal scrub, and annual grassland.

RTA AC012. This is an 18.93-acre area located in the southwestern area of the park and contains coyote brush scrub, northern coastal scrub, successional grassland, and eucalyptus forest/plantation.

RTA AC013. This is a 16.85-acre area located at the southern end of the park and contains eucalyptus forest/plantation, California annual grassland, coyote brush scrub, and developed/disturbed/landscaped areas.

RTA AC014. This is a 92.55-acre area located at the southern end of the park and contains coyote brush scrub, California annual grassland, oak-bay woodland/forestland, coastal scrub (xeric), eucalyptus forest/plantation, and riparian woodland.

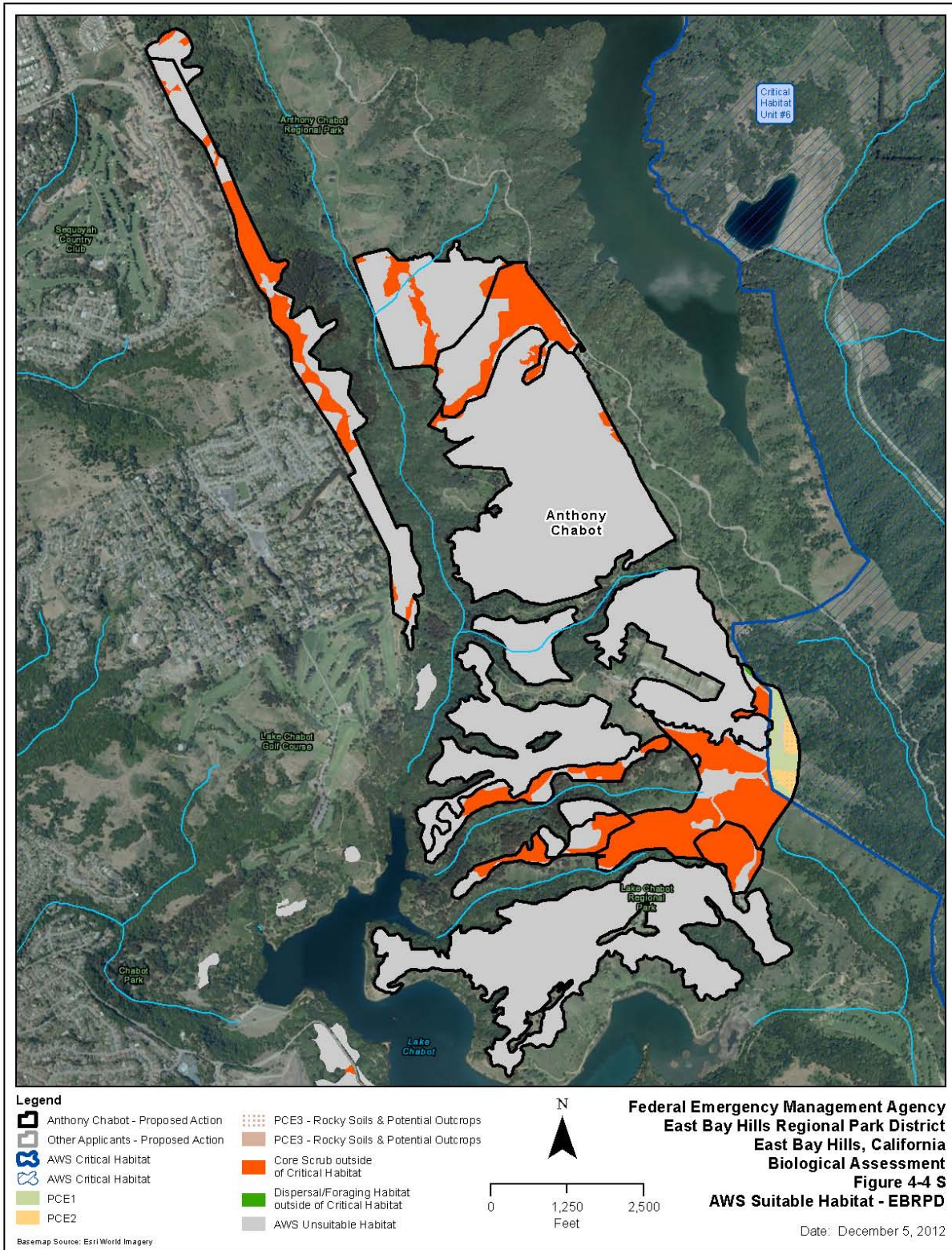


Figure 5S. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 19).

The Anthony Chabot Regional Park portion of the project consists of a 200.0-acre area in the following nine RTAs: AC001, AC002, AC003, AC006, AC007, AC011, AC012, AC013, and AC014, as described below.

RTA AC001. This is a 4.32-acre area located at the northeastern end of the park and contains oak-bay woodland/forestland and northern coastal scrub (xeric).

RTA AC002. This is a 2.48-acre area located at the northeastern end of the park and contains coniferous forest, developed/disturbed/landscaped areas, and northern coastal scrub.

RTA AC003. This is a 27.5-acre area located at the northeastern end of the park and contains coastal scrub (xeric) and oak-bay woodland/forestland.

RTA AC006. This is a 25.52-acre area located along the western-central boundary of the park and contains coyote brush scrub, oak-bay woodland/forestland, coastal scrub (xeric), coniferous forest, eucalyptus forest/plantation, developed/ disturbed/landscaped areas, and successional grassland.

RTA AC007. This is an 8.44-acre area located along the western-central boundary of the park and contains developed/disturbed/landscaped areas, northern coastal scrub (xeric), California annual grassland, coniferous forest, and oak-bay woodland/ forestland.

RTA AC011. This is a 26.15-acre area located in the southwestern area of the park and contains eucalyptus forest/plantation, coyote brush scrub, oak-bay woodland/ forestland, developed/disturbed/landscaped areas, northern coastal scrub, and annual grassland.

RTA AC012. This is an 18.93-acre area located in the southwestern area of the park and contains coyote brush scrub, northern coastal scrub, successional grassland, and eucalyptus forest/plantation.

RTA AC013. This is a 16.85-acre area located at the southern end of the park and contains eucalyptus forest/plantation, California annual grassland, coyote brush scrub, and developed/disturbed/landscaped areas.

RTA AC014. This is a 92.55-acre area located at the southern end of the park and contains coyote brush scrub, California annual grassland, oak-bay woodland/forestland, coastal scrub (xeric), eucalyptus forest/plantation, and riparian woodland.

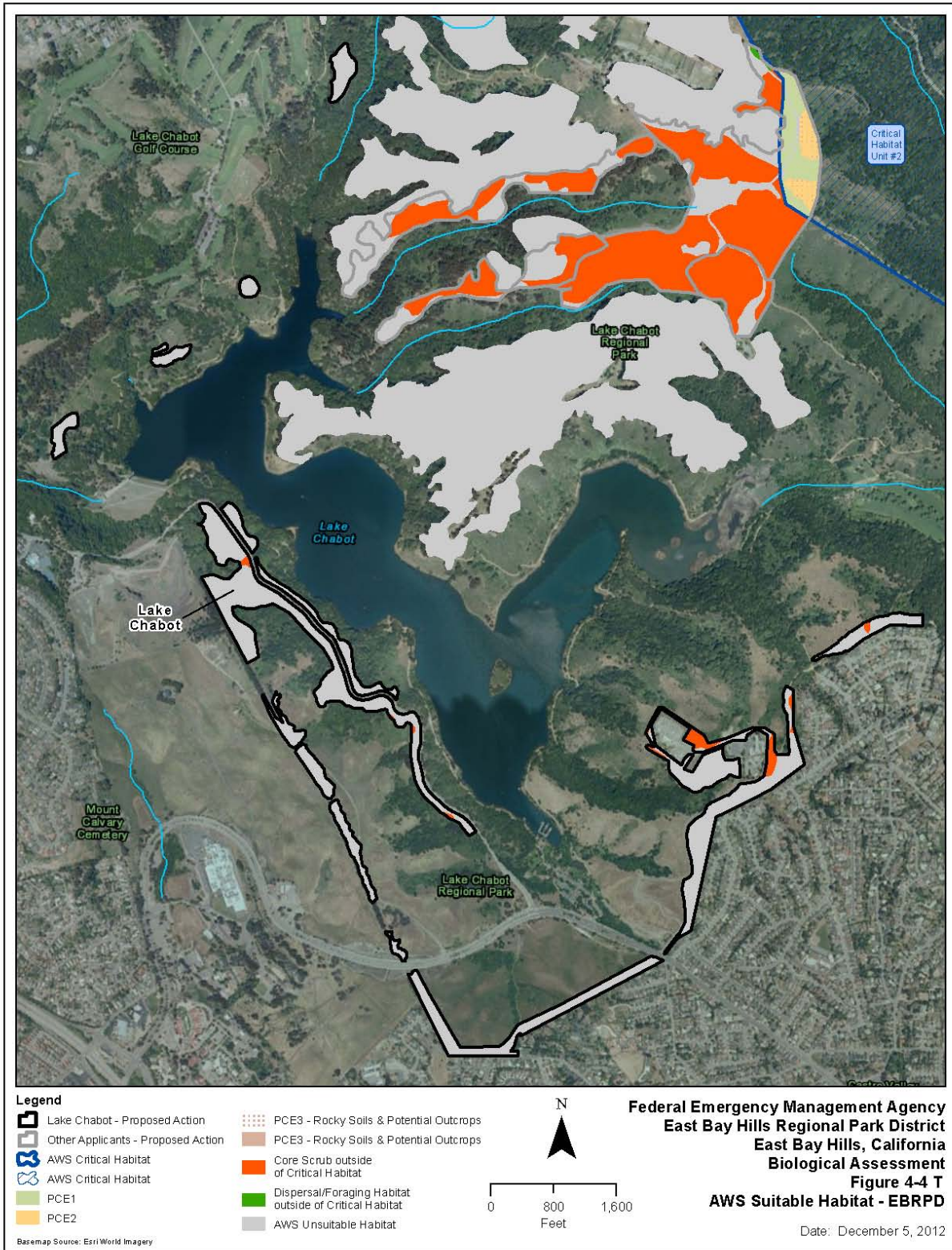


Figure 5T. Alameda Whipsnake Suitable Habitat and PCEs (EBRPD Map 20).

The Lake Chabot Regional Park portion of the project consists of a 4.79-acre area in RTA LC010. This RTA is located in the southeastern end of the park and contains California annual grassland, coyote brush scrub, and oak-bay woodland/forestland.

Appendix Q Public Comment and Responses

Contents

Section One Introduction	5
1.1 Appendix Organization	5
1.2 Overview of Response Process	6
Section Two Primary Key Index	7
Section Three Responses to Comments	195
Biological Resources Issues	195
Issue 1: Tree Clearing and Habitats	195
Issue 2: Tree Clearing and Herbicide Use	196
Issue 3: Species (includes Sudden Oak Death Syndrome)	197
Issue 4: Herbicide Application and Species	205
Issue 5: Impact on Native and Non-Native Plants	208
Issue 6: Biological Resources Analysis Methodology	208
Issue 7: Project Implementation	216
Fire and Fuels Issues	225
Issue 8: Modeling	225
Issue 9: Wood Chips	225
Issue 10: Shrubs and Grasses	226
Issue 11: Fire Risk Reduction	227
Issue 12: Fuel Breaks and Defensible Space	228
Issue 13: Flammability	229
Issue 14: Windbreaks	230
Geology, Seismicity and Erosion Issues	230
Issue 15: Tree Clearing and Erosion and Landslide Risk	230
Issue 16: Tree Clearing and Soil Moisture and Chemistry (Includes Fog Drip)	239
Issue 17: Maintenance	240
Water Resources and Water Quality Issues	240

Issue 18: Erosion, Stream Sedimentation, and Flooding	240
Issue 19: Water Quality	240
Issue 20: Flooding	248
Issue 21: Water Quantity (Drought Conditions and Fog Drip)	249
Air Quality, Climate, and Microclimate Issues	249
Issue 22: Vegetation Removal and CO2 and GHG	249
Issue 23: General Impacts of Equipment Use and Burning	251
Issue 24: General Microclimate Effects Including Shade Loss and Temperature	252
Historic Properties Issues	252
Issue 25: Artifact and Burial Finds and Monitoring	252
Issue 26: Methodology	253
Aesthetics and Visual Quality Issues	253
Issue 27: Impacts to Viewscapes	253
Issue 28: Impacts to Privacy Screening	254
Socioeconomic Issues	254
Issue 29: Property Values and Other Economic Values	254
Issue 30: Environmental Justice Issues	255
Human Health and Safety	255
Issue 31: Herbicide Health Impacts	255
Issue 32: Drinking Water Contamination (including public water supply)	257
Issue 33: Disease Vectors	258
Public Services, Utilities, and Recreation Issues	258
Issue 34: Recreational and Educational Uses	258
Issue 35: Burial of Utilities	259
Land Use and Planning Issues	259
Issue 36: Planning and Induced Growth	260
Issue 37: Zoning	260
Transportation Issues	260
Issue 38: Road Closures	261
Issue 39: Economic Transportation Effects	261

Noise Issues	261
Issue 40: Comments about Noise	261
Cumulative Impacts Issues	262
Issue 41: Comments about Cumulative Impacts	262
Project Alternatives Issues	262
Issue 42: Insufficient Project Alternatives	262
Issue 43: Project Rationale	272
Issue 44: Implementation of Alternatives	273
Public Involvement Issues	274
Issue 45: Comment Period	274
Issue 46: Inadequate Outreach	274
Issue 47: Public Meeting and Document Accessibility	275
Federal Funding Issues	275
Issue 48: Misuse of Federal Funds	275
Issue 49: Misuse of Authority	276
Issue 50: Alternative Use of Funds	277
Grants Management Issues	277
Issue 51: Financial Oversight	277
Issue 52: Funding Induced Growth	286
Issue 53: Compliance with the California Environmental Quality Act (CEQA)	286
Public Opinion, Support, and Opposition	287
Issue 54: Public Opinion, Support and Opposition of the Proposed Project	287

This page intentionally left blank.

Section One Introduction

1.1 Appendix Organization

Appendix Q of the final environmental impact statement (EIS) is composed of three parts:

Section 1 provides an introduction and overview of the appendix.

Section 2 contains an index of each comment received, identified by the author and Primary Key (PK) code.

Section 3 includes the Federal Emergency Management Agency's (FEMA) responses to the public comments. FEMA's responses are organized by reference to the following general topic areas:

- Biological Resources
- Fire and Fuels
- Geology, Seismicity, and Erosion
- Water Resources and Water Quality
- Air Quality, Climate and Microclimate
- Historic Properties
- Aesthetics and Visual Quality
- Socioeconomics
- Human Health and Safety
- Public Services, Utilities, and Recreation
- Land Use and Planning
- Transportation
- Noise
- Cumulative Impacts
- Project Alternatives
- Public Involvement
- Federal Funding
- Grants Management

Some topics have several subsections that focus on specific concerns under the general heading. The PKs of the comment authors who raised a particular concern are referenced in the responses to comments. PKs are repeated under each issue where a commenter raised more than one subject.

The scanned copies of all of the public and agency comments received are in Appendix R. The PK code has been added to each submittal and submittals are organized numerically by PK code in Appendix R.

1.2 Overview of Response Process

All of the public comments on the draft EIS were reviewed and accounted for. Due to the volume of comments received on the draft EIS, FEMA assigned each comment submittal a PK numerical code, which are listed in the index in Section 2 of this appendix. FEMA then summarized each issue raised by each commenter and categorized the topics raised according to subject matter. FEMA has responded to the comments in summary form by the subject matter raised and noted which PKs raised each issue in Section 3. In most cases, commenters raised more than one topic and an individual PK may be repeated in several responses.

Wherever possible, FEMA has responded to the comment by amending the EIS, clarifying its final language, or adding analysis to the EIS. A description of where each issue raised is discussed within the final EIS is in Section 3.

FEMA also reviewed all the comments received after the close of the draft EIS comment period. FEMA considered whether late-submitted comments raised any new issues and found that they did not. For this reason and because these late comments were not received during the comment period, FEMA provided responses through standard FEMA public affairs protocols. Those comments were not assigned PKs and are not included in this appendix.

Many comment authors expressed personal opinions, histories or experiences without reference to specific issue or concern. A specific response to these comments is not required under NEPA because the comment does not raise a significant environmental issue (NEPA Regulations 40 CFR Part 1503.4). Nevertheless, these comments were assigned a PK, responded to in general where a specific topic could be identified, and included as part of the record in Appendix R. These general comments will be made available to decision makers prior to a final decision on the proposed project.

Section Two Primary Key Index

This section contains an index of each author identified by PK. Copies of the full text of each comment submittal is contained in Appendix R, organized numerically by PK.

The following table is organized by last name first where a last name was provided or where it could be identified. Many people only provided first names, so individuals should search for both their last name and first name or for the identifier that they used in submitting their comments to FEMA.

Table 2-1. Commenter Index

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
?		3281	3,6,9,10,13,14,21,22,24,42,53,	Abrahms	Judith	10529	3,42,51,
?		4003	31,	Abram	Robert	5609	3,6,7,15,19,42,51,
?		4005	31,	abrams		2875	1,2,4,8,25,
?		4008	54,	Abrams	Sally	10657	42,51,
Rohr	Michaela	13068	54,	Abshear	Cory	6951	3,6,7,15,19,42,51,
A	Logan	768	54,	accardi	patrizia	13162	54,
A. Korn	Meryle	12764	54,	Acevedo	Jimmy	8512	3,6,7,15,19,42,51,
Aa	Phil	12341	54,	Achuff		2739	2,4,7,42,43,
Aaberg		1011	54,	Ackerman		1838	54,
Aaberg		1561	54,	Ackerman	Sara	6534	3,6,7,15,19,42,51,
Abbot		9488	3,6,7,15,19,42,51,	Ackley	Phoebe	8553	3,6,7,15,19,42,51,
Abdin	Terry	6793	3,6,7,15,19,42,51,	Acree	Michael	9349	3,6,7,15,19,42,51,
Abdul-Aleem	Nasira	6317	3,6,7,15,19,42,51,	Adam	Reinhardt	7973	3,6,7,15,19,42,51,
Abdur-Rahim		868	54,	Adams	Christopher	3	1,4,5,6,7,8,11,12,13,18,19,20,21,22,23,27,28,31,34,41,42,43,
Abel	Judith	12191	54,	Adams	E	353	1,
Abel	David	13197	5,36,37,	Adams		2785	54,
Abelson	Linda	5843	3,6,7,15,19,42,51,	Adams		3059	1,2,4,53,
Abercrombie	Sharon	10640	42,51,	Adams		3170	54,
Abernathy	William	5115	54,	Adams	John	5586	3,6,7,15,19,42,51,
Abers	Mimi	7299	3,6,7,15,19,42,51,	Adams	David	6319	3,6,7,15,19,42,51,
Abeyta	Vincent	8736	3,6,7,15,19,42,51,	Adams	Ariel	7491	3,6,7,15,19,42,51,
abouchabki	michelle	12504	54,	Adams	Richard S.	8722	3,6,7,15,19,42,51,
Abraham	Emily	8255	3,6,7,15,19,42,51,	Adams	Eileen	8842	3,6,7,15,19,42,51,
Abrahamsen	Mark	10036	3,6,7,15,19,42,51,	Adams	Tom	9019	3,6,7,15,19,42,51,
Abrahamson	Tsan Merritt-Poree	6639	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Adams	Jane	10389	3,7,15,19,42,51,	Airey	David	5880	3,6,7,15,19,42,51,
Adams	Christopher	10493	3,19,42,51,	Airoldi	Mike	7937	3,6,7,15,19,42,51,
Adams	Winn	12074	54,	aitani	satomi	12907	54,
Adams	Britt	10658	42,51,	Aitken	Stewart	12242	54,
Adams	Kim	12411	54,	Aiyer	Tina	10295	3,6,7,15,19,42,51,
Adamson		1848	2,4,42,43,	Ajay	Stephen	5079	54,
Adamson	Marnie	6914	3,6,7,15,19,42,51,	AK	Erin	10270	3,6,7,15,19,42,51,
Addicott		2768	54,	AKABAK		3079	54,
Addiego		3105	54,	Akbar	Paula	12794	54,
Addington	Lynda	12552	54,	Akelson	Robert	7975	3,6,7,15,19,42,51,
Adelaide	Reine	5771	3,6,7,15,19,42,51,	Akimova	Katya	12397	54,
Adler	Sarah	8342	3,6,7,15,19,42,51,	Aktas	Nancy	10136	3,6,7,15,19,42,48,51,
Admonius	Bart	10960	42,51,	Al-Alaoui	Souraya	9175	3,6,7,15,19,42,51,
Aduba	Rev. Dr. Peter	7853	3,6,7,15,19,42,51,	Alan		3224	54,
Agamaite	Belinda	9824	3,6,7,15,19,42,51,	Alaniz	Chris	7520	3,6,7,15,19,42,51,
Agerter	Linda	5039	54,	Alano	Maureen	5308	54,
Aggarwal	Josette	9452	3,6,7,15,19,42,51,	Alau	Jocelyn	10138	3,6,7,15,19,42,51,
Aguayo		2296	11,	Alba	Leana	6828	3,6,7,15,19,42,51,
Aguayo	Joannie	6987	3,6,7,15,19,42,51,	Albano	Alvin	9935	3,6,7,15,19,42,51,
Aguayo	Suzanna	7142	3,6,7,15,19,42,51,	Albe		5	1,4,5,6,7,19,34,42,44,
Aguilar	Lisa	10687	42,51,	Albe		520	1,34,42,44,
Aguirre	Vianeth	5553	3,6,7,15,19,42,51,	Alberti	Marie	5376	54,
Aguirre	Peter	9451	3,6,7,15,19,42,51,	Albertson	Geoffrey	9438	3,6,7,15,19,22,42,51,
Aidells	Andrea	5078	54,	Alcantar	Gustavo	10642	42,51,
Aileen		5324	54,	Alcock	Gael	6989	3,6,7,15,19,42,51,
Airborne-Williams	Revi	7383	3,6,7,15,19,42,51,	Alcorn	Kay	8804	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Alden		1020	27,	Allen		2126	54,
Alden		1562	2,4,27,	Allen	Gertude	5197	54,
Alden	Rory	8951	3,6,7,15,19,42,51,	Allen	Debra	5998	3,6,7,15,19,42,51,
Alderete	M	7487	3,6,7,15,19,42,51,	Allen	Deborah	6475	3,6,7,15,19,42,51,
Aldus	Peter	12040	54,	Allen	Ed	7420	3,6,7,15,19,42,51,
Alegre		2341	42,43,	Allen	BJ	9477	3,6,7,15,19,42,51,
Alegre	Lauren	9591	3,6,7,15,19,42,51,	Allen	Sigrid	10418	3,7,15,19,42,51,
Aleman		7	1,3,7,31,33,34,42,44,	Allen	Reginald	13048	54,
Aleskovski	Masha	12618	54,	Alley	Greer	5244	54,
Alex		10	1,3,4,5,9,10,11,15,22,23,24 ,27,28,31,34,40,42,43,	Alli	Timo	6841	3,6,7,15,19,42,51,
Alex		2464	54,	Allison	Liz	12967	54,
Alexander	Pamela	7475	3,6,7,15,19,42,51,	Allphin	Beverly	8184	3,6,7,15,19,42,51,
Alexander	Joan	7935	3,6,7,15,19,42,51,	Allseits	Cathy	6645	3,6,7,15,19,22,42,51,
Alexander	Ryan	8001	3,6,7,15,19,42,51,	Alpern		1016	27,
Alexander	Edward	8332	3,6,7,15,19,42,51,	Alpern		1590	27,
Alexander	Jim	8612	3,6,7,15,19,42,51,	Alter		3100	2,4,22,42,
Alexander	Sophie	8943	3,6,7,15,19,42,51,	Altman	LR	8330	3,6,7,15,19,42,51,
Alexandre	Charlotte	12637	54,	Altman	Marian	11027	42,51,
Alexanyan	Daniel	6239	3,6,7,15,19,42,51,	Alvarado	Frederick	6617	3,6,7,15,19,42,51,
Alford	Lori	5825	3,6,7,15,19,42,51,	Alvarado	Lisbeth	12489	54,
Al-Harbi	Adam	10280	3,6,7,15,19,42,51,	Alvarez	Mary	6036	3,6,7,15,19,42,51,
Allan	Marilee	8688	3,6,7,15,19,42,51,	Alvarez	Vincent	12507	54,
Allard	Sennett	6186	3,6,7,15,19,42,51,	Alvelda	Stephanie	5220	54,
Allaway		708	46,	Alyssa		1229	2,4,
Allen		1085	54,	Amada		2378	1,15,22,42,43,48,
Allen		1666	54,	Amada	Premadasi	7360	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Amaral	Orlia	6649	3,6,7,15,19,42,51,	Anderson	John	5176	54,
Amato		2434	2,4,11,17,44,	Anderson	Laura	6147	3,6,7,15,19,42,51,
Amato	Karen	5976	3,6,7,15,19,42,51,	Anderson	Maureen	6792	3,6,7,15,19,42,51,
Amato	Mariana	7686	3,6,7,15,19,42,51,	Anderson	Adam	6858	3,6,7,15,19,42,51,
Amber		2445	42,	Anderson	Robert	7178	3,6,7,15,19,42,51,
Amberger-Warren	Annette	7531	3,6,7,15,19,42,51,	Anderson	Henry P.	7866	3,6,7,15,19,42,51,
Ambrie		585	14,15,	Anderson	Angelika	8858	3,6,7,15,19,42,51,
Amer. Inst. Of Engineers		563	54,	Anderson	Elizabeth	9419	3,6,7,15,19,42,51,
Amerman	Jennie	7336	3,6,7,15,19,42,51,	Anderson	Kristina	9548	3,6,7,15,19,42,51,
Ammentorp	Adam	8345	3,6,7,15,19,42,51,	Anderson	Eric	9910	3,6,7,15,19,42,51,
Amrhein	Marielle	6593	3,6,7,15,19,42,51,	Anderson	Karin	10311	3,6,7,15,19,42,51,
Amyx		2897	1,2,4,11,15,19,23,53,	Anderson	Michael	10492	3,19,42,51,
and Nancy Butler	William	13163	54,	Anderson	Christeen	12002	54,
and Tina Partlow	Dan	13205	54,	Anderson	Joy	12259	54,
Anders	Liz	9913	3,6,7,15,19,42,51,	Anderson	Julie	12409	54,
Anders	Lunde	12022	54,	Anderson	Alexandra	12743	54,
Andersen		1193	54,	Andretta	Jeaneen	12051	54,
Andersen		1770	46,	Andrew	Lauren	9521	3,6,7,15,19,42,51,
Andersén	Minna	6065	3,6,7,15,19,42,51,	Andrews	Allison	5770	3,6,7,15,19,42,51,
Anderson	Laura	167	2,3,4,5,11,13,15,31,32,36,4 2,43,44,	Andrews	Danielle	6335	3,6,7,15,19,42,51,
Anderson		1276	1,2,4,6,42,48,	Andrews	Will	13204	54,
Anderson		2555	1,2,4,5,6,22,41,42,43,44,46 ,	Andries	Anneke	12054	54,
Anderson	Tamia Marg	2773	54,	Anelante		3103	54,
Anderson		3153	11,34,	angel		2443	3,5,9,18,22,24,31,48,
				Angel	Victoria	9100	3,6,7,15,19,42,51,
				Angell	JL	12015	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Angrish		1428	1,2,4,6,8,13,22,	Antonova	Darya	12132	54,
Angrish		2279	4,5,7,8,11,22,23,24,42,43,44,	Antonuccio	Joan	9606	3,6,7,15,19,42,51,
Angrish	Yogesh	10717	42,51,	Antunes	Helena	12344	54,
Angry Brit		2649	11,48,	Apple	Devon	10858	42,51,
Ann Brady	Lee	12365	54,	Appledorf	Bill	6258	3,6,7,15,19,42,51,
Ann Hone	Lori	12753	54,	Arakawa	Patricia	12389	54,
Ann Slaby		3199	54,	Arasteh	Roya	6466	3,6,7,15,19,42,51,
& Alise Hassell	Robert	12318	54,	Arazi	Lorri	7998	3,6,7,15,19,42,51,
Anna		15	1,5,22,44,52,	Arbeiter	Winifred	7976	3,6,7,15,19,42,51,
Anna		1106	5,6,7,36,42,44,52,	Arbuckle	D.	10294	3,6,7,15,19,42,51,
anne		628	1,15,22,	Archilla	Ellen	7103	3,6,7,15,19,42,51,
anne		3204	54,	Archilla	Ellen	8714	3,6,7,15,19,42,51,
anneoshea		3232	54,	Ardds	Yolanda	7518	3,6,7,15,19,42,51,
Annis	Bonita	5765	3,6,7,15,19,42,51,	Ardemis	Christina	7053	3,6,7,15,19,42,51,
Anonymous		558	22,31,	Arduini		921	31,34,
Anonymous		592	1,9,10,13,19,22,31,	Arduini		1582	1,2,4,34,
Anonymous		602	54,	Arechiga	Laura	11016	42,51,
Anonymous		603	54,	arfin	danielle	12418	54,
Anonymous		608	54,	Argentina	Donna	8084	3,6,7,15,19,42,51,
Ansolabehere	Ramona	7385	3,6,7,15,19,42,51,	Arias		1072	27,32,
Ansolabehere	Roxanne	8288	3,6,7,15,19,42,51,	Arias		1660	2,4,31,34,
Anspach	Barb	6049	3,6,7,15,19,42,51,	Arias	Carlos	12199	54,
ant6353@comcast.net		790	54,	Ariel		1030	54,
Antaky	Faye	8086	3,6,7,15,19,42,51,	Ariel	Joan	9987	3,6,7,15,19,42,51,
Antaramian		502	2,4,	Arlen	Sarah	7579	3,6,7,15,19,42,51,
				armao	terri	12387	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Armaroli	Elisa	12239	54,	Ashley	Jodi	12501	54,
Armas	Robert	6581	3,6,7,15,19,42,51,	Ask Buur Clapp	Adam	9950	3,6,7,15,19,42,51,
Armentrout	Mary	8545	3,6,7,15,19,42,51,	Askew	Kevin	5975	3,6,7,15,19,42,51,
Armistead	Susan	12488	22,	Atencio	Patricia	13069	54,
Armour	Cynthia	8527	3,6,7,15,19,42,51,	Athanas	Nancy	12981	54,
Armstrong	Anne	12716	54,	Athanasious Pachivas	John	9365	3,6,7,15,19,42,51,
Arndt	Robert	10706	42,51,	Atherton	Louis	7739	3,6,7,15,19,42,51,
Arneson	Bruce	5045	54,	Atherton	Lori	8463	3,6,7,15,19,42,51,
Arnold	Anandamayi	2249	54,	Atkins	Marena	6073	3,6,7,15,19,42,51,
Arnold		2879	1,25,	Atkins	Chloe	8775	3,6,7,15,19,42,51,
Arnold	Tara	6187	3,6,7,15,19,42,51,	Atkinson	Lori	6887	3,6,7,15,19,42,51,
Arnold	Anandamayi	7559	3,6,7,15,19,42,51,	Atkinson	Barbara	7332	3,6,7,15,19,42,51,
Arnold	Maris	8314	3,6,7,15,19,42,51,	Atlas		933	54,
Arnold	Connie	9434	3,6,7,15,19,42,51,	Atlas		1594	2,4,
Arnold	Alan	12495	54,	Atneosen	Laura	6027	3,6,7,15,19,42,51,
Arnold	Emily	10535	3,42,51,	Attia	Miriam	9796	3,6,7,15,19,42,51,
Aron	Marlene	6270	3,6,7,15,19,42,51,	Attig	Zeena	6920	3,6,7,15,19,42,51,
Arrington	Ardith	12843	54,	Attiyeh	Amy	7116	3,6,7,15,19,42,51,
Asatiani	Medea	6800	3,6,7,15,19,42,51,	Au	Elsie	12910	54,
Asberry	Kasey	8322	3,6,7,15,19,42,51,	Aubrey	Eric	8179	3,6,7,15,19,42,51,
Asberry	Kasey	10800	42,48,51,	Aubry	Russ	5008	54,
Asher	Kamala	9049	3,6,7,15,19,42,51,	Auerbach		1188	5,11,
Ashkenas	Susannah	8685	3,6,7,15,19,42,51,	Auerbach		1756	5,11,
Ashkenas	Molly	8705	3,6,7,15,19,42,51,	Auerbach	Elana	7667	3,6,7,15,19,42,51,
Ashley	Victoria	10924	42,51,	August	Melanie	9037	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Aungle	Kevin	8574	3,6,7,15,19,42,51,	B. Helm	S.	12662	54,
Ausmus	Peggy	12066	54,	Baar	Michael	7249	3,6,7,15,19,42,51,
Ausse	Lucretia	6847	3,6,7,15,19,42,51,	Babcock	William	6220	3,6,7,15,19,42,51,
Auston		5229	54,	Baber	Yolanda	7938	3,6,7,15,19,42,51,
Auyang	Czerny	13027	54,	Babic	Joanne	7039	3,6,7,15,19,42,51,
Auzins	Helen	12267	54,	Bacchi		765	11,43,44,
Avalos		17	1,4,5,15,16,19,22,	Bach	Ronald	12323	54,
Avedissian	Kathleen	6112	3,6,7,15,19,42,51,	Bachmanov	Eugene	10046	3,6,7,15,19,42,51,
Aven		2677	5,11,34,	Bacigalupi	Virginia	6001	3,6,7,15,19,42,51,
Averett	Maia	10255	3,6,7,15,19,42,51,	Bacinski	Christine	12988	54,
Avery	Lauren	8543	3,6,7,15,19,42,51,	Bacon	Nic	9297	3,6,7,15,19,42,51,
Avila		19	13,22,43,44,	Bacon	Richard K	9739	3,6,7,15,19,22,42,51,
Avila		2131	42,43,44,48,	Badame-Oldani	Sacha	8893	3,6,7,15,19,42,51,
Avila	Lorenzo	6689	3,6,7,15,19,42,48,51,	Badenhorst	Frans	12058	54,
Avila	Francisco	9919	3,6,7,15,19,42,51,	Bader	Govinda	7873	3,6,7,15,19,42,51,
Aycock	Christopher	10942	42,51,	Badgley	Jason	10507	3,19,42,51,
Ayer	Sandra	5284	54,	Baer		21	5,22,31,
Ayers		2547	5,6,31,42,46,	Baer		410	54,
Ayoub	Catherine	13076	54,	Baer		518	4,22,31,
Ayres	Melissa	8663	3,6,7,15,19,42,51,	Baer	Sheila	6608	3,6,7,15,19,42,51,
Ayzner	Lev	5530	3,6,7,15,19,42,51,	Baer	Jerome	11068	42,51,
			3,6,9,10,13,14,21,22,24,42,	Baer	Elizabeth	13191	54,
Azabehparnar	Sebastian	3261	53,	Bagga	Steve	10697	42,51,
Aziz	Zari	7238	3,6,7,15,19,42,51,	Bahadur	Raina	12170	54,
Azzam	Alexis	7318	3,6,7,15,19,42,51,	Bahati	Aziza	8954	3,6,7,15,19,42,51,
B	EV	7773	3,6,7,15,19,42,51,	Bahati	Aziza	10525	3,19,42,51,
b	a	13026	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Bahn	Michael	5311	54,	Bakke	Joan	5845	3,6,7,15,19,42,51,
Bahn	Tyler	10790	42,51,	Balderston	Jon	6051	3,6,7,15,19,42,51,
Bail	Doris	10692	42,51,	Baldino	Vincenza J	7757	3,6,7,15,19,42,51,
Bailey		2490	8,11,22,24,31,43,44,	Baldus	Merri	5895	3,6,7,15,19,42,51,
Bailey	Brenda	6481	3,6,7,15,19,42,51,	Baldwin		22	1,4,5,9,15,19,42,
Bailey	Lynn	12223	54,	Baldwin		2466	5,9,
Bain	Janina	7733	3,6,7,15,19,42,51,	Baldwin		3149	54,
Bain	William	12390	54,	Baldwin	Aimee	7927	3,6,7,15,19,42,51,
Baird		1498	54,	Bale	Virginia	10591	3,42,51,
Baird	Doug	10694	42,51,	Balester	Chad	7914	3,6,7,15,19,42,51,
Bak	Ji-Eun	12964	54,	Balestreri	Joe	7573	3,6,7,15,19,42,51,
Baker		897	6,7,42,44,	Balestreri MD	Dr. Laura	7630	3,6,7,15,19,34,42,51,
Baker		2184	54,	Balian	Marsha	7162	3,6,7,15,19,42,51,
Baker	John	5298	54,	Balick	Melissa	8072	3,6,7,15,19,42,51,
Baker	Josey	6362	3,6,7,15,19,42,51,	Ball Law Corp	J Ball	544	42,43,44,
Baker	Kenneth	6804	3,6,7,15,19,42,51,	Ball/Wallace		352	5,6,7,11,13,44,
Baker	Andrew	7013	3,6,7,15,19,42,51,	Ballard	Kim	5732	3,6,7,15,19,42,51,
Baker	Ryan	7092	3,6,7,15,19,42,51,	Ballek	Brian	7555	3,6,7,15,19,42,51,
Baker	Patrick	7760	3,6,7,15,19,42,51,	Ballem	Hugh	12573	54,
Baker	Judy	8036	3,6,7,15,19,42,51,	Baltes	Anushka	6619	3,6,7,15,19,42,51,
Baker	Glennie	9410	3,6,7,15,19,42,51,	Baly	Elaine	12101	54,
Baker	Pamela	9864	3,6,7,15,19,42,51,	Bankoff	Janis	5026	54,
Baker	Taylor	10039	3,6,7,15,19,42,51,	Banks		710	54,
Baker	James	10609	42,51,	Banks		804	6,7,9,10,12,44,
Baker	Arlene	12896	54,	Banner	Daniel	10696	42,51,
				Bannister	Brook	8905	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Banquer	Carol	6124	3,6,7,15,19,42,51,	Barolsky	Deborah	13094	54,
Bansall-Allen	Marilyn	13019	54,	Barr	Margaret	8818	3,6,7,15,19,42,51,
Bansbach	Patricia	10196	3,6,7,15,19,42,51,	Barrack	John	6387	3,6,7,15,19,42,51,
Banuett, Dr.	Flora	8245	3,6,7,15,19,42,51,	Barreto	Christal	5714	3,6,7,15,19,42,51,
Banyan	Alyx	10326	3,6,7,15,19,42,51,	Barrett	Nichola	7883	3,6,7,15,19,42,51,
Baranov	Antoinette	8829	3,6,7,15,19,42,51,	Barrett	Jane	9898	3,6,7,15,19,42,51,
Barbagallo		660	31,	Barrick	Rachelle	11012	42,51,
Barbagallo	Massimo	9522	3,6,7,9,15,19,42,51,	Barron	Julie	8918	3,6,7,15,19,42,51,
Barbara		94	14,15,38,	Barron	Joshua	9815	3,6,7,15,19,42,51,
Barbara		621	54,	Barrows	Anita	14	1,15,31,42,44,52,
BARBEAU	LUCIE	6826	3,6,7,15,19,42,51,	Barrows	Alexandra	8550	3,6,7,15,19,42,51,
Bardakci	Korkut	5022	54,	Barry		3075	6,
Bardakci	Ruth	5051	54,	Barry	Angelo	12752	54,
Barkan	Howard	5123	54,	Barry	Shirley	12386	54,
Barkan	Ruth	6126	3,6,7,15,19,42,51,	Barsby		2527	1,2,4,11,15,16,19,22,31,41,53,
Barker	Monica	5951	3,6,7,15,19,42,51,	Barshad	Evvah J	5213	54,
Barkley	Marilyn	13105	54,	Bartlett		1423	2,4,6,42,
Barlettani	Larry	8897	3,6,7,15,19,42,51,	Bartlett	Barry	5677	3,6,7,15,19,42,51,
Barlow		1854	1,42,	Bartlett	Ilsa	8395	3,6,7,15,19,42,51,
Barlow		2682	2,3,4,9,10,22,42,46,	Bartlett	Karl	10142	3,6,7,15,19,42,51,
Barlow	Sandra	8328	3,6,7,15,19,42,51,	Bartlett	Penny	10560	3,5,42,51,
Barnes	Sheryl	5731	3,6,7,15,19,42,51,	Bartolini	Davide Basilio	6161	3,6,7,15,19,42,51,
Barnes	Carol	8794	3,6,7,15,19,42,51,	Barton	Megan	7346	3,6,7,15,19,42,51,
Barnsdale		3087	1,2,4,6,7,22,24,25,31,42,43,	Barton	Babe	7458	3,6,7,15,19,42,51,
Barnsdale	Mary L	7567	3,6,7,15,19,42,51,	Bartosova	Lida	8837	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Bartsch		2364	4,7,8,11,13,15,17,22,23,24,42,43,44,48,	Bay	Don	12442	54,
Bartsch	Lynn	9254	3,6,7,15,19,42,51,	Bayless	Dillon	3264	3,6,9,10,13,14,21,22,24,42,53,
Basler	Judith	10806	42,51,	Bazar	Allan	6719	3,6,7,15,19,42,51,
Bass	Sally	7308	3,6,7,15,19,42,51,	Bazar	Julia	9274	3,6,7,15,19,42,51,
Bassen	Paul	8766	3,6,7,15,19,42,51,	Bazeley	Holly	6601	3,6,7,15,19,27,42,51,
Bassen	Georgia	8782	3,6,7,15,19,42,51,	Beals		1242	5,
bastian	mark	13131	54,	Beals		2204	1,2,4,6,7,15,19,
Batchelder		25	5,22,44,	Beam	G	12264	54,
Batchelder		3101	5,6,7,42,44,	Bean	Allison	5636	3,6,7,15,19,42,51,
Batchelder	Molly	6385	3,6,7,15,19,42,51,	Bean	Kim	5715	3,6,7,15,19,42,51,
Batchelder	Molly	10620	42,51,	Bean	Emma	6964	3,6,7,15,19,42,51,
Bat'el	Marie	9754	3,6,7,15,19,42,51,	Bean	Judith	10547	3,42,51,
Batey	Valerie	10042	3,6,7,15,19,42,51,	Beane-Martin	Chris	5881	3,6,7,15,19,42,51,
Bath	Mariah	6496	3,6,7,15,19,42,51,	Bear		1157	42,
Bath	Austin	6769	3,6,7,15,19,42,51,	Bear		1682	34,42,43,
Battista	Shelly	6008	3,6,7,15,19,42,51,	Beard	Lauren	8559	3,6,7,15,19,42,51,
Bauce	Michael	6589	3,6,7,15,19,42,51,	Beardsley		702	12,42,44,
Bauer		3501	5,11,22,31,42,	Bearman	Andrew	5276	54,
Baugh	Beth	9689	3,6,7,15,19,42,51,	Bearns		2493	3,5,43,48,
Baum		2500	6,	Bearns	Mel	6332	3,6,7,15,19,42,51,
Baum	Brian	8585	3,6,7,15,19,42,51,	Beasley	Carole	6831	3,6,7,15,19,42,51,
Baumgarten	Laurie	8950	3,6,7,15,19,42,51,	Beasley	Christopher	8757	3,6,7,15,19,42,51,
Bautista	Brigido	10485	3,7,19,42,51,	Beaudry	Chris	8779	3,6,7,15,19,42,51,
Baxter	Arthur	8443	3,6,7,15,19,42,51,	Beausoleil	Francois	12514	54,
Baxter	Arlene	8631	3,6,7,15,19,42,51,	Beccue	Deborah	6178	3,6,7,15,19,42,51,
Baxter	Mary	10811	42,51,	Bechmann	Elisabeth	12715	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Beck		2854	14,	Belding	Betsy	6750	3,6,7,15,19,42,51,
Beck	Marcia W	5122	54,	Belikoff-Strads	Nikolajs	9465	3,6,7,15,19,42,51,
Beck	Michael	6766	3,6,7,15,19,42,51,	Belknap	Ben	10118	3,6,7,15,19,42,51,
Beck	Galen	7673	3,6,7,15,19,42,51,	Bell	Judith	7533	3,6,7,15,19,42,51,
Beck	James	8102	3,6,7,15,19,42,51,	Bell	Natasha	8341	3,6,7,15,19,42,51,
Becker	Jaime	7780	3,6,7,15,19,42,51,	Bell/Wachter		524	54,
Becker	Tao	8336	3,6,7,15,19,42,51,	Belle	Liza	8151	3,6,7,15,19,42,51,
Becker-Spellman	Patricia	6038	3,6,7,15,19,42,51,	Bellino	Clara	8175	3,6,7,15,19,42,51,
Beckman	Elizabeth	7331	3,6,7,15,19,42,51,	Bellon	Laura	10198	3,6,7,15,19,42,51,
Beckwith	Tobias	6556	3,6,7,15,19,42,51,	Belsher	R	6714	3,6,7,15,19,42,51,
Beckwith	Mark	7545	3,6,7,15,19,42,51,	Belsher	R	9229	3,6,7,15,19,42,51,
Beckwith	Blane N.	7611	3,6,7,15,19,42,51,	Belvedere		669	54,
Beckwith	Blane	7692	3,6,7,15,19,42,51,	Belvedere		2504	3,5,11,15,22,
Bedenbaugh	Melanie	10010	3,6,7,15,19,42,51,	Belvedere	Remsen	10629	42,51,
Bednarz	Colleen	7785	3,6,7,15,19,42,51,	Belz		1220	2,4,6,11,43,44,48,
Bee		1931	48,50,	Belz		1323	1,2,4,5,6,15,44,
Beebe	Brenda	6130	3,6,7,15,19,42,51,	Belz	Paul	9251	3,6,7,15,19,42,51,
Behrens	Martha	5884	3,6,7,15,19,42,51,	Benda	Jasmin	7394	3,6,7,15,19,42,51,
Behrens	Christine	10539	3,42,51,	Bende	Katalin	10359	3,6,7,15,19,42,51,
Behymer	Krista	6005	3,6,7,15,19,42,51,	Bender	Diane	9802	3,6,7,15,19,42,51,
Beigler Davis	Samantha	5865	3,6,7,15,19,42,51,	Bendich	Pamela	9090	3,6,7,15,19,42,51,
Beil	Anita	12594	54,	Bendix		2485	54,
Bekersky	Carol	5734	3,6,7,15,19,42,51,	Bendt	Alison	10935	42,51,
Belavy	Stefan	9846	3,6,7,15,19,42,51,	Benedict	C.	9618	3,6,7,15,19,42,51,
Belbin		2801	9,13,14,19,22,24,48,	beneficialbug@sonic.net (Ventura)		26	2,3,4,5,15,22,31,32,42,48,49,51,52,53,
Belder	Virginia	13187	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Benenson		27	1,2,5,15,17,18,19,27,34,44,46,	Bensu	Janet	11004	42,51,
Benge	Cara	7894	3,6,7,15,19,42,51,	Benveniste	Guy	119	1,2,4,44,
Benham	Melissa	8538	3,6,7,15,19,42,51,	Benveniste	Guy	8458	3,6,7,15,19,42,51,
Benike	Gram	12549	54,	Benvenuto	Amanda	13216	22,
Benjamin	Daniel	6349	3,6,7,15,19,42,51,	Berahovich	Leesa	6227	3,6,7,15,19,42,51,
Benjamin	Nancy	10194	3,6,7,15,19,42,51,	Beran	Yvonne	12320	54,
Benko	Kamilla	6673	3,6,7,15,19,42,51,	Berendt	Barbara	5727	3,6,7,15,19,42,51,
Benner	Emily	9468	3,6,7,15,19,42,51,	Berezonsky	Denise	8292	3,6,7,15,19,42,51,
Bennett		445	54,	Berg		2699	1,49,50,
Bennett	Shoshanna	5763	3,6,7,15,19,42,51,	Berg	Lynne K.	6678	3,6,7,15,19,42,50,51,
Bennett	Bryan	6992	3,6,7,15,19,42,51,	Berg	Jane Elizabeth	9931	3,6,7,15,19,42,51,
Bennett	Nancy	7951	3,6,7,15,19,42,51,	Berger		1115	54,
Bennett	Carol	12217	54,	Berger		1705	2,4,41,42,43,44,
Benning	Terri	7052	3,6,7,15,19,42,51,	Berger	Shoshana	8230	3,6,7,15,19,42,51,
Benninghoven	Danica	10857	42,51,	Berger	Robin	12380	54,
Benoit	Christin	13117	54,	Berghmans	Federico	6445	3,6,7,15,19,42,51,
Bensetler	Shirley	12518	54,	Berglund		863	54,
Benson		402	54,	Bergman	Doris	5038	54,
Benson		1170	27,	Berhardt	Anthony	5471	54,
Benson		1520	54,	Berke	Jennifer	6169	3,6,7,15,19,42,51,
Benson		1694	34,	Berkenkamp	Mary	12325	54,
Benson		2213	54,	Berkowitz		28	1,3,4,13,16,24,27,31,42,
Benson		3503	41,	Berkowitz		448	19,
Benson	Ken	5461	54,	Berkowitz		2088	1,2,4,5,6,7,9,13,14,23,27,34,42,43,44,48,
Benson	Lois	5768	3,6,7,15,19,42,51,	Berkowitz		3519	1,2,4,11,16,19,22,31,41,53,
Benson	Sarah	8622	3,6,7,15,19,42,51,	Berkowitz	Pamela	6527	3,5,6,7,13,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Berkun	Eileen	6779	3,6,7,15,19,42,51,	Berson	Adam	9612	3,6,7,15,19,42,51,
Berland	Linda	5133	54,	Bertelsen	Judy	7979	3,6,7,15,19,42,51,
Berlier	Teresa	8014	3,6,7,15,19,42,51,	Bertero-Barcelo	Maria	9829	3,6,7,15,19,42,51,
Berman	Layna	6667	3,6,7,15,19,22,42,51,	Bertoni	Aleksis	7123	3,6,7,15,19,42,51,
Berman	Steven	8240	3,6,7,15,19,42,51,	Bertram	Carel	8752	3,6,7,15,19,42,51,
Berman	Regina	12140	54,	Berzin	Austra	12938	54,
Bernadel-Huey	Elliot	6795	3,6,7,15,19,42,51,	Berzok	Maxine	5014	54,
Bernard		764	54,	Berzon	Marshall	7814	3,6,7,15,19,42,51,
Bernard	Christopher	9578	3,6,7,15,19,42,51,	Best	John	12585	54,
Berndt	Dorothy	5386	54,	Beth		742	4,5,6,7,17,19,22,42,44,50,
Bernheimer		499	54,	Beth		809	1,4,15,17,19,22,29,31,34,42,
Bernheimer		3053	1,6,7,11,42,44,	Beth	Barbara	9423	3,5,6,7,15,19,42,51,
Bernheimer		3119	6,7,42,43,44,	Bettencourt		1382	54,
Bernheimer		3572	42,46,	Bettilyon	Ryan	283	2,9,11,13,24,27,31,
Bernier	Rosemary	12526	54,	Bettilyon		1606	13,
Bernstein	Harry	8320	3,6,7,15,19,42,51,	Bettilyon	Ryan	9005	3,6,7,15,19,42,51,
Bernstein	David	9125	3,6,7,15,19,42,51,	Betz	Claudia	8109	3,6,7,15,19,42,51,
Bernstein	Beth	9260	3,6,7,15,19,42,51,	Bevard	Dorothy	10238	3,6,7,15,19,42,51,
Bernstein	Ruby	9703	3,6,7,15,19,42,51,	Bevelacqua	Josh	9707	3,6,7,15,19,42,51,
Berntson	LynMarie	7572	3,6,7,15,19,22,24,42,51,	Beverly	J	13045	54,
Berreis	Ursula	13010	54,	Beyda	Wendy	5806	3,6,7,15,19,42,51,
Berrios	Annabelle	9811	3,6,7,15,19,42,51,	Beynart	Terre	10381	3,6,7,15,19,42,51,
Berry	Shavawn	5984	3,6,7,15,19,42,51,	Bezella	Andrew	7676	3,6,7,15,19,42,51,
Berry	Margaret	6486	3,6,7,15,19,42,51,	Bezuneh	Yodit	10315	3,6,7,15,19,42,51,
Berry	Murry	6613	3,6,7,15,19,42,51,	Bhogaonker	Priya	10648	42,51,
Berry	Linda	10358	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Bi	Connie	8769	3,6,7,15,19,42,51,	Birch	Linda	5723	3,6,7,15,19,42,51,
Biale	Cheryl	12999	54,	Birch	Annie	7609	3,6,7,15,19,42,51,
Bialecki Jr	Timothy	7058	3,6,7,15,19,42,51,	Birch	Martha	8189	3,6,7,15,19,42,51,
Bibey		797	54,	Birgit		10704	42,51,
Bickley	Kendra	6879	3,6,7,15,19,42,51,	Birnberg	Andrew	6394	3,6,7,15,19,42,51,
Bicoy	Sophia	12543	54,	Biron	Armand	13086	54,
Biedak	Louis	10993	42,51,	Bisch	Sean	7709	3,6,7,15,19,42,51,
Bielefeld	Melanie	8450	3,6,7,15,19,42,51,	Bischof	Clifford	6204	3,6,7,15,19,42,51,
Bielen	Denise	6412	3,6,7,15,19,42,51,	Bischoff	Carol	13222	54,
Bielstein		2049	54,	Bishoff	Marcia	5794	3,6,7,15,19,42,51,
Bier	Carol	7647	3,6,7,15,19,42,51,	Bishop	Ray	13013	54,
Bierman	Arthur	10976	42,51,	Bissen	Michelle	6019	3,6,7,15,19,42,51,
Bigelow-Teller	Betsy	30	1,9,19,22,31,43,44,	Bisson-Donahue	Eamon	8735	3,6,7,15,19,42,51,
Biggar	Joanna	8728	3,6,7,15,19,42,51,	Bissonnette	Carol	7452	3,6,7,15,19,42,51,
bikaki	Stella	12973	54,	Bjerke	Bruce	8461	3,6,7,15,19,42,51,
Bild	Elaine M	5300	54,	Black		2733	25,41,43,
Bilick	Sari	7002	3,6,7,15,19,42,51,	Black	Jeff	5171	54,
Bilorusky	John	9066	3,6,7,15,19,42,51,	Black	Martha	5189	54,
Binder	Cynthia	7221	3,6,7,15,19,42,51,	Black	Deborah	5235	54,
Binder	Jane	8850	3,6,7,15,19,42,51,	Black	Helen	5343	54,
Bingham	Mary	12358	54,	Black	Sherry	5702	3,6,7,15,19,42,51,
Bing-You	Kathryn	6754	3,6,7,15,19,42,51,	Black	Deborah	10579	3,42,51,
Binnewies	Sonya	8880	3,6,7,15,19,42,51,	Black	Nancy	12864	54,
Birch		2563	1,4,5,8,9,11,22,29,30,31,42,44,46,	Blackley	Anthony	13028	54,
Birch		2689	1,2,4,19,	Blacklidge-Carty	Lori	13238	22,
				Blackman	Candice J.	7366	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Blackwell	Mike	5440	54,	Blessing	William	8114	3,6,7,15,19,42,51,
Blackwell	Kerry	5456	54,	Bleymeyer	Michele	12652	54,
Blackwell	Mary Ann	8632	3,6,7,15,19,42,51,	Bloom	Erika	6906	3,6,7,15,19,42,51,
Blair		31	4,5,9,10,13,14,22,41,43,44,	Bloom	Amanda	11034	42,51,
Blake	Barbra	7730	3,6,7,15,19,42,51,	Blosser		924	29,
Blake	Wanda	7900	3,6,7,15,19,42,51,	Blott	Michael	6013	3,6,7,15,19,42,51,
Blakely	Linda	6142	3,6,7,15,19,42,51,	Blume	Rebekah	7240	3,6,7,15,19,42,51,
Blakley		1879	3,4,5,7,9,10,11,15,17,42,43,44,53,	Blumenstein	Kit	13212	54,
Blalack	Shannon	9694	3,6,7,15,19,42,51,	Blumenstock	Elizabeth	9114	3,6,7,15,19,42,51,
Blancaflor	Cynthia	6834	3,6,7,15,19,42,51,	Blumgart		1064	27,
Blank		2208	54,	Blumgart		1617	27,
Blank	Zoe	6615	3,6,7,15,19,42,51,	Blumstein		529	54,
Blankinship	Ben	10028	3,6,7,15,19,42,51,	Boain	Derek	8611	3,6,7,15,19,42,51,
blanton	rollin	12460	54,	Bobb	Pete	9720	3,6,7,15,19,42,51,
Blasey	Bill	9586	3,6,7,15,19,42,51,	Bobb	Josh	10013	3,6,7,15,19,42,51,
Blasingame		814	54,	bobguter		777	1,4,5,6,7,9,10,11,15,50,
Blasingame	Samie	9642	3,6,7,15,19,42,51,	Bobko	Brian	12832	54,
Blaskovich		1377	54,	Bobo	Brent	12857	54,
Blatt		1400	1,2,4,5,6,8,25,	bock	josh	12256	54,
Blatt	Miriam	7515	3,6,7,15,19,42,51,	Bockelman		760	42,43,
Blau	Ricki	5141	54,	Bodman	Sharon	12528	22,
Blazeby	Korina	7724	3,6,7,15,19,42,51,	Bodo	Andrew	9143	3,6,7,15,19,42,51,
Blechar	Heidi	13211	54,	Bogas	Roy	6105	3,6,7,15,19,42,51,
Blechman	Michael	8416	3,6,7,15,19,42,51,	Bogdanov	Alexei	8129	3,6,7,15,19,42,51,
Blendstrup	Gerhard	9158	3,6,7,15,19,42,51,	boggess	arielle	12008	54,
				Boggia	Tommaso	5269	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Boggian	Alessandro	8180	3,6,7,15,19,42,51,	Boneparth	Janine	6411	3,6,7,15,19,42,51,
Boggiano	Susan	5551	3,6,7,15,19,42,51,	Bonett		1993	54,
Boggs	Nicholas	7483	3,6,7,15,19,42,51,	Bonett	Leslie	6780	3,6,7,15,19,42,51,
Bohman	Claire	9772	3,6,7,15,19,42,51,	Bongiovanni		1835	54,
Bohn	Anita	8695	3,6,7,15,19,42,51,	Bongiovanni	John	5212	54,
Bohn	Willard	9022	3,6,7,15,19,42,51,	Boni	Zaven	10741	42,51,
Bohn	Christina	9570	3,6,7,15,19,42,51,	Boniello		33	9,43,44,
Bohn	Diana	10537	3,42,51,	Boniface	Kathryn	12308	54,
bohn	linnaea	12480	54,	Bonk	Denise	5600	3,6,7,15,19,42,51,
Bokhour	Jeanette	7455	3,6,7,15,19,42,51,	Bonney	S	6931	3,6,7,15,19,42,51,
Bolanos	Don	12435	54,	Bonsall	Patricia	7551	3,6,7,15,19,42,51,
Bolick	David	6437	3,6,7,15,19,42,51,	Booker	Matthew	5015	54,
Boller	Bonnie	7277	3,6,7,15,19,42,51,	Booker	Fred	5338	54,
Bolles	Jacqueline	10973	42,51,	Booker/Mickelson		528	54,
Bolt	Dianna	5053	54,	Boom	Terry	5419	54,
Bolter	Judy	8984	3,6,7,15,19,42,51,	Boone	Margie	5963	3,6,7,15,19,42,51,
Bolton	Tira	7525	3,6,7,15,19,42,51,	Boone	William	7980	3,6,7,15,19,42,51,
Bolton	Sarah	8424	3,6,7,15,19,42,51,	Boone	Linda	12330	54,
Bolton-Schmukler	Kate	9723	3,6,7,15,19,42,51,	Boornazian	Jill	6932	3,6,7,15,19,42,51,
Bomse	Ruben	9532	3,6,7,15,19,42,51,	Booth	Margaret	5260	54,
Bonacini	Casandra	5009	54,	Booth	Jennifer	9344	3,6,7,15,19,42,51,
Bondonno	Pauline	6717	3,6,7,15,19,42,51,	Booz		1368	54,
Bone		1872	15,31,	Borchardt		34	4,22,31,44,
Boneparth		32	1,4,22,	Borchardt		1156	4,6,7,19,31,44,
Boneparth		579	1,4,22,31,	Borg	Carmen	9130	3,6,7,15,19,42,51,
Boneparth		2439	1,3,31,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Borgases		3565	4,29,30,31,	Bove	Stephen	8000	3,6,7,15,19,42,51,
Borglum	David	6489	3,6,7,15,19,42,51,	Boven	Leah	5967	3,6,7,15,19,42,51,
Bornholtz	Gavin	12339	54,	Bowart		3001	54,
Borowitz		780	1,22,27,	Bowen		1145	3,5,9,11,13,14,15,17,22,24,31,48,
Borsook		2979	9,13,15,19,42,44,	Bowen		1719	2,3,4,5,9,11,13,14,15,22,27,31,42,43,44,48,
borsook	paulina	6814	3,6,7,15,19,42,51,	Bowen	Charlie	5248	54,
Borst-Rothe	Karen	9030	3,6,7,15,19,42,51,	Bowen	Ben	5413	54,
Borucki	Bonnie	10378	3,6,7,15,19,42,51,	Bowen	Jessica	10223	3,6,7,15,19,42,51,
Borum	Jeffrey	7022	3,6,7,15,19,42,51,	Bowen	Laraine	12936	54,
Bose		35	3,4,5,9,13,14,15,16,22,24,31,32,42,50,52,	Bower	Rosemary A.	6664	3,6,7,15,19,42,51,
Bose		615	54,	bowers		2676	54,
Bose		2633	2,3,6,7,9,52,	Bowers	Anita	5046	54,
Bose	Rupa	12769	50,	Bowes	Chuck	5240	54,
Bose	Rupa	11100	24,42,51,	Bowles	Jennifer	9402	3,6,7,15,19,42,51,
Bossert	Anne	9984	3,6,7,15,19,42,51,	Bowles	Carmi	12517	54,
Botcher	Eric	8972	3,6,7,15,19,42,51,	Bowles	Carmi	10808	42,51,
Bottesch	Marla	12756	54,	Bowling	Sandra	6391	3,6,7,15,19,42,51,
Bouchane	Ronald	5849	3,6,7,15,19,42,51,	Bowman	Arnita	16	5,18,22,27,31,48,
Bouchard	Aaron	12093	54,	Bowman		756	54,
Boudart		1348	1,2,4,11,15,44,	Bowman	Katherine L.	10434	3,7,19,42,51,
Boudreaux	Karen	8655	3,6,7,15,19,42,51,	Bowman	Arnita	11024	42,51,
Boudreaux	Karen	10669	42,51,	Bowman	Mark	11075	42,51,
Boulet	Eric L	8215	3,6,7,15,19,42,51,	Boyarin	Chava	9166	3,6,7,15,19,42,51,
Boum	Leron	12499	54,	Boyd	Kathe	6704	3,6,7,15,19,42,51,
Bourquin	Stephanie	5810	3,6,7,15,19,42,51,	Boyd	Melissa	9383	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Boyd	Laurel	13158	54,	Breed		538	54,
boyd	ernest	12772	54,	Breed		2515	5,6,9,43,
Boyle	Colleen	6260	3,6,7,15,19,42,51,	Breed	Martha	5453	54,
Boyle	Mary E	9901	3,6,7,15,19,42,51,	Breen	Patricia	7168	3,6,7,15,19,42,51,
Boyne	Deirdre	12474	54,	Bregante	Jennifer	6816	3,6,7,15,19,42,51,
Boynton	Brittany	12697	54,	Brennan	Pat	5297	54,
Brabec	Sara	9021	3,6,7,15,19,42,51,	Brennan	Marie	7292	3,6,7,15,19,42,51,
Brace	Sammy	12588	54,	Brenneis		2877	54,
Bracke	Andrew	12563	54,	Brenneis		2546	2,4,5,7,8,11,31,34,43,
Bradley	Mike	217	1,2,4,5,9,15,43,44,	Brenneis		2548	11,31,34,
Brady	Katherine	5130	54,	Brenner		36	1,4,9,15,21,22,24,31,
Bragdon	Elizabeth	6098	3,6,7,15,19,42,51,	Brenner	Summer	10357	3,6,7,15,19,42,51,
Bragg	Tessa	12869	54,	Brent	Colleen	9034	3,6,7,15,19,42,51,
braguer	manon	12178	54,	Brenton	Daniel	9305	3,6,7,15,19,42,51,
Bramhall		1774	4,11,31,	Bresilge	Heidi	12283	54,
Bramhall	Mark	6912	3,6,7,15,19,42,51,	Breslin	Karen	10776	42,51,
Brand	Donna	5705	3,6,7,15,19,42,51,	Bress	Daniela	12001	54,
Brandwynne	Robbie	9354	3,6,7,15,19,42,46,51,	Bresso	Mike	5309	54,
Brannigan	Joanne	7199	3,6,7,15,19,42,51,	Breton	Hopi	7932	3,6,7,15,19,42,51,
Branzburg	Judith	9217	3,6,7,15,19,42,51,	Breunig		1359	54,
Brast	Dave	7556	3,6,7,15,19,42,51,	Breunig		1941	15,
Bratkievich	Alex	10398	3,7,15,19,42,51,	Breunig	Mary	8703	3,6,7,15,19,42,51,
Bratton	Ronda	12884	54,	Brewer	Melissa	12050	54,
Bray	Magdalen	12912	54,	Brewin		38	9,10,15,22,24,31,42,
Brazis	Chris	10793	42,51,	Brewin		2711	5,9,15,31,43,
Breazeale	Vicki	9145	3,6,7,15,19,42,51,	Brewin	C. E.	5988	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Brewin	Mary Ann	11076	42,51,	Brodsky	Sarah	7865	3,6,7,15,19,42,51,
Brewster		2157	54,	Broese	Anthony	7777	3,6,7,15,19,42,51,
Brewster	George	6477	3,6,7,15,19,42,51,	Brogden	Penny	10355	3,6,7,15,19,42,51,
Bridges	Gary	9825	3,6,7,15,19,42,51,	Broker-Bullick	Jillian	9359	3,6,7,15,19,42,51,
Bridges	Rachel	9826	3,6,7,15,19,42,51,	Broner	Sari	5153	54,
Brien	Christian	12345	54,	Bronson	Wanda	5791	3,6,7,15,19,42,51,
Brigagliano	Christine	10467	3,7,19,22,27,42,51,	Bronstein	Debra A.	7661	3,6,7,15,19,42,51,
Briggs	Dixie	6985	3,6,7,15,19,42,51,	Brontman	Gennadiy	9794	3,6,7,15,19,42,51,
Brigham	Shannon	6002	3,6,7,15,19,42,51,	Brook-Kothlow		1159	42,
Brigham	Kristin	10753	42,48,51,	Brook-Kothlow		1736	2,4,42,43,44,
Brightbill		735	46,	Brook-Kothlow	Marit	10256	3,6,7,15,19,42,51,
Brigmann	Ria	9489	3,6,7,15,19,42,51,	Brooks		1137	42,46,
Brill	Laren	5325	54,	Brooks		1713	2,4,42,43,46,
Brimhall	Mary Jane	5129	54,	Brooks	Robert	5904	3,6,7,15,19,42,51,
Brinn	Kelly	6386	3,6,7,15,19,42,51,	Brooks	Clifford	6472	3,6,7,15,19,42,51,
Brinner	Benjamin	9159	3,6,7,15,19,42,51,	Brooks	T. H.	7045	3,6,7,15,19,42,51,
Britt		39	3,31,42,	Brooks	Robin	9198	3,6,7,15,19,42,51,
Britt		1143	44,	Brooks	Patricia	9443	3,6,7,15,19,42,51,
Britzius	Alex	7289	3,6,7,15,19,42,51,	Brooks	Eric	10327	3,6,7,15,19,42,51,
Brock	Annie	12311	54,	Brooks	Jennifer	12814	54,
Brodersen		1896	54,	Broome		2148	54,
Brodersen		2217	54,	Broome	Claire	5102	54,
Brodersen		2536	1,2,4,5,6,7,11,31,41,43,	Brophy	Lindsey	8090	3,6,7,15,19,42,51,
Brodersen	Shelagh	3220	54,	Brosnan	Norma	6056	3,6,7,15,19,22,42,51,
Brodersen	Shelagh	5327	54,	Brott	Cory	6651	3,6,7,15,19,42,51,
Broderson	Robert	5342	54,	Brougham	Thomas	5131	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Brouhard	Jennifer	9844	3,6,7,15,19,42,51,	Brown	Janelle	8403	3,6,7,15,19,42,51,
Brown		701	54,	Brown	Sara	9076	3,6,7,15,19,42,51,
Brown	Halsey	1494	1,2,4,6,8,13,22,43,44,	Brown	Cassidy	9658	3,6,7,15,19,42,51,
Brown		2197	54,	Brown	Laurie	9731	3,6,7,15,19,42,51,
Brown		2491	8,11,22,24,31,43,44,	Brown	Phil	9971	3,6,7,15,19,42,51,
Brown		2815	54,	Brown	Daniel	10504	3,19,42,51,
Brown		2933	1,6,7,9,10,13,14,15,31,43,44,	Brown	Vicki	10644	42,51,
Brown	Julie	3272	3,6,9,10,13,14,21,22,24,42,53,	Brown	Ross	10844	42,51,
Brown	Irene	6000	3,6,7,15,19,42,51,	Brown	Daniel	10897	42,51,
Brown	Chana	6071	3,6,7,15,19,42,51,	Brown	Ian	12919	54,
Brown	Liz	6125	3,6,7,15,19,42,51,	Brown	Kim	12776	54,
Brown	Lew	6154	3,6,7,15,19,42,51,	Brown	Allison	12801	54,
Brown	Susan	6166	3,6,7,15,19,42,51,	Brown Gucciardo	Dawn	12544	54,
Brown	Madison	6218	3,6,7,15,19,42,51,	Brown Jones		1788	1,3,4,6,9,11,13,15,42,43,44
Brown	Jay	6550	3,6,7,15,19,22,42,51,	Brown/Robbins		519	54,
Brown	Jean Pauline & Tom	6616	3,6,7,15,19,42,51,	Browning	Jemma	12017	54,
Brown	Jasmine	7504	3,6,7,15,19,42,51,	Browning	Cassandra	13034	54,
Brown	Carina	7623	3,6,7,15,19,42,51,	Browning	Crystal	12900	54,
Brown	Donna	7688	3,6,7,15,19,42,51,	Brownstein	Carol	5128	54,
Brown	Laura	7718	3,6,7,15,19,42,51,	Brownstein	Alex	12948	54,
Brown	Tanya	7793	3,6,7,15,19,42,51,	Bru	Au	6226	3,6,7,15,19,42,51,
Brown	Sue	7831	3,6,7,15,19,42,51,	Brubaker	Wendy	339	1,2,4,11,12,44,
Brown	Claire	7855	3,6,7,15,19,42,51,	Brubaker	Susan	10496	3,19,42,51,
Brown	Sheena	7864	3,6,7,15,19,42,51,	Brubaker	Wendy	10929	42,51,
Brown	Skot	8150	3,6,7,15,19,42,51,	Bruce		1042	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Bruce		1602	27,	Brzezinski	Carol	8687	3,6,7,15,19,42,51,
Bruce		2002	54,	Bucciarelli	Barbara	6680	3,6,7,15,19,42,51,
Bruce	Lisa	2242	54,	Buchanan	Leslie	5540	3,6,7,15,19,42,51,
Bruce		2267	9,11,19,22,23,24,36,	Buchanan	Petra	8864	3,6,7,15,19,42,51,
Bruce		3048	54,	Buchla	Ezra	10018	3,6,7,9,10,15,19,42,51,
Bruce	Robert	10637	22,42,51,	Buckingham	Cheryl	8016	3,6,7,15,19,42,51,
Bruck	Nicole	5570	3,6,7,15,19,42,51,	Buckingham-Brown	Rev. Dr. Beth	7505	3,6,7,15,19,42,51,
Brückner	Michael	9733	3,6,7,15,19,42,51,	Buckley		1195	54,
Bruckner	Anthony	10890	42,51,	Buckley		1749	54,
Bruder	Susannah	10678	42,51,	Buckley		2675	54,
Brudney		782	4,5,9,10,11,18,19,22,32,43,44,46,48,	Bucklin	Linda	5876	3,6,7,15,19,42,51,
Brudvig	Kim	12598	54,	Buczynski		3167	54,
Bruehl	Richard	5188	54,	Buczynski	Beth	3167	54,
Bruehl	Richard	9094	3,6,7,15,19,42,51,	Budd	Steve	7775	3,6,7,15,19,42,51,
Bruff	Anne	5400	54,	Buell	Barbara	12550	54,
Brugman	Cheri	9995	3,6,7,15,19,51,	Buffa	Kristen	5582	3,6,7,15,19,42,51,
Brulenski	Joseph	5062	54,	Buginas	Kristen	10145	3,6,7,15,19,42,51,
Bruni	Curzio	13149	54,	Buhangus	J	12789	54,
Brunk	Tina Schnake	6010	3,6,7,15,19,42,51,	bukowski	sandra	12426	54,
Bryan	Hilary	10305	3,6,7,15,19,42,51,	Bulakowski	Paul	7377	3,6,7,15,19,42,45,46,51,
Bryan	Amber	10760	42,51,	Bulat	Evgeny	6401	3,6,7,15,19,42,51,
Bryant	Rebecca	5561	3,6,7,15,19,42,51,	Bull	Barbara and Henrik	5202	54,
Bryant	Jared	7403	3,6,7,15,19,42,51,	Bullard	Chelsi	9064	3,6,7,15,19,42,51,
Bryer		1275	54,	Buller		2216	54,
Bryson		699	54,	Bullock		1231	43,44,46,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Bullock	Deborah	9289	3,6,7,15,19,42,51,	Burkhart-Grove		2191	11,36,42,43,44,48,
Bullwinkel	Lisa	8582	3,6,7,15,19,42,51,	Burley		1937	1,4,7,8,11,13,15,22,23,24,4 2,43,44,
Bulos	Howard I	7428	3,6,7,15,19,42,51,	Burlison	JoAnne	8875	3,6,7,15,19,42,51,
Bunnell	Dave	5108	54,	Burmester	Mary	9027	3,6,7,15,19,42,51,
Bunnell	Theodore	10096	3,6,7,15,19,42,51,	Burnett		894	54,
Bunnin		1421	54,	Burnette	Katie	9607	3,6,7,15,19,42,51,
Bunnin		1892	54,	Burnham	Tracy	8130	3,6,7,15,19,42,51,
Bunnin	Brad	5283	54,	Burno	Larena	8191	3,6,7,15,19,42,51,
Bunton	Dennis	6275	3,6,7,15,19,42,51,	Burns		659	9,31,
Buntring	Kristen	5146	54,	Burns	Jerry	5748	3,6,7,15,19,22,42,51,
Buongiorno	Jean-Paul	8446	3,6,7,15,19,42,51,	Burns	Vicki-Lyn	8169	3,6,7,15,19,42,51,
Burbick	Curtis	8806	3,6,7,15,19,42,51,	Burns	Kathryn	8651	3,6,7,15,19,42,51,
Burch	Beverly	8157	3,6,7,15,19,42,51,	Burris	Larry	10720	42,51,
Burch	Benjamin	9917	3,6,7,15,19,42,51,	Burt		984	22,
Burd	Faunce	12192	54,	Burt		1600	22,
Burdett	Regina	5800	3,6,7,15,19,42,51,	Burt	Shannon	7338	3,6,7,15,19,42,51,
Burgan	Kathleen	8627	3,6,7,15,19,42,51,	Burt	Sarah	8224	3,6,7,15,19,42,51,
Burgess		3089	54,	Burton	Carol	5908	3,6,7,15,19,42,51,
Burgoyne	Christa	10457	3,7,19,42,51,	Burton	Jennifer	7700	3,6,7,15,19,42,51,
Burke	Kathleen	5820	3,6,7,15,19,42,51,	Burttt		2161	54,
Burke	Nancy	6547	3,6,7,15,19,42,51,	Burwell	Vita	9459	3,6,7,15,19,42,51,
Burke	Paul	8071	3,6,7,15,19,42,51,	Busani	Elena	12454	54,
Burke	Michael	9458	3,6,7,15,19,42,51,	Busby	Mary	7638	3,6,7,15,19,42,51,
Burkey	Patricia	7804	3,6,7,15,19,42,51,	Busch	M	12422	54,
Burkhardt	Brian	6148	3,6,7,15,19,42,51,	Busler	Michele	12340	54,
				Buslot	Chantal	12044	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Bustos	Laura	5513	3,6,7,15,19,42,51,	Cabuco		3539	2,4,31,41,48,
Butensky	Gail	7799	3,6,7,15,19,42,51,	Cabunoc	Eric	10040	3,6,7,15,19,42,51,
Butkus	Dolores	6487	3,6,7,15,19,42,51,	Cacace	Chris	8055	3,6,7,15,19,42,51,
Butler		1300	6,9,44,	Cade	Cathy	9786	3,6,7,15,19,42,51,
Butler	Jennifer	7378	3,6,7,15,19,42,51,	Cadete	Leonor	6993	3,6,7,15,19,42,51,
Butler	Deborah	9635	3,6,7,15,19,42,51,	Cadwell	Hilary	7933	3,6,7,15,19,42,51,
Butler	Taz	12230	54,	Cahill	Rafy	7528	3,6,7,15,19,42,51,
Butler	LaVonne	12824	54,	Cahill	Dorothy	7580	3,6,7,15,19,42,51,
Butler/Freitas		3168	54,	Cain		1436	2,3,4,5,9,13,14,15,16,22,
Butoiu	Ana	12207	54,	Cain	Martha	9484	3,6,7,15,19,42,51,
Butterfield	John	9645	3,6,7,15,19,42,51,	Cajade	Sonia	6122	3,6,7,15,19,42,51,
Buttery	Ricky	12932	54,	Calabrese	Marcello	6791	3,6,7,15,19,42,51,
bx	kx	12570	54,	Calder	Diane	12410	54,
Byers		1441	2,4,22,	Calderone	Daniel	8603	3,6,7,15,19,42,51,
Byers	Andrea	9885	3,6,7,15,19,42,51,	Caldwell	Lydia	5860	3,6,7,15,19,42,51,
Byrd	Becky	12135	54,	Caldwell	Peter	10920	42,51,
Byrne		545	54,	Califano	Shannon	9485	3,6,7,15,19,42,51,
Byrne	Charles	7962	3,6,7,15,19,42,51,	Callahan	Margaret	7374	3,6,7,15,19,42,51,
Byron	Janeyt	5469	54,	Callahan	David	7851	3,6,7,15,19,42,51,
Bysouth	Thomas	6277	3,6,7,15,19,42,51,	Callahan	Jessica	8152	3,6,7,15,19,42,51,
C		5222	54,	Callender	Susan	10453	3,7,19,42,51,
C	Bill	12103	54,	Caller	Susan	5818	3,6,7,15,19,42,51,
C C RYDER		12304	54,	Calvert	Stacey	12663	54,
Caballero		1152	54,	Camarena	Patricia	5545	3,6,7,15,19,42,51,
Caballero		1671	2,4,6,34,43,44,	Cambell		3511	6,11,24,46,
Cabuco		468	54,	Cambier	Danielle	10643	42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Camburn	Karen	5936	3,6,7,15,19,42,51,	Canright	Rebecca	12011	54,
Cameron	Anita	6102	3,6,7,15,19,42,51,	Cantor	Robert	7460	3,6,7,15,19,42,51,
Cameron	Liz	12231	54,	Cantwell		2376	22,42,43,
Camhi		2867	9,13,14,19,	Cantwell	A	9221	3,6,7,15,19,42,51,
Camhi	Gail	8429	3,6,7,15,19,42,51,	Capalbo	Rosanne	10867	42,51,
Camille	Lea	9391	3,6,7,15,19,42,51,	Capps	Kim	12628	54,
Campaigne		1316	1,2,4,6,22,	Caprari	Antonio	13000	54,
Campaigne	Marjorie	6066	3,6,7,15,19,22,42,51,	Caravas	Audra	6314	3,6,7,15,19,42,51,
Campbell		411	34,46,	Carballo	Natalia	6135	3,6,7,15,19,42,51,
Campbell		1827	54,	Cardarelli	Tracy	5663	3,6,7,15,19,42,51,
Campbell		2201	2,4,11,34,43,44,	Cardiff	Judy	9275	3,6,7,15,19,42,51,
Campbell	Chrostopher	5032	54,	Cardoso	Alicia	9816	3,6,7,15,19,42,51,
Campbell	Shalamee	5926	3,6,7,15,19,42,51,	Cardoza	Andrew	7163	3,6,7,15,19,42,51,
Campbell	Alison	7241	3,6,7,15,19,42,51,	Care	Jackie	9475	3,6,7,15,19,42,51,
Campbell	Spencer	8581	3,6,7,15,19,42,51,	caremariew		926	31,
Campbell	Diana	9127	3,6,7,15,19,42,51,	Carey	Tehan	8980	3,6,7,15,19,42,51,
Campbell	Cynthia	10176	3,6,7,15,19,42,51,	Carey	John	10023	3,6,7,15,19,42,51,
Campbell	Thomas	10589	3,42,51,	Cari		785	54,
Campbell	Matt	10626	42,51,	Carl		829	27,
Canada		747	54,	Carleton		2134	1,9,11,31,34,42,43,
Canady	Cassandra	13152	9,19,22,32,	Carleton	Mary	5040	54,
Canez	Gabriella	8998	3,6,7,15,19,42,51,	Carleton	Nancy	9775	3,6,7,15,19,42,51,
Canlas	Melissa Ann	9753	3,6,7,15,19,42,51,	Carlo	Angela	9437	3,6,7,15,19,27,42,51,
Cannady		526	13,	Carlson	Susan	5829	3,6,7,15,19,42,51,
Canning	Susan	7135	3,6,7,15,19,42,51,	Carlson	Richard	10114	3,6,7,15,19,27,34,42,51,
Cannon	John	12300	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Carmi	Ore	6713	3,6,7,15,19,42,51,	Carroll	Tom	4001	6,9,
Carmichael	Jean	8475	3,6,7,15,19,42,51,	Carroll	Patricia	8227	3,6,7,15,19,42,51,
Caroline Taymor		40	1,2,3,4,5,15,22,42,44,	Carson	Sydney	8156	3,6,7,15,19,42,51,
Carolyn		493	27,	Carson	Tamar	8591	3,6,7,15,19,42,51,
Carothers-Liske	Andrew and Jennifer	8435	3,6,7,15,19,42,51,	Carswell		1479	1,2,4,6,8,13,22,43,44,
Carpenter		618	4,19,31,	Carswell	Anita	8594	3,6,7,15,19,42,51,
Carpenter		2797	2,4,	Carter		925	54,
Carpenter		2833	9,10,11,19,48,	Carter	Allen	7862	3,6,7,15,19,42,51,
carpenter		2871	2,4,19,22,48,	Carter	Jaan	8046	3,6,7,15,19,42,51,
Carpenter	Carol	5099	54,	Carter	Susan	9711	3,6,7,15,19,42,51,
Carpenter	Kayla	7703	3,6,7,15,19,42,51,	Carter	Jeffrey	10332	3,6,7,15,19,42,51,
Carpenter	Ben	8096	3,6,7,15,19,42,51,	Carter	Christina	10470	3,7,19,42,51,
Carpenter	Rebecca	8144	3,6,7,15,19,42,51,	Cary		2094	54,
Carpenter	Fernando	10076	3,6,7,15,19,42,51,	Casana	Vici	8641	3,6,7,15,19,42,51,
Carpenter	Victoria	10406	3,7,15,19,42,51,	Case		2158	27,
Carpenter	Sally	11049	42,51,	case		2538	3,8,11,50,
Carpenter	Lu	11098	24,42,51,	Case	Greg	6485	3,6,7,15,19,42,51,
Carpenter	Harry	10593	3,42,48,51,	Casentini	Susan	5776	3,6,7,15,19,42,51,
Carpenter	Paul	11064	42,51,	Casetta	Dilza	12799	54,
Carpenter	John	12922	54,	Casey	Judy	5393	54,
Carr	Claudia	6180	3,6,7,15,19,42,51,	Casey	Michael	7219	3,6,7,15,19,42,51,
Carrara	Pamela	9236	3,6,7,15,19,42,51,	Casey	David	12807	54,
Carrillo	Stephen	7613	3,6,7,15,19,42,51,	Cash	Lisa	12447	54,
Carrol		3280	3,6,9,10,13,14,21,22,24,42,53,	Caskey	Laura	6182	3,6,7,15,19,42,51,
Carroll		1954	54,	Casper	Colette	5673	3,6,7,15,19,42,51,
				Casper	Douglas	12309	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Cassels	Charles	6563	3,6,7,15,19,42,51,	Cauchois	Elizabeth Marie	6910	3,6,7,15,19,42,51,
Cassia		914	42,	Caughman	Erin	10820	42,51,
Cassia	Anne	8590	3,6,7,15,19,42,51,	Cavaluzzo	Laura E	8882	3,6,7,15,19,42,51,
Cassidy		880	54,	Cc	Chris	12976	54,
Cassie		1120	54,	Cecil	Morgan	10017	3,6,7,15,19,42,51,
Cassie		1715	2,4,	Celena		2472	54,
Cassis	Kathryne	9052	3,6,7,15,19,42,51,	CeliaSue Hecht		41	1,2,3,5,13,14,15,22,24,42,44,
Cassius	Dante	9470	3,6,7,15,19,42,51,	Celico	L	9322	3,6,7,15,19,22,42,51,
Castaldi	Carmen	5728	3,6,7,15,19,42,51,	Celik	Mehmet Kemal	5401	54,
Castaneda	Tina	6478	3,6,7,15,19,42,51,	Cendahl		10971	42,51,
Castellino	J.I.	12943	54,	Cernac	Joe	5179	54,
Castle	Virginia	7070	3,6,7,9,15,19,42,50,51,	Cerny		42	1,8,9,10,11,22,31,41,43,44,
Castleberry	Judy	9724	3,6,7,15,19,42,51,	Cerny	Susan	8480	3,6,7,15,19,42,51,
Castleman	Paul	11008	42,51,	CF60-01	Kiser		1,13,22,24,31,44,
Castrillon	Fernando	6513	3,6,7,15,19,42,51,	Chacich	Elizabeth	12872	54,
Castro	Claudia	9386	3,6,7,15,19,42,51,	Chacon		506	11,44,
Caswell		1264	1,2,4,6,11,15,21,22,	Chadwick	Ian	10444	3,7,19,42,51,
Caswell	Gail	9253	3,6,7,15,19,42,51,	Chaffins	Sheila	12509	54,
Cataline	Mark	5803	3,6,7,15,19,42,51,	Chaitman	Elana	5464	54,
Catania	Kimberly	7347	3,6,7,15,19,42,51,	Champagne		1000	12,15,42,
Catipovic	Maja	8869	3,6,7,15,19,42,51,	Chan	Hingman	6191	3,6,7,15,19,42,51,
Catoline	John	8613	3,6,7,15,19,42,51,	Chan	Chengling	6980	3,6,7,15,19,42,51,
Caton	Nancy	7649	3,6,7,13,15,19,42,51,	Chan	Nancy	9953	3,6,7,15,19,42,51,
Catskill	Clover	13091	54,	Chandler	Chrostopher	5077	54,
Cattanach	Herbert G	8203	3,6,7,15,19,42,51,	Chandranatha	Rakesh	12962	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Chandy	Dinah	12826	54,	Chase	Mary	10911	42,51,
Chang	Dora	59	8,9,10,19,22,24,31,42,44,	Chatti	Leila	6836	3,6,7,15,19,42,51,
Chang		2057	6,7,19,32,43,44,	Chaturvedi	Meera	7198	3,6,7,15,19,42,51,
Chang	Shelly	8208	3,6,7,15,19,42,51,	Chavez	Edwin	10008	3,6,7,15,19,42,51,
Chang	Jeesung	8310	3,6,7,15,19,42,51,	Chavez	Anastasia	10120	3,6,7,15,19,42,51,
Chang	D	9222	3,6,7,15,19,42,51,	Cheetham	Ken	6197	3,6,7,15,19,42,51,
Chapler	Susan	6786	3,6,7,15,19,42,51,	Cheetham	Aileen	12196	54,
Chaplin	Juliet	13065	54,	Cheezalini	Nico	7073	3,6,7,15,19,42,51,
Chapman	Linda Ann	5535	3,6,7,15,19,42,51,	Chemouni	Elisabeth	8359	3,6,7,15,19,42,51,
Chapman	John	7563	3,6,7,15,16,19,22,27,42,51,	Chen	Lina	6302	3,6,7,15,19,42,51,
Chapman	John	7992	3,6,7,15,19,42,51,	Chen	Nora	7393	3,6,7,15,19,42,51,
Chapman	Michael	10180	3,6,7,15,19,42,51,	Chen	William	7599	3,6,7,15,19,42,51,
Chapman	Margaret	12903	54,	Chen	Cindy	7627	3,6,7,15,19,42,51,
Chappell	Mickie	5611	3,6,7,15,19,42,51,	Cheney		858	54,
Char	Elizabeth M.	7693	3,6,7,15,19,42,51,	Cheng	DeWitt	6052	3,6,7,15,19,42,51,
Charity	Jeff	12157	54,	Chernicoff	Stephen	5273	54,
Charkowski	Elaine	11018	42,51,	Chernoff	Jenya	8412	3,6,7,15,19,42,51,
Charles-Harris	Stina	9585	3,6,7,15,19,42,51,	Cherry	Chris	6629	3,6,7,15,19,42,51,
Charman	Margaret	5613	3,6,7,15,19,42,51,	Cherry	christopher	12603	54,
Charney	Ross	9974	3,6,7,15,19,42,51,	Chervin	Lena	9609	3,6,7,15,19,42,51,
charonnat		857	46,	Chesler	Jill	7867	3,6,7,15,19,42,51,
Charrier	Philippe	12188	54,	Cheu	Cheryl	8997	3,6,7,15,19,42,51,
Charron-Martin	Alexandre	12562	9,14,21,	Cheyne		689	1,16,19,27,
Chase	Kate	7451	3,6,7,15,19,42,51,	Cheyne	Andrew	10314	3,6,7,9,10,14,15,19,22,24,42,51
Chase	Janet	12877	54,	Chi	Ani Mae	13202	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Chicarelli	Diane Lee	5828	3,6,7,15,19,42,51,	Chrisman	Christine	9861	3,6,7,15,19,42,51,
Chick		486	44,	Christensen	Paula	10099	3,6,7,15,19,42,51,
Chick	Warren	6205	3,6,7,15,19,42,51,	Christensen	Kaela	12485	36,37,
Chick	Warren	9654	3,6,7,15,19,21,27,42,51,	Christenson	LJ	6457	3,6,7,15,19,42,51,
Chieco	Sara	8126	3,6,7,15,19,42,51,	Christoffer	Margaret	9957	3,6,7,15,19,42,51,
Child	Ginger	5808	3,6,7,15,19,42,51,	Christoplos	Laura	12931	54,
Child	Katrina	10906	42,51,	Christy	Heather D	6796	3,6,7,15,19,42,51,
Childs	Linda	9358	3,6,7,15,19,42,51,	Chuan-Riley	Elizabeth	9617	3,6,7,15,19,42,51,
Childs	Rev Alexandra	9427	3,6,7,15,19,32,42,49,51,	Chui		44	2,4,15,22,31,32,42,
Chilvers	Kimberly	9695	3,6,7,15,19,42,51,	Chulada		1012	54,
Chin	Hong	5446	54,	Chun		656	27,31,
Chin	Jason	13167	54,	Churchill		1855	1,4,22,42,
Chip		3557	31,44,	Churchill		2537	1,2,4,5,6,9,10,11,15,17,18, 19,31,42,43,44,48,
Chirico		1805	1,22,	Churchill	Angela	6813	3,6,7,15,19,42,51,
Chiu	Jonathan	5529	3,6,7,15,19,42,51,	Chyburayev	Sergey	12978	54,
cho	sun	12813	54,	Ciancimino	S.	5546	3,6,7,15,19,42,51,
Choate	Christina	7154	3,6,7,15,19,42,51,	Cicalla Junior	Martin Anthony	10101	3,6,7,15,19,42,51,
Choate	Fred	7471	3,6,7,15,19,42,51,	Cichon	Helana	5850	3,6,7,15,19,42,51,
Chou	Amandine	12746	54,	Cidal	Suzie	8176	3,6,7,15,19,42,51,
Chouinard		2859	54,	Cimino	Maryrose	12736	54,
Chouinard	Devin	12100	54,	Cinelli	Claudia	10112	3,6,7,15,19,27,42,51,
Choules	Tara	6262	3,6,7,15,19,42,51,	Cinelli	Claudia	12131	54,
Chow	Adrienne	10701	42,51,	Cipolla	Ora	5086	54,
Choy	Frankie	6622	3,6,7,15,19,42,51,	Cipperly		1260	54,
Chris C		2978	22,	Circharo	John	13195	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Circiello		2492	54,	Clarke	Cher	13200	54,
Cisper	Christopher	10069	3,6,7,15,19,42,51,	Clarnece	Zachary	6736	3,6,7,15,19,42,51,
Citrin	Bessie	5537	3,6,7,15,19,42,51,	Clary		45	1,2,3,4,5,8,9,11,15,16,19,2 1,22,31,32,42,43,44,46,47, 50,51,53,
Citrin	Anneka	9497	3,6,7,15,19,42,51,	Clausen	Ina	5349	54,
Citty	Krystal	9590	3,6,7,15,19,42,51,	Clausen	Maren	12888	54,
Cizauskas	Carrie	9986	3,6,7,15,19,42,51,	clayton	gina	12406	54,
Claire		874	54,	Clear		2858	29,43,50,51,
Clambaneva	Catherine	8474	3,6,7,15,19,42,51,	Cleary	Erica	9441	3,6,7,15,19,42,51,
Clancy	Liadain	6456	3,6,7,15,19,42,51,	Cleek	karen	5196	54,
Clarence	Judy	7578	3,6,7,15,19,42,51,	Clein	LM	9651	3,6,7,15,19,42,51,
Clarence	Henry	9582	3,6,7,15,19,42,51,	Clements	Carolyn	6737	3,6,7,15,19,42,51,
Clark		1160	1,4,15,27,34,	Clerici & family	N. J.	7309	3,6,7,15,19,42,51,
Clark		1690	5,15,34,43,44,	Cliff-Evans	Kristina	12277	54,
Clark	John L.	6365	3,6,7,15,19,42,51,	Cliffod	Donna	9719	3,6,7,15,19,42,51,
Clark	Leslie	6544	3,6,7,15,19,22,34,42,51,	clifford		2444	43,48,
Clark	Karen	7166	3,6,7,15,19,42,51,	Clifford	Meghan	9541	3,6,7,15,19,42,51,
Clark	Rebecca	8204	3,6,7,15,19,42,51,	Clift	Earlyne	5166	54,
Clark	Naomi	8262	3,6,7,15,19,42,51,	Cline	Thomas W	5097	54,
Clark	Rachel	8636	3,6,7,15,19,42,51,	Clingman	Leon	12220	54,
Clark	Shad	8760	3,6,7,15,19,42,51,	Clinton	Arthur	8572	3,6,7,15,19,42,51,
Clark	Marika	8787	3,6,7,15,19,42,51,	Clothier		1393	54,
Clark	Tehran	10545	3,29,36,37,42,51,	Clubb	Louise	9496	3,6,7,15,19,42,51,
Clark	Rebecca	12445	54,	Clurman	Dan	10419	3,7,15,19,42,51,
Clarke	John	9200	3,6,7,15,19,42,51,	Cobb		2572	2,4,5,7,18,19,42,44,46,50,
Clarke	Babs	12836	54,	Cobb	Jeff	6185	3,6,7,15,19,42,51,
Clarke	Nancy	10567	3,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Cobb	Rachel	6874	3,6,7,15,19,42,51,	Cohen	Hagit	9150	3,6,7,15,19,42,51,
Cobb	Cindy	10878	42,51,	Cohen	Anna	9741	3,6,7,15,19,42,51,
Cobbett		1949	54,	Cohen	Daniel	10481	3,7,19,42,51,
Cobbledick	Steven	5330	54,	cohen	tova	12338	54,
Cochran		1781	4,8,11,14,24,27,42,43,44,	Cohen	Basha	8785	3,6,7,15,19,42,51,
Cochran		2402	8,11,22,31,42,	cohen	naomi	13227	54,
Cochran	Eli	5364	54,	Cohn		1190	2,4,19,31,
Cochran	Joyce	8290	3,6,7,15,19,42,51,	cohn		1766	9,43,44,
Cody	Kelsey	6448	3,6,7,15,19,42,51,	Cohn	Michael E.	7392	3,6,7,15,19,42,51,
Coffin	Stephen	5430	54,	Cohn	Sylviane	7921	3,6,7,15,19,42,51,
Coffin	Leah	9740	3,6,7,15,19,42,51,	Cohn	Patricia	8862	3,6,7,15,19,42,51,
Cogley	Ann	7363	3,6,7,15,19,42,51,	Cohn	Patricia	9238	3,6,7,15,19,22,42,49,51,
Cohen	Eileen	85	4,6,8,11,22,31,42,	Colby	David	8564	3,6,7,15,19,42,51,
Cohen		569	54,	Cole		47	1,2,4,18,22,27,31,34,
Cohen		3024	2,4,9,13,14,15,24,27,29,48,	Cole		692	1,34,
Cohen	Ella	3258	3,6,9,10,13,14,21,22,24,42,53,	Cole	Nancy	9807	3,6,7,15,19,42,51,
Cohen	Eva	5090	54,	Cole	Kevin	9912	3,6,7,15,19,42,51,
Cohen	Dan	5399	54,	Cole	Veronika	10350	3,6,7,15,19,42,51,
Cohen	Katherine	6189	3,6,7,15,19,42,51,	Cole	Linc	12310	54,
Cohen	Lisa	6755	3,6,7,15,19,42,51,	Coleman		3143	2,4,9,13,31,
Cohen	Averie	6891	3,6,7,15,19,42,51,	Coleman	Nicola	5968	3,6,7,15,19,42,51,
Cohen	Eileen	7486	3,6,7,15,19,42,51,	Coleman	Sha	8577	3,6,7,15,19,42,51,
Cohen	Jesse	7698	3,6,7,15,19,42,51,	Coleman	Candace	10283	3,6,7,15,19,42,51,
Cohen	Cindy	7710	3,6,7,15,19,42,51,	Coles	Eileen	9006	3,6,7,15,19,42,51,
Cohen	Julie	8074	3,6,7,15,19,42,51,	Collier	Fran	8600	3,6,7,15,19,42,51,
Cohen	Andrew	8087	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Collins		2273	27,34,	Conley	Assad	9428	3,6,7,15,19,42,51,
Collins	Zipporah	5082	54,	Conley	Jared	9520	3,6,7,15,19,42,51,
Collins	Amy	6668	3,6,7,15,19,42,51,	Conn		3530	54,
Collins	Nicholas	6703	3,6,7,15,19,42,51,	Conner	Jean	5187	54,
Collins	Bill	7340	3,6,7,15,19,42,51,	connolly	Patricia	5743	3,6,7,15,19,42,51,
Collins	Rhonda	9677	3,6,7,15,19,42,51,	Connolly	Joan	6945	3,6,7,15,19,42,51,
Collins	Rachel	10991	42,51,	Connolly	Matthew	7901	3,6,7,15,19,42,51,
Collins	Anne	12228	54,	Connolly	James	8626	3,6,7,15,19,42,51,
Collins	Craig	9041	3,6,7,15,19,42,51,	Connolly Haupt	Meghan	10508	3,19,42,51,
Collins	gerry	13090	54,	Connor	Allison	6159	3,6,7,15,19,42,51,
Colman	Emily	8132	3,6,7,15,19,42,51,	Conor		2765	8,22,31,42,
Colotti		2873	9,13,14,19,22,24,48,	Conrad	Lisa	6746	3,6,7,15,19,42,51,
Colotti	Deborah	5574	3,6,7,15,19,42,51,	Conrad	Jody	6971	3,6,7,15,19,42,51,
Colson		50	54,	Conrad	BJ	10117	3,6,7,15,19,42,51,
Colson		1354	5,6,42,	Cons	Alexandra	6196	3,6,7,15,19,42,51,
Colwell	Kate	5144	54,	Conti	R	12848	54,
Comacchio	Elisabetta	8783	3,6,7,15,19,42,51,	Contis	Leda	8524	3,6,7,15,19,42,51,
Comeau		1301	54,	Conway	Zandra	7019	3,6,7,15,19,42,51,
Comitas	Mara	5925	3,6,7,15,19,42,51,	conway	elaine	12953	54,
Compton	Lena	6463	3,6,7,15,19,42,51,	Cook	Dan	8796	3,6,7,15,19,42,51,
Compton	Nancy	6582	3,6,7,15,19,42,51,	Cook	Elizabeth	8959	3,6,7,15,19,42,51,
Comstock	Sharon	5840	3,6,7,15,19,42,51,	Cook	Christopher	9697	3,6,7,15,19,42,51,
Condon	Alysia	13	1,5,9,10,11,18,19,21,32,33, 42,43,44,	Cooke	Brian	6919	3,6,7,15,19,42,51,
Condon	Alysia	10006	3,6,7,15,19,42,51,	Cooke	Joanne	9078	3,6,7,15,19,42,51,
Cone	David	5060	54,	Cooksey		972	54,
				Cooksey	Jonathan	9979	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Cool		681	54,	Corneglio	Sarah	10544	3,42,51,
Cooley	Paul	7993	3,6,7,15,19,42,51,	Cornet	Marie Christine	8609	3,6,7,15,19,42,51,
Coolidge		2882	54,	Cornish	Jayson	8945	3,6,7,15,19,42,51,
Coolidge		2986	2,4,22,	Correll	Leslie	10309	3,6,7,15,19,42,51,
Coolidge	Charles Stuart	9763	3,6,7,15,19,42,51,	Corse	Victoria	5948	3,6,7,15,19,42,51,
Coolidge	Rebecca M.	9798	3,6,7,15,19,42,51,	Corsick		53	1,2,4,19,21,22,31,34,42,43,44,
Cooper		1972	54,	Corsick	Jeanne	2222	5,6,11,19,22,31,34,
Cooper		2923	1,6,7,	Corson-Knowles		1127	27,34,
Cooper	Talia	6160	3,6,7,15,19,42,51,	Corson-Knowles		1686	2,4,27,31,34,44,
Cooper	Kim	6257	3,6,7,15,19,42,51,	Coryell	Lark	6370	3,6,7,15,19,42,51,
Cooper	Ken	8064	3,6,7,15,19,42,51,	Coss	Shelley	12782	54,
Cooper	Barbara	9191	3,6,7,15,19,42,51,	cossio	camila	12576	54,
Cooper	Martha	10027	3,6,7,15,19,42,51,	costa	Naila	12090	54,
cooper	raya	12568	54,	Costas		744	4,6,7,44,50,
Cope	Peggy	12328	54,	Costas	L	9375	3,6,7,15,19,42,51,
Copi	Margaret	6900	3,6,7,15,19,42,51,	Costello	Jameson	8547	3,6,7,15,19,42,51,
Corbelli	Carolyn	5044	54,	Cotas	Arwin	9963	3,6,7,15,19,42,51,
Corbelli	Carolyn	8012	3,6,7,15,19,42,51,	Cotlow	Leslee	10928	42,51,
Corbin	Mary	6978	3,6,7,15,19,42,51,	Cotter		1066	27,
Corbin	Marion	12352	54,	Cotter		1628	2,4,27,
Corcoran		2433	5,11,31,	Cotter	Caitlin	9091	3,6,7,15,19,42,51,
Cordero	Enrique	12732	54,	Cotton	Paul	9605	3,6,7,15,19,42,51,
Corey	Cindy	5782	3,6,7,15,19,42,51,	Cougar	Will	12185	54,
Coria	Jorge	6690	3,6,7,15,19,42,51,	Coughenour	Michael	9809	3,6,7,15,19,42,51,
Corkey	Peter	10881	42,51,	Council	Deborah	12085	54,
Cormier	Roger	9001	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Councilman	Dave	13023	54,	Crandall	S	6583	3,6,7,15,19,42,51,
Courant	Jane	9097	3,6,7,15,19,42,51,	Cranmer	Pat	12336	54,
Court	Mimi	10085	3,6,7,15,19,42,51,	Cranney		2505	11,
courte		3074	54,	Crask	C E	6845	3,6,7,15,19,42,51,
Covarelli	Diana	7629	3,6,7,15,19,42,51,	Cravens		705	54,
Covarrubias	Manuel	12491	54,	Crawford		497	54,
Covay	Cab	10916	42,51,	Crawford		2034	4,9,10,11,14,29,32,36,
Coveney	Kevin	8415	3,6,7,15,19,42,51,	Crawford		3569	42,54,
Cover		2715	54,	Crawford	Theodora	10061	3,6,7,15,19,42,51,
Covey		1396	1,2,4,5,6,8,11,22,48,	Crawford	Marion	10618	42,51,
Covey	Susan	7183	3,6,7,15,19,42,51,	Crawford	Jonah	10815	42,51,
Covey	Madelyn	10074	3,6,7,15,19,42,51,	Crawley	Adam	8397	3,6,7,15,19,42,51,
Cowan		2805	29,42,	Creane		2609	2,4,46,
Cowan	Deborah	8717	3,6,7,15,19,42,51,	Crespin	George	8241	3,6,7,15,19,42,51,
Cox		2545	2,4,5,6,15,31,34,41,44,46,	Crickmore		55	1,2,3,4,5,9,27,43,44,
Cox	Janet	5101	54,	Crider	Iris	6641	3,6,7,15,19,42,51,
Cox	Andrea	5626	3,6,7,15,19,42,51,	Crim	Kathryn	8516	3,6,7,15,19,42,51,
Cox	David	12249	54,	Cripps	Cathy	12855	54,
Coyle		2611	2,4,7,	Crispin	Hiroko	8866	3,6,7,15,19,42,51,
Crabtree	Carrie	9204	3,6,7,15,19,42,51,	cristen		1277	54,
Crabtree	Elizabeth	9445	3,6,7,15,19,42,51,	Cristina Zaninotti	Elaine	12958	54,
Craft	Carolyn	9466	3,6,7,15,19,42,51,	Cristofalo		2164	54,
Craig		3188	2,4,14,48,	Crittenden	Isobel	7598	3,6,7,15,19,42,51,
Craig	Timothy A	9682	3,6,7,15,19,42,51,	Cronbach	Robert	10752	42,51,
Craig	Ian	10014	3,6,7,15,19,42,51,	Cronin	Connie	8502	3,6,7,15,19,42,51,
cramer	maggie	12699	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Cronin	David	9014	3,6,7,15,19,42,51,	Cummings	Lynne	9870	3,6,7,15,19,42,51,
Crooks	Arlene	6899	3,6,7,15,19,42,51,	Cummins	Peter	12863	54,
Crosthwait	Dalton G	9069	3,6,7,15,19,42,51,	Cuneo	Mary	6464	3,6,7,15,19,42,51,
Crow	Lauren	8236	3,6,7,15,19,42,51,	Cunningham	Dan	7439	3,6,7,15,19,42,51,
Crowe	Trish	5655	3,6,7,15,19,42,51,	Cunningham	Jennifer	13223	54,
Crowe	Erin	7594	3,6,7,15,19,42,51,	Cupples	David	12472	54,
Crowley		1150	54,	Currie		58	1,2,31,32,42,44,45,46,
Crowley		1684	2,4,48,	Currie		3081	2,4,19,31,42,43,44,45,46,53,
Crowley	Marty	12538	54,	Currier	Shannon	6856	3,6,7,15,19,42,51,
Cruse		466	54,	Curry	Donna	5783	3,6,7,15,19,42,51,
Cruser		1249	1,2,4,31,	Curry	Beth	9924	3,6,7,15,19,42,51,
Crutchfield	Orpheus	8947	3,6,7,15,19,42,51,	CURRY	RICHARD	12803	54,
Cruz	M	5258	54,	Curtis		727	4,5,6,7,31,43,44,48,
Cruz	Michael	9223	3,6,7,15,19,42,51,	Curtis		729	4,5,6,7,31,43,44,48,
Cruz	Cibele	12735	54,	Curtis	Carol	5271	54,
Csuba	Olga	13113	54,	Curtis	Sandra	6415	3,6,7,15,19,42,51,
Cuadra	Bari	5759	3,6,7,15,19,42,51,	Curtis	James D.	6765	3,6,7,15,19,42,51,
Cudnohufsky	John	5726	3,6,7,15,19,42,51,	Cussins	Thomas	7978	3,6,7,15,19,42,51,
Cuisenaire	Martine	12173	54,	Cutchin		906	42,
Culclasure	ER	12567	54,	Cutchin		1598	27,43,44,
Cull		56	1,2,5,9,15,22,27,31,42,44,	Cutler		1278	54,
Cull		1309	1,2,4,5,6,15,44,	Cutting		1510	54,
Cull	Tim	8863	3,6,7,15,19,42,51,	cybyk	maria	12414	54,
cumberland		787	54,	Cyrce		741	54,
Cummings		773	5,6,7,11,44,	czermak	pawel	12271	54,
Cummings	Laird	7297	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
D	Destany	1273	54,	D'Ambrosio	Patricia	8654	3,6,7,15,19,42,51,
D	Chelsey	1363	54,	D'Ambrosio	Ed	10562	3,42,51,
D East	T	12430	54,	Damian	Andrew	10795	42,51,
D Grazier	Larry	13016	54,	Dana	Christy	10382	3,6,7,15,19,42,51,
D.	Aimee	9911	3,6,7,15,19,42,51,	Danek		61	1,15,27,29,32,
D.	N.	12148	54,	Danek	John	10472	3,7,19,42,51,
Daddow	Carrie	13031	54,	Daniel		624	54,
Daffern	Terri	12827	54,	Daniel	Kathleen	11070	42,48,51,
Dahl	Nathan	10551	3,42,51,	Daniel	Paul	13095	54,
Dahle	Kim	13125	54,	Daniel	Maxine	10683	42,51,
Dahlstrand	Jule and Nick Pappas	8546	3,6,7,15,19,42,51,	Daniel	Joel	10758	42,51,
Dal Pino	John	5357	54,	Daniel	Emily	12559	54,
Dale		1208	2,4,11,41,42,	Daniels	Clarke	5018	54,
Daley	Betsy	6254	3,6,7,15,19,42,51,	Daniels	Ted	6797	3,6,7,15,19,42,51,
Dalition	Mitch	10856	42,51,	Daniels	Bradley	12619	54,
Dallal		1803	8,9,10,22,24,	Danielson	Bren	7955	3,6,7,15,19,42,51,
Dallal	Omri-Shir	10245	3,6,7,15,19,42,51,	Danis		2723	7,42,
Dallal	Rose	10247	3,6,7,15,19,42,51,	Danis		2726	7,42,
Dalpe	Joan A.	6209	3,6,7,15,19,42,51,	Danis		2881	9,13,14,19,22,24,48,
Dalton		928	42,44,	Danis	Susan	8209	3,6,7,15,19,42,51,
Dalton	Mary	7111	3,6,7,15,19,42,51,	Dann		1346	54,
Dalton	Janie	8421	3,6,7,15,19,42,51,	Dann	Autumn	9620	3,6,7,9,15,19,42,51,
Dalton	C	8708	3,6,7,15,19,42,51,	D'Anne		2806	54,
Daly		733	54,	D'Anne	Denise	10727	42,51,
Daly		1134	54,	Dannels	Rebecca	7365	3,6,7,15,19,42,51,
Daly		1717	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Dantzler	Phyllis	7352	3,6,7,15,19,42,51,	David		5230	54,
Danysh	Kyla	7631	3,6,7,15,19,42,51,	David	Christian	7011	3,6,7,15,19,42,51,
Daoheung	Metha	7643	3,6,7,15,19,42,51,	David	Firshein	10732	42,51,
D'Apuzzo	Romina	12609	54,	David	Cheryl	12373	54,
Darby	Margart E.	9107	3,6,7,15,19,42,51,	Davidge	Donna	5773	3,6,7,15,19,42,51,
Darcy	Frances	12669	54,	Davidson		2567	2,4,5,6,8,16,24,29,30,31,43
Dare	Christopher	10655	42,51,	Davies		2143	42,43,
Dargis	Kathleen	9332	3,6,7,15,19,42,51,	Davies	Jane Hoffmann	5733	3,6,7,15,19,42,51,
Darling`	Chris	8492	3,6,7,15,19,42,51,	Davies	Dorothy L	6121	3,6,7,15,19,42,51,
Darnell	Jake	8229	3,6,7,15,19,42,51,	davies	sue	12718	54,
Darner	Dawn	12647	54,	Davies	Angela	10575	3,42,51,
Darrell		442	54,	Davies	Dorothy L	10667	42,51,
Darville	Bianca	6428	3,6,7,15,19,42,51,	Davila		1776	4,22,44,
Darway	Nick	6235	3,6,7,15,19,42,51,	Davis	Renay	263	1,2,4,7,9,22,
Darway	Alina	6237	3,6,7,15,19,42,51,	Davis		549	54,
Das	Pondurenga	10341	3,6,7,15,19,42,51,	Davis		830	46,
Dasgupta	Riju	7645	3,6,7,15,19,42,51,	Davis		1381	42,46,
Dasgupta-Yeung	Vishnupriya	8162	3,6,7,15,19,42,51,	Davis		2032	54,
Dashe	Julia	6820	3,6,7,15,19,42,51,	Davis		2050	1,14,15,21,42,43,
Daskarolis	Elizabeth	6578	3,6,7,15,19,42,51,	Davis		2451	1,7,20,31,34,42,46,
Dattilo		798	54,	Davis		3007	9,13,14,19,24,48,
Daughenbaugh	Laura	9955	3,6,7,15,19,42,51,	Davis	Maxine	5463	54,
Dava	Kristine	10054	3,6,7,15,19,42,51,	Davis	Tonya	6059	3,6,7,15,19,42,51,
Davenport	Stephen	8313	3,6,7,15,19,42,51,	Davis	Jennifer	6341	3,6,7,15,19,42,51,
Davenport	Sharon	9710	3,6,7,15,19,42,51,	Davis	Crystal	6832	3,6,7,15,19,42,51,
Davi	Jennifer	5846	3,6,7,15,19,42,51,	Davis	Emma	6840	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Davis	Ann Marie	7105	3,6,7,15,19,42,51,	De	waard	12039	54,
Davis	Lance	7174	3,6,7,15,19,42,51,	De Carolis	Ana	8826	3,6,7,15,19,42,51,
Davis	Melissa	7388	3,6,7,15,19,42,51,	de Cassia Oliveira	Rita	12045	54,
Davis	Andrew	7517	3,6,7,15,19,42,51,	De Domenico		1812	54,
Davis	Peter	7658	3,6,7,15,19,42,51,	De Haven	Janey	5198	54,
Davis	Elliot	7735	3,6,7,15,19,42,51,	De Jasu	Barry	12683	49,
Davis	Laroilyn	8020	3,6,7,15,19,42,51,	De La Cruz	Sammi(MaryAnn)	12150	54,
Davis	Sita R	8076	3,6,7,15,19,42,51,	de la Vega	Connie	7904	3,6,7,15,19,42,51,
Davis	Charles	8367	3,6,7,15,19,42,51,	De Lackner	Frieda	8296	3,6,7,15,19,42,51,
Davis	Patricia	8455	3,6,7,15,19,42,51,	De Lena	Ariana	8876	3,6,7,15,19,42,51,
Davis	Elinor	8537	3,6,7,15,19,42,51,	De Lu		2122	42,44,
Davis	Justin	8707	3,6,7,15,19,42,51,	de Oliveira		3042	54,
Davis	Cameron	9515	3,6,7,15,19,42,51,	De Pinto	Basil	8706	3,6,7,15,19,42,51,
Davis	Dustin	9602	3,6,7,15,19,42,51,	de Regil	Valenta	7583	3,6,7,15,19,42,51,
Davis	Emily	10065	3,6,7,15,19,42,51,	De Rooy	Sylvia	6638	3,6,7,15,19,42,51,
Davis	Patrice	12469	54,	de silva	shirley	12458	54,
davis	martha	12614	54,	de With	Sebastiaan	7820	3,6,7,15,19,42,51,
Davis	Judson	10833	42,51,	Deaktor		1815	4,8,11,
Davis	Mark	11061	42,51,	Deaktor	Linda	7712	3,6,7,15,19,42,51,
Davis	Brenda	12383	54,	Deamer	Kelly	9782	3,6,7,15,19,42,51,
Dawkins	Mary	8022	3,6,7,15,19,42,51,	Dean	Brittany	11106	42,51,
Dawson	Susan	13156	5,	DeAngelo	Vic	10869	42,51,
Day	Kathryn	5140	54,	Deans		3054	54,
Day	Erin	6060	3,6,7,15,19,42,51,	deCarion	Suzanne	6643	3,6,7,15,19,42,51,
Day	Katherine	7774	3,6,7,15,19,42,51,	Decker	Sonia	6739	3,6,7,15,19,42,51,
Day	Diana	8106	3,6,7,15,19,42,51,	Decker	Ruth	8853	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
DeCristo	Jeremy	10900	42,51,	DelliGatti	Andreanna	7104	3,6,7,15,19,42,51,
Dedel	Penny	8946	3,6,7,15,19,42,51,	Delman		626	54,
Dederick	Jan	8038	3,6,7,15,19,42,51,	Delman	Jamie	10832	42,51,
Dee		2067	42,43,48,	Delman	Claudia	11099	42,51,
Dees	Jennifer	7691	3,6,7,15,19,42,51,	Delmar		2476	3,22,31,42,
Deese		2863	54,	Delmar	Jessica	6656	3,6,7,15,19,22,27,42,51,
DeFranco	Dana	10538	3,42,51,	Delogu		2641	54,
Degenshein	Deborah Silverman	6536	3,6,7,15,19,42,51,	DeLu	Ardys	10603	42,51,
Degraw	Mishaa	8053	3,6,7,15,19,42,51,	Delucia	Amédée	13022	54,
DeHaven	Jeffrey	9884	3,6,7,15,19,42,51,	DelValle	Charles	5534	3,6,7,15,19,42,51,
Delaco		1093	42,43,44,46,	Delvecchio	T.	6849	3,6,7,15,19,42,51,
Delaco		1663	42,43,45,47,	Delventhal		946	54,
Dejoie	Duane	7127	3,6,7,15,19,42,51,	Delventhal		1486	43,44,
Dejoie	Aimee	10329	3,6,7,15,19,42,51,	Delventhal		1570	53,
DeKellis		1895	54,	Delventhal	Megan	9679	3,6,7,15,19,42,51,
Del Lima	Bethany	9805	3,6,7,15,19,42,51,	Delventhal-Sali	Beverly	9483	3,6,7,15,19,42,51,
DeLaCruz	Don	10512	3,19,42,51,	DeManche	Andrea	5979	3,6,7,15,19,42,51,
DeLancy	John	9277	3,6,7,15,19,42,51,	deManda		66	2,3,4,9,27,34,
DeLancy	Carla	9310	3,6,7,15,19,42,51,	Demant	Tarah	10894	42,51,
Delaney	William	9593	3,6,7,15,19,42,51,	DeMarco	Rachel	7809	3,6,7,15,19,42,51,
Delaney	John	12640	54,	DeMark	Christi	12996	54,
Delay	Myra	6962	3,6,7,15,19,42,51,	DeMelo		808	54,
Delegeane	Evan	6624	3,6,7,15,19,42,51,	Demsky	Lynn	13154	54,
DeLeo	Maria	9406	3,6,7,15,19,42,51,	Dendias	Andromahi	5946	3,6,7,15,19,42,51,
Delight	Sky	9691	3,6,7,15,19,42,51,	Deneauv	Denise	3274	3,6,9,10,13,14,21,22,24,42, 53,
delles	susan	12895	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Denicore	Karen	7049	3,6,7,15,19,42,51,	DeVries	Maya	9781	3,6,7,15,19,42,51,
Denison	Julie	9657	3,6,7,15,19,42,51,	Dewhurst		68	3,4,12,22,27,
Denmead	Ellen	5306	54,	Dewhurst	Bob	10636	42,51,
Dennehy	Kelly	10932	42,51,	Dewitt	Sylvia	6333	3,6,7,15,19,42,51,
Dennehy	Kelly	12378	54,	DeWitt	John	7418	3,6,7,15,19,42,51,
Denney	Erin	5388	54,	Dewitt	Natalie	10914	42,51,
Denney	Richard	6268	3,6,7,15,19,42,51,	Dewley	Tiffany I	6033	3,6,7,15,19,42,51,
Denney	R Joel	6733	3,6,7,15,19,42,51,	Dexter		1187	54,
Denning		813	54,	Dexter		1763	54,
Dent	Edeltraud	6453	3,6,7,15,19,42,51,	Dexter	Robert	12060	54,
Dentel	Ann	8767	3,6,7,15,19,42,51,	Dhillon	Chris	6106	3,6,7,15,19,42,51,
DeNuccio	Laura	7085	3,6,7,15,19,42,51,	Dhillon	Chris	6107	3,6,7,15,19,42,51,
DePauw		885	4,5,6,7,44,	DHS Employee Communications		2479	54,
DePauw		887	54,	Di Costanzo	Marco	10291	3,6,7,15,19,42,51,
Deschenes	Amy	5578	3,6,7,15,19,42,51,	Diamond	Dave	5191	54,
DeSean	Ant	7615	3,6,7,15,19,42,51,	Diamond	Anthony	7650	3,6,7,15,19,42,51,
Deserio	John	8256	3,6,7,15,19,42,51,	Diamond	Claire	9624	3,6,7,15,19,42,51,
Desormeau	Kate	9869	3,6,7,15,19,42,51,	Diana		2807	11,46,
Despres	George	6253	3,6,7,15,19,42,51,	Diaz	Martha	5620	3,6,7,15,19,42,51,
Dettinger	Theresa	6309	3,6,7,15,19,42,51,	Diaz	Francisco	6200	3,6,7,15,19,42,51,
Deutschbein	Robert	13146	54,	Diaz	Robin	12465	54,
Devam	Nandi	10479	3,7,19,42,51,	Diaz	D	12905	54,
Deveau	Callie	5687	3,6,7,15,19,42,51,	Díaz	Laura	12527	54,
Dever	Kim	5866	3,6,7,15,19,42,51,	Dichari	Karen	5647	3,6,7,15,19,42,51,
deVeuve	Suzanne	7032	3,6,7,15,19,42,51,	Dickason	Daniel	10649	42,51,
Devore	Marcy	5779	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Dickerson	Faith	9972	3,6,7,15,19,42,51,	Dinwiddie	John	7250	3,6,7,15,19,42,51,
Dickey		69	4,	Dinwiddie	Gerda	8427	3,6,7,15,19,42,51,
Dickey	Julianna	7210	3,6,7,15,19,42,51,	Dinwiddie	Eric	8643	3,6,7,15,19,42,51,
Dickinson	Beth	7031	3,6,7,15,19,42,51,	Disend	Nadya	9537	3,6,7,15,19,42,51,
Dickinson	Sheila	7719	3,6,7,15,19,42,51,	diSessa	Melina	5255	54,
Dickinson	Jean	9141	3,6,7,15,19,42,51,	Dishon	Danny	12299	54,
Dickinson	Theresa	10946	42,51,	Disney	Tressa	5848	3,6,7,15,19,42,51,
Dickmeyer	Dan	11101	42,51,	Distler	Maria	5295	54,
Dicus	Tony	6554	3,6,7,15,19,42,51,	Ditchev	Vlastimir	13070	54,
didonato	scott	12479	54,	Ditmars	Elizabeth	8242	3,6,7,15,19,42,51,
Dieckman	Gayl	5508	3,6,7,15,19,42,51,	Ditonto	Alec	7235	3,6,7,15,19,42,51,
Dierauf	Benjamin	8933	3,6,7,15,19,42,51,	Dittmer		2497	11,
Diermayer		71	1,4,8,9,10,11,13,15,16,19,2 1,22,24,29,34,42,	Ditton	Patricia G	8483	3,6,7,15,19,42,51,
DiFederico	Jennifer	8781	3,6,7,15,19,42,51,	Divenyi		74	43,44,
DiGiondomenico	Ryan	8263	3,6,7,15,19,42,51,	Divney		3128	1,2,4,15,22,24,31,42,48,
DiGirolamo	Elizabeth	8413	3,6,7,15,19,42,51,	Divney	Kathleen	7434	3,6,7,15,19,42,45,46,51,
Dill	Rebecca	9674	3,6,7,15,19,42,51,	Dix	Griffin	5017	54,
Dillard, Jr.	Lawrence Gerald	10975	42,51,	Dixon		1893	1,4,15,19,22,27,
Diller	Jeanne V.	7253	3,6,7,15,19,42,51,	Dixon	Maureen	8894	3,6,7,15,19,42,51,
Dillon	Christi	13110	54,	Dixon	James	12110	54,
Dillon	Sheila	12838	49,	Dixon	Roderick	13084	54,
Dimartini	Jared	7065	3,6,7,15,19,42,51,	do Céu Silva	Maria	12253	54,
Dimicco	Beth	10817	42,51,	Doak	Hartson	12546	54,
Dimitriou	Julia	10371	3,6,7,15,19,42,51,	Dober		721	3,
Dimock	Donald	12709	9,	Dockray	Edward	6118	3,6,7,15,19,42,51,
				Dodge	Shawn	5599	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Dodge	Alisa	6461	3,6,7,15,19,42,51,	Donovan		2822	2,4,48,
Dodge	Donald	7326	3,6,7,15,19,42,51,	Donovan	Clelia	8284	3,6,7,15,19,42,51,
Dodge	Zach	7876	3,6,7,15,19,42,51,	Donovan	Catherine	12537	54,
Dodge	Elizabeth	9576	3,6,7,15,19,42,51,	Doolittle	Katherine	6671	3,6,7,15,19,42,51,
Dodson		571	54,	Doonan	Karen	5985	3,6,7,15,19,42,51,
Dodson		2160	54,	Doran		3504	1,3,5,9,10,16,46,
Doff	Jonathan	8834	3,6,7,15,19,42,51,	Dorenz		76	15,24,43,44,
Doherty		494	54,	Dorenz		633	3,5,15,22,
Dolan		889	1,27,	Dorenz	Dorothea	9418	3,6,7,15,19,22,27,42,51,
Dolan	Patricia	6681	3,6,7,15,19,42,51,	Dormieu	Cyrille	13228	54,
Dolan	Thomas	8738	3,6,7,15,19,42,51,	Dorn	Maya	7063	3,6,7,15,19,42,51,
dolbear	robin	13029	54,	Doron	Kathleen	6176	3,6,7,15,19,42,51,
Dolin	Lenore	7276	3,6,7,15,19,42,51,	Dorrance	Jean	8065	3,6,7,15,19,42,51,
Dolphin	Alia	8552	3,6,7,15,19,42,51,	Dorsey		3194	42,
Domahue	Susan	7467	3,6,7,15,19,42,51,	Dorsey	Patricia	8239	3,6,7,15,19,42,51,
Dombrowski	Sabrina	5997	3,6,7,15,19,42,51,	Dorsey	Kerry L.	9925	3,6,7,15,19,42,51,
Domingues	Haroldo	10665	42,51,	Dostourian	Annamarta	8401	3,6,7,15,19,42,51,
Domonkos	Bill	9897	3,6,7,15,19,42,51,	Doublin	Robert	11059	42,51,
Donahower	Deborah	9377	3,6,7,15,19,42,51,	Doug		2864	54,
Donahue		2874	54,	Doughtery		3566	2,4,5,
Donahue	Marcia	5652	3,6,7,15,19,42,51,	Douglas	Felicia	6007	3,6,7,15,19,42,51,
Donegan		2176	2,4,31,43,44,	Douglas	Katherine	8605	3,6,7,15,19,42,51,
Donigan	Geraldine	12733	54,	Douglas	Dee	8732	3,6,7,15,19,42,51,
Donlou	Tim	9736	3,6,7,15,19,42,51,	Douglass	Isabel	10980	42,51,
Donnelly	Francis	10663	22,32,42,51,	Dowd	Robert Michael	5424	54,
donohue	colin	12551	54,	Dowell	Vivian	12751	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Dowlatshahi	Siahvash	10518	3,19,42,51,	Drechsler		81	22,
Downey	John M	7653	3,6,7,15,19,42,51,	Drenkelfuss	Carolin	12125	54,
Downey	Afy	7843	3,6,7,15,19,42,51,	Drescher	Lauren	6192	3,6,7,15,19,42,51,
downey	frank	13165	54,	Dresser	David	10058	3,6,7,15,19,42,49,51,
Downie	David	9011	3,6,7,15,19,42,51,	Drew	Deborah	8848	3,6,7,15,19,42,51,
Doyka		2092	54,	Drisdell	Walter	8431	3,6,7,15,19,42,51,
Doyle		79	8,11,22,43,44,	Drossel	Devonn	12711	54,
Doyle	Aine	831	4,19,31,42,	Drummond	Karen	6261	3,6,7,15,19,42,51,
Doyle	Angela	6540	3,6,7,15,19,42,51,	Drummond	David	9376	3,6,7,15,19,42,51,
Doyle	Mary	7227	3,6,7,15,19,42,51,	Du Bois		2105	54,
Doyle	Joe	7747	3,6,7,15,19,42,51,	du Domaine	Robert	6190	3,6,7,15,19,42,51,
Doyle	Laurie Ann	8644	3,6,7,15,19,42,51,	Du Val	Elizabeth	8535	3,6,7,15,19,42,51,
Doyle	Valerie	10121	3,6,7,15,19,42,51,	Duboe	Gail	6642	3,6,7,15,19,42,51,
Doyle	Crystal	12012	54,	DuBois	Marcia	7476	3,6,7,15,19,42,51,
Dozier	Samantha	5965	3,6,7,15,19,42,51,	DuBois	Sarah	12805	54,
Draeger	H. Antohony	5205	54,	Ducay	Terri	5696	3,6,7,15,19,42,51,
Dragas	Linda	6459	3,6,7,15,19,42,51,	DuClos	Jennifer	9220	3,6,7,15,19,42,51,
Dragas/Armstrong		2173	1,4,7,8,11,13,15,22,23,24,	Duffy		82	1,4,11,22,24,27,31,34,
Drain		80	22,42,44,	Duffy		1027	1,22,27,
Drake		1397	22,	Duffy	Becky	9341	3,6,7,15,19,42,51,
Drake	Eric	7390	3,6,7,15,19,42,51,	Duffy	Robyn	10012	3,6,7,15,19,42,51,
Drake	Laura	9387	3,6,7,15,19,42,51,	Dugdale	Angella	5809	3,6,7,15,19,42,51,
Drake	Megan	12494	54,	Duke	Lynda	12456	54,
Drda	Darrin	10224	3,6,7,15,19,42,51,	Dulaney	Joelle	147	12,
Dreaper	George	10380	3,6,7,15,19,42,51,	Dumitru		840	48,
Dreaper	Brendan	10509	3,19,42,51,	DuMolin	Robin	7416	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Dunaway	Christine	6745	3,6,7,15,19,42,51,	Dyal	Benita	13194	54,
Dunbar	Kelly	6290	3,6,7,15,19,42,51,	Dyer	Liza	6760	3,6,7,15,19,42,51,
Duncan	Ian	8917	3,6,7,15,19,42,51,	Dykas	Todd	5890	3,6,7,15,19,42,51,
Duncan	Sylvia	12601	54,	Dykes		896	54,
Dunn		812	6,7,11,31,42,	Dykwomon	Elana	6730	3,6,7,15,19,42,51,
Dunn	Vin	5294	54,	E	Renee	6044	3,6,7,15,19,42,51,
Dunn	Gretchen	6864	3,6,7,15,19,42,51,	e Burnham	Bob	12400	54,
Dunn	Laurel A	9547	3,6,7,15,19,42,51,	E G Scott	Susan	12608	54,
dunn	debbie	12822	54,	Eagle	Jane	5816	3,6,7,15,19,42,51,
Dunwody	William	9503	3,6,7,15,19,42,51,	Ealey	Sarah	12797	54,
DUPLICATE		2869	2,4,6,42,46,48,	Eargle		2349	1,4,5,8,9,10,11,13,18,22,24,27,33,34,42,43,44,48,
DUPLICATE		2876	1,2,4,8,25,	Eargle	Dolan	10875	42,51,
Durand	Catherine	6999	3,6,7,15,19,42,51,	Earl		2984	54,
Durbin	Timothy	7296	3,6,7,15,19,42,51,	Earl	Emily	5052	54,
Durham	Maggie	5899	3,6,7,15,19,42,51,	Earl	Robinson	7248	3,6,7,15,19,42,51,
Durham	Robert	8542	3,6,7,15,19,42,51,	Earl	Emily	10278	3,6,7,15,19,42,51,
Durr	Christian	9737	3,6,7,15,19,42,51,	Earnshaw	Carly	9730	3,6,7,15,19,42,51,
Dussell		1440		Earth		456	54,
Dutiel	Cheri	9930	3,6,7,15,19,42,51,	Earth		3018	2,4,27,
Dutto	Marie	13224	54,	Earth		3527	1,31,46,48,
Dutton		83	13,14,15,19,27,29,	Earth	Robin	10220	3,6,7,15,19,42,51,
Dutton	Indigo	9810	3,6,7,15,19,42,51,	earth	greenplanet	12027	54,
Dutton	Michael	13009	54,	Easling	Margaret	10830	42,51,
Duvall	Stephan	7939	3,6,7,15,19,42,51,	East Bay Chapter of the California Native Plant Society's		3076	2,3,5,6,7,9,41,53,
Dwyer	Kenneth	8616	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
East Bay Municipal Utility District		562	54,	Edwards	Michael	9662	3,6,7,15,19,42,51,
Eaton	Alex	3255	3,6,9,10,13,14,21,22,24,42,53,	Efron	Deborah	12889	54,
eaton	paula	12025	54,	Egendoerfer	Shannon	5583	3,6,7,15,19,42,51,
Eatwell	Byron	12950	54,	Eggen	Kris	7922	3,6,7,15,19,42,51,
ebacher	rene	12989	54,	Egger		2355	4,7,8,11,13,22,23,24,42,43,44,
Eberhard	Nick	3249	1,2,4,6,31,	Egger	Rebecca	10445	3,7,19,42,51,
Eberhard	Sam	3259	3,6,9,10,13,14,21,22,24,42,53,	Eggers	Lynne	6854	3,6,7,15,19,42,51,
Eberhard	Laura	3263	3,6,9,10,13,14,21,22,24,42,53,	Ehnebuske		1905	42,43,
Eberstein	Suart	5360	54,	Ehrlich		567	13,15,
Ebert	Christopher	10330	3,6,7,15,19,42,51,	Ehrlich		2181	54,
Eckard	Damon	8447	3,6,7,15,19,42,51,	Ehrlich-Feldman	Toni	6572	3,6,7,15,19,42,51,
Ecke	Andrea	6077	3,6,7,15,19,42,51,	Ehsman	Ildi	12420	54,
Economos	Mary	9246	3,6,7,15,19,42,51,	eifert		1507	54,
Edel	Morgan	7530	3,6,7,15,19,42,51,	Eifler	David	8404	3,6,7,15,19,42,51,
Edman	John	8573	3,6,7,15,19,42,51,	Einhorn	Margret	10337	3,6,7,15,19,42,51,
Edmonds	Teresa	12510	54,	Eiseley		3097	15,34,52,
Edmondson	Leonard	9750	3,6,7,15,19,42,51,	Eisenberg		642	15,18,24,
Edmondson/Sutton		1417	1,2,4,6,8,13,15,16,22,43,44,48,	Eisenberg		645	31,
Edmunds	Carolyn	7988	3,6,7,15,19,42,51,	Eisenberg	Bronwyn	8028	3,6,7,15,19,42,51,
Edwards		473	46,	Eisenhart	Mary	10302	3,6,7,15,19,42,47,48,51,
Edwards		1299	54,	Eiser	Tina	13139	54,
Edwards		3544	5,6,42,46,	Eitzel		86	22,42,43,44,
Edwards	Martin	5121	54,	Ekberg		1024	1,4,27,42,45,
				Ekberg	Carol	5353	54,
				Ekberg	Rebekah	8212	3,6,7,15,19,42,51,
				Eklund	Anne	5716	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Ekstrand		3070	54,	Elliott	Chris	12897	54,
el amine benmouaz	mohamed	13038	54,	Ellis	J A	5080	54,
El Baradie	Mona	12079	54,	Ellis	JoAnn	5623	3,6,7,15,19,42,51,
Elashi	Maya	8504	3,6,7,15,19,42,51,	Ellis	Mark	6606	3,6,7,15,19,34,42,51,
Elder		516	1,34,44,	Ellis	Jane	8711	3,6,7,15,19,42,51,
Eldridge	Margaret	3277	3,6,9,10,13,14,21,22,24,42,53,	Ellis	Koll	8901	3,6,7,15,19,42,51,
Elepano	Amy	13233	54,	Ellis	LaVonne	9308	3,6,7,15,19,42,51,
Elfant	Barry D	8686	3,6,7,15,19,42,51,	Elman	Joanne	5598	3,6,7,15,19,42,51,
Elfert	Dena	8517	3,6,7,15,19,42,51,	Elphick	Lucy	10071	3,6,7,15,19,42,51,
Elfield	Mark	6922	3,6,7,15,19,42,51,	Elsbury	Jennifer	10731	42,51,
Eli	Michael	9644	3,6,7,15,19,42,48,50,51,	Ely		88	44,
Elia	Eric	5372	54,	Ely		470	54,
Elia	Maureen	7732	3,6,7,15,19,42,51,	Ely		2162	54,
Elias	Dean	7632	3,6,7,15,19,42,51,	Ely		3235	50,51,
Elisan Jr.	Isabelo F.	6488	3,6,7,15,19,42,51,	Ely	David	8955	3,6,7,15,19,42,51,
Eliza	Mari	10984	22,42,51,	Emanuel	Jane	6419	3,6,7,15,19,42,51,
Elkin	David	10576	3,42,51,	Emanuel	Dave	11082	42,51,
Elkins		891	1,4,42,46,48,	Emberton	Max	5675	3,6,7,15,19,42,51,
Elkins	Tod	10988	34,42,51,	Emerson	Jack	5242	54,
Ellinger	Jon	9965	3,6,7,15,19,42,51,	Emerzian	Marilyn	6901	3,6,7,15,19,22,24,42,51,
Elliot	John G	5112	54,	Emma		895	1,22,42,
Elliot	Karen	8999	3,6,7,15,19,42,51,	emmanuelle	burrot	12092	54,
Elliott		2163	54,	Emmons	Sue	5161	54,
elliott		3056	9,13,14,19,24,48,	End	Susannah	6611	3,6,7,15,19,42,51,
Elliott	Eric	9603	3,6,7,15,19,42,51,	Enderton	Elaine	8308	3,6,7,15,19,42,51,
				Endo	Michelle	8362	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Enelow	David	8121	3,6,7,15,19,42,51,	Escher	Herbert	12274	54,
Engel	Mary	6085	3,6,7,15,19,42,51,	Escobar-Ausman	Taran	6775	3,6,7,15,19,42,51,
Enger	Sue	10388	3,7,15,19,42,51,	Escobedo		1294	1,2,4,6,11,15,42,
Engle	Mary	10414	3,7,15,19,42,51,	Esfandiari	Mehran	8709	3,6,7,15,19,42,51,
ENGLER	RAYA	12363	54,	Eshleman	Elizabeth	7211	3,6,7,15,19,42,51,
English		3183	54,	Espinas	Paul	8813	3,6,7,15,19,42,51,
English	Julie	13246	54,	Esposito	Susan	5878	3,6,7,15,19,42,51,
Enoch	Tamar	5329	54,	Esposito	J.	6330	3,6,7,15,19,42,51,
Enoch	Tamar	7836	3,6,7,15,19,42,51,	Esposito	Emilia	6363	3,6,7,15,19,42,51,
Enright	Elizabeth	10631	42,51,	Esposito	Lori	12530	54,
Entwistle	S	8261	3,6,7,15,19,42,51,	Esposito	Donna	12542	54,
EPA		351	4,5,6,7,15,17,31,32,36,43,44,	Essex	Michael	12521	54,
Epiphany	Sugar	7229	3,6,7,15,19,42,51,	Esteban	Amparo	8772	3,6,7,15,19,42,51,
Eposito	Ellen	7626	3,6,7,15,19,42,51,	Esters	Deborah	10170	3,5,6,7,15,19,42,51,
Eppley	John	9875	3,6,7,15,19,27,34,42,51,	Estes		1490	1,2,4,6,8,13,22,43,44,
Epstein	Howard	9045	3,6,7,15,19,42,51,	Estes	Douglas	10799	42,51,
Erdreich	David	7554	3,5,6,7,15,19,42,51,	Ettlinger		1871	6,7,42,43,
Erickson		867	54,	Evans		546	54,
Erickson	Sandra	6089	3,6,7,15,19,22,42,51,	Evans		1512	54,
Eriksson	Margery F.	7369	3,6,7,15,19,42,51,	Evans	Bob	5368	54,
Eriksson	Maud	12036	54,	Evans	Samuela	5410	54,
Erlich		93	2,4,15,42,44,	Evans	John	5506	3,6,7,15,19,42,51,
Erokan	Will	7746	3,6,7,15,19,42,51,	Evans	Lyn	5619	3,6,7,15,19,42,51,
Eroy	Ariane	6353	3,6,7,15,19,22,42,51,	Evans	Geoff	8093	3,6,7,15,19,42,51,
Erway	Tracey	5741	3,6,7,15,19,42,51,	Evans	Dinda	12165	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Evans	Jacquelyn	10594	3,5,42,51,	Faith	Jessica	9315	3,6,7,15,19,42,51,
Evans	Sophie	12793	54,	Falcon		95	1,2,31,42,
Everall		2659	9,10,48,	Falcon	Jennifer	6425	3,6,7,15,19,42,51,
Everall	Patricia	7668	3,6,7,15,19,42,51,	Falik		547	54,
Everest		1369	1,2,4,5,11,18,22,48,	Falk	Janet	8298	3,6,7,15,19,42,51,
Everest	Mary	7275	3,6,7,15,19,42,51,	Fallbrooke	Gwyn	9649	3,6,7,15,19,42,51,
Everett		781	54,	Fallon	R.J.	12428	54,
Everitt	Miranda	10175	3,6,7,15,19,42,51,	Fang		1247	1,2,3,4,5,6,11,14,18,23,24,42,48,
Ewoldt	Dave	13061	54,	Fang	Lynn	9311	3,6,7,15,19,42,51,
Exter	Liz	9160	3,6,7,15,19,42,51,	Fanny	John	7155	3,6,7,15,19,42,51,
Ezzy	Christine	13025	54,	Farber		866	42,
f	Jennifer	12904	54,	Farhadian	Thea	7568	3,6,7,15,19,42,51,
F.	Teri	9473	3,6,7,15,19,42,51,	Farley	Lin	9527	3,6,7,15,19,42,51,
Facey	Laurel	12302	54,	Farmer		832	42,
Fadden		955	54,	Farmer		2183	42,43,48,
Fadden		956	29,	Farmer	Vickie	5594	3,6,7,15,19,42,51,
Fadden		958	54,	Farmer	Ann	8771	3,6,7,15,19,42,51,
Fadden		1550	22,43,44,	Farmer	Mark	8971	3,6,7,15,19,42,51,
Fadden		1554	2,4,22,48,	Farmer	Nicholas	9133	3,6,7,15,19,42,51,
Fadden		1560	2,4,22,48,49,	Farnham	Lara	8650	3,6,7,15,19,42,51,
Fain	Beth H	10370	3,6,7,15,19,42,51,	Farr	Irma	7106	3,6,7,15,19,42,51,
Fair	Tom	9509	3,6,7,15,19,42,51,	Farrar	Brandi	8119	3,6,7,15,19,42,51,
Fairfield		1977	6,8,11,22,42,	Farrell		1360	54,
Fairfield	Richard A	11033	42,51,	Farthing	Dawn	6053	3,6,7,15,19,42,51,
Faith	Karlene	7621	3,6,7,15,19,42,51,	Fasano		847	11,32,
				Fasano	Christine	9314	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Fateman		1912	4,				4,
Fateman	Richard	5218	54,	Feist		1465	1,2,4,6,8,13,22,34,43,44,
Faulkner	Nina	5644	3,6,7,15,19,42,51,	Feist	Kerstin	11041	42,51,
Faulkner	Ellen	8011	3,6,7,15,19,42,51,	Feist	Kerstin	13130	54,
Faulkner	Jennifer	9751	3,6,7,15,19,42,51,	Feldman		531	54,
Faulkner-Uriarte	Elisa Faulkner-Uriarte	12042	54,	Feldman	Vallery	5001	54,
faure	peter	13235	54,	Feldman	Ron H	7565	3,6,7,15,19,42,51,
Fausett	Johnny	7961	3,6,7,15,19,42,51,	Feldman	Nina	10519	3,19,42,51,
Fay	Benjamin	5423	54,	Feldman	L. A.	10764	42,51,
Fay	Rosalyn	9225	3,6,7,15,19,42,51,	Feldmann	Bronya	7167	3,6,7,15,19,42,51,
Fayerabend		97	4,5,6,8,11,42,	Feldt	Michelle	3270	3,6,9,10,13,14,21,22,24,42,53,
Fazeli	Saba	6510	3,6,7,15,19,42,51,	Felter		2887	54,
Fechner	Charles	6720	3,6,7,15,19,42,51,	Felter	June	7453	3,6,7,15,19,42,51,
Federici		641	4,31,	felzer	Cherie	9652	3,6,7,15,19,42,51,
Fedorova		424	22,31,42,	Fenster	Laura	9189	3,6,7,15,19,42,51,
Feeney	Matthew	6709	3,6,7,15,19,42,51,	Fenster	Diane	10947	42,51,
Fehr	Robert	10598	3,42,51,	Feral		3176	1,3,4,6,7,8,9,11,13,14,15,19,36,42,43,44,45,46,48,49,50,51,52,53,
Feibus	Aaron	7641	3,6,7,15,19,42,51,	Ferber	Laura	9902	3,6,7,15,19,42,51,
Feiler	Deborah	10450	3,7,19,42,51,	Ferguson		1055	54,
Feinberg	Daniel	5147	54,	Ferguson		1528	54,
Feingold	Bruce	5447	54,	Ferguson	Cathy	7284	3,6,7,15,19,42,51,
Feingold	Lainey	8803	3,6,7,15,19,42,51,	Ferguson	Tim	9318	3,6,7,15,19,42,51,
Feinstein		534	54,	Ferguson	Gwen	9355	3,6,7,15,19,42,51,
Feinstein		1048	54,	Ferguson	Tom	9888	3,6,7,15,19,42,51,
Feist	Kerstin	159	2,4,5,9,13,14,15,22,40,42,4				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Ferina	Donna	8885	3,6,7,15,19,42,51,	Fiene		1395	1,2,4,5,6,8,11,22,27,
Ferlin		821	11,	Fiene	Karen	8252	3,6,7,15,19,42,51,
Ferlin	Lindsay	9756	3,6,7,15,19,42,51,	Fier	Debbie	6933	3,6,7,15,19,42,51,
Fernandez	Cecilia	7314	3,6,7,15,19,42,51,	Figueroa	Paula	13128	54,
Fernandez	Emily	7343	3,6,7,15,19,42,51,	Fikre-sellassie	Meheret	7449	3,6,7,15,19,42,51,
Fernos	Talia	6991	3,6,7,15,19,42,51,	Fillin	Amy Jo	5528	3,6,7,15,19,27,42,50,51,
Ferranti	Dolli	9380	3,6,7,15,19,42,51,	Fingland	Randy	7815	3,6,7,15,19,42,51,
Ferrazi	Mariah	12155	54,	Finkelstein	Harriet S.	7091	3,6,7,15,19,42,51,
Ferreira	Claudia	5962	3,6,7,15,19,42,51,	Finley	Robert	10926	42,51,
Ferris		1852	1,3,4,15,19,42,	Finnerty	Benjamin	7856	3,6,7,15,19,42,51,
Ferris	Lloyd	8967	3,5,6,7,15,19,42,51,	Finney		2276	4,
Fetter	Tufford	873	4,11,27,	FIorentini	FULVIO	13171	54,
Fetterman	Lauren	6280	3,6,7,15,19,42,51,	Firestone	Naama	9080	3,6,7,15,19,42,51,
Feusner	James	6880	3,6,7,15,19,42,51,	Fischer		648	54,
Feyrer	Gayle	9139	3,6,7,15,19,42,51,	Fischer	Craig	5717	3,6,7,15,19,42,51,
Fichtler	Ken	7143	3,6,7,15,19,42,51,	Fischer	Clare	7987	3,6,7,15,19,42,51,
Fidjeland	Eva	12179	54,	Fischer	Pam	9538	3,6,7,15,19,42,51,
Fiederer		1205	1,2,4,19,22,31,41,	Fischer	Dennis	12301	54,
Fiedler	Michael	10415	3,7,15,19,42,51,	Fischer	Quentin	12333	54,
Field		2791	54,	Fischer	Claudia	12600	54,
Field	Connie	6396	3,6,7,15,19,42,51,	Fischman	Alison	8928	3,6,7,15,19,42,51,
Field	Siobhan	7375	3,6,7,15,19,42,51,	Fisdell	Steven	9394	3,6,7,9,10,15,18,19,20,22,4 2,51
Field	Connie	8383	3,6,7,15,19,42,51,	Fisher	Cathy	8661	3,6,7,15,19,42,51,
fieldgrove	gayle	12790	54,	Fisher	Lana	10282	3,6,7,15,19,42,51,
Fields		2607	2,4,	Fisher	Casey	11055	42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Fisher-Golton		985	17,19,22,	Fletcher	Kate	10554	3,42,51,
Fishman	Larry	10853	42,51,	Flexner	James	9822	3,6,7,9,10,15,19,42,51,
Fistek	Michelle	5823	3,6,7,15,19,42,51,	Flint	Ben	8865	3,6,7,15,19,42,51,
Fitting	Christian	8773	3,6,7,15,19,42,51,	Flom	Caitlin	8285	3,6,7,15,19,42,51,
Fitts	Gary	9446	3,6,7,15,19,42,51,	Flor	Beth	5882	3,6,7,15,19,42,51,
Fitz	Sonja	8852	3,6,7,15,19,42,51,	Flora	Jason	5699	3,6,7,15,19,42,51,
FitzGerald	Maura E.	8219	3,6,7,15,19,42,51,	Florczak	Kathy	5747	3,6,7,15,19,42,51,
Fitzgibbon	Christina	12461	54,	Flores	Mike	6782	3,6,7,15,19,42,51,
Fitzpatrick	Toni	8895	3,6,7,15,19,42,51,	Flores	Jessica	7783	3,6,7,15,19,42,51,
Fitzsimon		2650	7,11,23,	Flores	Fernando	10319	3,6,7,15,19,42,51,
Fiza		646	31,34,50,	Florido	Carlos	7442	3,6,7,15,19,42,51,
flaherty	joyce	12744	54,	Flowers	Julie	5750	3,6,7,15,19,42,51,
Flanagan		1402	54,	floyd	teresa	13184	54,
Flanagan	Mary	7669	3,6,7,15,19,42,51,	Foerster	Grant	10502	3,19,42,51,
flannery		3066	54,	Folch	Maica	8544	3,6,7,15,19,42,51,
Flannery	Marcia	10549	3,42,51,	Foley	Julian	9436	3,6,7,15,19,42,51,
Flasher		99	1,5,22,42,43,44,48,50,51,	Foley	Mary Beth	10662	42,51,
Flasher		460	50,	Folino	Joanna	8556	3,6,7,15,19,42,51,
Flasher		3531	1,2,4,6,9,10,11,15,17,18,19 ,31,42,43,44,48,	Follette		1270	54,
Fleig	William D	5282	54,	Foltz	Gary	9212	3,6,7,15,19,42,51,
Fleisher	Seth	8909	3,6,7,15,19,42,51,	Fong	Alan	5193	54,
Fleisig		1364	54,	Fong/Vermiglio		1509	54,
Fleisig	David	5319	54,	Fonseca		461	54,
Flemer	Janet	9876	3,6,7,15,19,42,51,	Fonseca		3532	50,
Fleming	Alisa	9068	3,6,7,15,19,42,51,	Fonte	Verona	10506	3,19,42,51,
Fletcher	Jude	8293	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Forbes	Virginia H.	6637	3,6,7,15,19,42,51,	Foster	James	8428	3,6,7,15,19,42,51,
Force	Lorrain	5081	54,	Foster	Tracy	9291	3,6,7,15,19,42,51,
Ford	Andrea L	8470	3,6,7,15,19,42,51,	Foster	Allen	10917	42,51,
Forge	John	5150	54,	Foster		101	1,2,4,15,19,31,
Forge	Michele	5157	54,	Foti	Michael	10977	42,51,
Foriska	Joseph	13052	54,	Founds	Lee	13135	54,
forman	janet	12252	54,	fountain	ashleigh	13103	54,
Forno	Eric	9010	3,6,7,15,19,42,51,	Fouts	Mikaela	3257	3,6,9,10,13,14,21,22,24,42,53,
Forrest		2329	48,	Fowler	Geri	5524	3,6,7,15,19,42,51,
Forrest	Elizabeth	9990	3,6,7,15,19,51,	Fowler	Victoria	8920	3,6,7,15,19,42,51,
Forrester		612	54,	Fowler	Liz	9414	3,6,7,15,19,42,51,
Forrester	Don	11089	42,51,	Fox		436	54,
Forrester	George	12297	54,	Fox		500	54,
Forrest-Garcia	Melissa	6331	3,6,7,15,19,42,51,	Fox		3573	54,
Forsberg	Nancy	6199	3,6,7,15,19,42,51,	Fox	LeAnn	5797	3,6,7,15,19,42,51,
Forsberg	Sofie	13173	54,	Fox	John	6710	3,6,7,15,19,42,51,
Fort	Jeff	7144	3,6,7,15,19,42,51,	Fox	Midge	6953	3,6,7,15,19,42,51,
Forte	Shanti	8964	3,6,7,15,19,42,51,	Fox	Tonia	7181	3,6,7,15,19,42,51,
Forte	PG	9163	3,6,7,15,19,42,51,	Fox	Teja	7273	3,6,7,15,19,42,51,
Fortune	Denise	7665	3,6,7,15,19,42,51,	Fox	Armando	7330	3,6,7,15,19,42,51,
Fosnaugh	Ashley Rose	7342	3,6,7,15,19,42,48,51,	Fox	N	9085	3,6,7,15,19,42,51,
Fossgreen		637	22,27,	Fox	Stewart	12399	54,
Fossgreen		639	54,	Fox Ruby	Jacki	8138	3,6,7,15,19,42,51,
Foster		573	4,5,15,	Fraker		805	11,31,
Foster		584	4,5,15,	Fraley	Lynn	6145	3,6,7,15,19,42,51,
Foster		2424	1,5,6,15,31,42,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Fraley	Colleen	10860	42,51,	Franklin	Alicia	8867	3,6,7,15,19,42,51,
Franca-Serpa	Brenda	7463	3,6,7,15,19,42,51,	Franklin	Gareth	13199	54,
Francis	Tristan	12944	54,	Franklin	Constance	13215	54,
Francois	Anne-Lise	9131	3,6,7,15,19,42,51,	Franzen	Tura	6981	3,6,7,15,19,42,51,
Frangenberg	Robert	10402	3,7,15,19,42,51,	Fraser		970	48,
Frank		102	4,11,13,14,22,31,	Fraser	Jasmine	8306	3,6,7,15,19,42,51,
Frank		950	54,	fraser	leah	12350	54,
Frank		1545	2,4,	Frassetto		2291	1,6,7,15,22,42,43,44,48,
Frank		2861	9,13,14,19,22,24,48,	Frassetto	Ruth	9257	3,6,7,15,19,42,51,
Frank	James	8186	3,6,7,15,19,42,51,	Frazee	Cathy	5892	3,6,7,15,19,42,51,
Frank	James	10925	5,42,51,	Frazier	Laura C	6843	3,6,7,15,19,42,51,
Frank	Bindu	10630	42,51,	Frede	Victoria	8569	3,6,7,15,19,42,51,
Frankel		1180	54,	Frederick	Timothy	5241	54,
Frankel		1765	5,11,13,14,	Fredman		949	46,
Frankel		2203	54,	Fredman	Gabe	9916	3,6,7,15,19,42,51,
Frankel	Susan	5262	54,	Fredman	Juliana	10237	3,6,7,15,19,42,51,
Frankel	Sam	7285	3,6,7,15,19,42,51,	Fredrickson Daly	Laura	9184	3,6,7,15,19,42,51,
Frankel	Jan	12891	54,	Freed	Becky	7827	3,6,7,15,19,42,51,
Frankfurter	Aryeh	10953	42,51,	Freedman	Jodi	6706	3,6,7,15,19,42,51,
Franklin	L	103	42,44,	Freeman	Andrea	6369	3,6,7,15,19,42,51,
Franklin		1965	1,11,34,42,43,	Freeman	Daniel	8032	3,6,7,15,19,42,51,
Franklin		2570	2,3,4,5,9,15,19,27,43,46,50	Freeman	Jeanne	9713	3,6,7,15,19,42,51,
Franklin	Margaret	5265	54,	Freeman	M	10447	3,7,19,42,51,
Franklin	Sherry	5507	3,6,7,15,19,42,51,	Freeman	Ian	12721	54,
Franklin	Linda	7999	3,6,7,15,19,42,51,	Frei	Sarah	9299	3,6,7,15,19,42,51,
Franklin	Rasjidah	8371	3,6,7,15,19,42,51,	Freitas	Amanda	8173	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
French	William	10454	3,7,19,42,51,	Frink		3165	2,3,7,11,42,
Freudiger		2473	2,4,	Frisbee	Adrienne	6276	3,6,7,15,19,42,51,
Freund	Michael	8860	3,6,7,15,19,42,51,	Frisch	Jonathan	5185	54,
Frew		574	54,	Fritz	Shari	7513	3,6,7,15,19,42,51,
Frey		907	54,	Fritzell	Mark	10011	3,6,7,15,19,42,51,
Frey		1593	54,	Frizzell	Jennifer	8113	3,6,7,15,19,42,51,
Frey	Robert	12356	54,	Froseth	Darian	6271	3,6,7,15,19,42,51,
Frey	Michael	13142	54,	Fruge	Judith	9999	3,6,7,15,19,42,51,
Frick	Dean	10713	42,51,	Fry	Patrick	10269	3,6,7,15,19,27,42,51,
Fricke	Kyle	9868	3,6,7,15,19,42,51,	Frym	Gloria	10352	3,6,7,15,19,42,51,
Fried	Suzanne	8696	3,6,7,15,19,42,51,	Fuchs	Gabrielle	10625	42,51,
Friedemann		910	54,	Fuentes	Emma	10072	3,6,7,15,19,42,51,
Friedemann		3535	54,	Fujimoto	Genevieve	10927	42,51,
Friedland		671	54,	Fujioka		433	42,
Friedman	Donald	5094	54,	Fukuji	Bruce	6210	3,6,7,15,19,42,51,
Friedman	Stephanie	5117	54,	Fulcher	Nancy J	5920	3,6,7,15,19,42,51,
Friedman	Sally	6757	3,6,7,15,19,42,51,	Fuller	Faith	8570	3,6,7,15,19,42,51,
Friedman	Nancy M	6952	3,6,7,15,19,42,51,	Fuller	Brittany	10146	3,6,7,15,19,42,51,
Friedman	Helen	7126	3,6,7,15,19,42,51,	Fullmer	Jaimie	7018	3,6,7,15,19,42,51,
Friedman	Lisa	8486	3,6,7,15,19,42,51,	Fulton	William	8218	3,6,7,15,19,42,51,
Friedmann		464	54,	fulton	Dana	10354	3,6,7,15,19,42,51,
Friedmann	Alice	5370	54,	Fulwiler	Fran	13179	54,
Friend	Judy	7112	3,6,7,15,19,42,51,	Furlong	Mary	12003	54,
Friends of Sausal Creek		3138	54,	Furnari	Meri	10546	3,42,51,
Fries	Lauren	8059	3,6,7,15,19,42,51,	furnee	marieke	12868	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
FURUTATE	MIDORI	12754	54,	Gale	Joan	7179	3,6,7,15,19,42,51,
Fusco	Carol	8991	3,6,7,15,19,42,51,	Galen	Ron	7337	3,6,7,15,19,42,51,
Futran	Sasha	9676	3,6,7,15,19,42,51,	Gallacher	Victoria	12226	54,
Fuzesy	Sherry	9991	3,6,7,15,19,51,	Gallagher	Betsy Ann	3275	3,6,9,10,13,14,21,22,24,42,53,
G Baker	Leslie	12247	54,	Gallagher	James	10116	3,6,7,15,19,42,51,
G E Chow		12503	54,	Gallaher	Tim	6384	3,6,7,15,19,42,51,
G.	Maria	6718	3,6,7,15,19,42,51,	Gallegos		2332	4,6,7,8,22,23,24,42,43,44,
G. Devlin	Clotilda	13134	9,24,	Galligan	Laura	8101	3,6,7,15,19,42,51,
Gaar	Greg	5164	54,	Galloro		105	4,19,31,44,
Gabolini	Eileen	4007	31,	Galloway		850	54,
Gabolini	Eileen	4009	54,	Galloway		1513	54,
Gachesa	Ellen	12649	5,24,	Galloway	Terry	3212	54,
Gadberry	Andrea	8467	3,6,7,15,19,42,51,	Galloway	Terry	5303	54,
Gadberry	Sharon	10908	42,51,	Galloway	Nancy	7300	3,6,7,15,19,42,51,
Gadd	Peter	5431	54,	Galloway	Michelle	8854	3,6,7,15,19,42,51,
Gadient	Robin	7738	3,6,7,15,19,42,51,	Galt	Jan	10254	3,6,7,15,19,42,51,
Gadye	Levi	8923	3,6,7,15,19,42,51,	Gamble	Ella	8142	3,6,7,15,19,42,51,
Gaffey	Erin P.	10029	3,6,7,15,19,42,51,	Gamboa	Liz	6885	3,6,7,15,19,42,51,
Gage	Jennifer	5633	3,6,7,15,19,42,50,51,	Gambrill	Eileen	6700	3,6,7,15,19,42,51,
Gagliardi	Louis B	10941	42,51,	Gamliel	Eric	9333	3,6,7,15,19,42,51,
Gahley	Carl	9306	3,6,7,15,19,42,51,	Gannon	Robert M	269	2,3,4,7,10,11,12,13,31,42,43,44,
Gaian		877	4,5,6,7,44,	Gans	Cherie	7354	3,6,7,15,19,42,51,
Galan	Edward	8048	3,6,7,15,19,42,51,	Garbarino	Louise	7201	3,6,7,15,19,42,46,51,
Galarza	Marissa	7625	3,6,7,15,19,42,51,	Garber	Kristin	5943	3,6,7,15,19,42,51,
Galdeman	Kristi	6233	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Garchitorena		872	22,42,44,	Garratt	Liz	12610	54,
Garcia	Julie	5844	3,6,7,15,19,42,51,	Garraway	Chris	12914	54,
Garcia	Analisa	6957	3,6,7,15,19,42,51,	Garrett	Thomas	12505	54,
Garcia	Sonsire	8741	3,6,7,15,19,42,51,	Garrison	Harry	6963	3,6,7,15,19,42,51,
Garcia	Samantha	9729	3,6,7,15,19,42,51,	Garrison	Harry	8874	3,6,7,15,19,42,51,
Garcia	Gale	10405	3,7,15,19,42,51,	Garrison	Ben	13101	54,
Garcia	Debra	8789	3,6,7,15,19,42,51,	garrity	kevin	13046	54,
Garcia	Barbara	13181	54,	Garshelis	Daren	10747	42,51,
Garcia Swiecicki	Atava	7132	3,6,7,15,19,42,51,	Gartenberg	Dildar	10411	3,7,15,19,42,51,
Garcia Valera	Rocio	12468	54,	Garth	Ann	13032	54,
Gardella	Elena	7644	3,6,7,15,19,42,51,	Garvin	Kathleen	6929	3,6,7,15,19,42,51,
Gardener		1785	1,24,	Garvin	Joan	7657	3,6,7,15,19,42,51,
Gardener	Diana	10686	42,51,	Gary	Charles	6575	3,6,7,15,19,42,51,
Gardener	Eternal	13176	54,	Garzon		106	31,46,
Gardner	Laurie	176	2,4,44,	Garzon		2028	4,31,42,43,46,
Gardner		1995	42,44,	Garzon	Mauricio	8529	3,6,7,15,19,42,51,
Gardner	Amber	5418	54,	Gaski	Joanna	6234	3,6,7,15,19,42,51,
Gardner	Kristen	6517	3,6,7,15,19,42,51,	Gasperoni	John	10425	3,7,15,19,42,51,
Gardner	Dr. A.	7671	3,6,7,15,19,42,51,	Gauder	Konrad	2256	54,
Gardner	Jake	8677	3,6,7,15,19,42,51,	Gaudet	Myra	8507	3,6,7,15,19,42,51,
Garfield		828	27,	Gaudet	Dwight	10899	42,51,
Garfinkle		2013	3,5,6,7,18,19,27,42,43,44,	Gaul	Ros	12875	54,
Garfinkle	Frayda	6968	3,6,7,15,19,42,51,	Gayler	Anne	12289	54,
Garfinkle	Elizabeth	10167	3,6,7,15,19,42,51,	Gayton	Matthew	7803	3,6,7,15,19,42,51,
Garis	Joanne	5651	3,6,7,15,19,42,51,	Gazzano	Anjelica	7819	3,6,7,15,19,42,51,
Garlena	Sharon	12674	54,	gdespres1@verizo		2460	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
n.net				Georges	Frederique	10729	42,51,
Gearhart		792	3,5,9,11,13,14,15,17,22,24,31,48,	Gerber		2742	54,
Gearhart	Maryl	9650	3,6,7,15,19,42,51,	Gerber	Elaine	5392	54,
gebels	ewelin	12765	54,	Gere	Steve	8725	3,6,7,15,19,42,51,
Gebremicael	Yonas	8575	3,6,7,15,19,42,51,	Gerecht		810	54,
Gecas	Cynthia	10267	3,6,7,15,19,42,51,	Gerecht	Hope	5645	3,6,7,15,19,42,51,
Gecas	George	10476	3,7,19,42,51,	Gerike	Christian	7743	3,6,7,15,19,42,51,
Geerlings	Sonia	12483	54,	German	Greg	8713	3,6,7,15,19,42,51,
Geier		2852	54,	Germann	Klaus	12651	54,
Geigerich	Sophia	3252	3,6,9,10,13,14,21,22,24,42,53,	Gerra	Tistan	10876	42,51,
Gelender	Jacob	8719	3,6,7,15,19,42,51,	Gerst		644	31,
Gelfo	Regina M	9759	3,6,7,15,19,42,51,	Gerwein	Joel	7376	3,6,7,15,19,42,51,
Gelles		108	4,15,	Gescheidt	Jack	6533	3,6,7,15,19,42,51,
Gelles		952	1,4,6,7,15,17,27,42,44,	Gesley		2186	3,4,6,7,42,43,
Gelles	Kat	10068	3,6,7,15,19,42,51,	Getz	John	9871	3,6,7,15,19,42,51,
Gem	Charlotte	12151	54,	Gg	Patricia	12828	54,
Genco	Francesca	10263	3,6,7,15,19,42,51,	Ghiglieri		849	4,19,31,
Gendreau		109	54,	Ghiglieri	Nicole	9286	3,6,7,15,19,27,42,51,
Genev	George	12939	54,	Ghost Dancer Wene	M.	12401	54,
Gengo	Julie	10183	3,6,7,15,19,42,51,	Giacchino		1383	1,6,22,
Gent	Sandra	12241	54,	Giachino	Rick	9908	3,6,7,15,19,27,42,51,
Gentry	H Clarke	9161	3,6,7,15,19,42,51,	Giamartino	Terri	6504	3,6,7,15,19,22,42,51,
gentry	Laurie	13060	54,	Giammatteo	Edith	7161	3,6,7,15,19,42,51,
Geoghegan	Ian	8839	3,6,7,15,19,42,51,	Giancoli		2448	1,8,9,10,13,23,31,41,42,43,
				Gianni	Kevin	9507	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Giannoni		2692	1,2,4,9,10,11,19,21,22,24,3 1,34,36,37,48,	Gilbert	Judith	5567	3,6,7,15,19,42,51,
Giannoni	Linda	6634	3,6,7,15,19,42,51,	Gilbert	Veronica	6295	3,6,7,15,19,42,51,
Giannoni	Linda	12139	54,	Gilbert	Jaine	7971	3,6,7,15,19,42,51,
Gibbs	Duncan	9581	3,6,7,15,19,36,42,51,	Giles	Rachel	9046	3,6,7,15,19,42,51,
Gibbs	Brigitte	13099	54,	Gill		1141	54,
Gibsen		419	54,	Gill		1175	54,
Gibson		1499	54,	Gill		1669	4,43,44,
Gibson	Marge	3221	54,	Gill		1723	27,31,43,44,
Gibson	Jesse	10000	3,6,7,15,19,27,42,51,	Gill	Marie	8380	3,6,7,15,19,42,51,
Gibson Haskell	Marge	5407	54,	Gill	Leori	10067	3,6,7,15,19,42,51,
Gidinez	Shari	9389	3,6,7,15,19,42,51,	gillard	Liz	13225	54,
Gieringer	Dale	8797	3,6,7,15,19,42,51,	Gillespie	Kay	5970	3,6,7,15,19,42,48,51,
Gierson		1071	54,	Gillespie	Bryan	6490	3,6,7,15,19,42,51,
Gierson		1637	54,	Gillies		1201	54,
Gierson		1828	7,8,11,13,15,22,23,24,42,4 3,44,	Gillies	Tom	5615	3,6,7,15,19,42,51,
Gierson		2287	4,5,7,8,11,22,23,24,42,43,4 4,	Gilmartin		2616	6,7,42,
Gierson	Ellen	10164	3,6,7,13,14,15,19,24,42,49, 51,	Gilmartin	Steve	9705	3,6,7,15,19,42,51,
Giese-Zimmer	Astrid	8154	3,6,7,15,19,42,51,	Gilmore	Blake	5169	54,
Giesick	Lisa	6265	3,6,7,15,19,42,51,	Gilson	Gwynne	7373	3,6,7,15,19,42,51,
Gifford		770	54,	Ginger	E.M.	8563	3,6,7,15,19,42,51,
Gifford		3055	54,	Ginsberg	Barbara	12366	54,
Gifford	Zeke	7017	3,6,7,15,19,42,51,	Ginsburg		2214	54,
Gift	Kyle	10887	42,51,	Ginsburg	Larry	5334	54,
Gilbert		111	22,42,44,	Ginsburg	Leonard	10478	3,7,19,42,51,
				Ginzburg	Igor	9407	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Giordano	Deborah	7540	3,6,7,15,19,42,51,	Glover	Janet	12620	54,
Girardin	Paul	13239	54,	Gluck	Katie	5106	54,
GIRODAT	KAREN	12094	54,	Gobel		862	48,
Girvin	Pauline	9639	3,6,7,15,19,42,51,	Goday		427	54,
Giuliano	Claudia	12183	54,	Goddard	Sharon	6397	3,6,7,15,19,42,51,
Giusti		3072	54,	Godena	Ellen	9628	3,6,7,15,19,42,51,
Gjernes	Terese	10240	3,6,7,15,19,42,51,	Godinez		2198	54,
Gjersand	Tasha	7756	3,6,7,15,19,42,51,	Godlenberg		1357	54,
Glanz	Zachary	8809	3,6,7,15,19,42,51,	Godwin	Laura	3265	3,6,9,10,13,14,21,22,24,42,53,
Glasgow		763	54,	Goebel	Luke	9426	3,6,7,15,19,42,51,
Glasgow	Amanda	8993	3,6,7,15,19,42,51,	Goebel	Matthias	12204	54,
Glass	Tom	6903	3,6,7,15,19,42,51,	Goeden	Kimberly	9121	3,6,7,15,19,42,51,
Glass/Penn		607	54,	Goerlitz	Julia	10157	3,6,7,15,19,42,51,
Glasser		879	1,6,7,11,42,44,	Goetz	Peter	8659	3,6,7,15,19,42,51,
Glassey	Tammy	9852	3,6,7,15,19,42,51,	Goggins	Kay	13218	54,
Glaz	Gregory	6500	3,6,7,15,19,42,51,	Gogol	Andy	7741	3,6,7,15,19,42,51,
Glazar	MaryAnne	6512	3,6,7,15,19,42,51,	GOing	Kevin	7243	3,6,7,15,19,42,51,
Glazer	Amy	9467	3,6,7,15,19,42,51,	Goings		2185	42,43,
Gleghorn	Beth E	6596	3,6,7,15,19,42,51,	Gold		861	54,
Glenn	Margaret	5950	3,6,7,15,19,42,51,	Gold		2941	1,6,7,11,13,22,25,27,31,42,45,48,
Glikshtern		2880	9,13,14,15,22,24,48,49,	Gold		3080	54,
Glikshtern	Pete	6925	3,6,7,15,19,42,51,	Gold	Peter	5422	54,
Glikshtern	Anastasia	11015	42,51,	Gold	Elizabeth	5438	54,
Glotov	Petr	7097	3,6,7,15,19,42,51,	Gold	Victor	5457	54,
Glotzer	Ron	7835	3,6,7,15,19,42,51,				
glover	sandra	12477	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Gold	Cindy	6815	3,6,7,15,19,42,51,	Goldman	Gregory	9038	3,6,7,15,19,42,51,
Gold	Esther	6970	3,6,7,15,19,42,51,	Goldman-Hull	Sergi	7544	3,6,7,15,19,42,51,
Gold	Judith	7064	3,6,7,15,19,42,51,	Goldsmith		113	1,15,18,31,
Gold	Ellis	9758	3,6,7,15,19,42,51,	Goldsmith	Tamara	3250	3,6,9,10,13,14,21,22,24,42,53,
Goldberg		112	42,44,51,	Goldsmith	John	9764	3,6,7,15,19,42,51,
Goldberg	Art	6727	3,6,7,15,19,42,51,	Goldsmith	Diane	9894	3,6,7,15,19,42,51,
Goldberg	Patricia	10766	42,51,	Goldsmith/Zucker		593	4,31,
Golden	Susan	7262	3,6,7,15,19,42,51,	Goldstein	Linda	5588	3,6,7,15,19,42,51,
Golden	Steve	10433	3,7,19,42,51,	Goldstein	Stewart	9830	3,6,7,15,19,42,51,
Goldenberg	Barbara	5361	54,	Goldstein	Bluma	10395	3,7,15,19,42,51,
Goldenstein	Susanna	11006	42,51,	Goldstein Love	Yael	9103	3,6,7,15,19,42,51,
Goldfaber		3534	54,	Golinveaux	Joseph H	8249	3,6,7,15,19,42,51,
Goldflies	Barrett	12581	54,	Gollatz	June	13210	54,
Goldhaber		463	54,	Gomez		2461	1,15,19,27,
Goldhaber		1314	54,	Gomez	Elizabeth	9040	3,6,7,15,19,42,51,
Goldhaber	Marilyn	5450	54,	Gomez	Lehi	9726	3,6,7,15,19,42,51,
Goldhammer		706	54,	Gomez	Jenna	9761	3,6,7,15,19,42,51,
Goldhammer	Renee	5448	54,	Gomez	Eduardo	9880	3,6,7,15,19,42,51,
Goldhammer	Alan	5449	54,	Gong		432	1,34,42,
Golding		1210	1,	Gonnella	Jeffrey	10586	3,42,51,
Goldmacher	Sheila	9519	3,6,7,15,19,42,51,	Gonzales	David A	7488	3,6,7,15,19,42,51,
Goldman	Luanne	6021	3,6,7,15,19,42,51,	Gonzales	Enrique	7940	3,6,7,15,19,42,51,
Goldman	Flora	6522	3,6,7,15,19,42,51,	Gonzales Brown	Lillian	182	2,11,44,
Goldman	Lori	6882	3,6,7,15,19,42,51,	Gonzales Brown		1759	2,4,11,13,42,43,44,
Goldman	E. A.	7923	3,6,7,15,19,42,51,	Gonzalez	Joanne	7137	3,6,7,15,19,42,51,
Goldman	Arthur S.	8199	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Gonzalez	Gerardo Lobo	9530	3,6,7,15,19,42,51,	Gorell	Wallace	5883	3,6,7,15,19,42,51,
Gonzalez	Jeremy	9543	3,6,7,15,19,42,51,	Goren	Laurie	10188	3,6,7,15,19,42,51,
González	Adriana	12771	54,	GORHAM	PATRICIA	6805	3,6,7,15,19,42,51,
Goodheart	Steven	6859	3,6,7,15,19,42,51,	Gorjance		822	1,4,15,16,18,19,21,22,27,3 1,34,36,42,52,
Goodman		634	54,	Gorman		817	6,7,44,45,
Goodman		2209	44,	Gorman	Deborah	7481	3,6,7,15,19,42,51,
Goodman	Lisa	5024	54,	Gorman	Therese	9672	3,6,7,15,19,42,51,
Goodman	Suzan	6298	3,6,7,15,19,42,51,	Gorman Winters	Ellen	8220	3,6,7,15,19,42,51,
Goodman	Pearl	7208	3,6,7,15,19,42,51,	Gorodetsky		114	1,4,11,14,15,22,31,
Goodman	Laraine	7822	3,6,7,15,19,42,51,	Gorodetsky	Galina	6889	3,6,7,15,19,42,51,
Goodman	Karen	7908	3,6,7,15,19,42,51,	Gorokhovskiy	Olga	10556	3,42,51,
Goodman	Jenaver	9858	3,6,7,15,19,42,51,	Gorrell	Nancy	8845	3,6,7,15,19,42,51,
Goodman	Diana	10737	42,51,	Gosling	Karen	7737	3,6,7,15,19,42,51,
Goodman	Shomriel	10834	42,51,	Goss	Kathy	5409	54,
Goodman	Margaret	12845	22,	Gosselin	Kachina	6137	3,6,7,15,19,42,51,
Goodrich	Clark	6103	3,6,7,15,19,42,51,	Gosselin	Wendy	10060	3,6,7,15,19,42,51,
Goodsell	Cindi	6529	3,6,7,15,19,42,51,	Gotkowska	Ela	12106	54,
Goodwin	Avilee	6905	3,6,7,15,19,42,51,	Goto	Tatsuya	9154	3,6,7,15,19,42,51,
Gordon	Amanda	5913	3,6,7,15,19,42,51,	Gottlieb		575	54,
Gordon	A.	6072	3,6,7,15,19,42,51,	Gottwald	Norman and Laura	7074	3,6,7,15,19,42,51,
Gordon	Marcy J.	6763	3,6,7,15,19,42,51,	Gough	Jyrica	12429	54,
Gordon	Eric	7203	3,6,7,15,19,42,51,	Gould	Corrina	5532	3,6,7,15,19,42,51,
Gordon	Linda	10446	3,7,19,42,51,	Gould	Dennis	7133	3,6,7,15,19,42,51,
Gordon-Kirsch	Andrew	6104	3,6,7,15,19,42,51,	Gould	Theresa	9346	3,6,7,15,19,42,51,
Gore	Sally	7726	3,6,7,15,19,42,51,	Govea	Victoria	6307	3,6,7,15,19,42,51,
				Goward	Elisabeth	6088	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Gower	Nicholas	8745	3,6,7,15,19,42,51,	Grassetti	Dan	11091	42,51,
Gozali	Roselle	10859	42,51,	Grassetti-Kruglikov	Silvia	6695	3,6,7,15,19,42,51,
Grable	Hope	12644	54,	Grasso	Karina	7404	3,6,7,15,19,42,51,
Graburn		752	54,	Gravanis	Ruth	5170	54,
Grace		1062	5,6,7,44,	Graves	Caryn	8969	3,6,7,15,19,42,51,
Grace		1638	2,4,31,41,44,	Gray		115	15,16,31,
Grady	Dan	6140	3,6,7,15,19,42,51,	Gray		1109	15,16,17,19,31,
Gragg	Thomas J.	9149	3,6,7,15,19,42,51,	Gray		2540	2,4,31,34,
Graham	Stephen	5174	54,	Gray	Kim	5661	3,6,7,15,19,42,51,
Graham	James	7131	3,6,7,15,19,42,51,	Gray	Melissa	6029	3,6,7,15,19,42,51,
Graham	Nancy	7550	3,6,7,15,19,42,51,	Gray	Kristen	6873	3,6,7,15,19,42,51,
Graham	Natalie	12780	54,	Gray	Jen	8217	3,6,7,15,19,42,51,
Graham	Lauren	12860	54,	Gray	Janet	8481	3,6,7,15,19,42,51,
Grajeda-Paulk	Shawna	8405	3,6,7,15,19,42,51,	Gray	Carol	12070	54,
Grampp	Chris	10487	3,7,19,42,51,	Graydon	Tracy	5698	3,6,7,15,19,42,51,
Granovetter		3049	2,4,22,31,48,	Green		1014	9,
Grasetti		3508	5,8,11,31,43,	Green		3146	1,11,24,31,34,46,
Grasetti	Dan	3061	3,6,7,15,19,21,22,42,44,51, 53,54,	Green	Teresa	5852	3,6,7,15,19,42,51,
Grassatt		405	54,	Green	Terri	6449	3,6,7,15,19,42,51,
Grassetti		690	8,43,	Green	Chino	6528	3,6,7,15,19,42,51,
Grassetti		2911	4,5,8,9,10,11,22,42,43,44,4 6,47,53,	Green	Judy	8110	3,6,7,15,19,42,51,
Grassetti		3061	3,6,7,15,19,21,22,42,44,51, 53,54,	Green	Kelli	8247	3,6,7,15,19,42,51,
Grassetti	Elizabeth	10675	42,51,	Green	Jo	8896	3,6,7,15,19,42,51,
Grassetti	Richard	11011	42,51,	green	cynthia	13129	54,
				Greenbaum	Alexander	8098	3,6,7,15,19,42,51,
				Greenberg	Douglas	5091	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Greenberg	Sally	5096	54,	Greig	Jasper	13098	54,
Greenberg	Kenny	7160	3,6,7,15,19,42,51,	Greiner	Csilla	6803	3,6,7,15,19,42,51,
Greenberg	Jim	7595	3,6,7,15,19,42,51,	Grenier	Vala	12534	54,
Greenberg	Corinne Louise	7899	3,6,7,15,19,42,51,	Gretinger		3549	5,6,41,
Greenberg	Simone	7926	3,6,7,15,19,42,51,	Grettenberg		478	54,
Greene	Eliza	5367	54,	Greyson		2000	54,
Greene	Claire	5466	54,	Gribko	Linda	5790	3,6,7,15,19,42,51,
Greene	Stephanie	5870	3,6,7,15,19,42,51,	Grice	Victorine	5758	3,6,7,15,19,42,51,
Greene	Kathleen	7009	3,6,7,15,19,42,51,	GRICE	DEAN	13015	54,
Greene	Nathan	7501	3,6,7,15,19,42,51,	Griego	Gabriel	10570	3,42,51,
Greene	Cindy	10161	3,6,7,15,19,42,51,	Griesel	Arthur	7925	3,6,7,15,19,42,51,
Greene	David	10173	3,6,7,15,19,42,51,	Griffin		117	1,4,14,15,16,22,31,34,
Greenebaum	Lang	769	27,42,46,	Griffin		1283	1,42,45,
Greene-Dittz	Amy	10511	3,19,42,51,	Griffin	John	7781	3,6,7,15,19,42,51,
Greenhill		438	54,	Griffin	Lisa	9118	3,6,7,15,19,42,51,
Greenlief	Phillip	8822	3,6,7,15,19,42,51,	Griffin	Laurel	9183	3,6,7,15,19,42,51,
Greenman	Jessea	8846	3,6,7,15,19,42,51,	Griffin	A	10638	42,51,
Greenspan	Helen	6659	3,6,7,15,19,42,51,	Griffith	Jennifer	13123	54,
Greenstone		755	11,12,42,43,	Griffits	Yvonne	13208	54,
Greenstone	Althaea	9481	3,6,7,15,19,42,51,	Griffits	Oscar	13206	54,
greentheglobe		1136	4,5,6,7,44,	Griffits	John	13207	54,
Greenwood	Denise	5911	3,6,7,15,19,42,51,	Griggs	Tarin	9405	3,6,7,15,19,42,51,
Greer		1017	1,11,22,43,44,	Grilli	Maryan	5903	3,6,7,15,19,42,51,
Gregoire		1222	41,	Grimes	Ruth	3219	54,
Greider		762	27,	Grimm	Andrew	5622	3,6,7,15,19,42,51,
Greider	Susan	7701	3,6,7,15,19,42,51,	Grimsinger	Ray	10666	42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Griot	Kei	6355	3,6,7,15,19,42,51,	Guarnieri	Cindy	12314	54,
Gripman	Marc	7749	3,6,7,15,19,42,51,	Gucciardo	Kaye	12524	54,
Grosh	William	12388	54,	Guccione	Mara	6939	3,6,7,15,19,42,51,
Grosman	Susan	12227	54,	Guckenheimer	Debra	10400	3,7,15,19,42,51,
Gross		1797	2,4,	Guerlac	Suzanne	8726	3,6,7,15,19,42,51,
Gross	Lynne	5923	3,6,7,15,19,42,51,	Guerrero		1274	54,
Gross	Phillip C.	9039	3,6,7,15,19,42,51,	Guggenheimer	Shirley	8351	3,6,7,15,19,42,51,
Gross, Jr.	Gordon	8892	3,6,7,15,19,42,51,	Guido	Wanda	13198	54,
Grossman	Bart	8339	3,6,7,15,19,42,51,	Guilford	Joan	7929	3,6,7,15,19,42,51,
Grossman	Paul B	10748	42,51,	Guilhem	Patricia	12105	54,
Grosz	Gerald	6886	3,6,7,15,19,42,51,	Guilkey	Lucas	6995	3,6,7,15,19,42,51,
grotegut	bette	12956	54,	guillou corinne	le	12632	54,
Grove	Earl	12234	54,	Guire	Tom	10540	3,42,51,
Groves	Rebecca	10317	3,6,7,15,19,42,51,	Gunston	Elizabeth	7311	3,6,7,15,19,42,51,
Groves	Anne	10550	3,42,51,	Guntharp	Kelsey	10728	42,51,
Grudin		1883	1,5,11,13,16,42,43,	Gunther-Murphy	Steve	6940	3,6,7,15,19,42,51,
Grue		1130	1,6,7,42,44,	Gurerrero	Martin	5293	54,
Grue		1712	2,4,43,44,	Gustafson	Cliff	8983	3,6,7,15,19,42,51,
Gruenheid	Katja	9949	3,6,7,15,19,42,51,	Gustin	Judy	9073	3,6,7,15,19,42,51,
Grundtner		1098	1,4,	Guter	Robert	9608	3,6,7,15,19,42,51,
Grundtner		1615	2,4,19,34,	Gutfriend	Chantal	12894	54,
Gruner	Horst	7587	3,6,7,15,19,42,51,	Guthrie		1006	54,
Gruntfest	John	6666	3,6,7,15,19,42,51,	Gutierrez	Andrew Paul	5234	54,
Grutchfield	Alice	7447	3,6,7,15,19,42,51,	Gutierrez	Will	9453	3,6,7,15,19,42,51,
Guaraglia		1162	34,	Gutierrez	Eve	10477	3,7,19,42,51,
Guaraglia		1711	34,43,44,	Guttilla	Darcee	5697	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Guynn		1051	46,	Haddad	George	13077	54,
Guynn		1524	6,27,46,	Hadri		3198	1,2,4,9,21,22,24,27,42,44,
Gwalter415		657	54,	Haehl	Matthew	12481	54,
Gwazda	Farley J	7731	3,6,7,15,19,42,51,	Haet	Rani	7685	3,6,7,15,19,42,51,
Gwynn	John	9134	3,6,7,15,19,42,51,	Haftel	Marion E	6451	3,6,7,15,19,42,51,
Gyllenhammar	Magdalena	12433	54,	Hageman	Bridgette	7816	3,6,7,15,19,42,51,
Gyulassy	Gyorgyi	6712	3,6,7,15,19,42,51,	Haggard	Carol	5760	3,6,7,15,19,42,51,
Gyulassy	Kati	6807	3,6,7,15,19,42,51,	Haggett	Sonya	6753	3,6,7,15,19,42,51,
H	Arise	515	54,	Hagler	Jim	10939	42,51,
H	Brian	6211	3,6,7,15,19,42,51,	Hagy	Pam	5955	3,6,7,15,19,42,51,
H	Erin	9255	3,6,7,15,19,42,51,	Hahn	Stephen	7683	3,6,7,15,19,42,51,
H	Jason	10038	3,6,7,15,19,42,51,	Haimes	Barbara	10338	3,6,7,15,19,42,51,
H.	Jordana	12975	54,	Haith	Ellen Douglass	5938	3,6,7,15,19,42,51,
H. Pinchin	Dolores	12658	54,	Hakim	Mandana	8398	3,6,7,15,19,42,51,
Ha	Khanie	11005	42,51,	Hale	Jacqueline	10755	42,51,
Haag		2071	34,	Hale	Sara	12712	54,
Haas	Karen	10674	42,51,	Halek	Thomas	12293	54,
Habekoss	Gaetan	6499	3,6,7,15,19,42,51,	Hall	M	121	4,8,11,12,22,31,42,43,44,
Haberkern	E	8877	3,6,7,15,19,22,42,51,	Hall		496	54,
Habib	Ehsan	9595	3,6,7,15,19,42,51,	Hall		935	22,48,
Hablinski		2596	7,9,	Hall		1311	2,4,6,44,
Hack	Stefan	8407	3,6,7,15,19,42,51,	Hall		2129	54,
Hackler	Cathrael	8694	3,6,7,15,19,42,51,	Hall		2719	1,34,48,
Hackworth		835	42,	Hall		2751	1,31,43,44,53,
Hadassah	Loren	9422	3,6,7,15,19,42,51,	Hall		3568	43,
Haddad		1940	54,	Hall	Perry	5395	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Hall	Michelle	6157	3,6,7,15,19,42,51,				53,
Hall	William	6294	3,6,7,15,19,42,45,51,	Hammer	Hali	7450	3,6,7,15,19,42,51,
Hall	Pamela	6324	3,6,7,15,19,42,51,	Hammerberg	Rebecca	6343	3,6,7,15,19,42,51,
Hall	Michael	6586	3,6,7,15,19,34,36,42,51,	Hammerson	Brad	8721	3,6,7,15,19,42,51,
Hall	Willard	7257	3,6,7,15,19,42,51,	Hammett	Jane Erwin	6407	3,6,7,15,19,42,51,
Hall	Chelsea	9065	3,6,7,15,19,42,51,	Hammond	Sue	10020	3,6,7,13,14,15,19,24,42,48,51,
Hall	Marg	9412	3,6,7,15,19,42,51,	Hammond	David	12275	54,
Hall	Peni	9490	3,6,7,15,19,42,51,	Hamstra	Suzanne	6371	3,6,7,15,19,42,51,
Hall	Gina	10229	3,6,7,15,19,42,51,	Hancock		617	54,
Hall	Hayley	10288	3,6,7,15,19,42,51,	Hancock	Tim	10221	3,6,7,15,19,42,51,
Hall	Kenyon	10471	3,7,19,42,51,	Hancock	Emily	11088	42,51,
Haller	Teresa	12439	54,	Hancock	Richard	12359	54,
Halme		3073	2,4,9,10,13,14,25,27,42,46,	Handel	Elisabeth	10366	3,6,7,15,19,32,42,51,
Halpern		2507	1,2,4,7,27,34,42,	Hanes		3154	45,46,48,
Halpern	Joshua	6351	3,6,7,15,19,42,51,	Hanes	John	5068	54,
Halpern	Linda	8004	3,6,7,15,19,42,51,	Hanes	John	8683	3,6,7,15,19,42,51,
Hamby	Carol	5543	3,6,7,15,19,42,51,	Hanes	Okhoo	10761	42,48,51,
Hamilton	Theresa	5999	3,6,7,15,19,42,51,	Hangzhou		3113	54,
Hamilton	Chia	10261	3,6,7,15,19,42,48,51,	Hanin		570	54,
Hamilton	Lindsay	10272	3,6,7,15,19,42,51,	Hanley	Mark	8387	3,6,7,15,19,42,51,
Hamilton	Kim	10561	3,42,51,	Hanna		800	54,
Hamilton	Donna	12068	54,	Hannan	Patrick	10090	3,6,7,15,19,42,51,
Hamlin		1216	1,2,4,22,24,41,43,44,	Hannaway	Maureen	6866	3,6,7,15,19,42,51,
Hammack	Amy Lee	6979	3,6,7,15,19,42,51,	Hansch	Lauren	7759	3,6,7,15,19,42,51,
Hammack	Catherine	9882	3,6,7,15,19,42,51,	Hansell	Jody	7877	3,6,7,15,19,42,51,
Hammer	Barbara	3271	3,6,9,10,13,14,21,22,24,42,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Hansen	Anthony	5104	54,	Harleman	Susan	6163	3,6,7,15,19,42,51,
Hansen	Curtis N. P.	7957	3,6,7,15,19,42,51,	Harleman	Peter	6366	3,6,7,15,19,42,51,
Hansen	arthur	12266	54,	Harling	John	12315	54,
Hanson		1114	4,15,19,27,42,	Harman		1968	1,4,7,8,11,13,15,22,23,24,4 2,43,44,
Hanson		1163	4,15,19,27,42,	Harmon		1502	54,
Hanson		1707	2,4,19,31,43,44,	Harmon	William R.	6675	3,6,7,15,19,42,51,
Hanson		1709	2,4,15,19,27,34,42,43,44,	Harper	DJ	5853	3,6,7,15,19,42,51,
Hanson	Steven E	5304	54,	Harper-McPike	Sidonie	7949	3,6,7,15,19,42,51,
Hanson	Susan	5514	3,6,7,15,19,42,51,	Harpring	Paul	10870	42,51,
Hanson	Audrey	6153	3,6,7,15,19,42,51,	Harrel	Mary Ann	10343	3,6,7,15,19,42,51,
Hanson	John	8598	3,6,7,15,19,42,51,	Harrigan	Teresa	6482	3,6,7,15,19,42,51,
Hanson	Nate	10213	3,6,7,15,19,27,34,42,51,	Harrington	Eileen M.	8251	3,6,7,15,19,42,51,
Hanson	Jared	10322	3,6,7,15,19,42,51,	Harrington	Rita	8746	3,6,7,15,19,42,51,
Hanson	David	11056	42,51,	Harris		694	54,
Haouchar	Abraham	12880	54,	Harris	Susan	5215	54,
Harada		3083	54,	Harris	Linda	5406	54,
Harada	Carol	9604	3,6,7,15,19,42,51,	Harris	Frank	6555	3,6,7,15,19,42,51,
Hardack		2313	4,5,7,8,11,22,23,24,42,43,4 4,	Harris	Seth	7050	3,6,7,15,19,42,51,
Hardack	Richard	8207	3,6,7,15,19,42,51,	Harris	Julie	8216	3,6,7,15,19,42,51,
Hardin	April	12738	54,	Harris	Tammy	8859	3,6,7,15,19,42,51,
Harding	Susan	10566	3,42,51,	Harris	Erin	12322	54,
Hargett	Carol	13047	54,	Harrison		1122	31,34,
Harker	Jenny	12316	54,	Harrison		1673	2,4,31,34,
Harleman		122	1,11,20,34,	Harrison		2583	2,4,7,8,31,42,48,
Harleman		2344	1,2,4,5,9,11,42,43,44,	Harrison		2954	1,2,3,4,7,9,10,18,22,31,42, 43,44,48,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Harrison		3190	54,	Hassell	Sherry	5737	3,6,7,15,19,42,51,
harrison	Kelsey	8763	3,6,7,15,19,42,51,	Hatch	Katherine	8987	3,6,7,15,19,42,51,
Harrison	Norma J F	9429	3,6,7,15,19,42,51,	Hatcher	Terry	5511	3,6,7,15,19,42,51,
Harrison	Margot	10499	3,19,42,51,	Haumann	Rebecca	10197	3,6,7,15,19,42,51,
Harrison	Linda	12812	54,	Hauptmann	Daniela	7801	3,6,7,15,19,42,51,
Harrison	Jeane	13024	54,	Hause	Joan	8697	3,6,7,15,19,42,51,
Harrow	Jaimie	6650	3,6,7,15,19,42,51,	Hauser	Till	12021	54,
Hart	Katie	4010	54,	Hausman	Van	9390	3,6,7,15,19,42,51,
Hartley	Holly	8558	3,6,7,15,19,42,51,	Havens	Lorena	12745	54,
Hartman		968	1,4,34,	Haverty Rugg	Linda	9187	3,6,7,15,19,42,51,
Hartman	Courtney	10791	42,51,	Hawhee	Dylan	9579	3,6,7,15,19,42,51,
Hartman	Barrie	11038	42,51,	Hawk		1041	48,
Hartmann	Sarah	6360	3,6,7,15,19,42,51,	Hawkey	Andy S.	8992	3,6,7,15,19,42,51,
Hartsell	Merideth	8304	3,6,7,15,19,42,51,	Hawkins	Becky	5751	3,6,7,15,19,42,51,
Hartwig	Karen	6430	3,6,7,15,19,42,51,	Hawkins	Danielle	7093	3,6,7,15,19,42,51,
Harvey	Kelly	10904	42,51,	Hawkins	Maureen	12681	54,
Harvill	Annette	13119	54,	Hawley	Daniel	12290	54,
Harville	Av	12728	54,	Hay	Merlin	13093	54,
Harwig	Glennis	12076	54,	Hayase	Nozomi	6264	3,6,7,15,19,42,51,
Hasa		1189	11,25,	Hayes		1527	54,
Hasa		1755	11,27,43,44,	Hayes		2498	2,4,15,
Haskell		446	54,	Hayes		3082	54,
Haskell	Carol	9230	3,6,7,15,19,42,51,	Hayes	J.K Martinez	7690	3,6,7,15,19,42,51,
Hassberg	Leslie	6521	3,6,7,15,19,42,51,	Haymaker	Elisabeth	5718	3,6,7,15,19,42,51,
Hasse	Andrew	7875	3,6,7,15,19,42,51,	Hays	Sally Payson	10983	42,51,
Hasselgren	joan	12539	54,	Hayward	Diane	12158	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Hazard	Adam	7791	3,6,7,15,19,42,51,	Hedges	Robb	7687	3,6,7,15,19,42,51,
Hazel	Inanna	9555	3,6,7,15,19,42,51,	Hedgpeth	Susan	6400	3,6,7,15,19,42,51,
Hazelton	Marilyn	7795	3,6,7,15,19,42,51,	Hedin		2327	54,
Hazlett	Rob	12791	54,	Hedin	Clare	6403	3,6,7,15,19,42,51,
Headley	Jennifer	10186	3,6,7,15,19,42,51,	Hedlund-de Witt	Nicholas	10762	42,51,
Healthnutrition	Silversage	12701	54,	Heffernan		990	42,
Hearn	V. K. and W. R.	8042	3,6,7,15,19,42,51,	Heffernan		1558	2,4,42,
Hearse	Andrew	12194	54,	Heffernan	Sara	5785	3,6,7,15,19,42,51,
Hearst	Jean	8562	3,6,7,15,19,42,51,	Heginbottom	Maryanna	10408	3,7,15,19,42,51,
Heath		1038	3,5,9,11,13,14,15,17,22,24,31,48,	Heil	Lisa	9357	3,6,7,15,19,42,51,
Heath		1546	1,2,3,4,5,6,9,11,14,15,16,22,24,29,31,48,	Heim	Harold	8324	3,6,7,15,19,42,51,
Heath	Christine	7225	3,6,7,15,19,42,51,	Heintz	Penny	12577	54,
Heath	Ladina	8630	3,6,7,15,19,42,51,	Hejinian	Lyn	8828	3,6,7,15,19,42,51,
Heaton	Pam	9363	3,6,7,15,19,42,51,	Helbling	Robin	9833	3,6,7,15,19,42,51,
Hebblewhite	Mary	12513	22,	Helfrich	Lynn	5684	3,6,7,15,19,42,51,
Hebden	Marsha	10421	3,7,15,19,42,51,	Heller	Dave	6452	3,6,7,15,19,42,51,
Hecht	CeliaSue	6446	3,6,7,15,19,42,51,	Helmetsie	M	5877	3,6,7,15,19,42,51,
Hecht	Eva	9086	3,6,7,15,19,24,42,51,	Hencky	Afton	8672	3,6,7,15,19,42,51,
Hecht	Lisa	12486	54,	Hendel	Larry	5547	3,6,7,15,19,42,51,
Hecker	Kaileigh	3262	3,6,9,10,13,14,21,22,24,42,53,	Henderson		1139	54,
Heckman	Julie	9958	3,6,7,15,19,42,51,	Henderson		1227	2,4,11,41,
Heckman	Robert	12626	54,	Henderson		1703	2,4,31,
Hector	Brianna	12049	54,	Henderson	Kathleen	6827	3,6,7,15,19,42,51,
Hedges		123	2,4,42,44,	Henderson	Margaret	10523	3,19,42,51,
				Hendrick	Karyl	6259	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Hendrickson	Alec	12224	54,	Herke	Michelle	9269	3,6,7,15,19,42,51,
Hennen	Brett	7278	3,6,7,15,19,42,51,	Herman	Gene	7274	3,6,7,15,19,42,51,
Hennessy	Charlotte	7444	3,6,7,15,19,42,51,	Herman	Gene	9016	3,6,7,15,19,42,51,
Hennig		776	43,44,45,46,	Herman	Bill	12120	54,
Henning	Michael	8187	3,6,7,15,19,42,51,	Hern	Harold	6224	3,6,7,15,19,42,51,
Henning	Carol	8505	3,6,7,15,19,42,51,	Hernandez		1469	22,42,
Henninger	Barbara	5029	54,	Hernandez		2438	8,11,22,24,43,44,
Henon		2140	54,	Hernandez	Christina	7108	3,6,7,15,19,42,51,
Henon	Marion	5020	54,	Hernandez	Alex	8444	3,6,7,15,19,42,51,
Henrick	Christopher L	6460	3,6,7,15,19,42,51,	Hernandez	Arline	9316	3,6,7,15,19,42,51,
Henrikson	Michael	5182	54,	Heron	Manda	8384	3,6,7,15,19,42,51,
Henriques	Leslie	9460	3,6,7,15,19,42,51,	Herresthal	Isabelle	13021	54,
Henry	Lauren	7014	3,6,7,15,19,42,51,	Herrick	Robert	5037	54,
Henry	Jennifer	9701	3,6,7,15,19,42,51,	Herrick	Jasmine	10422	3,7,15,19,42,51,
Henry	Estelle	12436	54,	Herrick	Rufous	8784	3,6,7,15,19,42,51,
Henshaw	Kenneth	8533	3,6,7,15,19,42,51,	Hertz	Patty	7094	3,6,7,15,19,42,51,
Henshaw	Kenneth	8549	3,6,7,15,19,42,51,	Hertz	Jack	10132	3,6,7,15,19,42,51,
Hensill-Dobson	Janice	7936	3,6,7,15,19,42,51,	Herzog	Kristine M.	6406	3,6,7,15,19,42,51,
Hensley	Jonna	9653	3,6,7,15,19,42,51,	Herzog	Jan K	8066	3,6,7,15,19,42,51,
Henson	Lisa	8299	3,6,7,15,19,42,51,	Heselwood	Stephen	12883	54,
Hepner	Brent	12372	54,	Hess		794	42,43,
Hepworth	Jon	8593	3,6,7,15,19,42,51,	hess		1389	6,31,
Herber	Leslea	12678	5,	Hess	Kathleen	7761	3,6,7,15,19,42,51,
Herbert	Ernest	5114	54,	Hess	Kait	10052	3,6,7,15,19,42,51,
Herd	Maria	9952	3,6,7,15,19,42,51,	Hess	Julie	10490	3,19,42,51,
Heringer		125	4,9,13,14,	Hess-Behrens	Betsy	5232	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Hess-Behrens	Betsy	8568	3,6,7,15,19,42,51,	Hill	Ellen	5278	54,
Hester	Karen	10250	3,6,7,15,19,42,51,	Hill	Sharla	6404	3,6,7,15,19,42,51,
Heydom	Kris	7233	3,6,7,15,19,42,51,	Hill	Sophia	6501	3,6,7,15,19,42,51,
Hiatt	Soren	8977	3,6,7,15,19,42,51,	Hill	Laurie	8123	3,6,7,15,19,42,51,
Hibbard	Patricia	9692	3,6,7,15,19,42,51,	Hill	Misako E	8599	3,6,7,15,19,42,51,
Hickey	Mara	199	1,2,4,6,31,	Hill	Timothy	10268	3,6,7,15,19,42,51,
Hickey		1631	2,4,	Hill	Ginger	12911	54,
Hickey	Ken	7808	3,6,7,15,19,42,51,	Hill	Bobbi	12985	54,
Hickey	Alexandrea	7824	3,6,7,15,19,42,51,	Hilliard	Llewellyn	8958	3,6,7,15,19,42,51,
Hicklin	Mary	12147	54,	Hillier-O'Hara	Ramona	12749	54,
Hickman	Russ	6958	3,6,7,15,19,42,51,	Hillinger	Edith	6080	3,6,7,15,19,42,51,
Hicks	Nadia	6374	3,6,7,15,19,42,51,	Hillis	Dawn	8146	3,6,7,15,19,42,51,
Hicks	MaryLee	13033	54,	Hills Conservation Network		622	54,
Hidalgo	Nikolas	9388	3,6,7,15,19,42,51,	Hills Conservation Network		629	54,
Hiersch	Richard	10438	3,7,19,42,51,	Hills Conservation Network		631	54,
Hiestand	Kristen	5596	3,6,7,15,19,42,51,	Hills Conservation Network		683	54,
Higgins	Amy	5679	3,6,7,15,19,42,51,	Hills Conservation Network		1297	1,2,4,6,9,11,15,42,
High	Chris	9399	3,6,7,15,19,42,51,	Hills Conservation Network		1386	1,2,4,11,15,44,
High	Benjamin	10207	3,6,7,15,19,42,51,	Hills Conservation Network		1505	1,2,4,11,15,44,
Hilal		650	54,	Hills Conservation Network		1908	1,11,15,42,
Hilden	Peggy	6612	3,6,7,15,19,42,51,				
Hilden	Joy	6693	3,6,7,15,19,42,51,				
Hill		458	54,				
Hill		530	54,				
hill		2976	31,				
Hill		3529	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Hills Conservation Network		2001	13,	Hirsch	Rosemary	8776	3,6,7,15,19,42,51,
Hills Conservation Network		2124	1,2,4,6,11,31,	Hirsh	Mitchell	6881	3,6,7,15,19,42,51,
Hills Conservation Network		2159	1,2,4,6,11,31,	Hirsh	Deborah	7335	3,6,7,15,19,42,51,
Hills Conservation Network		2250	1,2,4,6,11,31,	Hirth		1813	4,8,11,
Hills Conservation Network		2431	2,4,5,27,42,43,	Hirth	Carol	7849	3,6,7,15,19,42,51,
Hills Conservation Network		2470	2,4,5,27,42,43,	Hirtz-Wold	Max	10182	3,6,7,15,19,42,51,
Hills Conservation Network		11108	24,42,51,	Hise	Jessamyn	8376	3,6,7,15,19,42,51,
Hills Conserv. Network		126	22,42,44,	Hiss	Mark	7832	3,6,7,15,19,42,51,
Hillyer		568	54,	Hitchen		1215	54,
Hinchey	Glenn	12878	54,	Hite	Jim	8681	3,6,7,15,19,42,51,
Hinderstein		1265	4,	Hites	Nathalie	6498	3,6,7,15,19,42,51,
Hines	Bridget	5510	3,6,7,15,19,42,51,	Hitt		1225	2,4,19,41,
Hingle		3140	31,42,	Hitt	Jaan	7054	3,6,7,15,19,42,51,
Hingle-Webster	Octavio	9896	3,6,7,15,19,42,51,	Hlodnicki	Bruce	12646	54,
Hinkle		2468	2,4,19,31,43,48,	Ho	Marilyn	10804	42,51,
Hinkle	John	6297	3,6,7,15,19,42,51,	Hoachlander	Jennifer	8358	3,6,7,15,19,42,51,
Hinrichs	Sherry	6609	3,6,7,15,19,42,51,	Hoag	Jason	7989	3,6,7,15,19,42,51,
Hipple	David W	10391	3,7,15,19,42,51,	Hoaglin	Donna	12829	54,
Hippler	Rosa M.	8237	3,6,7,15,19,42,51,	Hobart	Sue	7432	3,6,7,15,19,42,51,
Hirlehey	Clara	12881	54,	Hobbs		1117	1,4,5,6,7,43,44,
Hirsch		1095	54,	Hobbs		1726	2,4,5,7,42,43,
Hirsch		1630	27,	Hobbs	Thomas	5885	3,5,6,7,15,19,42,48,51,
				Hobbs	Courtney	5906	3,6,7,15,19,42,51,
				Hobbs	Tia	8640	3,6,7,15,19,42,51,
				hochendoner	bernard	12478	54,
				Hochfelder	Margaret	9050	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Hochfield		707	54,	Hogancamp	David	12462	54,
Hochstetler	Lisa	12965	54,	Hoge	Nettie	8499	3,6,7,15,19,42,51,
Hodge	Nicole	9136	3,6,7,15,19,42,51,	Hogencamp		875	54,
Hoelzl	Jeanette	12768	54,	Hogenson	Mark	10385	3,7,15,19,42,51,
Hoepner	Lori	7321	3,6,7,15,19,42,51,	Hogg		128	4,22,31,44,
Hoes		745	22,	Hogg	Lindsey	9533	3,6,7,15,19,42,51,
Hoey	Nicole	9482	3,6,7,15,19,42,51,	Holbrook	Holly	5512	3,6,7,15,19,42,51,
Hofer	Patricia M.	5934	3,6,7,15,19,42,51,	Holiday		610	54,
Hofer	Marcia	8751	3,6,7,15,19,42,51,	Holiday		2263	1,2,4,8,9,10,11,42,43,44,
Hoff	Sheena	6520	3,6,7,15,19,42,51,	Holiday	Tony	11062	24,42,51,
Hoffberg	Emiy	10978	42,51,	Holland		774	27,43,44,
Hoffer	julie	13089	54,	Holland		3506	1,5,8,11,
Hoffman		127	1,2,4,7,	Holland	Lia	9474	3,6,7,15,19,42,51,
Hoffman	Jeff	5333	54,	Holland	Tara	9841	3,6,7,15,19,42,51,
Hoffman	Chrissy	6313	3,6,7,15,19,42,51,	Holleman	Bette	9976	3,6,7,15,19,42,51,
Hoffman	Marcia L	7852	3,6,7,15,19,42,51,	Hollenbach	Barbara	7470	3,6,7,15,19,42,51,
Hoffman	Noah	8578	3,6,7,15,19,42,51,	Holley		2469	43,
Hoffman	Ian	9531	3,6,7,15,19,42,51,	Holliman	Shea	12083	54,
Hoffman	Carleton	10958	42,51,	Hollingsworth	Judy	6869	3,6,7,15,19,42,51,
Hofmann		535	54,	Hollingsworth	Lynne A	9135	3,6,7,15,19,42,51,
Hofmann	Lynne	5344	54,	Hollins-Davidson	Virginia	8457	3,6,7,15,19,42,51,
Hofmann	Robert	5356	54,	Hollis-Franklyn	Candace	12852	54,
Hofmann	Melanie	6505	3,6,7,15,19,42,51,	Hollister	Sidney J.P.	8518	3,6,7,15,19,42,51,
Hogan		437	1,	Holly		662	22,24,27,
Hogan	Sharon	6548	3,6,7,15,19,42,51,	Holly		1456	2,4,6,8,42,
				Holly		2643	22,25,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Holman	Mary Jane	6647	3,6,7,15,19,42,51,	Hood	Camille	5719	3,6,7,15,19,42,51,
holman	kyva	12134	54,	Hood	Marin	8673	3,6,7,15,19,42,51,
Holmberg	Meg	10531	3,42,51,	Hood	Joel	9926	3,6,7,15,19,42,51,
Holme		819	42,	Hooker	Ryan	10025	3,6,7,15,19,42,51,
Holme	John	8960	3,6,7,15,19,42,51,	Hooker	Emily	10053	3,6,7,15,19,42,51,
Holmen		1022	1,4,15,18,	Hooker	Claire	10103	3,6,7,15,19,42,51,
Holmes		130	1,11,22,42,	Hooper	Margaret	7128	3,6,7,15,19,22,42,51,
Holmes		748	54,	Hoopes	Phila	6081	3,6,7,15,19,42,51,
Holmes		749	54,	Hope	Sylvia	10233	3,6,7,15,19,42,51,
Holmes		2808	9,14,19,22,24,48,	Hope	Katherine	12398	54,
Holmes	Heather	6247	3,6,7,15,19,42,51,	Hope	Jane	12742	54,
Holmes	Sharon	6930	3,6,7,15,19,42,51,	Hopkins	Jessica	7194	3,6,7,15,19,42,51,
Holmes	Peggy	9197	3,6,7,15,19,42,51,	Hopkins	Jeff	8026	3,6,7,15,19,42,51,
Holmes	Tara	11058	42,51,	Hopkins	Jennifer	10034	3,6,7,15,19,42,51,
Holmes	Tara	12160	54,	Hoppenbrouwers	Elke	13136	22,48,
Holsinger	Diane	6228	3,6,7,15,19,42,51,	Hopper	Stephen M	5833	3,6,7,15,19,42,51,
Holt	Patricia	6566	3,6,7,15,19,42,51,	Horacek	Tamara	7025	3,6,7,15,19,42,51,
Holt	Dave	7634	3,6,7,15,19,42,51,	Horn		771	45,46,49,
Holt	Lorri	8724	3,6,7,15,19,42,51,	Horner		2353	54,
Holton	Louise	11014	42,51,	Horner	Justin	5359	54,
Holtz	Sue	12086	54,	Horner DUPLICATE		2354	54,
Holtzman	Steve	5472	54,	Horowitz		133	11,42,44,
Holy	Dominique	12375	54,	Horowitz		527	54,
Honey	John	6935	3,6,7,15,19,42,51,	Horowitz		2671	54,
Hono	Patrick	10994	42,51,	Horowitz	Jill	5227	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Horowitz	Julian	5635	3,6,7,15,19,42,51,				33,34,42,43,44,46,47,48,49,51,52,
Horowitz	Cynthia	7398	3,6,7,15,19,42,51,	Hovland		406	13,
Horowitz	Lynn	9378	3,6,7,15,19,42,51,	Hovland		407	22,
Horrells	Sheila	6092	3,6,7,15,19,42,51,	Hovland		616	9,10,
Horsfall	John	12272	54,	Hovland	Madeline	12137	54,
Horton		730	15,20,44,46,50,	Hovland	Heikki J	10652	42,51,
Horton	Jeffrey	8259	3,6,7,15,19,42,51,	Hovland	John	10715	42,51,
horton	heather	12823	54,	Howard	Ryan	8128	3,6,7,15,19,42,51,
Horvitz	Casey	7521	3,6,7,15,19,42,51,	Howard	Molly	8871	3,6,7,15,19,42,51,
Horwitz	Karen	10627	42,51,	Howard	Beatrice	9577	3,6,7,15,19,42,51,
Horwood	Sue	12954	54,	Howard	Trey	9749	3,6,7,15,19,42,51,
Hostetler	Diane	5725	3,6,7,15,19,42,51,	Howard	Karen	12890	22,48,
Hotes	Marilyn J.	9587	3,6,7,15,19,42,51,	Howard	Katherine	10974	42,51,
Hough	Matthew	7986	3,6,7,15,19,42,51,	Howard	Patricia	11069	42,51,
Houlne	Gloria	6306	3,6,7,15,19,42,51,	Howe	Eric	9706	3,6,7,15,19,42,51,
House	Darryl	7384	3,6,7,15,19,42,51,	Howe	George	12722	54,
Houshour	Lisa	6120	3,6,7,15,19,42,51,	Howell		2475	2,4,11,48,
Houston		1341	54,	Howell	Mary	6231	3,6,7,15,19,42,51,
Houston	Mandi	12770	54,	Howell	Darliene	6716	3,6,7,15,19,42,51,
Hout	Eileen	7871	3,6,7,15,19,42,51,	Howie	may	13083	54,
Hout	Jake	8198	3,6,7,15,19,42,51,	Hoyt	Margie	5805	3,6,7,15,19,42,51,
Hove		2187	54,	Hsieh		992	54,
Hoven	Molly	8392	3,6,7,15,19,42,51,	Hsieh	Kevin	10003	3,6,7,15,19,42,51,
Hover		1485	54,	Hsu	Hsuan	10387	3,7,15,19,42,51,
Hover	David	10801	42,51,	Huang		488	1,22,34,46,
Hovland		135	2,3,4,5,6,8,11,22,27,31,32,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Huard	Nick	5156	54,	Hughes	Lynda	12928	54,
huber	marga	12694	54,	Hughes	Anne	10712	42,51,
Hubert	Ron	12686	54,	Hughes	Suzie	12885	54,
Hubik	Kelsie	10095	3,6,7,15,19,42,51,	Hui	Michael	10318	3,6,7,15,19,42,51,
Huckle	Heather	12520	54,	Huie		1361	2,4,31,
Hudson	Jon	149	4,14,15,19,31,44,46,	Hullihen	Marta	7607	3,6,7,15,19,42,51,
Hudson	Jon	6424	3,6,7,15,19,42,51,	Humes		1312	2,4,6,22,
Hudson	Heidi	8996	3,6,7,15,19,42,51,	Hummel	Autumn	7079	3,6,7,15,19,42,51,
Hudson	Nori	9165	3,6,7,15,19,42,51,	Humphrey	S	10596	3,42,51,
Hudson	Gayle	9462	3,6,7,15,19,42,51,	Humphrey	S	10597	3,42,51,
huelster	mary	12815	54,	Hungate	H Nona	6269	3,6,7,15,19,42,51,
Huey	Veronica	7305	3,6,7,15,19,42,51,	Hunkler	Angela	8718	3,6,7,15,19,42,51,
Huftel	Lisa	10892	42,51,	hunt		824	54,
Hughes		791	54,	Hunt	Barbara	5159	54,
Hughes		883	48,	Hunt	Adam P	6213	3,6,7,15,19,42,51,
Hughes		1433	1,2,4,5,6,15,16,	Hunt	Nancy L	8201	3,6,7,15,19,42,51,
Hughes		1962	42,44,50,	Hunter	Kanchan	6777	3,6,7,15,19,42,51,
Hughes		2055	54,	Hupp	Carol	13221	54,
Hughes	Eric	5277	54,	Hurd	Mary	5267	54,
Hughes	Gary Graham	6383	3,6,7,15,19,42,51,	Hurley	Jennifer	5896	3,6,7,15,19,42,51,
Hughes	Donald	6458	3,6,7,15,19,42,51,	Hurt Echernach	Luc	12254	54,
Hughes	Chris	7711	3,6,7,15,19,42,51,	Hurwitz	Jeffrey	10722	42,51,
Hughes	Kathryn	8382	3,6,7,15,19,42,51,	Husein	Carole	6286	3,6,7,15,19,42,51,
Hughes	Erica	8464	3,6,7,15,19,42,51,	Husserl	Fred	6347	3,6,7,15,19,42,51,
Hughes	Alex	9863	3,6,7,15,19,42,48,51,	Hut	Anneke	13230	54,
Hughes	Bonnie	10416	3,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Hutcheon		1308	54,	Internicola	Kate	5722	3,6,7,15,19,42,51,
Hutcheon		2514	1,3,5,9,10,11,16,46,	Ippolito	Nancy	7895	3,6,7,15,19,42,51,
Hutchinson	Joy Sue	2244	2,3,4,5,9,11,13,14,15,22,27, ,31,42,43,44,48,	Irby	Kathryn	12016	54,
Hutchinson	Susan	7896	3,6,7,15,19,42,51,	Irene Gargallo		12597	54,
Hutmacher	Terry	7283	3,6,7,15,19,42,51,	Irizarry	Mesha	6381	3,6,7,15,19,42,51,
Hyatt	Yvonne	6263	3,6,7,15,19,42,51,	Irvine	Bessie M	5287	54,
Hyman	Paula	9886	3,6,7,15,19,42,51,	Irvine	Peggy	5316	54,
Iacovitti	Rosalinda	12361	54,	Irving		1829	7,8,11,13,15,22,23,24,42,4 3,44,
Iazzetto	Sarah	5994	3,6,7,15,19,42,51,	Irving		2856	54,
Ibaboa		653	54,	Irving	Ian	7716	3,6,7,15,19,42,51,
Ichikawa	Tazuko	12391	54,	Irwin	Kara	5764	3,6,7,15,19,42,51,
ichikawa	jeri	12547	54,	Isack	Ecatherina	7884	3,6,7,15,19,42,51,
Ichinose	Audrey	7648	3,6,7,15,19,42,51,	Isburg		136	11,15,22,
Idso	Bonnie	9959	3,6,7,15,19,42,51,	Isherwood	Maggie	8887	3,6,7,15,19,42,51,
Idso	Sophia	10361	3,6,7,15,19,42,51,	Ishii-Kiefer	Takako	12741	54,
Iglecia	Beth	9231	3,6,7,15,19,42,51,	Isler	David	5100	54,
Imes	Marilyn	9922	3,6,7,15,19,42,51,	Isler	David	8729	3,6,7,15,19,42,51,
Imholz	John	10362	3,6,7,15,19,42,51,	Israel	Phyllis	6519	3,6,7,15,19,42,51,
Imus-Hanlon		540	54,	issa	samer	12143	54,
Ingenthron	Karen	12693	54,	Iversen	John	7880	3,6,7,15,19,42,51,
Ingram-Rich	Robina	10698	42,51,	Iyer	Marika	10740	42,51,
Inkrott	J	6781	3,6,7,15,19,42,51,	Izant	Bertram C	11052	42,51,
Innes	Alexandra	12606	54,	Izzo	Judith	7682	3,6,7,15,19,42,51,
Innocent	Madeleine	5548	3,6,7,15,19,42,51,	J- Kragler	Carin	5657	3,6,7,15,19,42,51,
Inotowok		655	3,13,14,24,	J Lane		12719	54,
Inotowok	Nancy	7081	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
J LEWIS	MARJORIE	13217	9,22,24,	Jacobson	Janet	6357	3,6,7,15,19,42,51,
Jack	Leslie	5834	3,6,7,15,19,42,51,	Jacobson	Addie	12783	54,
Jacklin	Carol	12940	54,	Jaffe	Molly	10033	3,6,7,15,19,42,51,
Jackson		2170	6,7,	Jaffer	Pam	8394	3,6,7,15,19,42,51,
Jackson		2495	2,4,42,	jagiello	carol	12250	54,
Jackson		2961	54,	Jahde		2095	1,4,7,8,11,13,15,22,23,24,4 2,43,44,
Jackson		3192	7,8,11,27,29,42,43,	Jahde	Carrie	10070	3,6,7,15,19,42,51,
Jackson	Judy	5226	54,	JAKSIK	martine	13081	54,
Jackson	Rob	5573	3,6,7,15,19,42,51,	Jamali	Alexandra	9026	3,6,7,15,19,42,51,
Jackson	Lisa	6938	3,6,7,15,19,42,51,	Jamaly	Mehdi	8168	3,6,7,15,19,42,51,
Jackson	Elizabeth	7958	3,6,7,15,19,42,51,	James	Loren	12294	54,
Jackson	Celia	8205	3,6,7,15,19,42,51,	Jamieson	Andrew	10520	3,19,22,42,51,
Jackson	Sage	8235	3,6,7,15,19,42,51,	Jane Kriss	Evan	12671	54,
Jackson	Judy	8623	3,6,7,15,19,42,51,	Janeiro		807	1,15,27,29,44,
Jackson	E	9004	3,6,7,15,19,42,51,	Janner	Miklane	7382	3,6,7,15,19,42,51,
Jackson	Martha	9693	3,6,7,15,19,42,51,	Janora	Bonnie	9839	3,6,7,15,19,42,51,
Jacob	Thomas	10290	3,6,7,15,19,42,51,	Janow	Susan	12498	54,
Jacobs	Sharon	6128	3,6,7,15,19,42,51,	Janowicz		2211	54,
Jacobs	Jennifer	7302	3,6,7,15,19,42,51,	Jans	Nathalie	6198	3,6,7,15,19,42,51,
Jacobs	Cynthia	9420	3,6,7,15,19,42,51,	Janson	Tamara	5310	54,
Jacobs	Linda	9819	3,6,7,15,19,42,51,	Janzen	Gayle	12650	54,
Jacobs	Genice	11045	42,51,	Jaramillo	Luis	7138	3,6,7,15,19,42,51,
Jacobs	Paul	9790	3,6,7,15,19,42,46,51,	Jardine	Berty	12124	54,
Jacobs	JoAnne	10787	42,51,	Jarka	June	13186	54,
Jacobson		1074	54,	Jarman	Dawn	5836	3,6,7,15,19,42,51,
Jacobson		1662	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Jasa		843	54,	Jensen	John	5059	54,
Jayakody	Sachini	5597	3,6,7,15,19,42,51,	Jensen	John	8202	3,6,7,15,19,42,51,
Jaycox	Julie	151	2,4,11,15,18,19,22,31,42,44,	Jensen	Jeremy	8857	3,6,7,15,19,42,51,
Jaycox	Julie	7312	3,6,7,15,19,42,51,	Jensen	Lauren	9968	3,6,7,15,19,42,51,
Jean-Pierre Guay		12698	54,	Jensen	margaret	12695	54,
Jeczen	Victoria	5720	3,6,7,15,19,42,51,	Jensen	Cheriel	12655	5,22,24,
Jeffers	Mara	8027	3,6,7,15,19,42,51,	Jensen Akula	Marilyn	10396	3,7,15,19,42,51,
Jefferson	Barbara	23	1,4,19,31,	Jenssen	Leif	5397	54,
Jeffress	Jean	7080	3,6,7,15,19,42,51,	Jenzeh	Stef	6361	3,6,7,15,19,42,51,
Jeffress	Mara	8118	3,6,7,15,19,42,51,	jerry mawhorter		12532	54,
Jelen	Cari R	8243	3,6,7,15,19,42,51,	Jessup		1865	11,15,
Jenkins	William	5173	54,	Jessup	Nancy	7226	3,6,7,15,19,42,51,
Jenkins	Janell	6377	3,6,7,15,19,42,51,	Jevtovic		2330	27,42,43,
Jenkins	Matthew	8494	3,6,7,15,19,42,51,	Jevtovic	Phoebe	8344	3,6,7,15,19,42,51,
Jenkins	Lynne	12748	54,	Jezowski	Jerry	8961	3,6,7,15,19,42,51,
jenkinson	susan	12837	54,	Jimenez	Jesse	9799	3,6,7,15,19,42,51,
Jenks	Alden	10527	3,42,51,	Jing		1148	9,11,13,15,
Jenner		512	13,	jing		1741	4,9,11,13,15,44,
Jenner		2337	54,	Jing	K	10165	3,6,7,15,19,42,51,
Jenner	Steven	8801	3,6,7,15,19,42,51,	Jirik	Nina	7524	3,6,7,15,19,42,51,
Jennifer		658	4,34,	JLF		728	54,
Jennings		143	2,42,43,44,	Joachim	Issa	8921	3,6,7,15,19,42,51,
Jennings	Len	12607	54,	Joan Hertel		12578	54,
Jensen		145	4,27,31,	Joanne Dixon		12529	54,
Jensen		503	48,	Joaquim Soares da Silva Ferr	Manuel	12506	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Jacobus	Don	5355	54,	Johnson	Julie	7288	3,6,7,15,19,42,51,
Joffe		2146	4,11,13,31,34,43,44,	Johnson	Molly	7422	3,6,7,15,19,42,51,
Joffe	Bruce	7585	3,6,7,15,19,42,51,	Johnson	Sue	7635	3,6,7,15,19,42,51,
Johannes	Astrid	10232	3,6,7,15,19,42,51,	Johnson	Roslyn	8139	3,6,7,15,19,42,51,
john myburgh	paul	12377	54,	Johnson	Andrea	8244	3,6,7,15,19,42,51,
Johns	Gregory	8515	3,6,7,15,19,42,51,	Johnson	Liz	8430	3,6,7,15,19,42,51,
Johnson		923	54,	Johnson	James R	9002	3,6,7,15,19,42,51,
Johnson		1129	54,	Johnson	Koryn	9093	3,6,7,15,19,42,51,
Johnson		1729	5,11,	Johnson	Suzanne	9111	3,6,7,15,19,42,51,
Johnson		2486	1,2,4,11,13,42,43,	Johnson	Robert	9179	3,6,7,15,19,42,51,
Johnson		2787	2,4,42,43,	Johnson	Kyrina	9215	3,6,7,15,19,42,51,
johnson		3122	1,2,4,5,6,11,31,	Johnson	Teri	9545	3,6,7,15,19,42,51,
johnson		3123	54,	Johnson	Bonnie Lou	9619	3,6,7,15,19,42,51,
johnson		3124	54,	Johnson	Tim	9755	3,6,7,15,19,42,51,
Johnson	Brad	3216	54,	Johnson	Cheri	10134	3,6,7,15,19,42,51,
Johnson	Joey	3269	3,6,9,10,13,14,21,22,24,42, 53,	Johnson	Graham	10513	3,19,42,51,
Johnson	Janine	5063	54,	Johnson	Jack	10611	19,22,42,51,
Johnson	Robert M	5263	54,	Johnson	Carol	12182	54,
Johnson	David	5274	54,	Johnson	Michele	12874	9,10,
Johnson	Don	5427	54,	Johnson	Carol	12403	54,
Johnson	Robert E	5468	54,	Johnson	Lisa	12691	54,
Johnson	Janet	5660	3,6,7,15,19,42,51,	Johnson Walker	Linda	9594	3,6,7,15,19,27,42,51,
Johnson	Nicole	5928	3,6,7,15,19,42,51,	Johnston		2114	54,
Johnson	Cynthia	6327	3,6,7,15,19,42,51,	Johnston		2888	2,4,42,
Johnson	Jeff	6785	3,6,7,15,19,42,51,	Johnston	Christing	5256	54,
Johnson	Brandon	7067	3,6,7,15,19,42,51,	Johnston	Roberta	9192	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Joi	Xan	6986	3,6,7,15,19,42,51,	Jones	Greg	6947	3,6,7,15,19,42,51,
Jolliffe		560	54,	Jones	Julian	7146	3,6,7,15,19,42,51,
Jones	Kitty	160	2,4,8,22,29,31,42,43,44,50,	Jones	Elaine	7417	3,6,7,15,19,42,51,
Jones	Cedar	651	54,	Jones	Thomas	8002	3,6,7,15,19,42,51,
Jones		672	4,22,	Jones	Carolyn	8580	3,6,7,15,19,42,51,
Jones	Darcy	1087	1,4,9,10,11,15,19,22,32,42,	Jones	Amanda	8639	3,6,7,15,19,42,51,
Jones		1477	2,4,	Jones	Eric	8973	3,6,7,15,19,42,51,
Jones		1656	2,4,6,15,22,27,31,43,44,	Jones	Andrew	9057	3,6,7,15,19,42,51,
Jones		2310	1,15,22,48,	Jones	Bethany	9600	3,6,7,15,19,42,51,
Jones		2579	2,4,7,42,	Jones	Molly	10440	3,7,19,42,51,
Jones		2824	2,4,22,31,	Jones	Loren	10862	42,51,
Jones		2995	54,	Jones	Debz	12020	54,
Jones	Kathleen	5023	54,	Jones	Cheryl	10578	3,42,51,
Jones	Thomas	5116	54,	Jones	Wendy	13148	54,
Jones	Sarah C	5358	54,	Jones, Jr.	Hardin	8091	3,6,7,15,19,42,51,
Jones	Carolyn	5467	54,	Jones-Romansic	Mona	9479	3,6,7,15,19,42,51,
Jones	Dana	5798	3,6,7,15,19,42,51,	Jonson	Suzanne	10965	42,51,
Jones	Suzann	5841	3,6,7,15,19,42,51,	Joplin		2826	9,11,14,19,24,
Jones	Sharon	5933	3,6,7,15,19,42,51,	Joplin	Molly	9865	3,6,7,15,19,42,51,
Jones	Frances	5939	3,6,7,15,19,42,51,	Jordan		754	54,
Jones	Leslie	6024	3,6,7,15,19,42,51,	Jordan	Jona	5590	3,6,7,15,19,42,51,
Jones	Rachael	6326	3,6,7,15,19,42,51,	Jordan	Nicole	5964	3,6,7,15,19,42,51,
Jones	Erica	6399	3,6,7,15,19,42,51,	Jordan	Debrah	6817	3,6,7,15,19,42,51,
Jones	Frances	6564	3,6,7,15,19,42,51,	Jordan	Tami	7640	3,6,7,15,19,42,51,
Jones	Deborah	6902	3,6,7,15,19,42,51,	Jordan	Stacey	7764	3,6,7,15,19,42,51,
Jones	Caylly	6917	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Jordan	Linda	7788	3,6,7,15,19,42,51,	Julien	Barb	13112	54,
Jordan	C.A.	8990	3,6,7,15,19,42,51,	Jumonville	Julie	10852	42,51,
Jordan	Kimberly	10842	29,42,51,	Juniper	Steve	9015	3,6,7,15,19,42,51,
Jordan	Christian	10684	42,51,	Jurcenoks		664	54,
Jorgensen	Jeanne	6842	3,6,7,15,19,42,51,	Juskowich	Nancy	12959	54,
Jorgensen	Mary	10356	3,6,7,15,19,27,42,51,	k r		12760	54,
jorjani		900	46,	Kadyk	Ann and John	5335	54,
Josephian	Jenny	11000	42,51,	Kadyk	Ann and John	10455	3,7,19,42,51,
Josephson	Stephen	8952	3,6,7,15,19,42,51,	Kaempf	Jared	10080	3,6,7,15,19,42,51,
Josephy	Ellen	7699	3,6,7,15,19,42,51,	Kahn		459	54,
Jostad-Laswell	Ariana	6655	3,6,7,15,19,42,51,	Kahn		1994	54,
Jovino	Anthony V	6988	3,6,7,15,19,42,51,	Kahn	Jeff	3218	54,
Juarez	Rolando	9550	3,6,7,15,19,42,51,	Kahn	Jeff	5366	54,
Juarez	Marcis	9563	3,6,7,15,19,42,51,	Kahney		2903	54,
Juarez	Elidia	9849	3,6,7,15,19,27,42,51,	Kahn-Hut	Rachel	8422	3,6,7,15,19,42,51,
Juchau	Aaron	9621	3,6,7,15,19,42,48,51,	Kaimowitz		1973	13,22,24,48,
Judd		150	1,2,3,4,27,31,44,	Kainama	Mozes	12235	54,
Judd	Richard	5214	54,	Kairys	Shams	9126	3,6,7,15,19,42,51,
Judd	Barbara	8188	3,6,7,15,19,42,51,	Kaiser	Susana	5261	54,
Judith Cashin Lerma		12396	54,	Kaiser	Connie	12677	54,
Judt	Joanne	9700	3,6,7,15,19,42,51,	Kaiserman	Patricia	12463	19,
Judy		2023	54,	Kaizer/Salk		153	1,27,
Juelich	Jennifer	10079	3,6,7,15,19,42,51,	Kalafati	Anton	9227	3,6,7,15,19,42,51,
Juhl	Brandon	7752	3,6,7,15,19,42,51,	Kaletzky	Marianne	8620	3,6,7,15,19,42,51,
Julich	Stephen	8312	3,6,7,15,19,42,51,	Kaley	Jeff	6661	3,6,7,15,19,42,51,
				Kalin	Clara	10347	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Kallah	Zee	12882	54,	Karan	Elizabeth	10088	3,6,7,15,19,42,51,
Kallay	Jelena	6274	3,6,7,15,19,42,51,	Karch	Donna	5425	54,
Kallio	Jay	7628	3,6,7,15,19,42,51,	Karim	Sahar	6892	3,6,7,15,19,42,51,
Kalouisi	Maria	12625	54,	Karlsson	Lisbeth	5972	3,6,7,15,19,42,51,
Kamish	Jen	6042	3,6,7,15,19,42,51,	Karnatz	Robin	12449	54,
Kane		2020	4,19,31,32,	karnn	chay	12676	54,
Kane	Irene	6139	3,6,7,15,19,42,51,	Karp	Nancy	8307	3,6,7,15,19,42,51,
Kane	Christine	6838	3,6,7,15,19,42,51,	Karpfinger		2747	2,4,7,19,
Kane	Stephen	9031	3,6,7,15,19,42,51,	Karpfinger	Eileen	6108	3,6,7,15,19,42,51,
Kane	Rosie	8390	3,6,7,15,19,42,51,	Karran	Angela	8141	3,6,7,15,19,42,51,
Kang	Theodore	10151	3,6,7,15,19,42,51,	Karvouna	Sofia	12710	54,
Kang	Asia	10153	3,6,7,15,19,42,51,	Kasoff	William	5285	54,
Kanjo	Kareen	8658	3,6,7,15,19,42,51,	Kassenbrock	Sherry	10209	3,6,7,15,19,42,51,
Kanner		2141	2,4,15,43,44,48,	Kastajoles		635	4,16,31,44,
Kantmann	Hillary	10384	3,7,15,19,42,51,	Kat	Roger	10646	42,51,
Kaofman		417	54,	Kates		2425	2,4,
Kapiotis	Eka	8618	3,6,7,15,19,42,51,	Kates	ND	10677	42,51,
Kaplan		537	54,	Katz		1836	4,42,
Kaplan	Laurence	7349	3,6,7,15,19,42,51,	Katz	Rachel	5061	54,
Kaplan	Richard	7557	3,6,7,15,19,42,51,	Katz	Michael	8040	3,6,7,15,19,42,51,
Kaplan	Jill	9464	3,6,7,15,19,42,51,	Katz	Joanna	8737	3,6,7,15,19,42,51,
Kaplan	Dennis	12156	54,	Katz	Kathy	9258	3,6,7,15,19,42,51,
Kapoor		2462	7,9,13,	Katz	Ken	9371	3,5,6,7,15,19,42,51,
Kapoor	Tara	6238	3,6,7,15,19,42,51,	Katz	Lili	9973	3,6,7,15,19,42,51,
Karagadayeva	Katerina	7947	3,6,7,15,19,42,51,	Katz	Paula	10868	42,51,
Karami	Mary Ann	9009	3,6,7,15,19,42,51,	Katznelson		158	1,5,6,9,22,31,42,44,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Kaufman		609	42,54,	Kelleher	Paulette	7024	3,6,7,15,19,42,51,
Kaufman		3514	54,	Keller	Jason	6916	3,6,7,15,19,42,51,
Kaufman	Jon	5473	54,	Keller	Alexi Matias	7401	3,6,7,15,19,42,51,
Kauppinen	Seth	293	4,54,	Keller	Eileen	7885	3,6,7,15,19,42,51,
Kauppinen		1856	9,11,19,42,43,	Kelley		2303	1,15,22,48,
Kauppinen		2118	54,	Kelley	Pat	5669	3,6,7,15,19,42,51,
Kausen	Valerie	6063	3,6,7,15,19,42,51,	Kelley	Rick	8777	3,6,7,15,19,42,51,
Kay	Tony	5292	54,	Kelley	Carl	9188	3,6,7,15,19,42,51,
Kazanjian	Anna	7100	3,6,7,15,19,42,51,	Kelley	Ron	10772	42,51,
Keach	Joseph	12802	54,	Kelley	Melissa	12261	54,
Kealoha-Blake	Paul	8073	3,6,7,15,19,42,51,	Kellner	Kimberly	10104	3,6,7,15,19,42,51,
Kearney	Doug	7769	3,6,7,15,19,42,51,	Kelly		2480	5,11,
Kearse	Carolyn	5788	3,6,7,15,19,42,51,	Kelly	Jon-Paul	10035	3,6,7,15,19,42,51,
Kearse	Stephanie	7304	3,6,7,15,19,42,51,	Kelly	Sharon	12119	54,
Keenan		3060	54,	Kelly	M	12508	54,
Keenan	Gerry	5458	54,	Kelly	Dennis	12920	54,
Keenan	David	10131	3,6,7,9,15,19,42,48,51,	Kelp	Larry	10393	3,7,15,19,42,51,
keenan	robert	13058	54,	Kemmer	Jennifer	5909	3,6,7,15,19,42,51,
Keene		1837	54,	Kemnitzer	David	8030	3,6,7,15,19,42,51,
Kehner	Cheryl	9404	3,6,7,15,19,42,51,	Kemp		415	46,
Kehrer	Stephen	8608	3,6,7,15,19,42,51,	Kemp		492	54,
Keilch	Patrick	8266	3,6,7,15,19,42,51,	Kemp		3516	5,8,44,46,
Keislar	Doug	5143	54,	Kemp		3563	5,42,44,46,
Keith		2494	1,8,9,10,13,41,42,43,	Kemp	Genevieve K.	7038	3,6,7,15,19,42,51,
Keith	Sherry	7180	3,6,7,15,19,42,51,	kemp	Denise	13153	54,
Kellam	Jacqueline	7996	3,6,7,15,19,42,51,	Kemp	Dale	13196	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Kemper	Michael	10861	42,51,	Kerr	Amber	8388	3,6,7,15,19,42,51,
Kempff	Anita	13244	54,	Kerrih		2452	17,31,43,
Kendall	Margaret	8159	3,6,7,15,19,42,51,	Kerrihard		2061	31,34,42,43,
Kennard	Brenda	5126	54,	Kerrihard		2074	42,
Kennedy		670	54,	Kerrihard		2123	34,42,43,
Kennedy		881	6,7,11,42,43,44,	Kershaw		836	22,24,34,43,44,46,50,
Kennedy	April	3215	54,	Kershner-Wine	Lori	6111	3,6,7,15,19,42,51,
Kennedy	Timm	7237	3,6,7,15,19,42,51,	Kersten	Nic	5872	3,6,7,15,19,42,51,
Kennedy	Patrick	9140	3,6,7,15,19,42,51,	Kesenheimer		1132	5,6,7,42,44,
Kennedy	Philippe	9918	3,6,7,15,19,42,51,	Kesenheimer		1675	6,42,43,44,45,
Kenny		2218	54,	Kessio	Anita	9325	3,6,7,15,19,42,51,
Kenny	John	5025	54,	Kessler	Janet	138	1,4,9,10,11,13,14,19,31,32,
Kent	Jerry D	5442	54,	Kessler		1924	54,
Kenworthy	Kathy	7344	3,6,7,15,19,42,51,	Kessler	David	5428	54,
Kenyon	Nancy B.	6665	3,6,7,15,19,42,51,	Kessler	Mathew	8903	3,6,7,15,19,42,51,
Kenzie	Kate	5712	3,6,7,15,19,42,51,	Kessler	Janet	10992	42,51,
Kenzie	Kate	12778	54,	Kessler	D	13189	54,
Kepley	Lee	12081	54,	Kessler		552	54,
Kepner	Rita	6770	3,6,7,15,19,42,51,	Kessler	Jack	10604	42,51,
Kerievsky	Tracy	8978	3,6,7,15,19,42,51,	Kesterson	Stephanie	9219	3,6,7,15,19,42,51,
Kermc	Nina	12427	54,	Key	Lynda	5694	3,6,7,15,19,42,51,
Kern	Renée	12923	21,	Keyes	Cristina Salvago	6479	3,6,7,15,19,42,51,
Kern, Esq.	Jennifer	8223	3,6,7,15,19,42,51,	Khalilollahi	Daryoosh	9171	3,6,7,15,19,42,51,
Kerr	John	5012	54,	Khalsa		1347	54,
Kerr	Christine	5013	54,	Khan	Arfa	5802	3,6,7,15,19,42,51,
Kerr	Laurie	7472	3,6,7,15,19,42,51,	Khan	Shama	7548	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Khorsandi	Shahzad	6808	3,6,7,15,19,42,51,	Kincade		1725	54,
Khoury	Charis	10639	42,51,	Kincaid	Christopher	10931	5,42,51,
Kidd	Sandra	12661	54,	Kinch	Christine	6061	3,6,7,15,19,42,51,
KIDD	PEGGY	12933	54,	Kinder	Michael	6553	3,6,7,15,19,42,51,
Kiefer	Douglas	7478	3,6,7,15,19,42,51,	King		904	9,10,11,42,43,
Kiesel	Jann	7817	3,6,7,15,19,42,51,	King	Kathleen	5831	3,6,7,15,19,42,51,
Kiley	Dene	9597	3,6,7,15,19,42,51,	King	Morgan	6844	3,6,7,15,19,42,51,
Killebrew	Ann	5522	3,6,7,15,19,42,51,	King	Acacia	7411	3,6,7,15,19,42,51,
Killingbeck	Sarah	5048	54,	King	Siobhan	7928	3,6,7,15,19,42,51,
Killingbeck	Emily	5066	54,	King	Renate	9613	3,6,7,15,19,42,51,
Killingbeck	Sarah	8309	3,6,7,15,19,42,51,	King	Jonathan	10123	3,6,7,15,19,42,51,
Killingbeck	Emily	8604	3,6,7,15,19,42,51,	King	Dave	12212	22,
Kilmer	Kelly	6587	3,6,7,15,19,42,51,	King	Gabrielle	12972	54,
Kilroy		1878	54,	King	Thomas E	10765	42,51,
Kim		508	44,	King	Dennis	12296	54,
Kim	Brian	6293	3,6,7,15,19,42,51,	King	Mary	12450	29,30,
Kim	Alison	8120	3,6,7,15,19,42,51,	King	Eugenia	12796	36,37,
Kim-Andres	Michele	9793	3,6,7,15,19,42,51,	King	Dan	12935	54,
Kimball	Anne	12138	54,	King	Judith	13109	54,
Kimball	Marsha	12731	54,	Kinthead		431	54,
Kimbley	Elizabeth	7508	3,6,7,15,19,42,51,	Kinstle	Buffy	10836	42,51,
Kimmel	Claire	6825	3,6,7,15,19,42,51,	Kinzie	Sandy	6688	3,6,7,15,19,42,51,
Kim-Ng	Shirley	12028	54,	Kipperman	Sarah	6242	3,6,7,15,19,42,51,
Kimsey	Rebecca	5552	3,6,7,15,19,42,51,	Kira	Liveya	7431	3,6,7,15,19,42,51,
Kinal	Destiny	7187	3,6,7,15,19,42,51,	Kiracofe	Roderick	7134	3,6,7,15,19,42,51,
Kincade		1168	54,	Kirby	Lorraine	5629	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Kirichenko	Vera	10711	42,51,	Kleine	Walt	7967	3,6,7,15,19,42,51,
Kirk	H.	5566	3,6,7,15,19,42,51,	Kler	Jerry	8420	3,6,7,15,19,42,51,
Kirk	Tye	6149	3,6,7,15,19,42,51,	Kletz	Abbey	8452	3,6,7,15,19,42,51,
Kirk	Steve	8579	3,6,7,15,19,42,51,	Kleven	Elisa	7088	3,6,7,15,19,42,51,
Kirkland	Dyane	5879	3,6,7,15,19,42,51,	Kley		2606	7,44,
Kirsch	Melissa	9278	3,6,7,15,19,42,51,	Kline-Cristofalo	Kathleen	7806	3,6,7,15,19,42,51,
Kirschenbaum	Alexis	6203	3,6,7,15,19,42,51,	Klitz	Willian	5070	54,
kirschling		3043	9,13,14,19,24,48,	Kloeters	Ursula	5538	3,6,7,15,19,42,51,
Kirschling	Karen	10872	42,51,	Klosterman	Pete	5199	54,
Kiser		3163	2,4,6,7,11,19,31,42,	Klotz	David	8377	3,6,7,15,19,42,51,
Kite	Melissa	10828	42,51,	Klugman	Tina	10203	3,6,7,15,19,42,51,
Kitses	Anita	10705	42,51,	Knabb	Ken	10227	3,6,7,15,19,42,51,
Kittiver	Amy	5301	54,	Knauft	Eric	5536	3,6,7,15,19,42,51,
Kitz Glen	Susan	12713	54,	Knebelman	James	7263	3,6,7,15,19,42,51,
Klann	Linda	6288	3,6,7,15,19,42,51,	Knecht	Gary	5031	54,
Klatt		600	2,6,7,	Knickerbocker	Kevin	5043	54,
Klatt	Indra	5444	54,	Knickerbocker	Steve Randall and Kevin	5254	54,
Klatt	Jennifer	8758	3,6,7,15,19,42,51,	Knight	Jody	6837	3,6,7,15,19,42,51,
Klavon	Evan	8399	3,6,7,15,19,42,51,	Knight	Sharon	10273	3,6,7,15,19,42,51,
Klayman	Melinda	7082	3,6,7,15,19,42,51,	Knobler	Karl	8679	3,6,7,15,19,42,51,
Kleczewski	Krista	6408	3,6,7,15,19,42,51,	Knowles	Mary	7560	3,6,7,15,19,42,51,
Klein		2503	2,4,42,48,51,	Knowles	Faith	9838	3,6,7,15,19,42,51,
Klein	Sandra	6236	3,6,7,15,19,42,51,	Knudson	Rachel	7124	3,6,7,15,19,42,51,
Klein	Carole	9249	3,6,7,15,19,42,51,	Kobayashi	Hugo	10441	3,7,19,42,51,
Klein	Alice	10178	3,6,7,15,19,42,51,	kobayashi	hisui	12908	54,
Kleine	Walt	7964	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Koch	Marianne	5110	54,				1,2,4,6,8,13,15,16,22,43,44
Kocher	Patricia G.	7642	3,6,7,15,19,42,51,	Koss		1411	,48,
Ko-Dial	June	5398	54,	Koss		2857	9,13,14,19,22,24,48,
Ko-Dial	June	7095	3,6,7,15,19,42,51,	Koss	James	10708	42,51,
Koenig	Liz	5775	3,6,7,15,19,42,51,	Kossoff	Laurie	9977	3,6,7,15,19,42,51,
Koerner	Nancy	10533	3,42,51,	Kossowsky	Lori	6888	3,6,7,15,19,42,51,
Koessel	Karl	5085	54,	Kossy		2960	54,
Koetting	Kaleigh	5966	3,6,7,15,19,42,51,	Kotrozo	Andi	8117	3,6,7,15,19,42,51,
Koffman	Spencer	9113	3,6,7,15,19,42,51,	Kotwani		943	54,
Kohler	Glen	5148	54,	Kotwani		1581	54,
Kolbe	Ken	12206	54,	Kotzamani	Sarah	7675	3,6,7,15,19,42,51,
Kolbeck	Tom	5003	54,	Kou	Jack	11103	42,51,
Kolodny	Susan	10439	3,7,19,42,51,	Kous	Billye	12281	54,
Kolter	Ellen	10930	42,51,	Kovardinsky	Sveta	12205	54,
Koltz	Candace	7446	3,6,7,15,19,42,51,	Kowalak	Amy	5685	3,6,7,15,19,42,51,
Komaromi	Jen	9208	3,6,7,15,19,42,51,	Kozariz Shoemaker		477	54,
Komp	Ellen	8827	3,6,7,15,19,42,51,	Kozelka	Kerry	5120	54,
Kopp	Christel	13175	54,	Kozlik		2904	42,48,49,51,
Kopp-Yates	Hannah	8704	3,6,7,15,19,42,51,				2,3,4,5,6,9,10,11,15,17,18,
Koran	Wendy	7466	3,6,7,15,19,42,51,	Kozoriz		164	19,22,23,24,27,28,29,31,32
koromzay		848	54,				,34,36,40,42,43,45,46,47,4
Kororiz Shoemaker	Helen	11090	42,51,	Krahenbuhl	Linda	5707	3,6,7,15,19,42,51,
			1,2,3,4,5,9,10,13,14,15,16,	Kramer		555	54,
Korsen		163	22,31,32,43,44,	Kramer		1930	54,
kort	darcy	5659	3,6,7,15,19,42,51,	Kramer		1956	54,
Kortz	Jeannette	6633	3,6,7,15,19,42,51,	Kramer	Merrill	6016	3,6,7,15,19,22,42,48,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Kramer	Edith	8823	3,6,7,15,19,42,51,	Kroboth	Liz	10945	42,51,
Kramer	Nora	9267	3,6,7,15,19,42,51,	Kroeber	Ann	7564	3,6,7,15,19,42,51,
Krampf	Diana	8453	3,6,7,15,19,42,51,	Krohnengold	Jay	9757	3,6,7,15,19,42,51,
Kranz	Peter	5312	54,	Kronholm		905	54,
Krattenmacher	Claudia	9368	3,6,7,15,19,42,51,	Krooth	Ann	8396	3,6,7,15,19,42,51,
Kravitz	Mara	6802	3,6,7,15,19,42,51,	Krug	Carole	6240	3,6,7,15,19,42,51,
Kreffft	Jeremy	7704	3,6,7,15,19,42,51,	Kruger		663	54,
Kreider	Ralph	12117	54,	Kruger	Dita	9534	3,6,7,15,19,42,51,
Kremen	Robin	6592	3,6,7,15,19,42,51,	Kruglikov	Aaron	6603	3,6,7,15,19,42,51,
Kren		2496	4,44,	Kruglikov	Andre	11102	42,51,
Kren	Alan	5002	54,	Krum	Laura M	9374	3,6,7,15,19,42,51,
Kren	Paula	12690	54,	Krupnik	Tzipora	9020	3,6,7,15,19,42,51,
Kresha		1483	6,22,43,44,	Kruse		3537	2,4,31,
Kresha	Rita	7768	3,6,7,15,19,42,51,	Krymis	Roy	6014	3,6,7,15,19,42,51,
Krigel	Adam	10016	3,6,7,15,19,42,51,	Krzywania-Lee	Maria	12063	54,
Kruger		1083	1,4,	Kubokawa	Jon	8426	3,6,7,15,19,42,51,
Kruger		1626	2,4,34,	Kucera		166	4,15,16,18,19,20,22,31,34, 42,43,44,52,
Krings	Barbara Curtis	5874	3,6,7,15,19,42,51,	Kucera	Frank L.	10514	3,19,42,51,
Krishnan	Hari	9353	3,6,7,15,19,42,51,	Kuchinskas		2541	2,4,5,9,11,15,17,31,42,44,4 8,
Krishnan	Sheila	9666	3,6,7,15,19,42,51,	Kuchinskas	Susan	6172	3,6,7,15,19,42,51,
Krishnan	Jennifer	9722	3,6,7,9,10,15,19,42,51,	Kuehn	Barbara	6677	3,6,7,15,19,42,51,
Krishnan	Vivek	10661	42,51,	Kuelper	Carol	5340	54,
Kristy		919	1,5,6,7,24,34,42,44,	Kuemmerle	Vanessa	8335	3,6,7,15,19,42,51,
Kristy		1111	54,	Kuhr	CT	12385	54,
Kristy		1699	54,	Kulz		1255	48,
Kritikos	Gary	8354	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Kumar	Arvind	5204	54,				1,2,3,4,7,9,10,11,13,16,18,19,21,22,27,31,32,33,34,42,46,47,48,50,
Kunz	Jennifer	6977	3,6,7,15,19,42,51,	La Pointe	J	169	1,2,9,16,18,19,27,31,33,34,44,
Kupfer	Judy	6773	3,6,7,15,19,42,51,	La Pointe	L	170	1,3,8,11,25,27,42,48,
Kupsaw	Wendy	7863	3,6,7,15,19,42,51,	La Pointe		3158	3,5,6,7,9,13,15,19,22,27,42,46,50,51,
Kurman	Michael	5348	54,	La Pointe	Jacki	5521	3,6,7,15,19,42,51,
Kurtz		1028	11,15,27,	La Pointe	Alan	6744	3,6,7,15,19,42,51,
Kurtz		2743	14,22,24,31,48,	La Pointe	Lauri	7258	3,6,7,15,19,42,51,
Kurtz	Sarah	7766	3,6,7,15,19,42,51,	La Rocca	Isabella	9361	3,6,7,15,19,42,51,
Kurtz	Sarah	8830	3,6,7,15,19,42,51,	Labra	Wendy	5503	3,6,7,15,19,42,51,
Kurtz	Eddie	10521	3,19,42,51,	LaBrecque	C	10668	42,51,
Kushner	Eve	8508	3,6,7,15,19,42,51,	Lackey	Kathleen	6359	3,6,7,15,19,42,51,
Kuthiala	Laleema	6087	3,6,7,15,19,42,51,	Lackland	Meta	9397	3,6,7,15,19,42,51,
Kuwabara	Kimberly	7546	3,6,7,15,19,42,51,	Lacklen	Sofia	9791	3,6,7,15,19,42,51,
Kuwano	Mako	10321	3,6,7,15,19,42,51,	Lacy	Beatrice	5591	3,6,7,15,19,42,51,
Kuznstsov	Alex	9228	3,6,7,15,19,42,51,	Lafond	Sandrine	6291	3,6,7,15,19,42,51,
Kyle	Clarence	5163	54,	Lafone	Heather	8438	3,6,7,15,19,42,51,
Kyra?		1487	1,2,4,6,8,13,22,43,44,	LaForce		3515	1,5,7,17,18,
L	Simon	10285	3,6,7,15,19,42,51,	Lage	Jessica	8635	3,6,7,15,19,42,51,
L	Cindy	12502	54,	Lagman	Jacqueline	6318	3,6,7,15,19,42,51,
L Born	Deborah	12519	9,	Lago	Melissa	8935	3,6,7,15,19,42,51,
L.	M.	5555	3,6,7,15,19,42,51,	Lai	Jadine	6249	3,6,7,15,19,42,51,
L. Trigg	George	12648	54,	Laidlaw	Julie	12263	54,
La Fleur	Gloria	12831	54,	Laing		2275	27,34,
La Force		2205	54,	Lake		837	54,
La Force		2206	4,5,6,7,42,44,48,50,	Lake	Zoe	7419	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Lakin	Paige	8075	3,6,7,15,19,42,51,	Landis	Jerry	10500	3,19,42,51,
Lale	Erin	5708	3,6,7,15,19,42,51,	Landon		554	54,
Lall	Brenda	13107	54,	Landrum	Mary	12095	15,16,22,
Lam		1291	54,	Landry		5065	54,
LaMagna	Marissa	7736	3,6,7,15,19,42,51,	Lane		172	4,7,19,32,42,44,
Lamb		954	1,15,36,48,52,	Lane		1519	54,
Lamb		1578	34,36,48,52,	Lane	Beth	5632	3,6,7,15,19,42,51,
Lamb	Leah	7782	3,6,7,15,19,42,51,	Lane	Stephanie	12566	54,
Lamb	Norma	9589	3,6,7,15,19,42,51,	Langan	Celeste	8847	3,6,7,15,19,42,51,
Lamberson	Petra	8833	3,6,7,15,19,42,51,	Lange	Leora	9690	3,6,7,15,19,42,51,
Lambert	Kaylee	10951	42,51,	Langer	Ari	7678	3,6,7,15,19,42,51,
LaMendola Kabat-Zinn	Teresa	10301	3,6,7,15,19,42,51,	Langert	Jules	6491	3,6,7,15,19,42,51,
Lamers	Elizabeth	12963	54,	Langevin	John L	6509	3,6,7,15,19,42,51,
Lamkey	Rod	8720	3,6,7,15,19,42,51,	Langley	Julia	12190	54,
Lamm	Nomy	6283	3,6,7,15,19,42,51,	Langridge	Robert	5275	54,
Lamoreaux	Richard	12586	54,	Langton	William	8140	3,6,7,15,19,42,51,
LAN	John	5460	54,	Lanigan	Maire	6470	3,6,7,15,19,42,51,
Lancaster		698	9,	Lansberry	Joan	9245	3,6,7,15,19,42,51,
Lancaster	Linus	7307	3,6,7,15,19,42,51,	Lansing	Gail	6559	3,6,7,15,19,42,51,
Lancia	Debra	12073	54,	LaPlant		174	1,4,11,15,16,27,31,34,43,44,50,
Land	Michael	9181	3,6,7,15,19,42,51,	Laplant		475	1,31,34,
Land	David	12476	54,	LaPlant		1185	2,4,27,
Landes	Ilyana	6974	3,6,7,15,19,42,51,	LaPlant		1743	2,4,27,34,
Landis		2336	54,	LaPlant		2432	2,4,7,41,42,44,
Landis	Michael	9680	3,6,7,15,19,42,51,	LaPlant	Carol	10184	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
LaPorta		1233	54,	Lau		1500	54,
Laporta		1304	1,44,	Lauby	Adrienne	7604	3,6,7,15,19,42,51,
Lapow	Gary	9095	3,6,7,15,19,42,51,	Laughon	Char	10936	22,42,51,
Larche		1272	54,	Lautaro	Gabriel	6784	3,6,7,15,19,42,51,
Lareau	Melissa B	10785	42,51,	Lavalli	Tim	8906	3,6,7,15,19,42,51,
Larkin	Timothy	10703	13,42,51,	Lavelle		2390	4,7,8,9,10,11,13,22,23,24,3 4,42,43,44,
Larrimore	Lauren	6222	3,6,7,15,19,42,51,	Lavelle	Kristie	7706	3,6,7,15,19,42,51,
Larry	Pamm	8155	3,6,7,15,19,42,51,	Laventurier		177	1,2,4,5,9,10,11,13,42,44,
Larry		175	1,2,4,11,15,19,22,27,31,34, 43,44,46,	Laventurier	Connie	10401	3,7,15,19,42,51,
Larsen	Robin	7916	3,6,7,15,19,42,51,	Lavoie	Angelina	6376	3,6,7,15,19,42,51,
Larsen	Robert	10133	3,6,7,15,19,42,51,	Lavorini	Charlene	10601	42,51,
Larsen	Tarina	10248	3,6,7,15,19,42,51,	Law	Stephanie	9232	3,6,7,15,19,42,51,
Larsen	Jessica	13178	54,	Law	Emily	9941	3,6,7,15,19,42,51,
Larson	Jonel	7185	3,6,7,15,19,42,51,	Law	Amy	10002	3,6,7,15,19,42,51,
Larsson	Birgitta	12565	54,	Lawhun	Liz	7847	3,6,7,15,19,42,48,51,
Larudee	Paul	5314	54,	Lawless	Michael	10583	3,42,51,
Lasahn	J	10172	3,6,7,15,19,42,51,	Lawnick	Steve	5642	3,6,7,15,19,42,51,
Lasensky	Elizabeth	12966	22,36,37,	Lawrence	Linda B.	6212	3,6,7,15,19,42,51,
Lass	Doug	12522	54,	Lawrence	Paula	6422	3,6,7,15,19,42,51,
Lassen	Karen	7125	3,6,7,15,19,42,51,	Lawrence	Jill E	6875	3,6,7,15,19,42,51,
Last	First	1366	54,	Lawrence	Alexandra	6877	3,6,7,15,19,42,51,
Lastimosa	Veneranda Luisa E	9626	3,6,7,15,19,42,51,	Lawrence	Arwen	9732	3,6,7,15,19,42,51,
Latham		428	31,46,	Lawrence	Holly	12993	54,
Latham		811	1,24,27,	Lawrence	Andrew	10883	42,51,
Lattimer	Joyce	5811	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Lawson		564	54,	Lebaner	K	162	1,3,4,5,9,10,13,14,15,16,22,31,32,42,43,44,
Lawson		576	54,	LeBeau		2003	2,4,11,42,43,
Lawton	Joe	6934	3,6,7,15,19,42,51,	LeBlanc		1986	22,
Layser	Susan	7368	3,6,7,15,19,42,51,	LeBlanc	Summer	9938	3,6,7,15,19,42,51,
Layton	Elaine Marie	7656	3,6,7,15,19,42,51,	Leblanc	Maria	12934	22,
Layton	Ometh	12819	54,	Lebofsky	Matt	6156	3,6,7,15,19,42,51,
Laz	Gabriela	9893	3,6,7,15,19,42,51,	LeBourgeois	Carolyn	8158	3,6,7,15,19,42,51,
Lazansky		759	1,5,17,43,44,	Lebovitz	Dorothy	6883	3,6,7,15,19,42,51,
Lazar	Jane	8127	3,6,7,15,19,42,51,	Lebow	Jeanne	5832	3,6,7,15,19,42,51,
Lazarin		912	50,	Lebow	River	9835	3,6,7,15,19,42,51,
Lazeau	Mike	4012	54,	LeBron		1841	1,4,
Le	Niki	13104	54,	Ledbetter	Sharon	6628	3,6,7,15,19,42,51,
Lea	Meri	10300	3,6,7,15,19,42,51,	Ledeux	Zio	9248	3,6,7,15,19,42,51,
Leach		481	2,4,11,	Ledger	Rachel	12849	54,
Leach		3114	54,	Lee	Deanna	5290	54,
Leach		3552	46,	Lee	Marla	5318	54,
Leach	Jasper	10031	3,6,7,15,19,42,51,	Lee	Brian	5365	54,
Leadbitter	Matt	12329	54,	Lee	Catherine	5641	3,6,7,15,19,42,51,
Leahy	Christian	6084	3,6,7,15,19,42,51,	Lee	Wendy	7087	3,6,7,15,19,42,51,
Leahy	Kate	7129	3,6,7,15,19,42,51,	Lee	Tammy	7182	3,6,7,15,19,42,51,
Leahy	Thomas	8326	3,6,7,15,19,42,51,	Lee	Roberta	7714	3,6,7,15,19,42,51,
Lean	Renee	6035	3,6,7,15,19,42,51,	Lee	Carie	7744	3,6,7,15,19,42,51,
Lear-Zugel	Meridith	7805	3,6,7,15,19,42,51,	Lee	Inhae	8668	3,6,7,15,19,42,51,
Leathers	Andrew	6670	3,6,7,15,19,42,51,	Lee	Trisha	9398	3,6,7,15,19,42,51,
Leathers	Katrina	7202	3,6,7,15,19,42,51,	Lee	Amy	9633	3,6,7,15,19,42,51,
Leavy	Michele	6636	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Lee	Elaine	9770	3,6,7,15,19,42,51,	Leibman	Coby	9559	3,6,7,15,19,42,51,
Lee	Crystal	10308	3,6,7,15,19,42,51,	Leigh	Nicole	7270	3,6,7,15,19,42,51,
Lee	Peter	10986	42,51,	Leiman		3090	6,7,42,43,
lee	jaewon	12032	54,	Leiman	Oren S	9101	3,6,7,15,19,42,51,
Lee	Mary	12238	54,	Leimbach	Shawn	9744	3,6,7,15,19,42,51,
Lee	Mary	10789	42,51,	Leipzig	Laura	8274	3,6,7,15,19,42,51,
Lee	Kelvin	12833	54,	Leite		178	2,4,10,11,12,14,44,
Lee Gist	Sharon	5549	3,6,7,15,19,42,51,	Leith	Leanne	10724	42,51,
Lee Parisi	Mary	13183	54,	Leitmann		2112	11,42,43,
Lee Pett	Sarah	12835	54,	Lem		2169	54,
Leeds	Sharon	7713	3,6,7,15,19,42,51,	LeMarr	Christina	5787	3,6,7,15,19,42,51,
Leefeldt	Christine	5323	54,	Lemire		1238	2,4,
Leeon	Kira	12913	54,	Lemon		1372	2,4,6,44,
Lees-Haley	Savannah	8137	3,6,7,15,19,42,51,	Lenahan	Jason	6759	3,6,7,15,19,42,51,
Leevey	Richard	9033	3,6,7,15,19,42,51,	Leneman	Cecile	8528	3,6,7,15,19,42,51,
Lefaive	Julie	5957	3,6,7,15,19,42,51,	Lenihan		1771	48,
Leffler	Kate	7966	3,6,7,15,19,42,51,	Lenihan		2783	3,11,15,19,27,34,42,
Lefizelier	Florence	12047	54,	Lenihan	Joan C.	6604	3,6,7,15,19,42,51,
Lefore		414	54,	Lenihan	Michelle	6738	3,6,7,15,19,42,51,
Lefsky	Barry	8466	3,6,7,15,19,42,51,	Lenihan	Tracy	6743	3,6,7,15,19,42,51,
Leger	Cate	10412	3,7,15,19,42,51,	Lenihan	Janet	9688	3,6,7,15,19,42,51,
Legg	Victoria Q	331	1,15,19,32,	Lenz	Marianne	12232	54,
Lehan	Claudia	9372	3,6,7,15,19,42,51,	Leon	Mary	5516	3,6,7,15,19,42,51,
lehman		786	54,	Leonard		2907	8,22,31,42,
Lehman	Caroline	6772	3,6,7,15,19,42,51,	Leonard	Annie	8835	3,6,7,15,19,42,51,
Leibich	Maureen	12596	54,	Leonard	Sarah	9029	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Leong	Julie	12571	54,	Levine	Peter	7941	3,6,7,15,19,42,51,
LePaule	Michaline	9180	3,6,7,15,19,42,51,	Levine	Ellen	8976	3,6,7,15,19,42,51,
LePlante		3546	1,2,4,6,34,41,43,50,	Levine	Betsy	9907	3,6,7,15,19,42,51,
Lerman	Sam	11029	42,51,	Levinson	Joan	5184	54,
Lerner	Julia	10827	42,51,	Levit	Judy	9599	3,6,7,15,19,42,51,
Lerner-Ramirez		3096	2,4,22,34,43,44,46,48,49,52,	Levy	David	64	5,12,27,44,
Lerner-Ramirez	Barbara	6323	3,6,7,15,19,42,51,	Levy		180	7,12,44,46,
lerza	Catherine	8963	3,6,7,15,19,42,51,	Levy		447	54,
Lesh	Carol	10346	3,6,7,15,19,42,51,	Levy		2770	1,2,4,11,15,19,43,44,48,
Lesinski	M	190	1,2,4,9,18,19,44,	Levy	Susan	6694	3,6,7,15,19,42,51,
Lesinski		1583	2,4,11,19,22,31,41,	Levy	Silvio	8005	3,6,7,15,19,42,51,
Lessing		1934	9,10,13,14,42,	Levy	David	8576	3,6,7,15,19,42,51,
Lessing	Jill	8937	3,6,7,15,19,42,51,	Levy	Alex	9303	3,6,7,15,19,42,51,
Lester	J	6285	3,6,7,15,19,42,51,	Levy	Susan	9307	3,6,7,15,19,42,51,
Letheule	Katina	7001	3,6,7,15,19,42,51,	Levy	Jane	9523	3,6,7,15,19,42,51,
Leung	Claudia	10879	42,51,	Lew	Bonny	10140	3,6,7,15,19,42,51,
LeVay	Kianna	7015	3,6,7,15,19,42,51,	Lewis	Keith	2241	54,
LeVelle	Joy Ann	5835	3,6,7,15,19,42,51,	Lewis	Keith	2243	54,
Levey	Laura	12515	54,	Lewis	Edwin R	5158	54,
Levi	Ariu	3217	42,	Lewis	Hank	5322	54,
Levi	Rachel	7702	3,6,7,15,19,42,51,	Lewis	Vicki	5562	3,6,7,15,19,42,51,
Levien	Heather	6865	3,6,7,15,19,42,51,	Lewis	Brandi	5616	3,6,7,15,19,42,51,
Levin	Jackie	5379	54,	Lewis	Lisa	6146	3,6,7,15,19,42,51,
Levin	Randi	12407	54,	Lewis	Lisa	7189	3,6,7,15,19,42,51,
Levine	Sandi	6356	3,6,7,15,19,42,51,	Lewis	Gloria	7294	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Lewis	Jacqueline	7361	3,6,7,15,19,42,51,	Light	Allie	10850	42,51,
Lewis	Patrick	7837	3,6,7,15,19,42,51,	Lighvani	Soheila	7445	3,6,7,15,19,42,51,
Lewis	Maxine	8007	3,6,7,15,19,42,51,	Liguori	Andrea	8506	3,6,7,15,19,42,51,
Lewis	Brad	9013	3,6,7,15,19,42,51,	Lii Chang		691	54,
Lewis	Sarah	9686	3,6,7,15,19,42,51,	Liljequist	Kimberly	5362	54,
Lewis	Ellen	10177	3,6,7,15,19,42,51,	Lillie		826	11,17,19,27,42,44,
Lewis	Kim	12593	54,	Lim		1390	54,
Lewis	Gregory	8385	3,6,7,15,19,42,51,	Linda		3200	1,2,4,9,10,11,14,23,24,48,
Lewis-Shaw	Veronica Marie	8484	3,6,7,15,19,42,51,	Lindahl	Lisa	8674	3,6,7,15,19,42,51,
L'hoir		2525	2,4,9,22,42,44,50,	Lindberg	Eric	9070	3,6,7,15,19,42,51,
Libbey	Jessica	9234	3,6,7,15,19,42,51,	Lindberg	David	9567	3,6,7,15,19,42,51,
Lieberman	Julie	8621	3,6,7,15,19,42,51,	Lindemann	Jeffrey Ernst	8297	3,6,7,15,19,42,51,
Lichterman	Joan	10215	3,6,7,9,10,15,19,27,42,48,51,	Linder	Alycia	6219	3,6,7,15,19,42,51,
Licina		2167	2,4,11,19,29,31,34,43,44,50,	linder	Michael	8765	3,6,7,15,19,42,51,
licina	Kay	6657	3,6,7,15,19,42,50,51,	Lindsay		739	9,13,
Lieber		2846	9,13,14,19,22,24,48,	Lindsay	Jacob	10230	3,6,7,15,19,42,51,
Lieber	Susan	6740	3,6,7,15,19,42,51,	Lindsey	Justin	8108	3,6,7,15,19,42,51,
Lieberman	Vicky	6567	3,6,7,15,19,42,51,	Lindstrom	Clara	8493	3,6,7,15,19,42,51,
Lieberman	Richelle	7379	3,6,7,15,19,42,51,	Ling	Charles	10030	3,6,7,15,19,24,42,51,
Liebermann	Richelle	5408	54,	Lingad	Rechelle	9860	3,6,7,15,19,42,51,
Liebert	Jonah	9079	3,6,7,15,19,42,51,	Ling-Ino	Julie	10829	42,51,
Lieberum	Michele	7512	3,6,7,15,19,42,51,	Linn		1269	54,
Lieblich	Nancy	8664	3,6,7,15,19,42,51,	Linneball	John	6996	3,6,7,15,19,42,51,
Lifschutz		2435	1,8,11,22,24,31,43,44,	Linsley	Julie	8133	3,6,7,15,19,42,51,
Lifschutz	Rebecca Rose	7754	3,6,7,15,19,42,51,	Lion	Rosemarie	5580	3,6,7,15,19,42,51,
				Lione	Sandra	9661	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Lipkind	Lawrence	10954	42,51,	Lockwood	Ronald	12627	54,
Lips	Stu	10608	42,51,	Loeper	Pia	6414	3,6,7,15,19,42,51,
Lish	Lianne	13127	54,	Loewen	Nancy	11030	42,51,
Lisinski	Irene	10210	3,6,7,15,19,42,51,	Lofft		620	54,
Litell	Mary	10571	3,42,51,	Lofft		2968	8,9,11,13,14,22,24,31,42,48,
Litewka		961	42,44,	Lofft	William A	11105	42,51,
Litewka		1538	11,43,44,	Loftus	Kate	6696	3,6,7,15,19,42,51,
Litewka	Jack	8902	3,6,7,15,19,42,51,	Logan	A	185	1,2,11,15,19,31,32,44,
Little	Fred	6305	3,6,7,15,19,42,51,	Logan	Jacqueline	5912	3,6,7,15,19,42,51,
Little	Courtney	7906	3,6,7,15,19,42,51,	Logan	Mia	6337	3,6,7,15,19,42,51,
Litton	Ruth	13133	54,	Logan	Colleen	7842	3,6,7,15,19,42,51,
litwin		888	4,9,11,34,48,	Logan	S	12416	48,
Litwin	Julie	9872	3,6,7,15,19,42,51,	Logan Hays	Helen	12825	54,
Litzler	Mary	8710	3,6,7,15,19,42,51,	Loganbill	Scott	6937	3,6,7,15,19,42,51,
Livingston		8468	3,6,7,15,19,42,51,	Logsdan	Dana	9906	3,6,7,15,19,42,51,
Livingstone	Aninha	5624	3,6,7,15,19,42,51,	Lohman-Burke	Melissa	9514	3,6,7,15,19,42,51,
Llanes	Cheeta	10782	42,51,	Lohser	Beate	9696	3,6,7,15,19,42,51,
Lloyd		939	1,4,15,18,	Loi	Ngoc	6395	3,6,7,15,19,42,51,
Lloyd	John	8912	3,6,7,15,19,42,51,	Lois	Monica	8625	3,6,7,15,19,42,51,
Lloyd	Andrea	9454	3,6,7,15,19,42,51,	Lomac-MacNair	Lynne	8586	3,6,7,15,19,42,51,
Lobdell	Jon	6131	3,6,7,15,19,42,51,	Lomba		1452	1,2,4,6,8,13,22,43,44,
LoBue	Joe	6129	3,6,7,15,19,42,51,	Lomba	Lisa	9327	3,6,7,15,19,42,51,
Lock	Susan	5898	3,6,7,15,19,22,42,48,51,	Londe	Helen	5137	54,
Locke	Dana	8682	3,6,7,15,19,42,51,	Lonergan		2930	54,
Lockwood	Barbara	12616	54,	Lonergan	Mike	5377	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Lonergan	Carol	5571	3,6,7,15,19,42,51,	Lopez	Larry	10334	3,6,7,15,19,42,51,
Lonergan	CA	9584	3,6,7,15,19,42,51,	Lopez	Irma G	10641	42,51,
Lonergan	Mary	10192	3,6,7,15,19,42,51,	Lopez	Jehimy	10864	42,51,
Long	Elisabeth	5132	54,	Lopez	Nelly	12820	54,
Long	David	5209	54,	Lopez	Jen	12909	54,
Long	Angela	5668	3,6,7,15,19,42,51,	Lord	Stuart	10386	3,7,15,19,42,51,
Long	Shari	5761	3,6,7,15,19,42,51,	Lorello	Shelley	5721	3,6,7,15,19,42,51,
Long	Lauren	9640	3,6,7,15,19,42,51,	Lorentzen	Greg	6591	3,6,7,15,19,42,51,
long	sheila	12078	54,	Lorenz	Henry	11023	42,51,
Long	Leland	13017	54,	Lorenz	Bettina	12071	54,
Long Gallegos	Julie	10880	42,51,	Loretta		2106	54,
Longhouse	Sweet Grass	6960	3,6,7,15,19,27,42,51,	Loretta		2107	54,
Longman	Laurie	5813	3,6,7,15,19,42,51,	Lou Church	Mary	13044	22,36,37,
Longshore	Wally	12540	54,	Louchard	Caitlyn	9164	3,6,7,15,19,42,51,
Loo	Glenda	12955	54,	Loughran	Jo	6207	3,6,7,15,19,42,51,
Loobey	Joannie	13088	54,	Loughran	Mary	7893	3,6,7,15,19,42,51,
loomis		2440	6,11,	Louie	Denise	5071	54,
Loomis	Margaret	12382	54,	Louisespecht		5034	54,
Loper	Laura J	7232	3,6,7,15,19,42,51,	Lovato	Patty Partch	7158	3,6,7,15,19,42,51,
Loper-Powers		820	42,	Love	Shumbi	6074	3,6,7,15,19,42,51,
Loper-Powers	Sue	7216	3,6,7,15,19,42,51,	Love	Kristin	12960	54,
Lopes	Carol	7918	3,6,7,15,19,42,51,	Loveall		758	11,43,44,48,
Lopes	Tanisha	9598	3,6,7,15,19,42,51,	Loveall	Chelsea	9560	3,6,7,15,19,42,48,51,
Lopes	Ana	12043	54,	Loveland	Virginia	5690	3,6,7,15,19,42,51,
Lopez	Christina	7077	3,6,7,15,19,42,51,	Loveland	Brandon	7963	3,6,7,15,19,42,51,
Lopez	Norma	9023	3,6,7,15,19,42,51,	Loveless	Annette	10871	42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Lovill		2488	2,4,15,34,42,	Ludden	Chelo	12286	54,
Lovins	Susie	7371	3,6,7,15,19,42,51,	Ludlum	Suzanne	10690	42,51,
Low-Chan	Nancy	5864	3,6,7,15,19,42,51,	Ludwig	Larry	9298	3,6,7,15,19,42,51,
Lowe	David	12180	54,	Luehrmann		1825	9,10,11,
Lowenstein	Annie	12202	54,	Luehrmann	Arthur	8469	3,6,7,15,19,42,51,
Lowenthal	Evan	8183	3,6,7,15,19,42,51,	Luenow	Brian	10634	42,51,
Lowenthal	Susanne	8432	3,6,7,15,19,42,51,	Luenow	Brian	12792	54,
Lowry	Pamela A.	8498	3,6,7,15,19,42,51,	Luera	Diane	12968	54,
Lowthorp	Leah	8185	3,6,7,15,19,42,51,	Lui		189	5,6,13,22,
Loyd	Sherrin	9007	3,6,7,15,19,42,51,	Luisa	Giogati	12248	54,
Lozar	Paula	12867	54,	Luiso	Mark	5901	3,6,7,15,19,42,51,
Lozeau		186	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,21,22,23,24,27,28,29,31,32,34,36,40,41,42,43,44,45,46,47,48,49,50,51,52,53,	Lujan	Solis	7056	3,6,7,15,19,42,51,
Loznitsa	Olga	12098	54,	Luk	Sherri	10888	42,51,
Lu		1918	6,27,29,42,	Lumley	Stephen	10998	42,51,
Luba	Russ	12118	54,	Lumsden	William	12244	54,
Luban	Jason	8177	3,6,7,15,19,42,51,	Luna	Jose Berber	5824	3,6,7,15,19,42,51,
Luban	Maria	9923	3,6,7,15,19,42,51,	Lundberg	Emily E. Lundberg; Jessica Bowen; Seth Rosenberg; Sharen Heath; Brandon Williamsraig;	92	5,9,11,14,15,22,31,48,
Lubertozzi		187	1,2,4,7,31,44,	Lundberg		1695	2,3,4,5,9,11,13,14,15,22,27,31,42,43,44,48,
Lubertozzi	David	6373	3,6,7,15,19,42,51,	Lundberg	Emily	8915	3,6,7,15,19,42,51,
Lubrano		890	1,15,19,22,24,31,	Lundgreen	Ken	10893	42,51,
Luca Ribichini	Gian	12925	54,	Lundquist	Sabrina	5812	3,6,7,15,19,42,51,
Lucas	M.	6132	3,6,7,15,19,42,51,	Lundquist	Sarah	9367	3,6,7,15,19,42,51,
Luciano	Inda	8849	3,6,7,15,19,42,51,	Lundy	Amanda	10778	42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Lunn E	Terry	13190	54,	Lyon		751	4,9,11,22,43,44,
Lupien		2042	54,	Lyon		973	4,5,6,7,19,44,
Lupton	Catherine	6039	3,6,7,15,19,42,51,	Lyon	Laura	7874	3,6,7,15,19,42,51,
Lupton	Jeanne	8648	3,6,7,15,19,42,51,	Lyon	Michael	10798	42,51,
LuQman	Tamir A.	7188	3,6,7,15,19,42,51,	Lyons		2212	4,6,7,42,43,44,
Luschen	Joseph	8041	3,6,7,15,19,42,51,	Lyons	John	6455	3,6,7,15,19,42,51,
Lusson	Jean	8348	3,6,7,15,19,42,51,	Lyons	Aleida	7592	3,6,7,15,19,42,51,
Lutge	Gwen	5868	3,6,7,15,19,42,51,	Lyons	Kathi	12364	21,
Luth	Sarah	12613	54,	Lyons	Shannon	12841	54,
Lutzky	Shirley	6946	3,6,7,15,19,42,51,	M	Macy	5742	3,6,7,15,19,42,51,
Luu	MaryJo	12798	54,	M	Martha	7948	3,6,7,15,19,42,51,
Luxem	Don	12346	54,	m o		2862	5,46,
Luzzi	Gina	10948	42,51,	M.	Andrew	5729	3,6,7,15,19,42,51,
Lvwiess		1846	54,	M.	Philipp	6811	3,6,7,15,19,42,51,
Lydie	Laberrondo	6006	3,6,7,15,19,42,51,	Mabry	Kate	13096	49,
Lydon	Norma	7812	3,6,7,15,19,42,51,	Mac Beth	Joan	5073	54,
Lyman	Nora	10369	3,6,7,15,19,42,51,	Mac Beth	Joan	6846	3,6,7,15,19,42,51,
Lynch	Mary	5236	54,	Macbride		191	6,11,12,31,44,
Lynch	Coni	6788	3,6,7,15,19,42,51,	Macdonald	Rosemary	5686	3,6,7,15,19,42,51,
Lynch	Reya	8058	3,6,7,15,19,42,51,	macdonald	meghan	12846	54,
Lynch	John	8105	3,6,7,15,19,42,51,	MacDonnell	Rebecca	5793	3,6,7,15,19,42,51,
Lynch	Timothy	8411	3,6,7,15,19,42,51,	Machiz		944	19,27,
Lynch	Diana	10559	3,42,51,	Machlis		3172	11,
Lynch	Richard	10653	42,51,	Mack		1054	54,
Lynes		3185	2,3,5,6,7,9,42,43,44,	Mack	Shelley	7101	3,6,7,15,19,42,51,
Lynn	Nancy	6972	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Mack	Beverly	11021	42,51,	Magee	Shannon	9842	3,6,7,15,19,42,51,
Mackelprang		753	11,27,43,44,50,	magnaguagno	margherita	13192	54,
Mackelprang	Rebecca	8975	3,6,7,15,19,42,51,	Magno	Angela	12175	54,
MacKenzie		2450	4,31,	Magnusson	Mary	10211	3,6,7,15,19,42,51,
MacKenzie	Michelle	10059	3,6,7,15,19,42,51,	Magree	Elaine	7220	3,6,7,15,19,42,51,
Mackenzie-Fast	JaNICE	6829	3,6,7,15,19,42,51,	Magruder	Joe	5183	54,
MacKey	Pat	9961	3,6,7,15,19,21,22,42,51,	Maguire		1839	4,42,43,
Mackin	Megan	10814	42,51,	Mah	Liwen	5181	54,
Mackinney	John G	10460	3,7,13,19,42,51,	Mah	Robert	7051	3,6,7,15,19,42,51,
MacLafferty	Michael	7007	3,6,7,15,19,42,51,	Mah	Kiri	7266	3,6,7,15,19,42,51,
Maclaurin	Akalia	6094	3,6,7,15,19,42,51,	Mahanes	Laura	5345	54,
Maclearie		827	31,	Mahler	Elaine	12511	54,
Macleod	Katherine	9495	3,6,7,15,19,42,51,	Mahmood	Jen	7944	3,6,7,15,19,42,51,
MacNair	Barbra	7534	3,6,7,15,19,42,51,	Mahoney		194	11,
Madden	Pamela	5902	3,6,7,15,19,42,51,	Mahoney		195	1,4,14,18,40,
Madden	Meg	10966	42,51,	Mahoney		505	1,18,31,40,
Maddox	Carol	6595	3,6,7,15,19,42,51,	Mahoney	Mary	5564	3,6,7,15,19,42,51,
Maddox	Oliver	9727	3,6,7,15,19,42,51,	Mahoney	Patrick	5784	3,6,7,15,19,42,51,
Madeline		2441	54,	Mahoney	Susan	6025	3,6,7,15,19,42,51,
Maetella		192	1,31,44,	Mahoney	Carolyn	9526	3,6,7,15,19,42,51,
Mafalda Boliani	Sonia	13115	54,	Mahood	Scott	6281	3,6,7,15,19,42,51,
Maffeo	Sammy	12990	54,	Maiara	Michael	5821	3,6,7,15,19,42,51,
Mafra	Axel	10105	3,6,7,15,19,42,51,	Maida		3186	9,13,14,19,24,48,
Mag. Widy	Verena	12641	54,	Maier	David	9735	3,6,7,15,19,42,51,
Magarian	Robert D	10491	3,19,42,51,	Main	Steve	6304	3,6,7,15,19,42,51,
Magedoff	Rachel	6821	3,6,7,15,19,42,51,	Mainelli	Margaret	12726	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Majesty		838	27,50,	mandel		2702	3,7,9,11,14,15,22,24,31,48,
Makower	Joel	10129	3,6,7,15,19,42,51,	Mandel	Debi Lee	9883	3,6,7,15,19,42,51,
Malarkey	Tom	8018	3,6,7,15,19,42,51,	Mandel	Melissa	10730	5,42,51,
maldonado		2866	1,7,11,19,22,27,42,44,	Manegold		2155	54,
Maldonado	Vania	5650	3,6,7,15,19,42,51,	manek	rina	13067	54,
Maler	Moshe	5067	54,	Manekin-Hrdy		196	1,2,4,6,15,19,44,
malfatti	piero	12779	54,	Manger	William	6852	3,6,7,15,19,42,51,
Malik	Anna	9551	3,6,7,15,19,42,51,	Mangini	Miriam	7316	3,6,7,15,19,42,51,
Malinowski	Stephen	8445	3,6,7,15,19,42,51,	Mangus		899	27,
malisani	julie	12374	54,	Manion	Rebecca	6950	3,6,7,15,19,42,51,
Malke Singer	Esther	9862	3,6,7,15,19,42,51,	Mankowski	Sarah	5961	3,6,7,15,19,42,51,
Malkin	Rebecca	8213	3,6,7,15,19,42,51,	Manley		712	11,27,42,43,
Mallamo	Tressa	7286	3,6,7,15,19,42,51,	Manley		2382	4,6,7,42,43,44,
Mallory	LMj	12035	54,	Manley	Jamie	10235	3,6,7,15,19,42,51,
Mallove	Elise	6789	3,6,7,15,19,42,51,	Mann		198	31,
Malmberg	Greg	10995	42,51,	Mann		3020	31,
Malone	Beth	5781	3,6,7,15,19,42,51,	Mann	Harper	5192	54,
Malone	Courtney	7136	3,6,7,15,19,42,51,	Mann	Linda	5264	54,
Malone	Stacey	7662	3,6,7,15,19,42,51,	Mann	Laurie	5637	3,6,7,15,19,42,51,
Malone	Myles	10882	42,51,	Mann	Onika	6894	3,6,7,15,19,42,51,
Maloney		3151	31,42,48,	Mann	Clive	7549	3,6,7,15,19,42,51,
Maloney	Nancy	9480	3,6,7,15,19,27,34,42,51,	Mann	Jaskiran	8451	3,6,7,15,19,42,51,
Maloney	Larla	9851	3,6,7,15,19,42,51,	Mann	Babara	10654	42,51,
Malvin	Donna	12369	54,	Manna	Robert	12104	54,
malyon	hilary	12700	54,	Manning		482	4,
Mandapati	Bharati	7358	3,6,7,15,19,42,51,	Manning		3553	42,44,46,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Manning	Stephanie	7271	3,6,7,15,19,42,51,	Margaritonda	Laurie	6344	3,6,7,15,19,42,51,
Manning	Curtis	7844	3,6,7,15,19,23,42,51,	Margerum	Christine	8122	3,6,7,15,19,42,51,
Manning	Scarlett	9063	3,6,7,15,19,42,51,	Margerum	Lisa	8334	3,6,7,15,19,42,51,
Manous	Michael	9250	3,6,7,15,19,27,42,51,	Margulis	S	9569	3,6,7,15,19,42,51,
Manowitz	Gary	12136	54,	Margulius	Laura	5149	54,
Manriquez	Rafael	10501	3,19,42,51,	Maricondo	J	10849	42,51,
Mansbach	Adam	9087	3,6,7,15,19,42,51,	MARIE	TRESSA	12029	54,
Mansbach	Claudia	9877	3,6,7,15,19,42,51,	Marie Cockerham	Joyce	12557	54,
Mansfield	Debera	5855	3,6,7,15,19,42,51,	Marie?		1525	31,34,
Mansky	John	12327	54,	Marie-Christine	Noel	10125	3,6,7,15,19,42,51,
Manthripragada		1296	2,4,6,41,42,	Marija Rumbak	Ana	13066	54,
Mantoen	Marianne	13124	54,	Marikovics	Lena	5993	3,6,7,15,19,42,51,
Manwarring	Haley	9927	3,6,7,15,19,42,51,	Mariscal	Cecelia	9012	3,6,7,15,19,42,51,
Maoz		1350	54,	Markel	Bennett	6715	3,6,7,15,19,42,51,
Marbury	Janet	7193	3,6,7,15,19,42,51,	Markiewicz		1241	54,
Marc Feldmann		12307	54,	Marks	Laurel	6857	3,6,7,15,19,42,51,
Marchenko	Alena	6684	3,6,7,15,19,42,51,	Marks	Luan	7462	3,6,7,15,19,42,51,
Marchessault	Cody	10821	42,51,	marley	yvonne	12774	54,
Marchioni	Lidia	10733	42,51,	Marliave		1999	54,
Marchman		2149	27,34,	Marlin	Laura	5135	54,
Marco		1792	4,8,22,42,43,	Marlin	Dan	8056	3,6,7,15,19,42,51,
Marco	Marilyn	10784	42,51,	Marman	Joe	6441	3,6,7,15,19,42,51,
Marco	Jim	10837	42,51,	Maron		435	8,
Marecek	Mae	10190	3,6,7,15,19,42,51,	Maron	Jess	2229	54,
Marell	Gail	8226	3,6,7,15,19,42,51,	Maron	Jess	9421	3,6,7,15,19,42,51,
Marg	Tamia	5391	54,	Marquardt	Tatiana	8035	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Marron	Jamie	6322	3,6,7,15,19,42,51,	Martin	Michael	12211	54,
Marschak	Madeline	10075	3,6,7,15,19,42,51,	Martin	Marcelina	12319	54,
Marsh		2947	1,6,7,19,31,34,42,43,	Martin	Nicolas	12362	54,
Marsh	Bob	7415	3,6,7,15,19,42,51,	Martinez	Concha	8115	3,6,7,15,19,42,51,
Marshall	Carolyn	6321	3,6,7,15,19,42,51,	Martinez	Maria	8164	3,6,7,15,19,42,51,
Marshall	Amelia	7122	3,6,7,15,19,42,51,	Martinez	Susan	8501	3,6,7,15,19,42,51,
Marshland	Susanna	5190	54,	Martinoff		3538	2,4,9,11,15,17,31,42,44,48,
Martel	Ronald	10094	3,6,7,15,19,42,51,	Martinot		203	1,5,6,7,11,24,31,33,44,
Martell	Jennifer	7792	3,6,7,15,19,42,51,	Martinot		467	54,
Martell	Laura	8940	3,6,7,15,19,42,51,	Martinot	Steve	7907	3,6,7,15,19,42,51,
Martella		3571	5,50,	Martinovic	Lisa	10458	3,7,19,42,51,
martelli	arnold	13035	54,	Martucci	Marilyn	12162	54,
Martin		988	1,4,16,31,	Marvin	Bill	12622	54,
Martin		3102	54,	Marx	Rani	5421	54,
Martin	Samantha	3268	3,6,9,10,13,14,21,22,24,42,53,	Marx	Beth	8369	3,6,7,15,19,42,51,
Martin	W Mike	5351	54,	Maryse	RENZI	12471	54,
Martin	Trish	6028	3,6,7,15,19,42,51,	Masaki	Beckie	6911	3,6,7,15,19,42,51,
Martin	Ingrid	6382	3,6,7,15,19,42,51,	Maselbas	June	9562	3,6,7,15,19,42,51,
Martin	Matt Robeson	7503	3,6,7,15,19,42,46,51,	Masi	Melinda	6471	3,6,7,15,19,42,51,
Martin	Stephanie K	8043	3,6,7,15,19,42,51,	Mason		1171	27,34,46,
Martin	Michelle	8054	3,6,7,15,19,42,51,	Mason		1701	2,4,27,34,47,
Martin	Brennan	9525	3,6,7,15,19,42,51,	Mason	Angela	7200	3,6,7,15,19,42,51,
Martin	Glenn H	10788	42,51,	Mason	Susannah	9631	3,6,7,15,19,42,51,
Martin	Helen	12087	54,	Mason	Daniel	9934	3,6,7,15,19,42,51,
Martin	Kay	12115	54,	Mason	Vicki	12730	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Massarano	Saadia	10252	3,6,7,15,19,42,51,	Matranga	Georgeanne	12164	54,
Massetti	Ilario	12181	54,	Matsugu	Miho	10577	3,42,51,
Massetti	Joan	12221	54,	Mattheussens	Kim	8372	3,6,7,15,19,24,42,51,
Massey	Eileen	8166	3,6,7,15,19,42,51,	Matthews		717	42,
Massey	James	8181	3,6,7,15,19,42,51,	Matthews		2542	1,2,4,11,31,41,48,
Massman	Casey	10299	3,6,7,15,19,42,51,	Matthews	Catherine	5315	54,
Masterson	CR	6956	3,6,7,15,19,42,51,	Matthews	Ann	6584	3,6,7,15,19,42,51,
Mastores		2820	3,	Mattingly	Constance	10056	3,6,7,15,19,42,51,
Mastores		2821	54,	Matus	Russell	5307	54,
Mastores		3078	54,	Matus	Russell	9051	3,6,7,15,19,42,51,
Matheny	Reed	8440	3,6,7,15,19,42,51,	Mauchlan	Fiona	9099	3,6,7,15,19,27,42,51,
Mathes	Shirley	6626	3,6,7,15,19,42,51,	Maughan		2638	54,
Matheson	Sue	12024	54,	Maughan DUPLICATE		2622	54,
Matheson	Jen	12075	54,	Maughmer	Zane	6015	3,6,7,15,19,42,51,
Mathews	Lou	12332		Mauk	Susan	6679	3,6,7,15,19,42,51,
Mathis	Pamela	8684	3,6,7,15,19,42,51,	Mauney	Jessie	10902	42,51,
Matinez		3164	54,	Maurer		1213	54,
Matis		693	54,	Max		1943	54,
Matis	Howard	3211	54,	Maxwell		205	3,4,11,15,16,18,19,31,36,
Matis	Howard	3234	54,	Maxwell		2394	1,2,4,5,6,7,9,11,13,14,15,17,18,19,27,28,29,31,34,42,43,44,
Matisoff	Nadja	7905	3,6,7,15,19,42,51,	Maxwell	Isabel	8089	3,6,7,15,19,42,51,
Matlock	Perry	7256	3,6,7,15,19,42,51,	May	Iris	10276	3,6,7,15,19,42,51,
Matney	Ed	5011	54,	Maya		1009	4,27,34,50,
Matney/Devico		532	54,	Maya		1535	34,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Mayer	Karen	12668	36,37,	McBride		1352	2,4,19,
Maynard	Jana	5819	3,6,7,15,19,42,51,	McBride		1633	2,4,42,
Mayo	Carolyn	8815	3,6,7,15,19,42,51,	McBride	Vicki	6119	3,6,7,15,19,42,51,
Mazurek	kate	12441	54,	McBride	Shaun	6278	3,6,7,15,19,42,51,
Mazza	Susan	12915	54,	McBride	Teresa	9292	3,6,7,15,19,42,51,
Mazzarisi	Richard	10809	42,51,	McCabe	Jennifer	6372	3,6,7,15,19,42,51,
Mazzeo	Rae	5919	3,6,7,15,19,42,51,	McCafferty	E.	6560	3,6,7,15,19,42,51,
Mc Gill	Mildred	8914	3,6,7,15,19,42,51,	McCaffrey	Kevin	9505	3,6,7,15,19,42,51,
McAllister		207	1,2,4,5,9,10,11,13,14,15,22,31,44,	McCall		1077	27,
McAllister		408	54,	Mccall		1634	27,
McAllister		413	54,	Mccall	Anna	9664	3,6,7,15,19,42,51,
McAllister		595	3,6,9,10,13,14,21,22,24,42,53,	McCall	Amber	10045	3,6,7,15,19,42,51,
McAllister		3184	2,3,5,6,7,8,11,14,22,43,44,48,49,51,53,	Mccall	Yvonne	12186	54,
McAllister		3505	5,6,9,43,	McCall	David	12459	54,
Mcallister		3509	1,2,4,9,11,14,16,22,23,48,	McCambridge	Patricia	10595	3,5,27,42,51,
Mcallister	Susan	10298	3,6,7,15,19,42,51,	McCance	Carol	7236	3,6,7,15,19,42,51,
McAllister	Margaret	11040	42,51,	McCann	Bianca	5867	3,6,7,15,19,42,51,
McAllister	Mary	11043	22,24,42,51,	McCann	Colleen	8459	3,6,7,15,19,42,51,
McAllister	Keith	11054	5,42,51,	mccarthy		1261	54,
McAnally	Elizabeth	8520	3,6,7,15,19,42,51,	McCarthy		2630	54,
McAneney	Bill	9304	3,6,7,15,19,42,51,	McCarthy		2786	54,
McArthur		507	1,31,44,	McCarthy	Michael	8941	3,6,7,15,19,42,51,
McArthur	Ruth	8300	3,6,7,15,19,42,51,	McCarthy	Bill	8986	3,6,7,15,19,42,51,
McBride		1103	42,	McCartin		2343	54,
				McCauley	Holly	5907	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
McClain		1026	54,	McCullough	Virginia	7204	3,6,7,15,19,42,51,
McClain	Terry	5519	3,6,7,15,19,42,51,	McCusker		2125	54,
McCleary	David	8278	3,6,7,15,19,42,51,	McDonald		208	1,2,4,11,15,18,31,36,44,
McClelland	Greer	116	12,22,42,44,	McDonald		2202	54,
McClelland	Janette	7030	3,6,7,15,19,42,51,	McDonald	Anna	10082	3,6,7,15,19,42,51,
McClennen	Tim	6640	3,6,7,15,19,42,51,	Mcdonnell	Hope	8319	3,6,7,15,19,42,51,
McClenney	Michael	5305	54,	McDonough		605	54,
Mccleskey	Ginger	8913	3,6,7,15,19,42,51,	McDonough	Meghan	6256	3,6,7,15,19,42,51,
McClinton	Ben	7734	3,6,7,15,19,42,51,	McDougall	Leigh	9370	3,6,7,15,19,42,51,
McClung		3107	54,	McDowell	Eva	5676	3,6,7,15,19,42,51,
McClung	Bill	5411	54,	McDowell	Amy	5996	3,6,7,15,19,42,51,
McClure	Molly	7272	3,6,7,15,19,42,51,	McDowell	Leela	6742	3,6,7,15,19,42,51,
McClure	Linda	12077	54,	McElfresh	Robin	5648	3,6,7,15,19,42,51,
mccclure	laurie	12141	54,	McEwen	Michael	7456	3,6,7,15,19,42,51,
McConnon	Mary K	5221	54,	McEwen	Lisa	13180	54,
McCormick		1031	6,7,44,	McFadden	Pat	10424	3,7,15,19,42,51,
McCormick		1587	2,4,42,44,	McFall	Violet	10242	3,6,7,15,19,42,51,
McCormick		3062	54,	McFarane		443	4,15,19,
McCoy		455	3,	McFarlane		209	2,4,44,
McCoy		3526	1,3,16,34,41,43,	McFarlane		1124	42,
McCoy	Allie	8454	3,6,7,15,19,42,51,	McFarlane	Marisa	10896	42,51,
McCoy	Duncan N	10073	3,6,7,15,19,42,51,	McFerrin	Linda	6692	3,6,7,15,19,42,51,
Mccoy	Nancy	10428	3,7,19,42,48,51,	McGann	Mary	7680	3,6,7,15,19,42,51,
McCrea	Ray	9233	3,6,7,15,19,34,42,51,	McGarr	Kathleen	6358	3,6,7,15,19,42,51,
McCrohan	Mary	7516	3,6,7,15,19,42,51,	McGaw	Pat	8812	3,6,7,15,19,42,51,
McCue	Danny	10107	3,6,7,15,19,42,51,	McGee		1932	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
McGee		2132	4,6,7,42,43,	McKee	Suzanne P	5145	54,
McGee		2681	54,	McKee	Rebecca	7953	3,6,7,15,19,42,51,
McGee	Paul H	5064	54,	McKelvie	Patricia	12612	54,
McGee	Aletha	8666	3,6,7,15,19,42,51,	McKendry	Mallory	9718	3,6,7,15,19,42,51,
McGee	Alexandra	10526	3,42,51,	Mckenna	Joann	6577	3,6,7,15,19,42,51,
McGill	Meredith	8145	3,6,7,15,19,42,51,	Mckenzie	Jeannie	141	4,27,31,
McGinty	Dorothy	12067	54,	Mckenzie	Jeannie	142	22,42,44,
McGlasson	P	7280	3,6,7,15,19,42,51,	Mckenzie		3177	1,2,3,4,5,6,7,15,16,19,21,27,31,42,44,53,
McGowan	Michael	5072	54,	Mckenzie	Jeannie	6949	3,6,7,15,19,42,51,
McGowan	Richard	6252	3,6,7,15,19,42,51,	McKenzie	Dakota	10216	3,6,7,15,19,42,51,
McGowan	Leela	6296	3,6,7,15,19,42,51,	McKenzie-Materowski	Maxine	6552	3,6,7,15,19,42,51,
McGrath		210	4,5,6,9,11,13,31,44,	McKey	Jen Elise	8925	3,6,7,15,19,42,51,
McGrath	Marcela	5769	3,6,7,15,19,42,51,	mclachlan	charles	12984	54,
McGrath	Jamie	9284	3,6,7,15,19,34,42,51,	McLaughlin		855	43,44,
McHale		1286	54,	mclean		2414	31,44,
McHenry	Beth	13231	54,	mclean-reid		2800	2,4,42,
McHollan	Nigel	8749	3,6,7,15,19,42,51,	McClean-Reid	Celeste	9155	3,6,7,15,19,42,51,
McHugh	Barbara	8888	3,6,7,15,19,42,51,	McLennan	Barb	12611	54,
McIntire	Jim	9350	3,6,7,15,19,42,51,	McLeod	Jacky	5905	3,6,7,15,19,42,51,
McIntosh		2511	2,4,5,11,22,31,42,	McLoughlin	Daniel	5238	54,
McIntosh	Barbara	12887	54,	McManus	Mary	7212	3,6,7,15,19,42,51,
McIntyre	A	11077	42,51,	McManus	Patricia	10863	42,51,
McIntyre	Rene	10812	42,51,	McMenamin	Deirdra	6091	3,6,7,15,19,22,42,51,
McKay	Megan	10407	3,7,15,19,42,51,	McMillan	Corie	10187	3,6,7,15,19,42,51,
McKearnan	Susan	9044	3,6,7,15,19,42,51,	McMullan	Dan	8557	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
McNally		3068	2,4,5,9,13,14,24,43,44,	Medow	Rivkah Beth	7145	3,6,7,15,19,42,51,
McNally	Elizabeth	5700	3,6,7,15,19,42,51,	Medress	Mark	5416	54,
McNamara	John	7722	3,6,7,15,19,42,51,	Meehan	Maureen	5695	3,6,7,15,19,42,51,
McNaught		2865	1,34,	Meersman	Lisa	12270	54,
McNeill	Roy	9828	3,6,7,15,19,42,51,	Meggyesy	Erin	8755	3,6,7,15,19,42,51,
McNitt		5069	54,	Meginness	F Noreen	5387	54,
McNulty	Brenda	5944	3,6,7,15,19,42,51,	Megley		211	1,2,4,7,9,22,27,36,
McPherson	Sharon	5007	54,	Mehrotra	Siddharth	12564	54,
McPherson	Evy	7480	3,6,7,15,19,42,51,	Melara	Jessica	8349	3,6,7,15,19,42,51,
Mcperson	Kathleen	10394	3,7,15,19,42,51,	Melchert	James Frederick	7159	3,6,7,15,19,42,51,
McQuade		1413	1,2,3,4,9,11,14,15,31,48,	Melendez		421	44,
McRae	Rhainne	5954	3,6,7,15,19,42,51,	Melendrez		3517	22,44,50,
McRae	Robin	6155	3,6,7,15,19,42,51,	Melgard	Timothy	7195	3,6,7,15,19,42,51,
McRae	Diana	7603	3,6,7,15,19,42,51,	Meliana	Mytrae	10336	3,6,7,15,19,42,51,
McRae	George	9806	3,6,7,15,19,42,51,	Mellers	Susan H	5050	54,
McTigue	Christie	7333	3,5,6,7,15,19,27,42,51,	Mellish	Dave	9498	3,6,7,15,19,42,51,
McVay	Kristina	9615	3,6,7,15,19,42,51,	Mellor	Sally	9300	3,6,7,15,19,42,51,
McWilliams	James	8927	3,6,7,15,19,42,51,	Melnyk	Travis	7413	3,6,7,15,19,42,51,
Meacham	Susan	8100	3,6,7,15,19,42,51,	Menauge	Danielle	12492	54,
Meade	William	12679	54,	Mendelsohn	Barbara	10462	3,7,19,42,51,
Mealy	Cynthia	9492	3,6,7,15,19,42,51,	Mendes-Visco	Donna	7252	3,6,7,15,19,42,51,
Meckstroth	Karen	6246	3,6,7,15,19,42,51,	Mendez	Virginia	12636	54,
Medanic		3187	8,	Mendicino	Rosa	8872	3,6,7,15,19,42,51,
Meder	Robert	12591	54,	Menefee	David	10310	3,6,7,15,19,42,51,
Medlen	Selena	9940	3,6,7,15,19,42,51,	Mennel		2457	5,
				Mennel	Nancy	5352	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Menschik	Maia	10452	3,7,19,42,51,	Meyer	Susan	7810	3,6,7,15,19,42,51,
Merecicky	Nora	8979	3,6,7,15,19,42,51,	Meyer	Patricia	11080	42,51,
Merljak	Julija	13138	54,	Meyers		1514	54,
Merrill	Rodney	7196	3,6,7,15,19,42,51,	Meyers	Robert	6109	3,6,7,15,19,42,51,
Merritt		3193	2,4,11,42,44,	Meyers	Rose	10660	42,51,
Merritt	Erin	9788	3,6,7,15,19,42,51,	Meza	Joel	10843	42,51,
Merritt	Chelsea	10159	3,6,7,15,19,22,42,51,	Miani	Katie	5978	3,6,7,15,19,42,51,
Merryman		1409	8,43,44,	Michael		212	9,31,
Merryman		2487	54,	Michaelis		1196	41,43,44,
Merryman	Arlene	8478	3,6,7,15,19,42,51,	Michaelis		1752	54,
Mervae	Gabrielle	8099	3,6,7,15,19,42,51,	Michaelis		3012	31,48,
Meryash		695	54,	Michaels		2025	22,43,44,
Merz	Alexey	5103	54,	Michahelles	Jane and Thomas	2084	27,34,
MESNER	Ana	12172	54,	Michal Stone	Gemini	10218	3,6,7,15,19,42,51,
Messenger-Dodge	Bonnie	7581	3,6,7,15,19,42,51,	Michal-Stone		3173	54,
Mestayer	Maria Elena	10786	42,51,	Micheaux	Lee	8922	3,6,7,15,19,42,51,
Metropole	Christienne	5789	3,6,7,15,19,42,51,	Michel	Jeff	10612	42,51,
Metzger	Charles	5035	54,	Michell	Desiree	10615	42,51,
Meux	Diana	10066	3,6,7,15,19,42,51,	Michelli	Nancy	8095	3,6,7,15,19,42,51,
Meux	Susan	10536	3,42,51,	Michel-Ruddy	Mark	10582	3,42,51,
Mevi-Shiflett	Juliet	9415	3,6,7,15,19,42,51,	Michels		1234	6,27,42,
Mewha	Christine	6758	3,6,7,15,19,42,51,	Michels	Jennifer A	6890	3,6,7,15,19,42,51,
Meyer		2477	3,15,48,	Michelson		995	1,4,5,12,15,19,42,
Meyer	Lauren	6312	3,6,7,15,19,42,51,	Michelson		2426	8,11,22,24,31,43,44,
Meyer	Matt	7279	3,6,7,15,19,42,51,	Michelson	Joseph	7057	3,6,7,15,19,42,51,
				Michiels	Johnson	2368	4,6,7,11,27,28,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Mickelson	Blythe	5337	54,	Miller		2483	44,
Mickelson	Natalie	12114	9,	Miller		2605	54,
Mickiewicz		2454	1,27,31,	Miller		3077	54,
Middlebrooks III	Albert E	8953	3,6,7,15,19,42,51,	Miller	Susan	5154	54,
Middleton	Erin	8378	3,6,7,15,19,42,51,	Miller	David	5247	54,
Miehl	Joann	5817	3,6,7,15,19,42,51,	Miller	C P	5374	54,
Mihalek	Jeannine	12108	54,	Miller	Cheryl	5426	54,
Mihm	Joe	13014	54,	Miller	Nadine	5602	3,6,7,15,19,42,51,
Mikalson	Amanda	13147	54,	Miller	Mary	5971	3,6,7,15,19,42,51,
Milburn	Kyle	10866	42,51,	Miller	Brian	5977	3,6,7,15,19,42,51,
Miles	Mark	9878	3,6,7,15,19,42,51,	Miller	Charles Keith	6538	3,6,7,15,19,42,51,
Miles	Robyn	10709	42,51,	Miller	Sandy	7023	3,6,7,15,19,27,42,51,
Miles	Mark	10656	42,51,	Miller	Jerome	7048	3,6,7,15,19,42,51,
Milgram	Joel	5404	54,	Miller	Nina	7184	3,6,7,15,19,42,51,
Milhoan	Gloria	9476	3,6,7,15,19,24,42,51,	Miller	Hannah	7605	3,6,7,15,19,42,51,
Milikan	Geo	5109	54,	Miller	Vince	7660	3,6,7,15,19,42,51,
Milkie		3095	2,4,31,42,46,	Miller	Howard	7798	3,6,7,15,19,42,51,
Milks	Linda	10846	42,51,	Miller	Lisa	8595	3,6,7,15,19,42,51,
Miller		218	4,31,42,43,	Miller	C.P.	8962	3,6,7,15,19,42,51,
Miller		219	4,19,22,31,34,42,	Miller	David	9042	3,6,7,15,19,42,51,
Miller		590	4,31,43,	Miller	Lauri	9172	3,6,7,15,19,42,51,
Miller		876	11,43,44,48,	Miller	Irene	9272	3,6,7,15,19,42,51,
Miller		1119	19,22,34,	Miller	Shari	9494	3,6,7,15,19,42,51,
Miller		1248	54,	Miller	Alison	9634	3,6,7,15,19,42,51,
Miller		2317	4,5,7,8,15,17,19,22,23,24,27,	Miller	Jacob	9905	3,6,7,15,19,42,51,
				Miller	Anne-Marie	10528	3,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Miller	Ann	12942	54,	Mishoe	Randall	8294	3,6,7,15,19,42,51,
Miller	Sue	13219	54,	Mitchell		220	2,4,9,10,22,31,
Miller	Brad	13242	54,	Mitchell		553	54,
Miller	Lynne	8361	3,6,7,15,19,42,51,	Mitchell		640	54,
Miller	Norma	10695	42,51,	Mitchell		1858	8,11,22,23,24,42,43,44,
Miller	Marlene	13050	54,	Mitchell	Cindy	5815	3,6,7,15,19,42,48,51,
Miller & Family	Sam	7879	3,6,7,15,19,42,51,	Mitchell	Silvia	7267	3,6,7,15,19,42,51,
Miller-Fleig	Doug	7960	3,6,7,15,19,42,51,	Mitchell	Molly	8814	3,6,7,15,19,42,51,
Millhorn	Greg	10679	42,51,	Mitchell	Kimberly	9356	3,6,7,15,19,42,51,
Mills		1353	2,4,9,19,32,41,48,	Mitchell	Elizabeth	12638	54,
Mills		2973	1,11,22,24,31,	Mitchnick	Patricia	6848	3,6,7,15,19,42,51,
Mills	Garey	6409	3,6,7,15,19,42,51,	Mixon	Myrtis	10955	42,51,
Mills	Ellen	7982	3,6,7,15,19,42,51,	Mixer		1104	42,
Mills	Kaycee	10111	3,6,7,15,19,22,42,51,	Mixer		1624	42,
Milosavljevic	Olga	6549	3,6,7,15,19,42,51,	miyoshi	linda	13174	54,
Milosevich	Karla	154	1,4,6,16,31,	Moan		1251	2,4,11,
Milton	Jack	12448	54,	Moan		2828	9,14,19,24,
Mimeau	Pat	10823	42,51,	Moderacki	Deidre	12675	54,
minacciolo	sandro	12064	54,	Mody	Monica	9335	3,6,7,15,19,42,51,
Mink	Perri	5992	3,6,7,15,19,42,51,	Moehlenkamp	Jodie	5757	3,6,7,15,19,42,51,
Mino	Mark	10323	3,6,7,15,19,42,51,	Moen	David	7776	3,6,7,15,19,42,51,
Mintz	Diane J	5420	54,	Moermond	Barb	12763	54,
Miotke	David	8495	3,6,7,15,19,42,51,	Mohammed	Aisha	8473	3,6,7,15,19,42,51,
Miranda	Maybelle	7727	3,6,7,15,19,42,51,	mohr	susan	13209	54,
Mirk	Doug	7510	3,6,7,15,19,42,51,	Mok	Vincent	9544	3,6,7,15,19,42,51,
Mishoe	Deborah K	8052	3,6,7,15,19,42,51,	Mokuau	Shana	13177	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Molander	Kayla	7141	3,6,7,15,19,42,51,	Monson	Michele	5160	54,
Molho		1951	46,	Monsoor	Matthew	5558	3,6,7,15,19,42,51,
Moliter		627	5,	Montalbano	Peter	10373	3,6,7,15,19,42,51,
Moliter	Gary	3203	54,	Montalvo	Marcelo Felipe Garzo	7465	3,6,7,15,19,42,51,
Molitor	Gary	11001	9,10,42,51,	Montanaro	Pamela	10563	3,42,51,
Molthen	M	6009	3,6,7,15,19,42,51,	Montoya	Elena	7878	3,6,7,15,19,42,51,
Mona		1218	6,11,42,	Moochnek	Cecile	8525	3,6,7,15,19,42,51,
Monaco	Nancy	5753	3,6,7,15,19,42,51,	Moody	Cindy	9271	3,6,7,15,19,42,51,
Monahan		1078	42,44,	Moon	John	10110	3,6,7,15,19,42,51,
Monahan		1612	2,4,42,43,44,	Mooney	Jen	12734	54,
Monahan	Cathleen	8258	3,6,7,15,19,42,51,	Moorcroft	Lowell	6127	3,6,7,15,19,42,51,
Moné		2147	4,6,7,	Moore	Peter	6420	3,6,7,15,19,42,51,
Monet	Morgan	9574	3,6,7,15,19,42,51,	Moore	Marsha	8050	3,6,7,15,19,42,51,
Mongan		1405	1,2,4,6,8,13,22,43,44,	Moore	Daniel	8311	3,6,7,15,19,42,51,
Monheit	Juliette	7924	3,6,7,15,19,42,51,	Moore	Jennifer	8425	3,6,7,15,19,42,51,
Monigle	Barry	8805	3,6,7,15,19,42,51,	Moore	MacKenzie	8904	3,6,7,15,19,42,51,
Monika T		3091	9,13,14,19,24,48,	Moore	Meagan	9572	3,6,7,15,17,19,22,42,51,
Monk	Roger	12034	54,	Moore	Melissa	9895	3,6,7,15,19,42,51,
Monks	Maria	200	1,3,4,5,6,8,11,13,14,22,27, 33,34,42,43,44,	Moore	Stan	10735	42,51,
Monks		1987	1,2,4,5,6,7,9,10,11,14,16,2 1,22,24,33,34,42,43,44,	Moore	Janet	11039	27,42,51,
Monks	Kenneth M	6705	3,6,7,15,19,42,51,	Moore	Thomas	12727	54,
Monks	Ken	6711	3,6,7,15,19,42,51,	Moore	Linda	10743	42,51,
Monks	Gina	8049	3,6,7,15,19,42,51,	Moores	Linda Boag	5921	3,6,7,15,19,42,51,
Monks	Maria	8820	3,6,7,15,19,42,51,	Moorhead		839	54,
Monroe		2499	2,4,31,	Moorhead	Jasmine	7755	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Moorhead	Ann	9270	3,6,7,15,19,42,51,	Morosco	Celestial	8107	3,6,7,15,19,42,51,
Moose	Mary Etta	10959	42,51,	Morris		3533	54,
Moothart	Cathryn	7172	3,6,7,15,19,42,51,	Morris	Desda	5777	3,6,7,15,19,42,51,
Moots	Heather	6292	3,6,7,15,19,42,51,	Morris	Jon	5857	3,6,7,15,19,42,51,
Moraiti	Vicky	12201	54,	Morris	Karen	5981	3,6,7,15,19,42,51,
Morales	Maria R	5354	54,	Morris	Sandra	9946	3,6,7,15,19,42,51,
Morales	Maria	5389	54,	Morris	Claude	12208	54,
Morales	Valerie	7968	3,6,7,15,19,42,51,	Morris	Jim	10813	42,51,
Morales	Mary Lynn	8936	3,6,7,15,19,42,51,	Morrison	Taryn	6136	3,6,7,15,19,42,51,
Moran	Missy	10289	3,6,7,15,19,42,51,	Morrison	Wendy E.	9153	3,6,7,15,19,42,51,
Morariu	Diana	6083	3,6,7,15,19,42,51,	Morrison	Arlene	12424	54,
Morello-Frosch	Rachel	8522	3,6,7,15,19,42,51,	Morrison	Peggy	12556	54,
Moreno	David	7319	3,6,7,15,19,42,51,	Morrison-Merritt		816	54,
Morey	Sandra	7424	3,6,7,15,19,42,51,	Morrow	Cheryl	7778	3,6,7,15,19,42,51,
Morey	Martha E	8551	3,6,7,15,19,42,51,	Morse		462	54,
Morfin	Shari	2221	4,27,48,50,	Morse		548	54,
Morgan		221	4,5,13,31,38,42,	Morse	Matt	5451	54,
Morgan	Stevie	4006	42,	Morton		3028	6,7,8,11,13,22,31,42,
Morgan	Colin	5139	54,	Morton	Kara	7811	3,6,7,15,19,42,51,
Morgan	Deb	5738	3,6,7,15,19,42,51,	Morton	Susan B.	8279	3,6,7,15,19,42,51,
Morgan	Timothy	10313	3,6,7,15,19,42,51,	Morton	Craig	9997	3,6,7,15,19,51,
Morgan	Paula	12629	54,	Moscovici	Hamburger	12285	54,
morgan	carolyne	13063	54,	Moscovitz		1984	46,
Mori	Michiko	8448	3,6,7,15,19,42,51,	Moser	Kristine	11092	42,51,
Morison	Carole	6433	3,6,7,15,19,42,51,	Mosier	Page	5565	3,6,7,15,19,42,51,
Morland	Laura	5119	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Moskow	Lisa	10143	3,6,7,15,19,42,51,	Mueller	Nancy	5434	54,
Moskowitz	Lelia	6787	3,6,7,15,19,42,51,	Mueller	Joni	12425	9,
Moss		1861	7,8,11,13,15,22,23,24,42,4 3,44,	Muennig	Michele	7324	3,6,7,15,19,42,51,
Moss	Catherine	5347	54,	Muggles	Mugg	10293	3,6,7,15,19,42,51,
Moss	Kaellyn	9592	3,6,7,15,19,42,51,	Muk	Fadi	12451	54,
Mossman		222	5,9,10,11,13,42,44,	Mulato	Jill	5937	3,6,7,15,19,42,51,
Mostaghim	Lynne	9646	3,6,7,15,19,42,51,	Mulcare	James	12014	54,
Motarjemi	Shereen	7430	3,6,7,15,19,42,51,	Mulder	Carol	12747	5,
Motto	Geralyn	13220	54,	Mulhall	Paula	6202	3,6,7,15,19,42,51,
Moulding	Margaret	9981	3,6,7,15,19,42,51,	Mulholland	Nina	10063	3,6,7,15,19,42,51,
Moulton	Shana	7529	3,6,7,15,19,42,51,	Mulholland Fuchs	Stephanie	10064	3,6,7,15,19,42,51,
Moussaioff	Miriam	8934	3,6,7,15,19,42,51,	mullahey		2883	54,
Mowen	Zachary	9321	3,6,7,15,19,42,51,	Mullen	Jean	8023	3,6,7,15,19,42,51,
Mowrer	Duane	6435	3,6,7,15,19,42,51,	Mullen	Maggie	9000	3,6,7,15,19,42,51,
Moyer		977	1,4,19,22,31,	Mullen	Alice	13159	54,
Moyes	David	12672	54,	Mullen	Jo	13166	54,
Moyle	James	7646	3,6,7,15,19,42,51,	Muller		225	2,4,5,8,10,13,14,27,34,
Mózes	Mónika	12982	54,	Muller		1928	6,27,43,
mramato		223	1,3,4,6,7,19,22,24,	Mulligan		2388	15,19,22,27,34,43,44,48,
MRKVICKA	EDWARD	12026	54,	Mulligan	Margaret	9771	3,6,7,15,19,22,42,51,
Muczynski		1173	5,6,7,11,	Mulliken	Denise	5989	3,6,7,15,19,42,51,
Muczynski		1679	2,4,5,9,10,	Mullins/Baylie		556	5,9,10,14,15,22,
Muczynski	Sharon	10191	3,5,6,7,15,19,42,51,	Mulvaney	Airiel	9455	3,6,7,15,19,42,51,
Mueller		1219	54,	Mumford	S	6165	3,6,7,15,19,42,51,
Mueller	Robert	3233	54,	Mumford	Sarah	12218	54,
				Mundis		2489	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Muneno	Sharon	3226	54,	Musick	Annette	10115	3,6,7,15,19,42,51,
Muñoz	Ileana	12816	54,	Musk	Sue	13157	54,
Mureseanu	Petruta	12917	54,	Musy	Corinne	12376	22,
Murfin		2474	27,	Myers		2674	8,
Murfin		2598	54,	Myers	Evelyn	6117	3,6,7,15,19,42,51,
Murphey	Cameron	6660	3,6,7,15,19,42,51,	Myers	Kevin	6289	3,6,7,15,19,42,51,
Murphy		2706	7,42,43,49,50,	Myers	Carol	6523	3,6,7,15,19,42,51,
Murphy	Conner	3256	3,6,9,10,13,14,21,22,24,42, 53,	Myers	Ann	7622	3,6,7,15,19,42,51,
Murphy	Melissa	6686	3,6,7,15,19,42,51,	Myers	Lindsay	7902	3,6,7,15,19,42,51,
Murphy	Joan	10461	3,7,19,42,51,	Myers	Tina	12862	54,
murphy	paul	12417	54,	N/A		2601	54,
Murr	Nancy	7454	3,6,7,15,19,42,51,	N/A		2648	54,
Murray		1052	1,16,22,24,27,	N/A		2792	42,
Murray	Dan	5801	3,6,7,15,19,42,51,	Nabity	Monica	6580	3,6,7,15,19,42,51,
Murray	Megan	6018	3,6,7,15,19,42,51,	Nachtwey	Julie	5006	54,
Murray	Richard	7245	3,6,7,15,19,42,51,	Nackerman	Colin	7421	3,6,7,15,19,42,51,
Murray	Marian	12214	54,	Nacon	Carole	5245	54,
Murrell	John	8910	3,6,7,15,19,42,51,	Nadolny	Michael	5228	54,
Murtaugh	Margot	5280	54,	Nagel	Jennifer	8851	3,6,7,15,19,42,51,
Murti	Vasu	11060	42,51,	nagle		2631	2,4,
Musacchia	Jon	5105	54,	nagy	cristina	12144	54,
Musacchia	Jon	10449	3,7,19,42,51,	Nagy	Arielle	12893	54,
Musanovic	Emina	8303	3,6,7,15,19,42,51,	Najdowski	Rebecca	7637	3,6,7,15,19,42,51,
Muscardini	Robyn	6623	3,6,7,15,19,42,51,	Nakadegawa	Judy	8034	3,6,7,15,19,42,51,
Musgrave	Jeff	7029	3,6,7,15,19,42,51,	Nakaso	Judy	5610	3,6,7,13,15,19,27,34,42,51,
				Nalezny	Annie	5252	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Nanassy	Judit	10154	3,6,7,15,19,42,51,	Neale	Adam	3276	3,6,9,10,13,14,21,22,24,42,53,
NanaYaa	Connie	12957	54,	Neckebroeck	Anne-Marie	12696	54,
Naples	Jean	13241	54,	Ned		1262	1,2,4,6,11,15,21,22,41,42,
Napolitano		1167	54,	Neely		3541	1,34,42,
Naruishi	Joseph I	6824	3,6,7,15,19,42,51,	Neely	Ginny	8891	3,6,7,15,19,42,51,
Naruishi	Koichi	7121	3,6,7,15,19,42,51,	Neet	Hendrik	12097	54,
Narvasa	Angela	9823	3,6,7,15,19,42,51,	Neff	Alice	9340	3,6,7,15,19,42,51,
Nash	Sarah	12116	54,	Negar		230	1,3,
Naskova		859	54,	Negar		1576	2,3,4,6,
Nasol	Susan	9659	3,6,7,15,19,42,51,	Nehrkorn		2152	9,10,11,42,
Nassiri	Seena	9156	3,6,7,15,19,42,51,	Neidorf	Margaret	8733	3,6,7,15,19,42,51,
Nassiry		429	54,	Neihart	Janet	12583	54,
Naumovich		228	1,2,3,4,6,7,9,43,44,45,46,	Neils	Danielle	9568	3,6,7,15,19,42,51,
Navarrete		2458	1,5,15,31,44,	Nellajoy		948	42,
Navarrete	Shaw	2502	1,2,4,5,15,22,42,	Nellis	MaryAnn	12251	54,
Navarrete	Jennifer Shaw	7380	3,6,7,15,19,42,51,	Nelson		452	54,
Navarro	Monica	9416	3,6,7,15,19,42,51,	Nelson	Chris	2075	42,43,
Nave		1339	2,4,5,6,42,	Nelson		2520	1,5,6,7,8,11,17,18,24,42,44,46,
Navitski	Rielle	8645	3,6,7,15,19,42,51,	Nelson		3523	1,2,4,11,18,19,21,22,31,34,41,
Nawabi	Ajmal	10102	3,6,7,15,19,42,51,	Nelson	Robert S	5459	54,
Nawaz	Iram	7639	3,6,7,15,19,42,51,	Nelson	Judith	5667	3,6,7,15,19,42,51,
Neal		514	54,	Nelson	Christopher	6423	3,6,7,15,19,42,51,
Neal	Vicki	5986	3,6,7,15,19,42,51,	Nelson	Sally	7255	3,6,7,15,19,27,42,51,
Neal	Denise	6982	3,6,7,15,19,42,51,	Nelson	Jesson A	7511	3,6,7,15,19,42,51,
neal	j	12167	54,	Nelson	Barbara	7826	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Nelson	Laura	8370	3,6,7,15,19,42,51,	Newman	Janet	10484	3,7,19,42,51,
Nelson	K	9334	3,6,7,15,19,42,51,	Newmark	Eileen	10363	3,6,7,15,19,42,51,
Nelson	Jon K	9338	3,6,7,15,19,42,51,	Newnham		1473	1,2,4,6,8,13,22,34,43,44,
Nelson	Victoria	10572	3,42,51,	Newnham	Nicole	8374	3,6,7,15,19,42,51,
Nelson	Allen	12219	54,	Newton		783	54,
Nelson	Mary	12786	54,	Newton		818	42,
Nelson	Barbara	12804	54,	Newton	Cecil	6141	3,6,7,15,19,42,51,
Nemer	M	9778	3,6,7,15,19,42,51,	Nguy	Dung	7215	3,6,7,15,19,42,51,
Nemeth	Val	7298	3,6,7,15,19,42,51,	Nguyen	Nia	5165	54,
Neophytou	Diane	7514	3,6,7,15,19,42,51,	Nguyen	Linh	8693	3,6,7,15,19,42,51,
Nero		865	9,22,27,	Nguyen	Kelly	9312	3,6,7,15,19,42,51,
Neroes	Michelle	12811	54,	Niamath	Noreen	12061	54,
Nesbitt	Dale	5350	54,	Nibley		1901	42,43,
Nesselroth		1280	54,	Niccolls	DJ	12335	54,
Nettleton	Eleanor	9709	3,6,7,15,19,42,51,	Niccum	Kristy	5987	3,6,7,15,19,42,51,
Neuman	Rebecca	5918	3,6,7,15,19,42,51,	Nicholas	Helen	2119	54,
Neustadt	Joseph	8321	3,6,7,15,19,42,51,	Nichols		420	46,
Nevill	Charlene	10845	42,51,	Nichols	McKenzie	578	54,
Neville	Maureen	12200	54,	Nichols	Jann	7033	3,6,7,15,19,42,51,
New	Merna	13080	54,	Nichols	Ambrey	12437	54,
Newborg	Carol	7861	3,6,7,15,19,42,51,	NICHOLS	PENNY	12575	54,
Newman		487	1,22,33,	Nickel-Janssen	Tracy	12298	54,
Newman		3558	1,15,18,31,34,42,44,50,	nickell	pamela	12198	54,
Newman	Ellen	7995	3,6,7,15,19,42,51,	Nickels		3518	46,50,
Newman	Chalyn	8536	3,6,7,15,19,22,42,51,	Nickelsen	Cordelia	9843	3,6,7,15,19,42,51,
Newman	T Zoe	10241	3,6,7,15,19,42,51,	Nickelson	Kalene	9546	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Nicolaus	Martin	5056	54,	Norris	Teresa	7807	3,6,7,15,19,42,51,
Nielsen	Karen	7840	3,6,7,15,19,42,51,	Norris	Zachary	8770	3,6,7,15,19,42,51,
Niesen	Sara	7652	3,6,7,15,19,42,51,	Norris	Larry	9945	3,6,7,15,19,42,51,
Nieters	Cassandra	9832	3,6,7,15,19,42,51,	Norris	Janice	12395	22,
Nieva-Woodgate	Alicia	6454	3,6,7,15,19,42,51,	North	CB	8081	3,6,7,15,19,42,51,
Nihipali	Michele	10816	42,51,	Northrop		3069	54,
Niklasson	Johan	10431	3,7,19,42,51,	Northrup	Andrew	6574	3,6,7,15,19,42,51,
niknam	amir	13003	54,	Norton	Paget	8460	3,6,7,15,19,42,51,
Niles	Jennifer	8418	3,6,7,15,19,42,51,	Norwood	Skyler	7574	3,6,7,15,19,42,51,
Nimmo		434	54,	Notkin		2591	2,4,8,22,31,42,
Nimmo		697	44,	Notkin	Debbie	9776	3,6,7,15,19,42,51,
Nishimura	Norine	6476	3,6,7,15,19,42,51,	Novak		441	54,
Nisoli		2437	8,11,22,24,31,43,44,	Novak	Anne	8471	3,6,7,15,19,42,51,
Nitsan	Kathy	7829	3,6,7,15,19,42,51,	Novak	Rebecca	9947	3,6,7,15,19,42,51,
Nitsan	Lena	8800	3,6,7,15,19,42,51,	Novelli	Patricia	6708	3,6,7,15,19,42,51,
Nixon	Sandy	7786	3,6,7,15,19,42,51,	Novelo	Cristina	13144	54,
Nix-Stevenson	Dara	5804	3,6,7,15,19,42,51,	Novotny	Lauren	9900	3,6,7,15,19,42,51,
Noble	Arlene	8286	3,6,7,15,19,42,51,	Nowak	Joseph	12899	54,
Nocito	Vince	9176	3,6,7,15,19,42,51,	Nowve	Frances	8327	3,6,7,15,19,42,51,
Noland	Ron	10944	42,51,	Noyes		2767	7,9,15,19,22,31,47,
Nomized	M.	10126	3,6,7,15,19,42,51,	Nugent		2151	54,
Noname	Natalia	12580	54,	Null	Robin	5945	3,6,7,15,19,42,51,
Noonan		2362	4,42,43,	Nulty	John	10865	42,51,
Noone	David	12949	54,	Nunes	Maria	9856	3,6,7,15,19,22,27,42,51,
nordby	Aud	12055	54,	Nunes	Maria	10840	42,51,
Norma	Murphy	2228	54,	Nunez-Adler	Jorge	8844	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
nunez-larraz		761	22,27,43,44,	O'Connell Keating	Margaret	12197	54,
NuRa	Ayesha	6096	3,6,7,15,19,42,51,	O'Connor		2594	2,4,31,
Nuttle	David	13172	54,	O'Connor	Amanda	7068	3,6,7,15,19,42,51,
Nyler		423	54,	O'Connor	Meave	7506	3,6,7,15,19,42,51,
Nyx	Aludra	12785	22,	O'Connor	Willa	8948	3,6,7,15,19,42,51,
O	Julio	10588	3,42,51,	O'Connor	Janet	9048	3,6,7,15,19,42,51,
O'Donnell	Amy	7818	3,6,7,15,19,42,51,	Oda		1404	54,
Oakes		2927	54,	Oda	John	10700	42,51,
Oakes	Wendy	10222	3,6,7,15,19,42,51,	O'Donnell	H.	7310	3,6,7,15,19,42,51,
Oakley	Doug	4004	54,	Oehser		235	10,13,15,
Oaks		2837	9,14,19,22,24,48,	Oehser	Susan	9287	3,6,7,15,19,42,51,
Obal		234	1,4,9,15,18,19,20,21,22,29, 43,48,	o'farrell	nicky	12615	54,
Obal		572	1,9,19,	Offer	Kate	9746	3,6,7,15,19,42,51,
Oborneva	Elena	12404	54,	O'Flaherty	Tara	8702	3,6,7,15,19,34,42,51,
O'Brien		232	4,	Ogan	Chiara	10912	42,51,
O'Brien		2072	3,42,43,44,	Ogden	Sara	12243	54,
O'Brien		2653	19,22,23,34,42,	O'Gorman	Kevin	8161	3,6,7,15,19,42,51,
O'Brien	Dan	5098	54,	O'Grady	Deborah	9411	3,6,7,15,19,42,51,
O'brien	Linda	8233	3,6,7,15,19,42,51,	O'Halloran	Elizabeth	12023	54,
O'Brien	Rebekah	12723	54,	O'Hara	Liz	8548	3,6,7,15,19,42,51,
Obzerova	Lubica	12129	54,	OHiggins	Judy	12545	54,
Ocampo	Glen	8393	3,6,7,15,19,42,51,	O'Higgins	Niall	7860	3,6,7,15,19,42,51,
Ochs	Richard	10751	42,51,	Ohman		2645	2,4,7,
O'Connell		2860	2,4,9,13,48,50,	Ohren	Rick	9115	3,6,7,15,19,42,51,
O'Connell	Donna	5871	3,6,7,15,19,42,51,	O'Keefe	Garet	10435	3,7,19,42,51,
O'Connell	Kathleen	7293	3,6,7,15,19,42,48,51,	Okumura	Stanley	5517	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Olafsdottir	Ruth	6663	3,6,7,15,19,42,51,	Onstad		1384	2,4,5,27,31,
Olafsson	Sveinn	5462	54,	Opela		2059	54,
Olazabal	Melissa	8691	3,6,7,15,19,42,51,	Oplinger	Barbara	10851	5,42,51,
oldfield	jane	12555	54,	Oppenheimer	Jonathan	5019	54,
Olesen	Robin	11071	42,51,	Oppositeoffaith		2178	9,10,11,42,43,
Oleta/Adams		2358	7,8,11,13,22,23,24,42,43,4 4,	Oram		917	1,4,5,17,48,
Oliveira	Ana	13170	54,	Oram		1533	2,4,
Oliver	Patrick	6158	3,6,7,15,19,42,51,	Oram	Mary	7348	3,6,7,15,16,19,22,42,51,
Oliver	Bonita	7485	3,6,7,15,19,42,51,	Orellana	Felipe	7694	3,6,7,15,19,42,51,
Oliver	Mary Anne	7717	3,6,7,15,19,42,51,	Orengo		444	54,
Oliver	Geraldine	7990	3,6,7,15,19,42,51,	Orevich	Jimmy	7072	3,6,7,15,19,42,51,
Olmstead		649	9,10,42,44,	Orgiyan	Maxim	5518	3,6,7,15,19,42,51,
Olney		2174	23,33,42,	Orman		237	2,4,14,42,
Olson	Ron	6599	3,6,7,15,19,42,51,	Orman		2024	11,22,27,29,42,43,
Olson	Sandra	7313	3,6,7,15,19,42,51,	Ormerod	Elizabeth	5693	3,6,7,15,19,42,51,
Olson	Judy	7833	3,6,7,15,19,42,51,	Ornelas	Karen	12107	54,
Olson	Tristan	10383	3,6,7,15,19,42,51,	O'Rorke	john	12257	54,
Olson	Lia	10541	3,42,51,	Orozco		239	2,4,5,8,9,10,11,13,15,18,19 ,21,22,23,27,31,32,42,43,4 4,
Olson	Anna	12536	54,	Orozco		601	54,
O'Maley	Lisa	8088	3,6,7,15,19,42,51,	Orozco		3108	3,5,6,7,8,9,10,13,15,22,23, 27,31,42,43,44,53,
Oman	Jane	5041	54,	Orozco	Catherine	8232	3,6,7,15,19,42,51,
Ondes	Sean	8013	3,6,7,15,19,42,51,	Orri	Julia	5381	54,
O'Neill	S	8514	3,6,7,15,19,42,51,	ortiz		2421	8,11,22,24,31,43,44,
Ong	Pamela S.	6741	3,6,7,15,19,42,51,	Ortiz	Perla	9047	3,6,7,15,19,42,51,
Onorato	Sue	5932	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Ortiz	Jessie	9866	3,6,7,15,19,22,27,34,42,51,	Ottenheimer	Shelly	7742	3,6,7,15,19,42,51,
Ortiz	Robert	12166	54,	Ottenheimer	Elizabeth	7859	3,6,7,15,19,42,51,
Ortiz	Annette	12246	54,	Ottesen	Kathy	156	1,2,4,8,9,22,42,43,44,
Ortiz	Encarnacion	12657	54,	Ottesen	Kathy	9549	3,6,7,15,19,42,51,
ortiz	monica	13043	54,	Otto	Nancy	10964	42,51,
Ortiz de Zevallos	Renato	12030	54,	Overcash	Curtis	9616	3,6,7,15,19,42,51,
Ortman	Ronald	6822	3,6,7,15,19,42,51,	Overdie	Ruth	12313	54,
Ortmann	Olga	5724	3,6,7,15,19,42,51,	overman	Jennifer	10349	3,6,7,15,19,42,51,
Orvis	Marian	12145	54,	Overmann	Laura	12926	54,
Osburn	Katharine	6630	3,6,7,15,19,42,51,	Owen		2708	15,22,31,40,
Oser	Wendy	7474	3,6,7,15,19,42,51,	Owen	Linda	5047	54,
Oseroff	Patricia	13072	54,	Owen	Marna	9186	3,6,7,15,19,42,51,
O'Shaughnessy	Meg	5563	3,6,7,15,19,42,51,	Ozawa	Donna	6907	3,6,7,15,19,42,51,
Oshiro	Alex	12269	54,	Ozawa	Susan	10723	42,51,
Oshun	Lucas	9967	3,6,7,15,18,19,22,42,51,	Ozol		1245	2,4,27,42,
Osmond	Sharon L.	8318	3,6,7,15,19,42,51,	P	Susan	1310	54,
Osorio-O'Dea	Patricia	9714	3,6,7,15,19,42,51,	P	Jeff	10739	42,51,
Osterhold	Helge	10342	3,6,7,15,19,42,51,	P	Athena	10835	42,51,
Ostro	Linda	8148	3,6,7,15,19,42,51,	P	Bhuvana	12916	54,
Oswald	Sarah	12237	54,	P Leon	Carol	12560	54,
Oswall	Michael	213	4,29,30,34,48,	Paap	Jo	10360	3,6,7,15,19,42,51,
Oswall	Michael	8368	3,6,7,15,19,42,51,	Pace	Judy	9766	3,6,7,15,19,42,51,
Otlowski		2552	5,6,11,15,31,41,48,	Pace	Nick	10189	3,6,7,15,19,34,42,51,
Ott	Mandy	8957	3,6,7,15,19,42,51,	Pachivas		1462	2,4,31,42,
Ottenheimer		1256	54,	Pachivas	Rachel	10179	3,6,7,15,19,42,51,
				Pacifica		852	42,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Packer	Anna	7591	3,6,7,15,19,42,51,	Pangelina	Robert	8843	3,6,7,15,19,42,51,
Padgett	Jane	11044	42,51,	Pannell	Bonnie	7268	3,6,7,15,19,42,51,
Padilla	Melania	12590	54,	panos	penny	12434	54,
Padilla	Anne	13161	54,	Pantoja	Laura	6090	3,6,7,15,19,42,51,
Pado	Lucy	5539	3,6,7,15,19,42,51,	Pantojas	Francisco	9472	3,6,7,15,19,42,51,
Pagano	Adriana	6724	3,6,7,15,19,42,51,	Paolini	Ramona	6020	3,6,7,15,19,42,51,
Page	Garril	12775	54,	Papen	Gina	10781	42,51,
Pagliareni		3561	29,30,46,	Papermaster	Cynthia	8513	3,6,7,15,19,42,51,
Pagliarini		2672	2,4,48,	Pappas		525	54,
Pagliarini	Marie	5639	3,6,7,15,19,42,51,	Pappas	Marie	7242	3,6,7,15,19,42,51,
Pagliarini	Marie	9263	3,6,7,15,19,42,51,	Paquette	Emilie	12584	54,
Pagliavini		490	54,	Paquette	Julie	12995	54,
Pagoulatos	Alexis	12195	54,	Paradise	Jacob Lee	8433	3,6,7,15,19,42,51,
Paige	Dave	8325	3,6,7,15,19,42,51,	Parajon	Susan	6557	3,6,7,15,19,42,51,
Painter	M J	8942	3,6,7,15,19,42,51,	Pardoe	Janice	5088	54,
Pakey	Donald D.	8606	3,6,7,15,19,42,51,	Parenty	Thomas	5279	54,
Palermo	Swan	9471	3,6,7,15,19,42,51,	Parikh	Monika	8716	3,6,7,15,19,42,51,
Paley	Jayah Faye	139	2,3,4,5,13,14,15,22,31,48,	Parizeau	Bérangère Maïa	7868	3,6,7,15,19,42,51,
Paley		2137	2,3,4,5,9,11,13,14,15,22,27,31,42,43,44,	Park	Phyllis	12412	54,
Palle	Leslie L	6340	3,6,7,15,19,42,51,	Parker	Elaine	8437	3,6,7,15,19,42,51,
Pallotta	Stephen	13232	54,	Parker	Jennifer	9157	3,6,7,15,19,42,51,
Pally	Karin	7164	3,6,7,15,19,42,51,	Parker	Laura	9366	3,6,7,15,19,42,51,
Palmbaum	Katherine	6426	3,6,7,15,19,42,51,	Parker	Aubree-Anna	12099	54,
Palmer	Mike	7601	3,6,7,15,19,42,51,	Parks	Wendy Lynn	6143	3,6,7,15,19,42,51,
Palmquist	Ben	10262	3,6,7,15,19,42,51,	Parks	Kristen	9431	3,6,7,15,19,42,51,
Pangburn	Leora	7950	3,6,7,15,19,42,51,	Parlett		533	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Parman	Kate	6012	3,6,7,15,19,42,51,	Pauls	Virgil	13039	54,
Parra	Socrates	8085	3,6,7,15,19,42,51,	Paulson	Sharon	12394	54,
Parry	Sue	5656	3,6,7,15,19,42,51,	Pavlinchak	Carin	5556	3,6,7,15,19,42,51,
Parson	Zachariah	10672	42,51,	Pavlova	Sofia	10050	3,6,7,15,19,42,51,
Partridge	Loren	7538	3,6,7,15,19,42,51,	Pavlovskaja	Eleonora	12599	54,
Pasek	Linda	10225	3,6,7,15,19,42,51,	Pawlitschek		2070	27,34,
Paskal	Alison	8357	3,6,7,15,19,42,51,	Pawlitschek	Jennifer	6543	3,6,7,15,19,42,51,
Pass	Gloria	6728	3,6,7,15,19,42,51,	Paxson	Kathy	7223	3,6,7,15,19,42,51,
Passarino	Maggie	5711	3,6,7,15,19,42,51,	Payne	Thomas	5281	54,
Passek	Stephen	5443	54,	Payne	Melissa	6438	3,6,7,15,19,42,51,
Pastovich	M	12348	54,	Payne	Maggi	6531	3,6,7,15,19,42,51,
Pat	Gran	13214	54,	Payne	Harry	10775	42,51,
Patch		2428	8,11,22,24,31,43,44,	Pazdirek		1154	54,
Patch	Rashid	10803	42,51,	Pazdirek		1734	27,
Patchava	Anusha	13143	54,	Peake	Jud	6823	3,6,7,15,19,42,51,
Patock	James	7758	3,6,7,15,19,42,51,	Peake	Wanda G.	6835	3,6,7,15,19,42,51,
Patrick		2922	1,7,27,43,53,	Pearce	Jensen	833	4,5,22,27,31,
Patrick	John	5531	3,6,7,15,19,42,48,51,	Pearlsteinn	Ned C	5210	54,
Patrick	Sarah	8025	3,6,7,15,19,42,51,	Pearlsteinn	Ned C.	7889	3,6,7,15,19,42,51,
Patsch		1313	54,	Pearsall	Denise	12072	54,
Pattajoti	Parichati	10397	3,7,15,19,42,51,	Pearson	Rose	5854	3,6,7,15,19,42,51,
Patterson	Noah	6539	3,6,7,15,19,42,51,	Pearson	Christ	6620	3,6,7,15,19,42,51,
Patterson	Hiroko	12766	54,	Pearson	Jeremy	7118	3,6,7,15,19,42,51,
Patton	Douglas K.	8479	3,6,7,15,19,42,51,	Peck	Shira	7523	3,6,7,15,19,42,51,
Paul	Jonathan	5223	54,	Peck	Anthea	7624	3,6,7,15,19,42,51,
Paull	Dennis	12781	54,	peck	karin	12453	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Peckham	Linda	8816	3,6,7,15,19,42,51,	Pereira	Fatima	13036	54,
Peddro		1285	1,2,4,6,11,15,42,	Perel-Slater		1007	54,
Pedersen	Sara	9320	3,6,7,15,19,42,51,	Peres	Alisa	7230	3,6,7,15,19,42,51,
Peebles	Melissa	6579	3,6,7,15,19,42,51,	Perez		766	54,
Peeples		2017	6,7,11,15,19,31,42,43,47,	Perez	Manuel	7021	3,6,7,15,19,42,51,
Peeples	Margaret	12384	54,	Perez	Najah	9062	3,6,7,15,19,42,51,
Peery	Kathleen	5575	3,6,7,15,19,42,51,	Perez	Julian	9554	3,6,7,15,19,42,51,
Peirce	JoAnn	7664	3,6,7,15,19,42,51,	Perez-Camacho	Kassandra	7674	3,6,7,15,19,42,51,
Pellegrini	Mary	8790	3,6,7,15,19,42,51,	Perin	Patrick	10938	42,51,
Pelletier	Danielle	9182	3,6,7,15,19,42,51,	Perkins		242	8,13,15,16,24,31,
Pellicaan	Elisabeth	12840	54,	Perkins	Hammond	2484	54,
Pellouchoud	Ashley	9964	3,6,7,15,19,42,51,	Perkins	Wanda	5739	3,6,7,15,19,42,51,
Penate	Vinicio	8788	3,6,7,15,19,42,51,	Perkins	Karin	6516	3,6,7,15,19,42,51,
Pengilly	Mitch	9552	3,6,7,15,19,42,51,	Perkins	Dorothy	6895	3,6,7,15,19,42,51,
Penkacik	Stephen	12809	54,	Perles	Claudia G,	6625	3,6,7,15,19,42,51,
Penn	Rebecca	6909	3,6,7,15,19,42,51,	Perley		1107	54,
Penner	Susan	9128	3,6,7,15,19,42,51,	Perley		1667	2,4,34,43,44,
Pennington	Amber	6093	3,6,7,15,19,42,51,	Perlman	Janet	5384	54,
Penzel	Zelda	5584	3,6,7,15,19,42,51,	Perlmutter	Jennifer	6691	3,6,7,15,19,42,51,
Peppercorn		1796	43,44,48,49,	Perme	Linda	9447	3,6,7,15,19,42,51,
Peppler	Trudi	12415	54,	Perreault	Piper	3267	3,6,9,10,13,14,21,22,24,42,53,
peralta	rolando	12541	54,	Perricone		1004	1,4,43,44,50,
Perandin	Joanna	6050	3,6,7,15,19,42,51,	Perry	Coyle	2077	54,
Peranio-paz	Giana	12930	54,	Perry	C	5470	54,
Pereira	Carina	5662	3,6,7,15,19,42,51,	Perry	Jo Ann	5947	3,6,7,15,19,42,51,
Pereira	Pablo	12268	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Perry	Vivian	6379	3,6,7,15,19,42,51,	Peticolas	Michelle	7464	3,6,7,15,19,42,51,
Perry	Michaela	7602	3,6,7,15,19,42,51,	Petinga	Ricardo	12229	54,
Perry	Sylvia	9082	3,6,7,15,19,42,51,	PETIT	VIRGINIE	12225	54,
PERRY	SANDRA	12569	22,	Petri	George	7663	3,6,7,15,19,42,51,
Perryman	C	6702	3,6,7,15,19,42,51,	Petrofsky	Matthew	10206	3,6,7,15,19,42,51,
Pesce	Lee	12484	54,	Petrov		870	6,7,11,15,27,42,44,48,
Pesner	Leah	10041	3,6,7,15,19,42,51,	Pettegrew		2959	54,
Pestell	Timothy	6389	3,6,7,15,19,42,51,	PETTENGER	LEE	12992	54,
Peter	Judith	12421	54,	Petterson		1204	5,11,18,34,36,41,43,44,
Peters	John	6468	3,6,7,15,19,42,51,	PETTIFER	DOREEN	13116	54,
Peters	Jane	6600	3,6,7,15,19,42,51,	pettis	shirley	12758	54,
Petersen		842	11,15,17,22,31,48,	Petty	Barbie-Lou	5956	3,6,7,15,19,42,51,
Petersen	Leann	9138	3,6,7,15,19,42,51,				1,2,3,4,5,6,7,10,11,15,16,18,19,21,22,24,27,31,32,40,42,44,
Petersen	Kari	9588	3,6,7,15,19,42,51,	Pfann		243	
Peterson		757	54,	Pfann	Jean	6184	3,6,7,15,19,42,45,46,51,
Peterson		1897	54,	Pfeffer	Mike	10676	42,51,
Peterson	Melissa	5792	3,6,7,15,19,42,51,	Pfile	Diane	10199	3,6,7,15,19,42,51,
Peterson	Kim M.	5795	3,6,7,15,19,42,51,	Pflaumer		2544	1,34,42,
Peterson	Dale	6545	3,6,7,15,19,42,51,	Pharo	Shawna	6480	3,6,7,15,19,42,51,
Peterson	Dale	6748	3,6,7,15,19,42,51,	Pheil	Betsy	5704	3,6,7,15,19,42,51,
Peterson	Kay	7789	3,6,7,15,19,42,51,	Phelps	Nan	9036	3,6,7,15,19,42,51,
Peterson	Naya	9557	3,6,7,15,19,42,51,	Phi	Jimmy	10962	42,51,
Peterson	Karen	10274	3,6,7,15,19,42,51,	Philabaum	Ian	8238	3,6,7,15,19,42,51,
Peterson	Scott	10819	42,51,	philip patterson		12871	54,
Peterson	John	13053	54,	Philipp	Connie	9109	3,6,7,15,19,42,51,
peterson	reina	12947	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Philipson		732	54,	Pierce	Rob	8269	3,6,7,15,19,42,51,
Phillips		245	2,4,5,8,9,10,13,22,	Pierette Torfs	Claudine	5455	54,
Phillips		246	11,13,15,16,18,20,	Pierson	Linda	11025	42,51,
Phillips	Stuart	317	1,11,15,	Pierson	Colleen	12069	54,
Phillips		1199	1,15,16,18,41,48,	Pietruszewicz	Magdalena	12970	54,
phillips		1267	1,15,21,22,48,	Pihl	Kathlyn	9769	3,6,7,15,19,42,51,
phillips		1503	1,6,11,15,16,21,24,	Pike		2625	54,
phillips		1646	1,11,13,15,16,20,22,48,	Piland	Susan	6030	3,6,7,15,19,42,51,
phillips		1750	2,4,9,10,11,13,15,22,43,44,48,	Pilger	Barry	5435	54,
phillips		2535	1,2,4,11,15,16,20,31,46,48,	pili		884	54,
Phillips	Rondi	6328	3,6,7,15,19,42,51,	Pillsbury/Eubanks		2517	4,5,11,44,
Phillips	Sydney	7062	3,6,7,15,19,42,51,	Pincus	Beverly	5296	54,
Phillips	Elizabeth	7357	3,6,7,15,19,42,51,	Pineda		2380	8,9,10,11,13,42,43,44,
Phylean		2945	54,	Pinkerton		2559	2,4,5,6,8,9,11,22,23,29,31,34,41,42,43,44,46,50,
Picchetti	Gloria	12080	54,	Pinkerton	Justin	8754	3,6,7,15,19,42,51,
Picheny	Jacob	10442	3,7,19,42,51,	Pinkerton	Andrea	9779	3,6,7,15,19,42,51,
Pickering	Cynthia	6851	3,6,7,15,19,42,51,	Pinkerton	Michael	10779	42,51,
Pickering	Amy	10128	3,6,7,15,19,42,51,	Pintagro	Thomas	12997	54,
Pickett	Kerith	7983	3,6,7,15,19,22,42,51,	Pinterits	Janie	10548	3,42,51,
Pickett	Carrie	8949	3,6,7,15,19,42,51,	Piper		416	54,
Pickett	Rick	9256	3,6,7,15,19,42,51,	Piper		453	54,
Picon	Ruth	8352	3,6,7,15,19,42,51,	Piper		2060	54,
Piecara	Terri	5980	3,6,7,15,19,42,51,	Piper	Susan	3228	54,
Piedrasanta	Silvia	7672	3,6,7,15,19,42,51,	Piper		3513	5,11,
Pierce	Andrew	7078	3,6,7,15,19,42,51,	Piper		3524	11,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Piper	Susan	5436	54,	Polishchuk	Igor	9288	3,6,7,15,19,42,51,
Pipkin		1293	2,4,41,42,	Pollatsek	Michael	8246	3,6,7,15,19,42,51,
Pirie	Claire	7423	3,6,7,15,19,42,51,	Pollyak	Ingrid	9542	3,6,7,15,19,42,51,
pisani		1284	1,2,4,6,11,15,42,	Polsoni	Domenico	12452	54,
Pisanu	Ricky	12808	54,	Polt Schmitt		700	54,
Piscitelli	Gina	9207	3,6,7,15,19,42,51,	Polt Schmitt	Renata	11083	42,51,
Pite	Joe	8808	3,6,7,15,19,42,51,	Pomert	Eric	8039	3,6,7,15,19,42,51,
Pitt		999	54,	Pond		1013	27,
Pittin	Renee	11020	42,51,	Pontau	Karl	10884	42,51,
Pitts	Tony	9058	3,6,7,15,19,42,51,	Pook		1998	54,
Platford	David	7575	3,6,7,15,19,42,51,	Poor	Joan	12795	54,
Platt		963	54,	Pooshs	Nikki	7482	3,6,7,15,19,42,51,
platt		1599	27,	Pop	Patrice	5910	3,6,7,15,19,42,51,
Plaza	Gilda	5579	3,6,7,15,19,42,51,	Pope	Katherine	8379	3,6,7,15,19,42,51,
Pleck	Tami	7000	3,6,7,15,19,42,51,	Popper	William	12112	54,
Plichta	Eileen	5216	54,	Popple	Ariella	6570	3,6,7,15,19,42,51,
Plowman	Millie	9077	3,6,7,15,19,42,51,	Porat	Ziv	10375	3,6,7,15,19,42,51,
Plughoff	Frank	10127	3,6,7,15,19,42,51,	Porebski	Przemyslaw	12516	54,
Plum	Rebecca	6833	3,6,7,15,19,42,51,	Porter	Ellen	12595	54,
Plunkett	Matthew	5439	54,	Portilla	Santiago	5755	3,6,7,15,19,42,51,
Poe		2127	46,	Portney	Kristen	6229	3,6,7,15,19,42,51,
Poe	Sophie	12455	54,	Portugal	Julia	7102	3,6,7,15,19,42,51,
Poet	Patrice	5515	3,6,7,15,19,27,42,48,51,	Posey	Alexandra	11	1,8,22,34,42,
Pohlman	Luana	7130	3,6,7,15,19,42,51,	Posey		1531	11,27,
Polchow	Greg	7500	3,6,7,15,19,42,51,	Poshepny		2588	2,4,27,
Polesky	Alice	5203	54,	Poshepny	Anthony	9384	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Posten	Rick	12856	54,	Price	Earl	8565	3,6,7,15,19,42,51,
Potereiko	Carole	5607	3,6,7,15,19,42,51,	Price	Suna	10243	3,6,7,15,19,42,51,
Potstada	Claire	9413	3,6,7,15,19,42,51,	Price	Natalie	10838	42,51,
Potter		476	46,47,	Price	Sean	13097	54,
Potter		3547	6,42,46,	Priest	Jason	10552	3,42,51,
Potter	Randall	6561	3,6,7,15,19,42,51,	Priestaf	Iris	5030	54,
Potts	Barbara R	7345	3,6,7,15,19,42,51,	PRIMORDIAL	MAR	12146	54,
Powell		439	31,42,	Primrose-Brown	Leanne	5666	3,6,7,15,19,42,51,
Powell	Arlene	5544	3,6,7,15,19,42,51,	Prindle	Gabriel J.	7881	3,5,6,7,15,19,42,51,
Powell	Sandra	7153	3,6,7,15,19,42,51,	Prins	Alma	7259	3,6,7,15,19,42,51,
Powell	Don	12554	54,	Prinz	Dawn	5595	3,6,7,15,19,42,51,
Powell	Peggy	13055	54,	Prischmann	Conor	9820	3,6,7,15,19,42,51,
Power	Richard	9648	3,6,7,15,19,42,51,	Pritchard	Roger	10335	3,6,7,15,19,42,51,
Powers	Kimberly	8410	3,6,7,15,19,42,51,	Pritchett	Jenny	8283	3,6,7,15,19,42,51,
Powers	Randy	9994	3,6,7,15,19,51,	Pritchett	Natalie	9500	3,6,7,15,19,42,51,
Powers	Elena	12866	54,	Pritikin	Kenneth	8965	3,6,7,15,19,42,51,
Pratt	L. Darlene	7209	3,6,7,15,16,19,22,42,51,	Proctor		1888	7,8,11,13,15,22,23,24,42,4 3,44,
Praus		688	1,19,	Proctor		2678	2,4,7,22,48,
Prausnitz	Susan	5253	54,	proctor		2812	9,14,19,22,24,48,
Preece	Darlene	13008	54,	Proctor	Martha	7484	3,6,7,15,19,42,51,
Pregerson	Suzanne	7763	3,6,7,15,19,42,51,	Proctor	Ron	8778	3,6,7,15,19,42,51,
Prendergast		1900	42,43,	Proctor	Jacque	11053	42,48,51,
Prescott	James	9813	3,6,7,15,19,42,51,	Prophet	Mary	10049	3,6,7,15,19,42,51,
Pressnall	Gabriel	8337	3,6,7,15,19,42,51,	Prose	Doug	78	27,34,
Preston	Ginny	8526	3,6,7,15,19,42,51,	Prose	Doug	11104	42,51,
Price		1295	2,4,6,31,42,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Prubant	Mary	12892	54,				,21,32,
Prussin	Alice	9241	3,6,7,15,19,42,51,	quilter	sinead	12273	5,19,22,
Prusynski	Megan	10093	3,6,7,15,19,42,51,	Quinn	Anne	5991	3,6,7,15,19,42,51,
Pryne	Jon	8617	3,6,7,15,19,42,51,	Quinn	Elizabeth	10957	42,51,
Psari	Jett	6597	3,6,7,15,19,42,51,	Quint M.D., MPH	Richard	8197	3,6,7,15,19,42,51,
Psaris		2063	1,4,5,11,13,15,16,19,22,	Quinton	Charles	6799	3,6,7,15,19,42,51,
puente	selene	12500	54,	Quirk	Nika	9777	3,6,7,15,19,42,51,
Pugh	Mary	8068	3,6,7,15,19,42,51,	R	Dawn	1207	2,4,27,41,46,
Pugh	Anne	8583	3,6,7,15,19,42,51,	R	Tiffany	10044	3,6,7,15,19,42,51,
Pulko	Natallia	6434	3,6,7,15,19,42,51,	R English	Geoff	12725	54,
Pulvers	Jeremiah	10007	3,6,7,15,19,42,51,	R. Weinstein	John	12643	54,
Purdy		1302	2,4,6,42,	Raamat	M	9854	3,6,7,15,19,42,51,
Pursley	Marilyn	6410	3,6,7,15,19,42,51,	Rabin	Mp	8671	3,6,7,15,19,42,51,
Purtle		247	1,	Rabkin	Martha	5076	54,
Pusey	Rachel	8759	3,6,7,15,19,42,51,	racansky	elena	12236	54,
Pusey	John	9623	3,6,7,15,19,42,51,	Radcliff		3191	2,4,34,42,46,
Putney	Susan	5678	3,6,7,15,19,42,51,	Radcliff	Sharon	7612	3,6,7,15,19,42,51,
Puza	A	13011	54,	Raddue		2021	2,4,11,27,34,42,43,
Puzey	David Lee	10771	42,51,	Rademaker	Sally	7177	3,6,7,15,19,42,51,
Pyle		249	1,6,7,27,43,44,	Radke	Irene	12589	22,
Pyle		2902	6,42,52,	Rae	Doug	5606	3,6,7,15,19,42,51,
pyun	lydia	12379	54,	Rae Beard-Landers	Tawny	12800	54,
Quady	David	5272	54,	Raeder		2736	2,4,31,43,44,
Quan	Carole C	5390	54,	Rael	Andrea	9417	3,6,7,15,19,42,51,
quanstrom	julie	13141	54,	Raeven		2849	9,13,14,19,22,24,48,
Quarles		250	1,3,4,5,9,10,15,16,18,19,20	Rafelle	Marlowe	9960	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Raffety	Sean	6188	3,6,7,15,19,42,51,	Ramirez	Ethan	7748	3,6,7,15,19,22,34,42,48,51,
Raffill	Genevieve	10147	3,6,7,15,19,42,51,	Ramirez	Isaac	8768	3,6,7,15,19,42,51,
Ragent	Mia	7152	3,6,7,15,19,42,51,	Ramirez	Martha	9768	3,6,7,15,19,42,51,
Ragle	Nancy	9638	3,6,7,15,19,42,51,	Ramirez	Ashley	10174	3,6,7,15,19,42,51,
Ragsdale	Billy	10874	42,51,	Ramos	Scott	7427	3,6,7,15,19,42,51,
Raich	Brandon	10097	3,6,7,15,19,42,51,	Ramos	Juan	7541	3,6,7,15,19,42,51,
Raiford	Leigh	7323	3,6,7,15,19,42,51,	Ramos	Elsa	8434	3,6,7,15,19,42,51,
Raikes	Jeremy	9240	3,6,7,15,19,42,51,	Ramos	Axel	12279	54,
Raikow	Radmila	253	2,4,11,14,15,23,	Randle		1056	42,
Raikow		1376	2,4,5,6,9,15,	Randle		1058	54,
Rain	Saphira	13132	54,	Randle		1059	54,
Raine	Tamar	7224	3,6,7,15,19,42,51,	Randle		1604	2,4,34,
Rains	Jean M.	9808	3,6,7,15,19,42,48,51,	Randle		1608	54,
Raintree	Sally	6069	3,6,7,15,19,42,51,	Randle		1609	54,
Rainville	Laura	7035	3,6,7,15,19,42,51,	random		2182	54,
Rainy	Judy	7497	3,6,7,15,19,42,51,	Randt	Jennifer	7920	3,6,7,15,19,42,51,
Rainy	Mike	7561	3,6,7,15,19,42,51,	Rannenberg	Mariann	12171	54,
Raj	Teresa	12673	54,	Ransome		611	1,
Ralda	Cindy	12737	54,	Ransome	Anna	11093	5,42,51,
Ralphs	Jennifer	9803	3,6,7,15,19,42,51,	Ranz	Lauren	9440	3,6,7,15,19,42,51,
Råmark	Erik	7004	3,6,7,15,19,42,51,	Rapalski		1089	54,
Ramer	Christina	6669	3,6,7,15,19,42,51,	Rapalski		1610	54,
Ramirez		254	2,9,12,31,42,43,44,52,	Rapalski	Martin	9993	3,6,7,15,19,51,
Ramirez		501	54,	Rapoport	Irwin	13168	54,
Ramirez		966	42,44,	Rapp	Melissa	8740	3,6,7,15,19,42,51,
Ramirez	Angie	6031	3,6,7,15,19,42,51,	Rappaport	Andrea	6762	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Rasch		255	22,	Ray	Janel	9773	3,6,7,15,19,42,51,
Rasch	Meehan	2238	22,43,44,	Ray	Michael	12287	54,
Raschick	Carol	12121	54,	Raymer	Elizabeth	8657	3,6,7,15,19,42,51,
Rashall		1287	54,	Rayve	Suzi	5839	3,6,7,15,19,42,51,
Rasmussen		1266	1,2,4,6,11,15,	Reamy	William	12987	22,46,
Rasmussen	K.	8021	3,6,7,15,19,42,51,				1,2,3,4,5,7,8,9,10,11,12,13, 15,19,22,24,27,31,33,38,40 ,42,
Rasmussen	Michael	9936	3,6,7,15,19,42,51,	Rebecca		257	
Ratcliff	Walter	335	2,4,19,31,32,42,44,	Redditt	Page	9556	3,6,7,15,19,42,51,
Ratcliff		1292	32,44,51,	Redmon	Cyd	12444	54,
Ratcliff		2621	54,	Redwood	Leah	9264	3,6,7,15,19,42,51,
Ratcliff	Walter	8462	3,6,7,15,19,42,51,	Reece	Ali	5754	3,6,7,15,19,42,51,
Ratcliffe	J and J	517	54,	Reed		1177	
Ratcliffe	J and J	542	54,	Reed	AJ	1178	1,36,37,
Ratcliffe	John and Judith	5219	54,	Reed		1758	54,
Rath	Autumn Skye	10956	42,51,	Reed		1768	2,4,36,43,44,
Rathod	Madhavi	11046	42,51,	Reed	Jill	6162	3,6,7,15,19,42,51,
Ratliff	Lillian	8667	3,6,7,15,19,42,51,	Reed	Claudia	7409	3,6,7,15,19,42,51,
Ratnayaka	Nipuni	5654	3,6,7,15,19,42,51,	Reed	Oletta	9783	3,6,7,15,19,42,51,
Rattner	Ron	10909	42,51,	Reedy	Patricia	6921	3,6,7,15,19,42,51,
Rauber	Paul	5113	54,	Rees	Benny	12010	54,
Rauzon		2456	11,	Reeves		6216	3,6,7,15,19,42,51,
Rawley	Ann	5134	54,	Reeves	Robin	6217	3,6,7,15,19,42,51,
Ray	Nancy	5982	3,6,7,15,19,42,51,	Reeves	Ella	13236	54,
Ray	Nick	6918	3,6,7,15,19,42,51,	Rega	Giovanni	12937	54,
Ray	Mary Beth	7119	3,6,7,15,19,42,51,	Regalado	Priscilla	6810	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Regan	Rob	9174	3,6,7,15,19,42,51,	Remington	Wanda	12233	54,
Reggio	Cambridge	12656	54,	Remora	Carol	8008	3,6,7,15,19,42,51,
Rego	Sonia	12705	54,	Renee	Yvette	10047	3,6,7,15,19,42,51,
Regul		2194	11,48,	Renneke	Joe	12209	54,
Regul	Lisa	6484	3,6,7,15,19,42,51,	Renouf Hall	Renee	8338	3,6,7,15,19,21,27,42,51,
Rehling	Lu	11019	42,51,	Renwick	Alilah	9336	3,6,7,15,19,42,51,
Reich		259	1,2,4,5,7,9,13,	repose	belinda	13240	54,
Reid	Grant	5402	54,	Repp	Tammie	5830	3,6,7,15,19,42,51,
Reid	Mary Susan	6114	3,6,7,15,19,42,51,	Resico	Neil	13012	54,
Reid	Christine	6421	3,6,7,15,19,42,51,	Resneck	Myrrhia	7614	3,6,7,15,19,42,51,
Reid	Janette	8442	3,6,7,15,19,42,51,	Resnick	Myra	7436	3,6,7,15,19,42,51,
reid	alan	13114	54,	Restivo	Andrew	9285	3,6,7,15,19,42,51,
REif	Misti	12525	54,	Retondo	Pete	10524	3,19,42,51,
Reime		261	2,4,5,6,7,13,24,27,29,	Rettay	Melody	6095	3,6,7,15,19,22,42,51,
Reinecke	Lynn	9499	3,6,7,15,19,42,51,	Reuer	Quentin	12371	54,
Reineke	Kelly	10163	3,6,7,15,19,42,51,	Revell	Eve	10219	3,6,7,15,19,42,51,
Reiner		262	27,42,	Reyes		264	1,2,4,5,7,9,19,22,23,31,42,
Reinhardt	Albert	9369	3,6,7,15,19,42,51,	Reyes		854	11,22,27,31,
Reinhart		878	54,	Reyes	Michelle	2225	6,11,19,22,24,31,34,42,44,
Reining		2516	1,5,7,8,11,	Reyes	Roxann	7217	3,6,7,15,19,42,51,
Reinys	Jean	7306	3,6,7,15,19,42,51,	Reyes	Tamara	9647	3,6,7,15,19,22,42,51,
Reiter	Rob	6058	3,6,7,15,19,42,51,	REYES	LUVINA	12998	54,
Reith	Douglas	10124	3,6,7,15,19,42,51,	Reynolds	Burk	1142	11,43,44,
Reitzen	Marian	13213	54,	Reynolds		1149	54,
Remedes	Rhani	9745	3,6,7,15,19,42,51,	Reynolds		1731	54,
Remer		2156	9,10,42,43,48,50,	reynolds		1739	2,4,11,43,44,48,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Reynolds	Michael	5237	54,				53,
Reynolds	Carolyn	5243	54,	Richard Dahlstedt		12331	54,
Reynolds	Rosanne	7890	3,6,7,15,19,42,51,	Richards	T Anne	7772	3,6,7,15,19,42,51,
Reynolds	Pamela	9444	3,6,7,15,19,42,51,	Richards	Nicole	10026	3,6,7,15,19,42,51,
Rhee	In Ja	5177	54,	Richards	Kim	10443	3,7,19,42,51,
Rhoda	Nancy	7767	3,6,7,15,19,42,51,	Richards	Jacquelyn	10691	42,51,
Rhoden	Courtney	9795	3,6,7,15,19,42,51,	Richardson	Bobby	6790	3,6,7,15,19,42,51,
Rhodes	Laurian	7969	3,6,7,15,19,42,51,	Richardson	Carol Sue	8795	3,6,7,15,19,42,51,
Rhyins	MaryEllen	6442	3,6,7,15,19,42,51,	Richardson	Paige	10264	3,6,7,15,19,42,51,
Ria		795	5,6,7,27,44,	Richerson		2626	8,22,31,42,
Ricchi	Christina	9061	3,6,7,15,19,42,51,	Richerson	Kathleen	5577	3,6,7,15,19,42,51,
Rice		1981	42,43,	Richman	Bonnie	9845	3,6,7,15,19,42,51,
Rice		2153	1,2,4,5,6,7,11,13,15,42,43, 44,48,	Richter	Edwqrd	8584	3,6,7,15,19,42,51,
Rice		2259	4,5,7,8,11,22,23,24,42,43,4 4,	Rick		480	54,
Rice		2463	1,4,9,32,49,50,	Rickard		2761	54,
Rice	Diane L	6444	3,6,7,15,19,42,51,	Ricker	Rodger	13040	54,
Rice	John	7265	3,6,7,15,19,42,51,	Ricketts	James Bradley	8540	3,6,7,15,19,42,51,
Rice	Carolyn	7930	3,6,7,15,19,42,51,	Rickles	Rena	5380	54,
Rich		3551	5,6,31,48,	Ridder	Lynette	12440	54,
Rich	Virginia	5339	54,	Riddle		1343	54,
Rich	Erin	5827	3,6,7,15,19,42,51,	Ridge	Terry	13005	54,
Rich	Deborah	6732	3,6,7,15,19,42,51,	Riebel	Linda	6685	3,6,7,15,19,42,51,
Rich	Amy Ballard	7440	3,6,7,15,19,42,51,	Riedmann		1927	54,
Rich	Patti	7821	3,6,7,15,19,42,51,	Riehart		2926	6,7,8,11,13,
Richard	Ysabella	3254	3,6,9,10,13,14,21,22,24,42,	Riehart		2338	8,9,10,11,13,
				Riehart	Dale	10910	42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Riepenhoff		737	42,	Riseam	Clive	12351	54,
Riering-Czekalla	Runa	9528	3,6,7,15,19,42,51,				2,4,5,6,7,8,9,10,11,13,14,15,17,19,22,23,24,31,32,34,
Ries	Stephanie	11084	42,51,	Risk		2215	41,42,43,44,48,49,50,51,
Rieser	Nancy	7397	3,5,6,7,15,19,42,50,51,	Risk	Valerie	10249	3,6,7,15,19,42,51,
Riess		1461	54,	Risk	Jane and Jerry	10996	42,51,
Riess	Eric	9035	3,6,7,15,19,42,51,	Risley	Claire	7395	3,6,7,14,15,19,42,51,
Riggs	Erica	9281	3,6,7,15,19,42,51,	Rist	Joanne	12305	54,
Rigopoulos	Panagiotis	13237	54,	Riter	Evan	10480	3,7,19,42,51,
Rile		2482	1,2,4,11,44,	Rittenburg	Scott	9324	3,6,7,15,19,42,51,
Rile	Kathryn	6320	3,6,7,15,19,42,51,	Rittenhouse	Holly	9859	3,6,7,15,19,42,51,
Riley		471	54,	Rivera	Daniel	10051	3,6,7,15,19,42,51,
Riley		2283	4,5,7,8,11,22,23,24,42,43,44,	Rivers	Charlotte	11065	42,51,
Riley		3125	6,7,42,43,44,	Rizer	Tammy	5983	3,6,7,15,19,42,50,51,
Riley		3542	2,4,5,6,15,31,34,41,44,46,	Rizzo	Richard	8995	3,6,7,15,19,42,51,
Riley	Julianna	7913	3,6,7,15,19,42,51,	Ro	Chris	8689	3,6,7,15,19,42,51,
Riley	Eric	9290	3,6,7,15,19,42,51,	Roach	Alayna	10100	3,6,7,15,19,42,51,
Rimerman		266	1,3,4,7,9,10,11,13,22,23,29,31,42,46,53,	Roark	K.	9283	3,6,7,15,19,42,51,
Rimerman	Deane	6334	3,6,7,15,19,42,51,	Roat		1508	54,
Rinaldo		2422	11,24,31,	Robak	Patricia	9075	3,6,7,15,19,42,51,
Rinaldo	Catherine	10607	42,51,	Robb	Nicole	7708	3,6,7,15,19,42,51,
Ringland		3106	54,	Robben		268	2,3,4,5,7,11,12,15,16,27,29,31,42,43,44,46,47,52,
Ringler	Ben	10348	3,6,7,15,19,42,51,	Robben		412	54,
Rios	Alana	7552	3,6,7,15,19,42,51,	Robben		418	54,
Risden	Dale	5042	54,	Robben	Barbara	4013	54,
				Robbins		3093	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Robbins	Jack	5289	54,	Robinson	Rochelle	7083	3,6,7,15,19,42,51,
Robbins	Terri	5681	3,6,7,15,19,42,51,	Robinson	Gerard	7571	3,6,7,15,19,22,42,51,
Roberson	Rick	12312	54,	Robinson	C. Anna	8762	3,6,7,15,19,42,51,
Roberts		869	54,	Robinson	Ruth	12089	54,
Roberts	Melissa	5502	3,6,7,15,19,42,51,	robinson	rachel	12159	54,
Roberts	Sandy	7034	3,6,7,15,19,42,51,	Robitscher	Jan	11037	42,51,
Roberts	Barb	9715	3,6,7,13,15,19,27,42,51,	Robles		2195	54,
Roberts	Ken	12357	54,	Robles	Kathy	6439	3,6,7,15,19,42,51,
Robertson		270	2,4,5,6,7,11,12,27,31,32,	Robles	Lisa	6652	3,6,7,15,19,42,51,
Robertson		270	2,4,5,6,7,11,12,27,31,32,	Robles	Joe	9385	3,6,7,15,19,42,51,
Robertson		1290	54,	Robson	MaryLou	6115	3,6,7,15,19,42,51,
Robertson	Jean	3209	54,	Robson	Ruth	12475	27,29,
Robertson	Bridget	5631	3,6,7,15,19,42,51,	Robt Chang	G	13118	54,
Robertson	John	5634	3,6,7,15,19,42,51,	Rochardt	Laurie	9491	3,6,7,15,19,42,51,
Robertson	Jim	6164	3,6,7,15,19,42,51,	Roche		2639	1,2,4,46,
Robertson	Kristen	8889	3,6,7,15,19,42,51,	Rochow		993	1,4,34,
Robey	Steve	5107	54,	Rochow		1579	1,2,4,34,
Robin	Kenneth	5452	54,	Rock	Sylvia	6300	3,6,7,15,19,42,51,
Robine		3512	54,	Roddy	Ellen	12262	54,
Robinette	Ilene	5646	3,6,7,15,19,22,42,51,	Rodie	Rachel	9330	3,6,7,15,19,42,51,
Robins	Rick	12633	54,	Rodini	Arline	7353	3,6,7,15,19,42,51,
Robinson		271	2,4,54,	Rodriguez		775	42,
Robinson		1253	11,42,	Rodriguez	David	10193	3,6,7,15,19,42,51,
Robinson		2695	2,4,7,9,42,52,	Rodriguez	Benjamin	10934	42,51,
Robinson	Jonathan	4011	54,	Rodrique	Jaella	13082	54,
Robinson	Marilyn	5752	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Roffers	Tony	8167	3,6,7,15,19,42,51,	rollo	pat	12980	54,
Rogalin		2763	42,	Roma	Michele	6144	3,6,7,15,19,42,51,
Rogalin	Suzanne	6819	3,6,7,15,19,42,51,	Roma	Michele	12787	54,
Rogers		273	1,4,5,9,10,11,18,19,20,21,22,27,31,32,33,34,42,43,44,	Romain		479	54,
Rogers		1214	43,44,48,	Romain		589	1,15,34,
Rogers	Lilith	5523	3,6,7,15,19,42,51,	Romaine		3550	11,15,
Rogers	Patricia	6524	3,6,7,15,19,42,51,	Roman	Alyssa	9814	3,6,7,15,19,42,51,
Rogers	Gina	9216	3,6,7,15,19,42,51,	Romaniuk	Anita	12210	5,13,
Rogers	David	9573	3,6,7,15,19,42,51,	Romano		277	2,3,6,7,9,10,22,42,44,
Rogers	Phila	10390	3,7,15,19,42,51,	Romano	Robert	8675	3,6,7,15,19,24,42,51,
Rogers	Inga	12714	54,	Romano	Robert	11066	42,51,
Rogers	Dennis	10682	42,51,	Romeo	Tati	12324	54,
Rogers	Jenessa	12635	54,	Romero	Johanna	9018	3,6,7,15,19,42,51,
Rogge	Suzanne	9698	3,6,7,15,19,42,51,	Romero	Linda	9524	3,6,7,15,19,42,51,
Roggeveen	Elizabeth	5525	3,6,7,15,19,42,51,	Romesburg	Denise	7412	3,6,7,15,19,42,51,
Rogozin	George	12446	54,	Ropers	Ann	8063	3,6,7,15,19,42,51,
Rohrback	Fran	5058	54,	Roque	Marisa	6232	3,6,7,15,19,42,51,
Rojas	Anjali	9439	3,6,7,15,19,42,51,	Rorty	Nancy	7356	3,6,7,15,19,42,51,
Roland	Jelica	12133	54,	Rosas	Greg	9797	3,6,7,15,19,42,51,
Roldan	Alicia	9243	3,6,7,15,19,42,51,	Roschuni	Franette	8589	3,6,7,15,19,22,42,51,
Rolfe		275	2,3,4,7,9,22,31,32,43,44,	Roschuni	Celeste	8824	3,6,7,15,19,42,51,
Rolfe	Laurie	6110	3,6,7,15,19,42,51,	Rose		536	54,
Roll	Angelika	13247	54,	Rose		2716	1,5,6,9,11,14,22,31,34,
Rollam Group		276	6,7,43,44,	Rose	Mary	7679	3,6,7,15,19,42,51,
Rollam Group		1259	54,	Rose	Katie	7762	3,6,7,15,19,42,51,
Rollins	Sharon	5016	54,	Rose	George	7942	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Rose	Cassandra	7946	3,6,7,15,19,42,51,	Ross	Pam	6751	3,6,7,15,19,42,51,
Rose	Julie	8103	3,6,7,15,19,42,51,	Ross	M	6927	3,6,7,15,19,42,51,
Rose	Carl	8698	3,6,7,15,16,19,42,46,51,	Ross	Shane	7536	3,6,7,15,19,42,51,
Rose	Tim	12977	54,	Ross	Sarah	8530	3,6,7,15,19,42,51,
Rose	Mary	10622	42,51,	Ross	John	12292	54,
Rosekrans		2188	54,	Ross	David	10826	42,49,51,
Rosen	Christine	5021	54,	Rossi	Diana	8346	3,6,7,15,19,42,51,
Rosenbaum	Ron	8282	3,6,7,15,19,42,51,	Rossi	Diana	8353	3,6,7,15,19,42,51,
Rosenbaum	Jane	13087	54,	Rossi	Christine	9137	3,6,7,15,19,42,51,
rosenberg		278	2,3,4,6,7,8,9,10,11,13,15,18,22,31,32,38,42,44,	Rossmann	Stephanie	7543	3,6,7,15,19,42,51,
Rosenberg		1032	3,5,9,11,13,14,15,17,22,24,31,48,	Rossmann		2777	5,11,25,27,42,43,44,53,
Rosenberg	O. F.	5589	3,6,7,15,19,42,51,	Rossoff	Margaret	9836	3,6,7,9,15,19,27,34,42,51,
Rosenberg	Ernest	6707	3,6,7,15,19,42,51,	Roszak		1081	5,6,7,44,46,
Rosenberg	Thomas	9382	3,6,7,15,18,19,42,51,	Roszak		1641	2,4,5,27,45,48,
Rosenblatt	Marsha	9665	3,6,7,15,19,42,51,	Roth		1086	1,5,6,7,44,
Rosenfeld	Meg	10714	42,51,	Roth		1621	5,34,44,
Rosenhaus		2193	27,34,42,	Roth	Mary L	6908	3,6,7,15,19,42,51,
Rosenthal		2101	54,	Roth	Gloria	7435	3,6,7,15,19,42,51,
Rosenthal	Leah	7715	3,6,7,15,19,42,51,	Roth	Tricia	9119	3,6,7,15,19,42,51,
Rosenthal	Illia	8939	3,6,7,15,19,42,51,	Rothbard	Jaime	6086	3,6,7,15,19,42,51,
Rosenthal	Ben	9122	3,6,7,15,19,42,51,	Rothchild		2467	1,2,4,31,
Rosenzweig	Sandra	8419	3,6,7,15,19,42,51,	Rothman	Carol	6676	3,6,7,15,19,42,51,
Rosner	Elizabeth	9162	3,6,7,15,19,42,51,	Rothman	Judy	7493	3,6,7,15,19,42,51,
Ross	Andy	4002	54,	Rotter		675	1,4,9,10,15,18,19,22,27,34,40,
Ross	Matthew R	6598	3,6,7,15,19,42,51,	rotter		815	4,6,7,44,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Rotter		3014	5,11,14,31,48,	Rubel	Scott	10822	42,51,
Rotter	Paul	5550	3,5,6,7,15,19,42,51,	Ruberti	Giovina	12337	54,
Rotter	Ronald	6390	3,6,7,15,19,42,51,	Rubey		1298	54,
Rotter	Elizabeth	10413	3,7,15,19,42,51,	Rubik	Beverly	10306	3,6,7,15,19,42,49,51,
Roudabush		806	45,46,	Rubinoff	Lia	8289	3,6,7,15,19,42,51,
Rougeau		2180	54,	Ruch	Martha	10324	3,6,7,15,19,42,51,
Roule	Thierry	8873	3,6,7,15,19,42,51,	Ruchlis	Janice	5186	54,
Roule Stewart	Lena	8276	3,6,7,15,19,42,51,	Ruchlis	Janice	8748	3,6,7,15,19,42,51,
Rountree		6152	3,6,7,15,19,42,51,	Ruddick	Victoria	6364	3,6,7,15,19,42,51,
Rountree	Roberte	7917	3,6,7,15,19,42,51,	Rudin		1516	54,
Rousell		3180	1,6,7,	Rudnicki		566	54,
Rousell	Jonathan	10275	3,6,7,15,19,22,27,42,51,	Rudolph	Lucy	8268	3,6,7,15,19,42,51,
Routledge	Judith	12854	54,	Rudy	Zak	9517	3,6,7,15,19,42,51,
Rovere	Ann	10770	42,51,	Rue	Amu E	3253	3,6,9,10,13,14,21,22,24,42,53,
Rowe		280	3,4,7,27,43,44,	Rueda	Luis Daniel	8078	3,6,7,15,19,42,51,
Rowe	Albert H.	6432	3,6,7,15,19,42,51,	Rueda	Ilse	8273	3,6,7,15,19,42,51,
Rowe	John	7239	3,6,7,15,19,42,51,	ruffinatto	lara	13164	54,
Rowe	Susan	9847	3,6,7,15,19,42,51,	Ruffolo	Marc	10614	42,51,
Rowe	Susan	12945	54,	Ruga	Caran	8211	3,6,7,15,19,42,51,
Rowen		2144	27,34,43,44,49,	Ruggeri	Darby	10108	3,6,7,15,19,42,51,
Rowland	Christine	6315	3,6,7,15,19,42,51,	Ruggiero		3118	54,
Rowley	Freda	7891	3,6,7,15,19,42,51,	Ruggles Stern	Dorothy	10628	42,51,
Roy	Joyce	8257	3,6,7,15,19,42,51,	Ruhland		1113	48,
Royan	Selvi	9704	3,6,7,15,19,42,51,	ruhland		1730	42,43,44,48,
Rubel		2339	1,22,	Rullman	Claudia	9205	3,6,7,15,19,42,51,
Rubel		2841	9,13,14,19,22,24,48,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Rumiantseva	Elena	12921	54,	Ryffel	Johanna	12354	54,
Running Wall		465	44,	Rymer		853	1,27,31,
RunningWolf	Zachary	10312	3,6,7,15,19,42,51,	Ryono	Angel	9430	3,6,7,15,19,42,49,51,
Rush	Claire	7526	3,6,7,15,19,42,51,	Rzeszutek	Sylwia	12189	54,
Russ	Jennifer	8931	3,6,7,15,19,42,51,	S		2855	54,
Russell	Hannah	8750	3,6,7,15,19,42,51,	S	C	5894	3,6,7,15,19,42,51,
Russell	Jane	9239	3,6,7,15,19,42,51,	S	Emilia	6976	3,6,7,15,19,42,51,
Russell	George	9279	3,6,7,15,19,42,51,	S	Rob	10818	42,51,
Russell	Cheri	9738	3,6,7,15,19,42,48,51,	S	A	12762	54,
Russell	Eva	10368	3,6,7,15,19,42,51,	S.	Tiffany	7566	3,6,7,15,19,42,51,
Russell	Michael	10895	42,51,	S.	Jody	8222	3,6,7,15,19,42,51,
Russo	Cathy	7770	3,6,7,15,19,42,51,	S.	Kiran	8295	3,6,7,15,19,42,51,
Rust	Linda	12941	54,	S.	Cindi	12280	54,
Rutherford	Marty	9074	3,6,7,15,19,42,51,	Saalfeld	Janet	5433	54,
Rutherford	Erica	10459	3,7,19,42,51,	Saba	Michael	5004	54,
Rutledge		1374	54,	Sablan	Erica	9944	3,6,7,15,19,42,51,
Ruybalid		281	2,4,9,31,42,	SABLONNIERES	Amandine	13151	54,
Ruybalid	Mariana	6392	3,6,7,15,19,42,51,	Sachs		2884	8,22,42,
Ryan	Nancy	5152	54,	Sachs	Jesse	6573	3,6,7,15,19,42,51,
Ryan	Timothy	5504	3,6,7,15,19,42,51,	Sachs	Nikki	6662	3,6,7,15,19,42,51,
Ryan	Meghan	5509	3,6,7,15,19,42,51,	Sachs	Nikki	8301	3,6,7,15,19,42,51,
Ryan	William	6183	3,6,7,15,19,42,51,	Sachs	Naomi	10181	3,6,7,15,19,42,51,
Ryan	Ken	6266	3,6,7,15,19,42,51,	Sacks	Steve	5172	54,
Ryan	Jason	7303	3,6,7,15,19,42,51,	Sacks	Brandy	8225	3,6,7,15,19,42,51,
Ryan	Catherine	9167	3,6,7,15,19,42,51,	Sadler	Robert D	10574	3,42,51,
Ryan	Therese	12561	54,	Saez	Roxana	12623	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Sahai	Anant	5118	54,	Sampson	Lindsey	10022	3,6,7,13,14,15,19,24,42,48,51,
Sahari		750	54,	Samreuang	Kenneth	10152	3,6,7,15,19,42,51,
Sahdev	Neelam	8966	3,6,7,15,19,42,51,	Samuels	Sam	7176	3,6,7,15,19,42,51,
Saiki	Roger	7107	3,6,7,15,19,42,51,	Samuels	Kate	7469	3,6,7,15,19,42,51,
Sajbel	Derek	8077	3,6,7,15,19,42,51,	Samuelsen	P	12630	54,
Sakovich		3084	1,2,3,4,6,7,15,19,22,45,51,	Sanchez	Aleja	6214	3,6,7,15,19,42,51,
Sakta	Alecs	5766	3,6,7,15,19,22,42,51,	Sanchez	JD	7616	3,6,7,15,19,42,51,
Sala	Hilal	9956	3,6,7,15,19,42,51,	Sanchez-Lasthaus	Anja H	11026	42,51,
Salatino	D. Joy	9840	3,6,7,15,19,42,51,	Sancisi	Valeria Vincent	6417	3,6,7,15,19,42,51,
Salazar	Rocio	12821	54,	Sand		3564	2,4,5,6,8,31,
Salazar	Joe	12844	54,	Sand	Robert H	11036	42,51,
Salazar	Joe	12873	54,	Sanderell	Richard	10905	42,51,
Saldana	Francisco	10688	42,51,	Sanders	Delmar	5405	54,
Saldivar	Guadalupe	5520	3,6,7,15,19,42,51,	Sanders	Jay	9969	3,6,7,15,19,42,51,
Sale	Judy	6017	3,6,7,15,19,42,51,	Sanderson	Sara	5124	54,
Salehzadeh	Amir	8417	3,6,7,15,19,42,51,	Sanderson	Peter	7402	3,6,7,15,19,42,51,
Saletti	Silvia	12052	54,	Sandes	Melinda	5603	3,6,7,15,19,42,51,
Salgado	Magaly	12102	54,	Sandoval	Heni	9717	3,6,7,15,19,42,51,
Salgado	Natasha	12149	54,	Sands	James Andrew	9487	3,6,7,15,19,42,51,
Salmon		2732	54,	Sandstrom	Joanne	6752	3,6,7,15,19,42,51,
Salmonsens	LeMoyn	12531	54,	sandulovic	desanka	12901	54,
Salovitz	Heiw A	6101	3,6,7,15,19,42,51,	Sanford		551	54,
Salzinger	Leslie	9054	3,6,7,15,19,42,51,	Sang	Rebecca	9742	3,6,7,15,19,42,51,
samadhi		1244	54,	Sanikovich	Tatyana	8291	3,6,7,15,19,42,51,
Sammani	R	5175	54,	Santaguida	Frances	3282	3,6,9,10,13,14,21,22,24,42,53,
Sample	John	5033	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Santana	Kathryn	6345	3,6,7,15,19,42,51,	Sawyer	Lewis	8092	3,6,7,15,19,42,51,
Santilli	Nicolo	8061	3,6,7,15,19,42,51,	Saxer	Jennifer	8482	3,6,7,15,19,42,51,
Santos		457	54,	Saxty		981	5,12,17,19,42,
Santos		3528	1,2,4,6,11,31,41,43,	Saxty		1567	2,4,5,19,41,42,
Santos	Jan	9687	3,6,7,15,19,42,51,	Saylor	Doyle	7040	3,6,7,13,15,19,42,51,
Sara		2081	54,	Sayre		1504	2,4,15,
Saravia	Jimena	10015	3,6,7,15,19,42,51,	Sayre	James K.	9266	3,6,7,15,19,42,51,
Sarch	L.	6467	3,6,7,15,19,42,51,	scalera	christi	13073	54,
Sarfan	Justine	10498	3,19,42,51,	Scally	Patrizia	12154	54,
Sarnoff	Bob	6722	3,6,7,15,19,42,51,	Scantlebury	Jane	8899	3,6,7,15,19,42,51,
Sasso	Mary Lynn	8024	3,6,7,15,19,42,51,	Scarborough	Carrie	13193	54,
Sasso	John	10949	42,51,	Scarpino	E.	12767	54,
Sasson	Michael-David	10745	42,51,	Scarr		284	4,9,10,18,19,27,31,42,43,44,
Satterlee	Sarah	6614	3,6,7,15,19,42,51,	Schabes	Alena	7589	3,6,7,15,19,42,51,
Sattler		1258	54,	Schacht	Bruce	12645	54,
Sauter	George	5326	54,	Schaefer	Roxy	7509	3,6,7,15,19,42,51,
Sauve	Camille	7086	3,6,7,15,19,42,51,	Schaeffer	Holly	12535	54,
Savage	Sherry	5893	3,6,7,15,19,42,51,	Schaff	Katherine	9211	3,6,7,15,19,42,51,
Savage	Cathy	6004	3,6,7,15,19,42,51,	Schaffell	Sanford	5375	54,
Savage	Hope	7351	3,6,7,15,19,42,51,	Schaffer	Teya	6687	3,6,7,15,19,42,51,
Savage	Nicole	7956	3,6,7,15,19,42,48,51,	Schaller	Milena	9565	3,6,7,15,19,42,51,
Savchuk		3037	9,13,14,15,22,24,48,49,	Schapiro	Naomi	7372	3,6,7,15,19,42,51,
Savchuk	Svetlana	10510	3,19,42,51,	Scheer		2891	1,2,4,
Savige	David	12457	54,	Scheer	Steve	10671	42,51,
sawant		1019	42,	Scheffler	Aaron	9024	3,6,7,15,19,42,51,
Sawant		1564	42,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Scheider	Holly	5055	54,	Schlein		2870	7,29,31,
Scheiter		2937	9,13,14,19,22,24,48,	Schlein	Julie	6542	3,6,7,15,19,42,51,
Schell	Eric	5208	54,	Schlosser	David	6206	3,6,7,11,15,19,42,51,
Scheney		577	54,	Schlosser	Olivia	13078	54,
Schenker	Elina	8067	3,6,7,15,19,42,51,	Schmerling		286	2,45,
Scherba	Jon	9867	3,6,7,15,19,42,51,	Schmidt	Christopher	10217	3,6,7,15,19,42,51,
Schermerhorn	Patricia	7396	3,6,7,15,19,42,51,	Schmidt-Banes		3543	2,4,8,11,31,34,43,
Scherr	Raquel	8135	3,6,7,15,19,42,51,	Schmierer		902	54,
Schertz	Dolly	13203	54,	Schmiett	Kathryn	6767	3,6,7,15,19,42,51,
Schickman	Susan	322	1,2,9,11,34,42,44,	Schmitt	Leigh	6037	3,6,7,15,19,42,51,
Schickman	Susan	9326	3,6,7,15,19,42,51,	Schmookler	Ed	10377	3,6,7,15,19,42,51,
Schiffman		1884	1,2,4,5,11,13,14,16,19,42,43,	Schnapp	Stephanie	7355	3,6,7,15,19,42,51,
Schiffman	Sepha	6839	3,6,7,15,19,42,51,	Schneider		947	54,
Schildkret	Day	9671	3,6,7,15,19,42,51,	Schneider	Greg	10744	42,51,
Schildkret		803	27,42,	Schneiderman	Andrew	6997	3,6,7,15,19,42,51,
Schindhelm	Bonnie	11096	42,51,	Schnicht-feng		472	4,19,
Schipper	LJ Speakup	184	1,2,25,27,28,42,43,44,53,	Schoefer	Christine	8734	3,6,7,15,19,42,51,
Schipper		1985	48,	Schoefer-Wulf	Ella	6926	3,6,7,15,19,42,51,
Schipper	Barbanell	2399	1,15,31,	Schoen	Claire	7751	3,6,7,15,19,42,51,
Schipper	Joel	11009	42,51,	Schoenbeck	Alison	8363	3,6,7,15,19,27,42,51,
Schipper		285	27,34,42,44,	Schoenberger	Beth	8333	3,6,7,15,19,42,51,
Schleifer	Berndt	3227	54,	Schoevaars	Yvette	13188	54,
Schleifer	Berndt	5396	54,	Scholl-Buckwald	Steve	9129	3,6,7,15,19,42,51,
Schleifer	Cheryl	5403	54,	Schongut	Emanuel	10915	42,51,
Schlein		2306	27,34,42,43,	Schooler	Lynn	9891	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Schopf	Stephanie	2080	50,	Schultz	Phylean	5527	3,6,7,15,19,42,51,
Schopf	Maureen R.	6830	3,6,7,15,19,42,51,	Schultz	Janet	5929	3,6,7,15,19,42,51,
Schorer		287	7,42,44,	Schulz	Lane	7213	3,6,7,15,19,42,51,
Schorer		288	2,4,6,7,42,43,44,	Schulz	Catherine	8170	3,6,7,15,19,42,51,
Schorer		469	54,	Schumacher	Linda	9681	3,6,7,15,19,42,51,
Schorer		1096	42,43,50,	Schumacher-Jennings		1799	4,8,11,22,42,43,
Schorer		1425	1,2,4,6,8,13,15,16,22,48,	Schumacher-Jennings	Judith	8855	3,6,7,15,19,42,51,
Schorer		2116	29,42,43,	Schumann	Ellen	5592	3,6,7,15,19,42,51,
Schorer	Peter	8929	3,6,7,15,19,42,51,	Schumann	Jorn	13006	54,
Schrader	Rhonda	5735	3,6,7,15,19,42,51,	Schut	Lidia	12983	54,
Schrag	Monika	7246	3,6,7,15,19,42,51,	Schwartz		422	54,
Schrauth	Kent	9096	3,6,7,15,19,42,51,	Schwartz		696	1,3,4,5,9,10,11,13,15,42,44,
Schreck	Betty	6776	3,6,7,15,19,42,51,	Schwartz		823	1,11,17,19,27,45,
Schreck	Noah	6868	3,6,7,15,19,42,51,	Schwartz		2811	9,14,
Schreck	Joel	6876	3,6,7,15,19,42,48,51,	Schwartz		2831	1,9,
Schreiber	Sayuri Suzuki	7406	3,6,7,15,19,42,51,	Schwartz		2832	1,19,
Schroder	Richard	9323	3,6,7,15,19,42,51,	Schwartz	Patricia A	3231	54,
Schroeder	Esther	7903	3,6,7,15,19,42,51,	Schwartz	Cheryl	6658	3,6,7,15,19,42,51,
Schroeer	Andrew	7012	3,6,7,15,19,42,51,	Schwartz	Ellen	8856	3,6,7,15,19,42,51,
Schrolucke	Jennifer	5953	3,6,7,15,19,42,51,	Schwartz	Judith	8886	3,6,7,15,19,42,51,
Schub	Claire	9364	3,6,7,15,19,42,51,	Schwartz	Rainbow	9752	3,6,7,15,19,42,51,
Schubert	Layla	5924	3,6,7,15,19,42,51,	Schwartz	Kurt	10226	3,6,7,15,19,42,51,
Schuh	Crystal	12830	54,	Schwartzburg		425	54,
Schuler	Urs	7494	3,6,7,15,19,42,51,	Schwarz		565	54,
Schulman	Susan	5074	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Schwarz	Raymond	7784	3,6,7,15,19,42,51,	Sculti	Kate	7320	3,6,7,15,19,42,51,
Schwarz	Emmanuelle	9780	3,6,7,15,19,42,51,	Scurich		2453	6,11,
Schweiger	Nan	12688	54,	Scurich	Chuck	5195	54,
Schwendinger	B	5321	54,	Sea		2885	54,
Scott		290	6,7,42,43,44,	Seabury	David	8699	3,6,7,15,19,42,51,
Scott		403	54,	Seaman	Michael	214	1,9,31,42,43,44,
Scott		561	3,5,9,10,13,14,19,21,22,24, 27,42,53,	Searfus		856	54,
Scott		983	54,	Sedger	Rachelle	12847	54,
Scott		1358	5,41,48,	Sedonne	Tina	8810	3,6,7,15,19,42,51,
Scott		1541	54,	Sedor	Robert	5572	3,6,7,15,19,42,51,
Scott		1952	54,	Seegal	David	8981	3,6,7,15,19,27,42,51,
Scott		2551	1,19,22,41,42,46,	Seeley	Justin	10759	5,42,51,
Scott		3510	6,42,	Segal	Betty	9168	3,6,7,15,19,42,51,
Scott	Patricia	5670	3,6,7,15,19,42,51,	Segal	Dasha	9821	3,5,6,7,15,19,42,51,
Scott	Lisa	6571	3,6,7,15,19,42,51,	Segall	Andrea	8386	3,6,7,15,19,42,51,
Scott	Andrea	6632	3,6,7,15,19,42,51,	Segelman		3521	5,9,10,11,14,24,43,
Scott	Sue	7020	3,6,7,15,19,42,51,	Segre	Piera	8112	3,6,7,15,19,42,51,
Scott	Rose-Lynn	7037	3,6,7,15,19,42,51,	Segura	Marcia	10802	42,51,
Scott	Gay	7334	3,6,7,15,19,42,51,	Seiben		3502	41,
Scott	Madeleine	8124	3,6,7,15,19,42,51,	Seiben	Robert	5313	54,
Scott	Tyler'	8523	3,6,7,15,19,42,51,	Seibert	Corry	6860	3,6,7,15,19,42,51,
Scott	Mattie	8898	3,6,7,15,19,42,51,	Seidel	Carol	7066	3,6,7,15,19,42,51,
scott	christopher	12284	54,	Seidel	Jon	9373	3,6,7,15,19,42,51,
Scott		3182	54,	Seidenman		841	1,4,5,9,17,19,44,
SCOZZOLA		834	54,	Seidman	Peter	8436	3,6,7,15,19,42,51,
				Seifi	Diane	5005	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Seiser	Barbee	10621	42,51,	serinus		1075	54,
Seitler		1263	41,	Serinus		1644	2,4,34,
Seitz	Robert	5576	3,6,7,15,19,42,51,	Serpa	Elizabeth	5412	54,
Selene	Jodi	5581	3,6,7,15,19,42,51,	Serpa	Gabriel	6944	3,6,7,15,19,42,51,
Seligman		450	54,	Serpa	Lisa	10989	42,51,
Seligman	Julianna	7387	3,6,7,15,19,42,51,	Serrano	Francisco J.	9879	3,6,7,15,19,42,51,
Seligman	Dee	10885	42,51,	Servais		1232	54,
Selk		1288	1,2,4,6,11,15,42,	Seth	Manu	6723	3,6,7,15,19,42,51,
Selk	CLAUDIA	7090	3,6,7,15,19,42,51,	Settle		2998	54,
Selkirk		2175	54,	Settles	Craig	7539	3,6,7,15,19,42,51,
Sella		1303	2,4,6,42,	Seville	Michele	6618	3,6,7,15,19,42,51,
Sella		1915	1,4,7,8,11,13,15,22,23,24,4 2,43,44,	Sevison	Jennifer L	8192	3,6,7,15,19,42,51,
Sella		2853	54,	Seymour	Frankie	12343	54,
Sella	Shelley	8265	3,6,7,15,19,42,51,	Shachory		3088	54,
Sells		1967	54,	Shacket	Susan	13051	54,
Selnick	Martha	9403	3,6,7,15,19,42,51,	Shadbolt	John	12443	54,
Seltzer	Janet	9117	3,6,7,15,19,42,51,	Shaffer		295	3,13,
Sen	Suranjan	12187	54,	Shaffer	Glynn	12927	54,
Senauke	Laurie	9089	3,6,7,15,19,42,51,	Shah	Poorvi	9203	3,6,7,15,19,42,51,
Senecal	Tina	6023	3,6,7,15,19,42,51,	Shain		2890	54,
Senf	Marilyn	8489	3,6,7,15,19,42,51,	Shaka	Yasodhara	6443	3,6,7,15,19,42,51,
Sengstake	Gene	12853	54,	Shalts	Faina	10201	3,6,7,15,19,42,51,
Senner		784	11,22,27,31,42,44,	Shames	Terry	10516	3,19,42,51,
Serb		1786	54,	Shane	Patricia	5560	3,6,7,15,19,42,51,
Sergeant		3132	54,	Shane	Anna	8761	3,6,7,15,19,42,51,
Sergeant	John	9442	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Shankari	Sadowsky	1279	2,4,11,27,31,	Shaw	Jennifer	9564	3,6,7,15,19,42,51,
Shanks	Patricia	5250	54,	Shaw	Jacqueline	12490	54,
Shannon	Maura	8389	3,6,7,15,19,42,51,	Shchetinina	Alina	13064	54,
Shannon	Charmaine	12991	54,	Shea	Emily	9636	3,6,7,15,19,42,51,
Shapiro		1070	22,	Shearer	Robert	7028	3,6,7,15,19,42,51,
Shapiro		1635	22,	Shearer	Cameron	9804	3,6,7,15,19,42,51,
Shapiro	Inna	6279	3,6,7,15,19,42,51,	Shearer/McAuley		1953	54,
Shapiro	Aliza	8676	3,6,7,15,19,42,51,	Sheehan	Cathleen	9152	3,6,7,15,19,42,51,
Shapiro	Ruth	8890	3,6,7,15,19,42,51,	Sheehy	Larry	10086	3,6,7,15,19,42,51,
Shapiro	Ed	10351	3,6,7,15,19,42,51,	Sheffer	Melissa	12717	54,
Sharee	Donna	10891	42,51,	Sheffield	Brandon	7796	3,6,7,15,19,42,51,
Sharfman	Susan	6697	3,6,7,15,19,42,51,	Shelleda		998	1,24,27,42,
Sharma	Amitabh	5414	54,	Shelleda	Leah	8280	3,6,7,15,19,42,51,
Sharp	William	9998	3,6,7,15,19,48,51,	Shelley	Sara	5682	3,6,7,15,19,42,51,
Sharp	Deb	10403	3,7,15,19,42,51,	Shelton		2964	8,22,31,42,
Sharp	Sean	10919	42,51,	Shelton	William	10610	42,51,
Sharp	Patricia	12592	54,	Shendelman	Sara	10420	3,7,15,19,42,51,
Sharpnack	Lois	5125	54,	Shenker	Patty	5856	3,6,7,15,19,42,51,
Sharpnack	Lois	6771	3,6,7,15,19,42,51,	Shepard		1430	3,24,
Shaw		974	5,6,7,15,17,31,42,44,	Shepard		2600	54,
Shaw		1596	15,31,42,44,48,	Shepard	Jill L	6041	3,6,7,15,19,42,51,
Shaw	Kathy	5960	3,6,7,15,19,42,51,	Shepard	Jane	6983	3,6,7,15,19,42,51,
Shaw	Mary	6011	3,6,7,15,19,42,51,	Shepard	William	7943	3,6,7,15,19,42,51,
Shaw	Cecelia	7569	3,6,7,15,19,42,51,	Shepard	Christy	8267	3,6,7,15,19,42,51,
Shaw	Jennifer	7695	3,6,7,15,19,42,51,	Shepard	Eliza	10158	3,6,7,15,19,42,51,
Shaw	Carolyn	8868	3,6,7,15,19,42,51,	Shepherd	Joanne	12858	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Sheppard	Mike	6245	3,6,7,15,19,42,51,	Shkud		1008	54,
Sher	Nicholas	9185	3,6,7,15,19,42,51,	Shoemaker	Kozoriz	3142	2,4,9,11,19,24,27,31,42,43, 44,45,46,49,52,
Sherer	Yael	8272	3,6,7,15,19,42,51,	Shoemaker		3548	1,19,22,41,42,46,
Sheridan	Bryan	7845	3,6,7,15,19,42,51,	Shoemaker	Matthew	6809	3,6,7,15,19,42,51,
Sheridan	Lenore	11010	42,51,	Shoemaker	Victoria	8521	3,6,7,15,19,42,51,
Sherman		2963	54,	Shokat	Ruth	8597	3,6,7,15,19,42,51,
Sherman	Laura	6898	3,6,7,15,19,42,51,	Shook	Philip	12642	54,
Sherman	Claire	10503	3,19,42,51,	short	simon	12295	54,
Sherman and family	Richard	12971	54,	Shoup		296	4,7,19,43,44,
Sherrer	R	7061	3,6,7,15,19,42,51,	Shoup		3236	19,31,
Sherrod	Grant	7218	3,6,7,15,19,42,51,	Shoup	Laurence H	10635	42,51,
Sherwood	Linda	6870	3,6,7,15,19,42,51,	Shrier	Merry	12082	54,
Shields	Janice	6594	3,6,7,15,19,42,51,	Shrieve	Ann C	7291	3,6,7,15,19,42,51,
Shields	Mary	8271	3,6,7,15,19,42,51,	Shulman	Marc	6179	3,6,7,15,19,42,51,
Shields	Maggie	12303	54,	shulman	sue	12572	54,
Shihab		1391	6,42,	Shuman	Derek	5201	54,
Shimata	Kathy	12724	54,	Shuman	Carolyn	10796	42,51,
Shimizu	Michele	13150	54,	Shumofsky		2951	2,4,6,7,11,13,
Shinbane	Maylou	7618	3,6,7,15,19,42,51,	Shurer		3540	11,48,
Shinomiya	CoCo	7322	3,6,7,15,19,42,51,	Shuster	Sheri	7099	3,6,7,15,19,42,51,
Shipman		1235	5,7,	Shvola		3520	54,
Shirley	Rebecca	10898	42,51,	Shwartz	Hertzi	5942	3,6,7,15,19,42,51,
Shiu	Paula	9929	3,6,7,15,19,42,51,	Si Nae	Emma	9899	3,6,7,15,19,42,51,
Shive	Bill	10777	42,51,	Sibio	Michael	10195	3,6,7,15,19,42,51,
Shively	John	7140	3,6,7,15,19,42,51,	Sichel-Tissot	Rebecca	7405	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Sicular-Mertens		2730	1,11,15,27,31,48,	Silva	Carmen	10296	3,6,7,15,19,42,51,
Sicular-Mertens	Mardi	7386	3,6,7,15,19,42,51,	Silver	Henry	8143	3,6,7,15,19,42,51,
Sidebotham	Nancy	9262	3,6,7,15,19,42,51,	Silver	Patricia	10573	3,42,51,
Sidhu		1925	22,34,	Silver Eagle	Aeyrie	12265	54,
sidney	deana	12215	54,	Silverberg		1181	54,
Sieben		401	54,	Silverberg		1764	5,11,13,
Siegel		2406	8,11,22,24,31,43,44,	Silverman	Murray	9765	3,6,7,15,19,42,51,
Siegel	Leni	8509	3,6,7,15,19,42,51,	Silverman	Susan	10162	3,6,7,15,19,42,51,
Siegfried	Rick	13056	54,	Silverstein	Judith	10750	42,51,
Siekierka	Tracy	6243	3,6,7,15,19,42,51,	Silvestre		1223	2,4,6,19,43,44,
Siemann	Thomas	8305	3,6,7,15,19,42,51,	Simeon	Julian V	10969	42,51,
Siems	Anne	2082	54,	Simmons	James	8970	3,6,7,15,19,42,51,
Sierra		298	2,4,11,13,19,	Simms	Donna	6375	3,6,7,15,19,42,51,
sightsixtyfour		846	54,	Simms	Kim	13185	54,
Sigman	Darlene	7192	3,6,7,15,19,42,51,	Simon		3178	54,
Sigurd Law	Matthew	9983	3,6,7,15,19,42,51,	Simon	Jacqueline	7381	3,6,7,15,19,42,51,
Sihvola		300	12,15,18,19,21,27,42,48,52 ,	Simon	Elinor	7974	3,6,7,15,19,42,51,
Sihvola		449	54,	Simon	Rebecca	12432	54,
Silber		1049	54,	Simonds		2135	27,
Silber		1571	2,4,	Simone	Louise	12951	54,
Silber		3092	54,	Simons	Bill	8539	3,6,7,15,19,42,51,
Silber	Susan	10534	3,42,51,	Simons	Christy	9226	3,6,7,9,10,15,19,42,51,
Silberman		789	11,27,50,	Simons	Jenna	12602	54,
Silberstein		303	3,4,5,8,9,10,11,13,19,22,31 ,	Simons	Judith	12861	54,
Silbey	Paul	3222	54,	Simpson	Daniel	5649	3,6,7,15,19,42,48,51,
				Simpson	Hue	8147	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Simpson	Johnathan	9319	3,6,7,15,19,42,51,	Sitkin	Shanon	7295	3,6,7,15,19,42,51,
Simpson	Josh	10113	3,6,7,15,19,42,51,	Sitzes	Cathy	10738	42,51,
Sims	Demian S.	6924	3,6,7,15,19,42,51,	Sivesind		1913	1,4,7,8,11,13,15,22,23,24,4 2,43,44,
Sinclair	Tessa	7391	3,6,7,15,19,42,51,	Sivesind		3002	9,13,14,19,24,48,
Siner		1211	2,4,	Sivesind	Torunn	8174	3,6,7,15,19,42,51,
Sines	Charlotte	12761	54,	Skaff	Richard	8798	3,6,7,15,19,42,51,
Sing	Rachel	5054	54,	skaggs		864	1,6,7,14,15,18,19,20,22,27, 32,42,44,
Singer		1821	4,8,11,22,24,42,43,44,	Skead		851	54,
Singer		2219	54,	Skeels	Wyn	8010	3,6,7,15,19,42,51,
Singer	Sam	5027	54,	Skelly	Lesley	6075	3,6,7,15,19,42,51,
Singer	D.	7707	3,6,7,15,19,42,51,	Skelton	Beverly	12740	54,
Singer	Morley M	9855	3,5,6,7,15,19,42,51,	Skiles	Martha	5526	3,6,7,15,19,42,51,
Singer	D	10592	3,42,51,	Skjelver	Mead	2582	54,
Singer	D.	12898	54,	Sklar	Leonard	9102	3,6,7,15,19,42,51,
Singh	Rajeev	6378	3,6,7,15,19,42,51,	Sklias	Nick	9792	3,6,7,15,19,42,51,
Singleton	Marilyn	9699	3,6,7,15,19,42,46,47,51,	skolnick		844	42,
Sinnott	Jeanne-Marie	8400	3,6,7,15,19,42,51,	Skolnick	David	8678	3,6,7,15,19,42,51,
Sinram	Danika	12817	54,	Skomer	Jerry	3225	54,
Sinton		1819	42,43,48,	Skomer	Jerry	5465	54,
Sinton	Jane	9518	3,6,7,15,19,42,51,	Skupa	Gary	7869	3,6,7,15,19,42,51,
Sipowicz	Kathy	5762	3,6,7,15,19,42,51,	Sky		304	2,3,4,8,9,10,11,13,14,15,16 ,22,23,31,43,44,48,
Sirbu		586	54,	Sky		715	9,11,13,19,27,32,42,
Sirbu		587	54,	Skye		1448	1,2,4,6,8,13,22,43,44,
Sirbu		604	54,	Skye	Lila	9760	3,6,7,15,19,42,51,
Sischo		1037	54,				
Sischo		1585	4,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Slaby		2207	54,	Smith		1281	1,2,4,6,42,
Slack	Ellen	8567	3,6,7,15,19,42,51,	Smith		1403	11,42,43,
Slama		2447	6,9,42,	Smith		1773	4,11,13,
Slama	Laurie	6418	3,6,7,15,19,42,51,	Smith		1811	54,
Slater	Amy	5320	54,	Smith		2043	2,4,31,42,43,
Slater	Nick	10005	3,6,7,15,19,42,51,	Smith	Fred	2220	54,
Slater	Heather	12974	54,	Smith	Shelly	5826	3,6,7,15,19,42,51,
Slattery	Sherrick	5441	54,	Smith	Janet	6272	3,6,7,15,19,42,51,
Slattery	Louise	13054	54,	Smith	BT	6329	3,6,7,15,19,42,51,
Slean	Jay	6221	3,6,7,15,19,42,51,	Smith	Violet	6502	3,6,7,15,19,42,51,
Sleeth		652	54,	Smith	Patricia	6562	3,6,7,15,19,42,51,
Slikker	Annette	9199	3,6,7,15,19,42,51,	Smith	Kimberly	6602	3,6,7,15,16,19,42,51,
Sloan	Lynne	10886	42,51,	Smith	Gar	6747	3,6,7,15,19,42,51,
Sloan	Cheryl	12113	54,	Smith	Jed	6768	3,6,7,15,19,42,51,
SLOBIN		898	1,4,50,	Smith	Samuella	7282	3,6,7,15,19,42,51,
Slobin	Dan	8315	3,6,7,15,19,42,51,	Smith	Heather	7838	3,6,7,15,19,42,51,
Sloss	Martha	9767	3,6,7,15,19,42,51,	Smith	Scott	7952	3,6,7,15,19,42,51,
Slovak	Robin	5336	54,	Smith	Sandra	7991	3,6,7,15,19,42,51,
Small		903	1,15,18,42,	Smith	Gar	8069	3,6,7,15,19,42,51,
Small	Aaron	7684	3,6,7,15,19,42,51,	Smith	Maximilian	8477	3,6,7,15,19,42,51,
Small	Michael	9892	3,6,7,15,18,19,42,51,	Smith	Patricia	8821	3,6,7,15,19,42,51,
Smallsreed		1845	54,	Smith	Sylvia	9337	3,6,7,15,19,42,51,
Smartt	Olivia	6884	3,6,7,15,19,42,51,	Smith	Hallie	9343	3,6,7,15,19,42,51,
Smee	Jennifer	6339	3,6,7,15,19,42,51,	Smith	Judith	9643	3,6,7,15,19,42,51,
Smiga	Karen	5974	3,6,7,15,19,42,51,	Smith	Taylor	9728	3,6,7,15,19,42,51,
				Smith	Bailey	9748	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Smith	Benjamin	9939	3,6,7,15,19,42,51,	Snow		623	22,
Smith	Janet	9943	3,6,7,15,19,42,51,	Snow		1959	11,42,44,
Smith	Megan	9951	3,6,7,15,19,42,51,	Snow		2133	5,6,9,42,44,
Smith	Emily	10098	3,6,7,15,19,42,51,	Snow	Evan	5249	54,
Smith	Krystal	10148	3,6,7,15,19,42,51,	Snow	Marvin	5257	54,
Smith	Teri	10253	3,6,7,15,19,42,51,	Snow	Christine	5940	3,6,7,15,19,42,51,
Smith	Benita	10475	3,7,19,42,51,	Snow	Darcey	12680	54,
Smith	Edwina	10590	3,42,51,	Snowi	Alicia	11067	42,51,
Smith	Glen	10918	42,51,	Snyder	James	137	5,11,15,31,48,
Smith	Paulette	12707	54,	Snyder		799	1,4,5,6,7,11,18,22,27,44,
Smith	Sharon	12788	9,	Snyder	Staeppan	5057	54,
Smith		2901	2,4,44,	Snyder	Melissa	6367	3,6,7,15,19,42,51,
Smith	Greg	12720	54,	Snyder	James	9393	3,6,7,15,19,42,51,
Smith	J.T.	12886	54,	Snyder	Todd	10855	42,51,
Smith	Phyllis	13001	36,37,	Soares	Lisa	12979	54,
Smith	C.	13092	54,	Sobczak		2793	1,2,4,8,22,27,31,34,42,
Smith	Waheeda	13111	54,	Sobczak	Connie	6761	3,6,7,15,19,42,51,
Smithfield	Jenny	6054	3,6,7,15,19,42,51,	Sobel	Stacey	9539	3,6,7,15,19,27,42,51,
Smock	Chris	5887	3,6,7,15,19,42,48,51,	Sobieralski	Casondra	9025	3,6,7,15,19,42,51,
Smyer		306	2,4,44,	Soderlund	Sandra	8802	3,6,7,15,19,42,51,
Smyer		1003	4,42,	Soffer	B	10297	3,6,7,15,19,42,51,
Snedden	Nancy	10287	3,6,7,15,19,42,51,	Sohaskey	Mike	10430	3,7,19,42,51,
Snel	Denise	12347	54,	Sohigian		915	42,
Snell		1807	4,8,11,22,42,43,	Sohigian		1522	2,4,43,44,
Snell	Jason	5239	54,	Sojka	Allison	10417	3,7,15,19,42,51,
Snell	Jason	8836	3,6,7,15,19,42,51,	Sol	Damian	9625	3,6,7,15,19,34,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Solano	Xtina	5709	3,6,7,15,19,42,51,	Sophiea	Dale	7892	3,6,7,15,19,42,51,
Solberg	Bonnita	10685	42,51,	Sorcher		613	29,48,
SOLER	Kirsten	12533	54,	Sorcher	Peter	3208	54,
Solg	Grete	12176	54,	Sorcher	Erin	10839	42,51,
Soliven	Linda	5554	3,5,6,7,15,19,42,51,	Sorcher	Peter	11074	29,42,48,51,
Soll	Svea Lin	7689	3,6,7,15,19,42,51,	Sorensen	Lenore	5075	54,
Solnit		725	54,	Sorensen	Heather	5778	3,6,7,15,19,42,51,
Solomon		2277	4,5,42,43,	Sorensen	Dale	6913	3,6,7,15,19,22,42,51,
Solomon		2587	42,	Sorensen	Janet	7329	3,6,7,15,19,42,51,
Solomon	Richard and Chihoko	6493	3,6,7,15,19,42,51,	Sorensen	Lenore	8111	3,6,7,15,19,42,51,
Solomon	Terry	6975	3,6,7,15,19,42,51,	Sorensen	Marlinah	10584	3,42,51,
Somack	Ralph	7492	3,6,7,15,19,42,51,	Sorenson	Eric	5341	54,
Somedy	Bonnie	7047	3,6,7,15,19,42,51,	Sorgen		308	2,4,44,
Somerville	Robin	6138	3,6,7,15,19,42,51,	Sorgen		485	54,
Somerville	Robin	8214	3,6,7,15,19,42,51,	Sorgen	Phoebe	614	5,
Somkin	Anthony	9067	3,6,7,15,19,27,42,51,	Sorgen	Poebe	5382	54,
Sommaruga	Cristina	12929	54,	Sorgen	Commissioner Phoebe	11073	5,42,51,
SOMMER		3189	8,11,13,42,48,	Sorgun		3556	4,5,6,8,9,11,22,23,41,42,44,46,
Sommer	Sue	5286	54,	Sorrelgreen	Ethan	10469	3,7,19,42,51,
Sommer	Sally	8956	3,6,7,15,19,42,51,	Sosa	Cave	3032	3,6,7,9,19,23,34,49,
Sondik	Sheila	8248	3,6,7,15,19,42,51,	Sosa	Jennifer	13182	54,
Sondin	Michael	9743	3,6,7,15,19,42,48,51,	Sotelo	Paula	6701	3,6,7,15,19,42,51,
Sonnad	Emina	8182	3,6,7,15,19,42,51,	Soukup	Pavel	12969	54,
Sonnichsen	Cheryl	8487	3,6,7,15,19,42,51,	Sousa	Rebecca	10062	3,6,7,15,19,42,51,
Sontag	Marshall	11107	42,51,	Southwick	Staci	8277	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Souza	Steve	9800	3,6,7,15,19,42,51,	Spiers	Victoria	6352	3,6,7,15,19,42,51,
Sovern	Nita	5601	3,6,7,15,19,42,51,	Spiker	Sandy	7858	3,6,7,15,19,42,51,
Sovin	Janet	8402	3,6,7,15,19,42,51,	Spiller		1521	54,
SPACHIDAKIS	THEODORE	12062	54,	Spinrad	Leah Noel	9702	3,6,7,15,19,42,51,
Spain	Jessica	7139	3,6,7,15,19,42,51,	Spitzer		2729	54,
Spangler		643	4,18,	Sposato	Chris	12467	54,
Spangler		2298	27,	Spreyer	Kurt	8660	3,6,7,15,19,42,51,
Spangler	Ward	7586	3,6,7,15,19,42,51,	Spring	Jeff	5541	3,6,7,15,19,42,51,
Spangler	Linda	7753	3,6,7,15,19,42,51,	Springer	Desiree	9716	3,6,7,15,19,42,51,
Spangler	Deborah	9461	3,6,7,15,19,42,51,	Sproul		941	5,6,7,27,44,
Spanos	Jennie	7655	3,6,7,15,19,42,51,	Sproul	Madeleine	11081	42,51,
Sparks		2384	1,4,27,43,44,	Spurgin Hussey	Emma	13201	54,
Sparr	Linda	5842	3,6,7,15,19,22,42,51,	Squance	Lynn	13002	22,36,37,
Spatz	Linda	8057	3,6,7,15,19,42,51,	Squires	Joan	12865	54,
Spautz	Laura	5095	54,	Srinivas	Shanti	12123	54,
Specter	Evan	6248	3,6,7,15,19,42,51,	St. John	Rayward	10328	3,6,7,15,19,42,51,
Spees	Richard	5089	54,	St. John	Rick	10825	42,51,
Spelt	Sarah	7593	3,6,7,15,19,42,51,	St. John-Dutra		2481	54,
Spence		2449	8,11,22,24,31,43,44,	St. Laurence	Aome	10967	42,51,
Spence	Rebecca	7156	3,6,7,15,19,42,51,	St.Onge	Gene	8614	3,6,7,15,19,42,51,
Spence	Haley	9342	3,6,7,15,19,42,51,	Stab	Chad	10048	3,6,7,15,19,42,51,
Spence	William	13140	54,	Stack	Bonnie L	5217	54,
Spencer	Daniel	7542	3,6,7,15,19,42,51,	Stack	Robert	7787	3,6,7,15,19,42,51,
Spencer	Shawna	12851	54,	Stafford	Nancy	6896	3,5,6,7,15,19,22,42,50,51,
Speranza	Kathryn	6429	3,6,7,15,19,42,51,	Stagg	Musia	7620	3,6,7,15,19,42,51,
spiegel	ei	12152	54,	Staiti	Erika	6282	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Staller		3036	54,	Stawinoga	Greg	12553	54,
Stancek	Claire Marie	8193	3,6,7,15,19,42,51,	Stdenis	Laura	12493	54,
stander	f.	12184	54,	Stebbins	Barbara	10497	3,19,42,51,
Standish	Jean	12193	22,	Steele	Caroline	6310	3,6,7,13,15,19,42,51,
Stange	Elizabeth	12876	54,	Steele	Jenifer	6734	3,6,7,15,19,42,51,
Stanic	Marina	6079	3,6,7,15,19,42,51,	Steere	John	10456	3,7,19,42,51,
Stanley	Lala	6354	3,6,7,15,19,42,51,	Steffes	Wayne	12986	54,
Stanley	James	13229	54,	Steigerwald		779	54,
Stansell	Dennis	12859	54,	Stein		845	54,
Stansfield	Lesley	5162	54,	Stein		937	48,
Stanton		588	5,	Stein	Valerie	5863	3,6,7,15,19,42,51,
Stanton		606	5,48,	Stein	liviastein	6057	3,6,7,15,19,42,51,
Staples		2038	3,42,43,	Stein	Michelle	7507	3,6,7,15,19,42,51,
Star	Sibyl	7010	3,6,7,15,19,42,51,	Stein	Naomi	7728	3,6,7,15,19,42,51,
Stark		309	1,2,19,21,31,32,33,43,	Stein	Aliyah	11022	42,51,
Stark		474	31,	Steinberg	Leah	9493	3,6,7,15,19,42,51,
Stark		3545	11,31,34,	Steinberg	Daniel	10432	3,7,19,42,51,
Stark	Philip B.	7075	3,6,7,15,19,42,51,	Steinberg	S	10645	42,51,
Stark	Philip B.	10185	3,6,7,15,19,42,51,	Steinberg-Michahelles	Jane	6721	3,6,7,15,19,42,51,
Starkweather	Peter	6338	3,6,7,15,19,42,51,	Steindal	Paul Peder	8588	3,6,7,15,19,42,51,
Starkweather	Mark	6342	3,6,7,15,19,42,51,	Steiner	Michael	8742	3,6,7,15,19,42,51,
Starner	Lynn	12685	54,	Steiner	Amy	10632	42,51,
Starner-Gillespie	Diane	9827	3,6,7,15,19,42,51,	Steinman	Laura	7597	3,6,7,15,19,42,51,
Starr	Loriel	10260	3,6,7,15,19,42,51,	Steinmeier	Angelica	7325	3,6,7,15,19,42,51,
States		668	54,	Steinmetz	Lee	7261	3,6,7,15,19,42,51,
Staverman	Joe	6076	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Stempler	Gail	7438	3,6,7,15,19,42,51,	Stern	Jan	12222	54,
Stenberg	Michele	7461	3,6,7,15,19,42,51,	Sternberg	Marvin J	9558	3,6,7,15,19,42,51,
Stenzel	Annie	7490	3,6,7,15,19,42,51,	Sterrenberg	Terry	6508	3,6,7,15,19,42,51,
Stephens		2991	9,13,14,15,22,31,	Stetl	N	5859	3,6,7,15,19,42,51,
Stephens	Stephenie	7362	3,6,7,15,19,42,51,	Steuart		1903	1,18,19,20,34,42,43,
Stephens	Camaron	7407	3,6,7,15,19,42,51,	Steuart	Barbara	7909	3,6,7,15,19,42,51,
Stephens	Sally	11002	42,51,	Stevens		825	48,
Stephens	Danielle	12682	54,	Stevens		1891	54,
Stephenson	Pauline	6514	3,6,7,15,19,42,51,	Stevens	Chamberlain	2189	54,
Stepney	Renee	7723	3,6,7,15,19,42,51,	Stevens	Eva L	5268	54,
Steponaitis	John	10981	42,51,	Stevenson	Carol	9362	3,6,7,15,19,42,51,
Sterba	Michael	8510	3,6,7,15,19,42,51,	Stevenson	Joanne	12708	54,
Stern	Lise	183	2,11,22,31,44,	Stevenu		314	4,11,14,34,36,
Stern		311	44,	Stever	Laurel	6483	3,6,7,15,19,42,51,
Stern		312	2,4,22,31,34,	Stevernu	Keefe	6244	3,6,7,15,19,42,51,
Stern		430	54,	Stewart		454	54,
Stern		1045	1,5,6,7,14,15,22,31,42,44,50,	Stewart		1165	54,
Stern		1542	2,4,11,14,15,16,17,48,50,	STEWART		1692	34,
Stern		1565	2,4,22,31,34,	Stewart	John	3213	54,
Stern		2931	9,11,13,24,48,	Stewart		3525	2,4,11,22,23,27,41,43,
Stern	Dan	3574	54,	Stewart	Katie	5683	3,6,7,15,19,42,51,
Stern	Carolyn	5270	54,	Stewart	Ron	5916	3,6,7,15,19,42,51,
Stern	Joyce	6627	3,6,7,15,19,42,51,	Stewart	Gail	8317	3,6,7,15,19,42,51,
Stern	Clara	7205	3,6,7,15,19,42,51,	Stewart	Jennifer	8838	3,6,7,15,19,42,51,
Stern	Kortney	8356	3,6,7,15,19,42,51,	Stewart	Andy	9043	3,6,7,15,19,42,51,
Stern	Daniel	10746	42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Stewart	Carol Lynn	9424	3,6,7,15,19,42,51,	Stone	Marselene	12423	54,
Stewart	Margaret	9425	3,6,7,15,19,42,51,	Stone (Straehley)	Marcia	6416	3,6,7,15,19,42,51,
Stewart	Rebecca	9988	3,6,7,15,19,42,51,	Stoneburner	Kylie	12587	54,
Stewart	Nick	10205	3,6,7,15,19,42,51,	Stopes		315	4,8,22,
Stewart		591	4,31,	Stopes, III.	Arthur	8302	3,6,7,15,19,42,51,
Stewart	Sharron	12419	54,	Storey		1240	54,
Stice		911	54,	Storm		1131	21,44,
Stiehl	Joanna	10877	42,51,	Storm		1688	9,10,22,24,42,43,
Stiles	Albert	12667	54,	Storm	Martha	8715	3,6,7,15,19,42,51,
Stimming	Franchesca	3273	3,6,9,10,13,14,21,22,24,42,53,	Storrow	Clare	12109	54,
Stock	Kelly	7696	3,6,7,15,19,42,51,	Stotland	Lea	10200	3,6,7,15,19,42,51,
Stock	Wendy	8149	3,6,7,15,19,42,51,	Stout	Nathan	10024	3,6,7,15,19,42,51,
Stock	Jennifer	9670	3,6,7,15,19,42,51,	Stout	Linda	10119	3,6,7,15,19,42,51,
Stock	Michael	10558	3,42,51,	Stout	Meredith	10532	3,42,51,
Stockards	Will	10681	42,51,	Stover	Jennifer	7410	3,6,7,15,19,42,51,
Stodola	Tahiti	8764	3,6,7,15,19,42,51,	Strader	Jason	9890	3,6,7,15,19,42,51,
Stoffel	Susanne	6683	3,6,7,15,19,42,51,	Strads	Andra	9954	3,6,7,15,19,42,51,
Stoller	Ursula	7582	3,6,7,15,19,42,51,	Strads	Baiba	10810	42,51,
Stolley	loren	12870	9,24,	Strahilevitz	Michal	8365	3,6,7,15,19,42,51,
Stone	DA	5674	3,6,7,15,19,42,51,	Straker	Jeff	7797	3,6,7,15,19,42,51,
Stone	Mindy	7779	3,6,7,15,19,42,51,	Strand	Muriel	226	15,18,19,22,45,
Stone	Molly	8044	3,6,7,15,19,42,51,	Strange		976	48,
Stone	Melinda	8989	3,6,7,15,19,42,51,	Strange		1573	2,4,48,
Stone	Sterling	9178	3,6,7,15,19,42,51,	Strasburger		2099	42,43,
Stone	Deanne	10530	3,42,51,	Strasburger	Susan	6541	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Stratton	Dwight	7477	3,6,7,15,19,42,51,	Stroup	Grace	12466	54,
Stratton	Patty	8560	3,6,7,15,19,42,51,	Strovink	Mark	3210	54,
Stratton	Jewels	10624	42,51,	Struve	Dimitry	11003	42,51,
Straus	Diane	10569	3,42,51,	Stryker	Rachael	7825	3,6,7,15,19,42,51,
Strauss		1944	54,	Strykowski	Nicole	10271	3,6,7,15,19,42,51,
Strauss	Fred	6699	3,6,7,15,19,42,51,	Stuart	Marcia	5897	3,6,7,15,19,42,51,
Strauss	Tessa	7408	3,6,7,15,19,42,51,	Stuart	Susan	7165	3,6,7,15,19,42,51,
Strauss	Nan	10725	42,51,	Stuart-Jennings	Erin	7473	3,6,7,15,19,42,51,
Strayer		3085	1,3,5,6,7,11,13,15,16,17,	Stubbe	Emilia	8587	3,6,7,15,19,42,51,
Strayer	Bob	5136	54,	Stubbers	Linda	12523	54,
Strayner		316	2,54,	Stuber	Jacquelyn	7350	3,6,7,15,19,42,51,
Streeter	Marjorie	8195	3,6,7,15,19,42,51,	Stuckgold	Debra	10374	3,6,7,15,19,42,51,
Streissguth		2427	8,11,22,24,31,43,44,	Studer	Maria	12739	19,
Streissguth	George	10650	42,51,	Sturtz	David	5180	54,
Strelow	B.	8350	3,6,7,15,19,42,51,	Stuttard	Jenny	9516	3,6,7,15,19,42,51,
Strickand		636	44,	Stutz	Sara	8807	3,6,7,15,19,42,51,
Strickland	Mike	13234	54,	Su	Jeremy	10266	3,6,7,15,19,42,51,
Strickland	James	13108	54,	Suarez		1194	5,6,43,44,
Stringer	Lewis	5178	54,	Suarez		1753	5,6,7,43,44,
Strom	Katinka	6607	3,6,7,15,19,42,51,	Sudjian		511	54,
Strom	Bianca	12582	54,	Sudjian	Ciara	7577	3,6,7,9,10,15,19,22,42,51,
Stronach	Keren	8316	3,6,7,15,19,42,51,	Sugar	Danny	6195	3,6,7,15,19,42,51,
Strong	Samuel A	6133	3,6,7,15,19,42,51,	Sugden	Alisa Gould	7846	3,6,7,15,19,42,51,
Strong	Ann	7636	3,6,7,15,19,42,51,	Sulka	Jill	9948	3,6,7,15,19,42,51,
Strong	Sara	9975	3,6,7,15,19,34,42,51,	Sullivan		319	2,4,44,
Stroud	Diane	9201	3,6,7,15,19,27,42,51,	Sullivan		801	15,31,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Sullivan		1933	54,	Sutherland		2735	54,
Sullivan	Christine	9381	3,6,7,15,19,42,51,	Sutherlin	Laurel	9502	3,6,7,15,19,42,51,
Sullivan	Kathleen E.	10228	3,6,7,15,19,22,42,51,	Sutton	Catherine	10903	9,10,42,51,
Sullivan	Tim	10933	42,51,	Suyematsu	Kazuye	7149	3,6,7,15,19,42,51,
Sullivan	Lenora	12122	54,	Svanoe	Tor	6255	3,6,7,15,19,42,51,
Sullivan-Cross		2549	1,2,4,6,34,41,42,43,46,50,	Swafford	Daniel	3229	54,
Sultanbek		2946	54,	Swain	Carole	8051	3,6,7,15,19,42,51,
Sultar	Joanne	8985	3,6,7,15,19,42,51,	Swann	Carol	7705	3,6,7,15,19,42,51,
Sumelius	Frederika B	8364	3,6,7,15,19,42,51,	Swanson		2190	54,
Sumiyoshi	Lisa	9351	3,6,7,15,19,42,48,51,	Swanz	Don	12203	54,
Summers	Suzette	6070	3,6,7,15,19,42,51,	Sweeley	Autumn	12059	54,
Summerville	Marjorie	6170	3,6,7,15,19,42,51,	Sweeney	Nicholas	7026	3,6,7,15,19,42,51,
Sumner-Wichmann	Mora	8015	3,6,7,15,19,42,51,	Sweeney	Jeremy	8329	3,6,7,15,19,42,51,
Sumner-Wichmann	Margaret	8104	3,6,7,15,19,42,51,	Sweeney	Ellen	9261	3,6,7,15,19,42,51,
Sun	Sara	10246	3,6,7,15,19,42,51,	Sweeney	Carolyn	10084	3,6,7,15,19,42,51,
Sunlake	Tom	12111	54,	Sweeney	James	10155	3,5,6,7,15,19,42,51,
Sunset	Lalita	10982	42,51,	Sweet	Brian	7729	3,6,7,15,19,42,51,
Sunstein		2774	15,19,22,31,42,43,	Sweeting	S.	9210	3,6,7,15,19,42,51,
Suprna	Danielle	6225	3,6,7,15,19,42,51,	Sweitzer	Beverle	5875	3,6,7,15,19,42,51,
Suprynowicz	Clark	10580	3,42,51,	Swenson	Robin	5706	3,6,7,15,19,42,51,
Sur	Wessely I.	7522	3,6,7,15,19,42,51,	Swift		2192	54,
Surls	Eve	10754	42,51,	Swift	Sarah	10106	3,6,7,15,19,42,51,
Suronen		320	2,4,44,	Swift	Allen	13122	54,
Surowiec	Michelle	9449	3,6,7,15,19,42,51,	Swigart	Jane	10659	42,51,
Sussman	Adam	9508	3,6,7,15,19,42,51,	swindel	Randi	10376	3,6,7,15,19,42,51,
Sutherland		654	19,31,48,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Swisher	Anna	7721	3,6,7,15,19,42,51,	Taguchi	Tracy	9637	3,6,7,15,19,27,42,51,
Swisher	Shawn	10568	3,42,51,	Tai	Wilson	7110	3,6,7,15,19,42,51,
Switkes	Marie	9235	3,6,7,15,19,42,51,	Takaro	Mark	5049	54,
SWYDEN	BARBARA	12759	54,	Takaro	Mark	6941	3,6,7,15,19,42,51,
Sydow		1355	2,4,34,	Tal	Miki	6605	3,6,7,15,19,42,51,
Sydow	Thomas	7389	3,6,7,9,14,15,19,42,51,	Taller	Dolores	7934	3,6,7,15,19,42,51,
Sykes	Dacia	6783	3,6,7,15,19,42,51,	Tam		860	54,
Sykora	Sylvia	9456	3,6,7,15,19,42,51,	Tamar	Rima	8908	3,6,7,15,19,42,51,
Symonds	Jeff	8456	3,6,7,15,19,42,51,	Tamara		5373	54,
Szabo		2172	54,	Tamares	Ryan	5557	3,6,7,15,19,42,51,
Szambelan	Sarah Jo	6492	3,6,7,9,10,15,19,29,34,42,51,	Tamsen	Angela	9668	3,6,7,15,19,42,51,
Szczepkowska	Paulina	12018	54,	Tanaka	Elaine	5010	54,
Szkaluba	Kalina	7008	3,6,7,15,19,42,51,	Tanaka	Elaine	8172	3,6,7,15,19,42,51,
Szymankowski		1850	54,	Tancredi-Ballugera		1305	54,
T	Marlowe	630	5,	Tandy	Katie	6610	3,6,7,15,19,42,51,
T	Ella	10557	3,42,51,	Tang	Jessica	9106	3,6,7,15,19,42,51,
T.	Aniko	6511	3,6,7,15,19,42,51,	Tankersley	June	7046	3,6,7,15,19,42,51,
T.	Diana	7854	3,6,7,15,19,42,51,	Tanner	Chad	9501	3,6,7,15,19,42,51,
T. Graffeo	Mary	12755	54,	Tansey	Mary L	10494	3,19,42,51,
Tabbush		1843	2,4,11,34,46,47,48,	Tantau	Gayle	10437	3,7,19,42,51,
Tabin		1282	54,	Taraldsen	Elisabeth	12053	22,36,
Tae	Sarah	5614	3,6,7,15,19,42,51,	Tarnas	Becca	10873	42,51,
Taggart		2896	54,	Tarpinian	Karina	13126	54,
Taggart	Lorrain	5083	54,	Tarver	Charlton	9302	3,6,7,15,19,42,51,
Taggart	Lorraine	8343	3,6,7,15,19,42,51,	Tasi	Deanna	8811	3,6,7,15,19,42,51,
				Tatkopp@aol.com		8381	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Taussig	Nancy	5299	54,	Teicholz	Marc	11078	42,51,
Tavares	Margaret	10985	42,51,	Teig	Marlowe	10999	42,51,
Taylor		3022	1,42,	Teish	Luisah	10489	3,7,19,42,51,
Taylor	Shirley	5028	54,	Teitelbaum	Manette	3266	3,6,9,10,13,14,21,22,24,42,53,
Taylor	Heidi	5587	3,6,7,15,19,42,51,	Teixeira	Eduardo	7231	3,6,7,15,19,42,51,
Taylor	Jessica	7055	3,6,7,15,19,42,51,	TEIXEIRA	Carrie	7251	3,6,7,15,19,42,51,
Taylor	Sunaura	7341	3,6,7,15,19,42,51,	Telford	A D	10505	3,19,42,51,
Taylor	Angela	7426	3,6,7,15,19,42,51,	Teller	David	12393	54,
Taylor	Kelly	8083	3,6,7,15,19,42,51,	Telli	Musca	7527	3,6,7,15,19,42,51,
Taylor	Richard	8592	3,6,7,15,19,42,51,	Tellyer	Sharon	7036	3,6,7,15,19,42,51,
Taylor	Paul Elias	8879	3,6,7,15,19,42,51,	Teltschick-Fall	Carol	6576	3,6,7,15,19,42,51,
Taylor	Michael	8994	3,6,7,15,19,42,51,	Tempkin	Lee	7794	3,6,7,15,19,42,51,
Taylor	Lindsay	9933	3,6,7,15,19,42,51,	Templeton	Sara	10702	42,51,
Taylor	Arlene	9970	3,6,7,15,19,42,51,	Tengan	Tania	5672	3,6,7,15,19,42,51,
Taylor	Leon	9989	3,6,7,15,19,51,	Tennenbaum	Jay	5328	54,
Taylor	Sara	10001	3,6,7,15,19,42,51,	Tenney	John	9433	3,6,7,15,19,27,42,51,
Taylor	Tana	11035	42,51,	Tepperman	Jean	7479	3,6,7,15,19,42,51,
Taylor	Carol	12961	54,	Terasawa	Terasawa	3251	3,6,9,10,13,14,21,22,24,42,53,
Taylor	Constance	10600	3,42,51,	Terbot	Lee	12624	54,
Taymor		1307	1,2,3,4,6,44,	Teresa Arauz de Zabala	M ^a	12216	54,
Taymor	Caroline	9120	3,6,7,15,19,42,51,	Teresita		8744	3,6,7,15,19,42,51,
Tazudeen	Rasheed	8373	3,6,7,15,19,42,51,	Terhune	Katherine	9611	3,6,7,15,19,42,51,
Teasley		793	1,11,18,22,24,27,43,44,	Terrill	Joshua	6325	3,6,7,15,19,42,51,
Teeger		3567	2,4,5,9,15,46,50,	Terry\	James	9123	3,6,7,15,19,42,51,
Teeney	Larry	6942	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Tertes	Andrew	8511	3,6,7,15,19,42,51,	Thomas	Ben	12702	54,
Tetenburg	Sandra	12038	54,	Thomas	Amanda	8786	3,6,7,15,19,42,51,
Thackston	Marcus	9512	3,6,7,15,19,42,51,	Thomas	Robert	10831	42,51,
Thaler	Dena R.	8624	3,6,7,15,19,42,51,	Thomas	Patricia	12605	54,
Thall	Nancy	10767	42,51,	Thomas Davila	Mary	13226	54,
Tharler	Jen	8323	3,6,7,15,19,42,51,	Thomas Sorgen		3099	2,4,6,7,31,42,44,45,
Thawley	Bob	6943	3,6,7,15,19,42,51,	Thomas Sorgen		3104	2,4,6,7,22,31,42,43,44,45,46,53
Thebert	Tamara	10805	42,51,	Thompson		324	31,44,
Thelin	Josh	9098	3,6,7,15,19,42,51,	Thompson		325	1,2,9,11,13,14,21,22,31,48,50,
Theodoropoulos	David	6431	3,6,7,15,19,42,51,	Thompson		557	3,
Theroux		1860	6,27,	Thompson		1043	54,
Theurich	Kimberly	6558	3,6,7,15,19,42,51,	Thompson		1236	31,
Thielscher		1921	9,10,11,42,43,44,	Thompson		1556	2,4,34,36,
Thiessen	Barry	13071	54,	Thompson		2429	2,4,
Thomas		323	1,3,5,9,11,31,36,44,52,	Thompson		2446	54,
Thomas		1444	1,2,4,6,8,13,22,43,44,	Thompson		3166	54,
Thomas		3135	9,19,22,27,42,44,	Thompson	Jennifer	5889	3,6,7,15,19,42,51,
Thomas	Beth	5093	54,	Thompson	Robert	6123	3,6,7,15,19,42,51,
Thomas	Robert	7977	3,6,7,15,19,42,51,	Thompson	Barbara	6631	3,6,7,15,19,42,51,
Thomas	Vicki	8774	3,6,7,15,19,42,51,	Thompson	Susan	6644	3,6,7,15,19,42,51,
Thomas	Judith	9060	3,6,7,15,19,42,51,	Thompson	Owen	6654	3,6,7,15,19,42,51,
Thomas	Ashley	9309	3,6,7,15,19,42,51,	Thompson	Miss. Kimberly	7888	3,6,7,15,19,42,51,
Thomas	Arend	9853	3,6,7,15,19,42,51,	Thompson	Sandi	7972	3,6,7,15,19,42,51,
Thomas	Josh	9889	3,6,7,15,19,42,51,	Thompson	Deborah	8881	3,6,7,15,19,42,51,
Thomas	Nicole	10156	3,6,7,15,19,42,51,	Thompson	Matt	9196	3,6,7,15,19,42,51,
Thomas	Stephanie	10234	3,6,7,15,19,27,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Thompson	Lisa	9903	3,6,7,15,19,42,51,	Tilotta	Theresa	5941	3,6,7,15,19,42,51,
Thompson	Matthew	10144	3,6,7,15,19,42,51,	Tilt		2138	54,
Thompson	Andree	10426	3,7,15,19,42,51,	Timko	Sally	5837	3,6,7,15,19,42,51,
Thompson	Daniella	10429	3,7,19,42,51,	Timm	Richard	12240	54,
Thompson	Allegra	10483	3,7,19,42,51,	Tinkey	Emily	7981	3,6,7,15,19,42,51,
Thompson	Sonja	12288	54,	Tinney	Alayna	6862	3,6,7,15,19,42,51,
Thompson	Keith	12757	54,	Tinsley		2436	11,22,31,
Thompson-Ray		2754	54,	Tinsley	Rebecca	8653	3,6,7,15,19,42,51,
Thoms	Susan	5087	54,	tippens	rebecca	12334	54,
Thorsen	Henrik	13243	54,	Tippie	Monika	10214	3,6,7,15,19,42,48,51,
Thorson	Partick	5251	54,	Tipton		328	2,19,31,34,42,44,
Threet	Jerry	8116	3,6,7,15,19,42,51,	Tipton		1202	27,31,34,42,
Thrumston	Devon	8700	3,6,7,15,19,42,51,	Tipton		2465	1,2,4,34,42,
Thumm	Travis	10970	42,51,	Tipton		2798	2,4,42,
Thurman	William	8743	3,6,7,15,19,42,51,	Tipton	Gerrie	5873	3,6,7,15,19,42,51,
Tibbetts	Reed	9513	3,6,7,15,19,42,51,	Tipton	Carolyn	10367	3,6,7,15,19,42,51,
Tichman	Nasya	10345	3,6,7,15,19,42,51,	Tisdell	Valerie	9478	3,6,7,15,19,42,51,
Tidd	John	9660	3,6,7,15,19,42,51,	Tiss		2199	19,29,34,42,44,
Tieburg	Nancy	6969	3,6,7,15,19,42,51,	Titcomb	Olivia	12342	54,
Tieger		495	2,4,9,	TOBIA		1830	7,8,11,13,15,22,23,24,42,43,44,
Tigert	Christina Gutierrez	7175	3,6,7,15,19,42,51,	Tobia	Jaclyn	6427	3,6,7,15,19,42,51,
Tighe		326	2,15,31,44,	tobin	judy	13085	54,
Tilford	Michele	5317	54,	Toepel	Anne	7610	3,6,7,15,19,42,51,
Tilley	Matthew	7596	3,6,7,15,19,42,51,	Toikach	Rits	3260	3,6,9,10,13,14,21,22,24,42,53,
Tillo	Masina	10372	3,6,7,15,19,42,51,	Tokarek	Jean	8503	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Tokes	Istvan	6794	3,6,7,15,19,42,51,	Torres	Tatiana	12818	54,
Tokuda		3197	54,	Tortora	Eugene	10486	3,7,19,42,51,
Tolomei	Chris	8165	3,6,7,15,19,42,51,	Torvik	Leslie	8974	3,6,7,15,19,42,51,
Tolpin	Mark	12706	54,	Toste	Jonathan	7498	3,6,7,15,19,42,51,
Tomacari	Joanna	5915	3,6,7,15,19,42,51,	Toth	Michael	6440	3,6,7,15,19,42,51,
Tomas	Leslie	6893	3,6,7,15,19,42,51,	Toy	Mary Ann	6022	3,6,7,15,19,42,51,
Tomasello	Pela	12245	54,	Tr	Bren	12161	54,
Tomczak	Bartłomiej	12088	54,	Traficante	Bruce	10968	42,51,
Tomczyszyn	Michael	10780	42,51,	Tran	Bao	9685	3,6,7,15,19,42,51,
Tompkins	Joe	12326	54,	Tranz	Michael	10613	42,51,
Toofan	Foroozan	6878	3,6,7,15,19,42,51,	Traugot	Myra	10792	29,42,51,
Tooke	Daphne	62	2,4,8,22,24,31,42,44,	Travaille	Connie	12258	54,
Tooke	Daphne	8287	3,6,7,15,19,42,48,51,	Travis	Terence	13018	54,
Tool	Sara	8602	3,6,7,15,19,42,51,	Traylor	Pearlean	5369	54,
Tool	William A	9055	3,6,7,15,19,42,51,	Tredo	Carol	12574	54,
Toomey	Ellen	9982	3,6,7,15,19,42,51,	Tree	Tom	12946	54,
Topfer	April	9850	3,6,7,15,19,27,42,51,	Treece	Michael	10943	42,51,
Torabi	Nima	9920	3,6,7,15,19,42,51,	Treen	Tracy	5807	3,6,7,15,19,42,51,
Torcoletti		2878	6,7,13,22,46,	Trego	Kelly	5206	54,
Torcoletti	Nina	7043	3,6,7,15,19,42,51,	Treisman	Dvora	8916	3,6,7,15,19,42,51,
Torfs	Claudine	3230	54,	Tremble'	Richard	13245	54,
Torrefiel	Esther	10972	42,51,	Tremmel	Leonard	10768	42,51,
Torrejon-Nisbet	Cathya	5931	3,6,7,15,19,42,51,	Trescastro	Rose	5838	3,6,7,15,19,42,51,
Torres	Rebecca	5585	3,6,7,15,19,42,51,	Trevillian	Jacqui	12291	54,
Torres	Griffith	8449	3,6,7,15,19,42,51,	Trevino	Jose	12405	54,
Torres	Daniel	12096	54,	Trickler	Josephine	6966	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Trieschmann		2818	54,	Tufford Fetter	Tevya	13049	54,
trigg	ashley	12558	54,	Tufo	Laura	12952	54,
Trigiani	Anthony	5593	3,6,7,15,19,42,51,	Tuggle	5	7260	3,6,7,15,19,42,51,
Trini		5084	54,	Tuiono	iLaisaane	7150	3,6,7,15,19,42,51,
Trippett	Laurie	10304	3,6,7,15,19,42,49,51,	Tukiainen	Katja	7588	3,6,7,15,19,42,51,
tritscher	michele	13075	54,	Tullis		1511	54,
Trombin	Mauro	7502	3,6,7,15,19,42,51,	Tulloss	Kathleen	10169	3,6,7,15,19,42,51,
Trottier	Shirley	12057	54,	Tung	Jennifer	7619	3,6,7,15,19,42,51,
Trowbridge	Jessica	9329	3,6,7,15,19,42,51,	Tung	Michelle	10340	3,6,7,15,19,42,51,
Trowell	Steve	5740	3,6,7,15,19,42,51,	Tupper	Steven	6749	3,6,7,15,19,42,51,
Trubin	Konstantin	12994	54,	Turek	Gabriella	5621	3,6,7,15,19,42,51,
Trump	Scott	10286	3,6,7,15,19,42,51,	Turgon	Sabrina	7954	3,6,7,15,19,42,51,
Truong	Eve	6402	3,6,7,15,19,42,51,	Turitz	Eugene	8665	3,6,7,15,19,42,51,
Truskier	Peter	5111	54,	Turner		2179	54,
Truskier	Peter	10581	3,42,51,	Turner	Donna Jeanne	6735	3,6,7,15,19,42,51,
Truthseeker	Lori	9909	3,6,7,15,19,42,51,	Turnor	Deborah	6497	3,6,7,15,19,42,51,
Tsai	Kathy	12634	54,	Tuteur	Mary	6764	3,6,7,15,19,42,51,
Tscharner	Leo	5990	3,6,7,15,19,42,51,	Tuttle	Essie Santana	7254	3,6,7,15,19,42,51,
Tsenter	Lana	10587	3,42,51,	Twichell	Julie	10231	3,6,7,15,19,42,51,
tssui	eugene	12402	22,	Twilling	Linda	5259	54,
Tucci	Jennifer	9401	3,6,7,15,19,42,51,	Two-Fingers	Lisa	6078	3,6,7,15,19,42,51,
Tuck	Zachary	8519	3,6,7,15,19,42,51,	Twomey	Patrick	9194	3,6,7,15,19,42,51,
Tucker		440	54,	TwoSticks	Jackie	6546	3,6,7,15,19,42,51,
Tucker	Michael	7433	3,6,7,15,19,42,51,	Tygar		1501	54,
Tucker	Naomi	9071	3,6,7,15,19,42,51,	Tyler	Catherine	9667	3,6,7,15,19,42,51,
tucker	lisa	12664	54,	Tyler	Connie	10344	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Tyner	Jeannie	5774	3,6,7,15,19,42,51,	Urias	VE	12579	54,
Tyree II	James	13062	54,	Urquhart	Rebecca	8029	3,6,7,15,19,42,51,
Tyrrell	Andrea	2078	54,	Urquhart Brown	Susan	10710	42,51,
Udall	Jonah	8485	3,6,7,15,19,42,51,	urrutia	Sabrina	10423	3,7,15,19,42,51,
Uhles	Glen	7887	3,6,7,15,19,42,51,	Urton	Robin	6336	3,6,7,15,19,42,51,
Ulitsky		2843	9,13,14,19,22,24,48,	Ustorf	Rachael	6990	3,6,7,15,19,42,51,
Ulitsky	Vsevolod	10963	42,51,	Utas	Jason	10606	42,51,
Ullman	Dana	8531	3,6,7,15,19,42,51,	Utley	Philip	8900	3,6,7,15,19,42,51,
Ullman	Elizabeth	12665	5,49,53,	Utne	Emily	7499	3,6,7,15,19,42,51,
Ulman	Erik	10923	42,51,	Uzarski	Donni O'Ryan	3279	3,6,9,10,13,14,21,22,24,42,53,
ulnick	carole	13121	54,	Uzzell	Richard	7830	3,6,7,15,19,42,51,
Umano	Georja	5710	3,6,7,15,19,42,51,	V	Elizabeth	7535	3,6,7,15,19,42,51,
Umar	Ali	7633	3,6,7,15,19,42,51,	V.	Lisa	7169	3,6,7,15,19,42,51,
Umeh		2130	42,43,	Vaccaro	Terry	13059	54,
Undebeck	Anna	12056	54,	Vaga	Camilla	12033	54,
Underhill	Julie Thi	6284	3,6,7,15,19,42,51,	Valada		3195	54,
Underhill	Roger	10907	42,51,	Valencia	E	10602	42,51,
Underwood	Robin	12381	54,	Valentine		979	1,19,27,42,
Ungar	Lynn	9785	3,6,7,15,19,42,51,	Valentine		1588	2,4,19,27,42,
ungaro	francine	12666	54,	Valentine	Catherine	10937	42,51,
Up	Fed	7214	3,6,7,15,19,42,51,	Valera	Enedina	13100	54,
Upham	Tim	12687	54,	valla	nelly	12306	54,
Uptegrove	Dale	5429	54,	Van	Marcia	12177	54,
Upton	Carolyn	5917	3,6,7,15,19,42,51,	van	lyn	13037	54,
Upton	Monica	6040	3,6,7,15,19,42,51,	Van Anderson	Tracy	7071	3,6,7,15,19,42,51,
Upton Brown	Letitia	5200	54,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Van Bellinghen	Elizabeth	8080	3,6,7,15,19,42,51,	Van Wicklen	Betty J.	12153	19,
van buynder	hella	12639	54,	Vanasco	Victoria	9116	3,6,7,15,19,42,51,
Van Cleave		1271	1,2,4,6,15,18,22,49,	Vance	Belen	8153	3,6,7,15,19,42,51,
Van Dam		1517	54,	Vance	Stephen	10265	3,6,7,15,19,42,51,
Van der Walt	Deon	13020	54,	Vandeman		329	2,4,6,18,19,31,33,
van Dien	Freya	8045	3,6,7,15,19,42,51,	Vandeman		2597	54,
Van Dohre		409	54,	Vandeman	Mike	3214	1,2,4,
Van Every	Leslie	10160	3,6,7,15,19,42,51,	Vander Weele	Arianna	8712	3,6,7,15,19,42,51,
Van Giesen	Robijn	9195	3,6,7,15,19,42,51,	Vanderbosch	Maureen	12689	54,
van Ginkel	Andrew	7264	3,6,7,15,19,42,51,	Vanderburgh	Susan	7606	3,6,7,15,19,42,51,
Van Ham	Lauren	7117	3,6,7,15,19,42,51,	Vanderbush	Terry	12130	54,
Van Heuit		1831	46,	Vandeventer	Vicki	6818	3,6,7,15,19,42,51,
Van Heuit		1832	42,43,	VanPortfleet	Tara	6850	3,6,7,15,19,42,51,
Van Lenning	Ryan	9032	3,6,7,15,19,42,51,	VanScoy	Helen	10651	42,51,
Van Lydegraf		1957	2,4,15,19,	VanWestenberg	Jimmy	11032	42,51,
van Moon	Lesli	10427	3,7,15,19,42,51,	VanWestenberg	Crystal	11095	42,51,
van Nieuwkerk	Kim	12777	54,	VanWestenberg	Deanna	11097	42,51,
van Patten		772	54,	Vardhana	Harsha	12037	54,
van Santen	Gysele	12041	54,	Vargas		1068	5,6,7,44,46,49,
van Slooten	Pieter	13155	54,	Vargas		1649	4,5,42,43,44,49,
Van Steen		665	9,10,22,27,	Vargas	Latisha	9937	3,6,7,15,19,42,51,
Van Steen	Joe	9684	3,6,7,9,10,15,19,22,34,42,51,	Varner	Shawna	8079	3,6,7,15,19,42,51,
van Tol	Miranda	12353	54,	Varnum	David	10719	42,51,
van Tol	Maud	12355	54,	Varon		559	1,13,
Van Valkenburgh	Mark	7495	3,6,7,15,19,42,51,	Vasalaki	Anna	5969	3,6,7,15,19,42,51,
				Vasco	Donald W	5378	54,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Vasconcellos	Rae	11048	22,42,51,	VERGIL		2430	11,
VASSAR	WILLIAM	12918	36,37,	Verhoeven	Martin J	201	2,4,31,43,44,48,
Vaughan	William	5194	54,	Verhoeven	Martin	10464	3,7,19,27,42,51,
Vaughan	Anna	6100	3,6,7,15,19,42,51,	Verner	M	7044	3,6,7,15,19,42,51,
Vaughan	Vance	8637	3,6,7,15,19,42,51,	Vero		10952	42,51,
Vaughan	Mark	12470	54,	Vetrano	Christopher	10616	42,51,
Vaughn		901	4,27,31,	Victoria-Delon	Michelle	216	1,2,6,9,15,22,43,44,
Vavrek	Ayesha	8439	3,6,7,15,19,42,51,	Vie	Pheonix	10623	42,51,
Vazquez	Patricia	12009	54,	Vieira	Megan	9818	3,6,7,15,19,42,51,
Vega	Vanessa	9072	3,6,7,15,19,42,51,	Vieira	Ed	12046	54,
Veitch	Heather	12512	54,	Viess	Debbie	10605	42,51,
Velasquez	David	7370	3,6,7,15,19,42,51,	Vigil	Nick	9675	3,6,7,15,19,42,51,
Velasquez	Kenny	13169	54,	Vigilante	Nicholas James	5371	54,
Veltman	Edwin	10889	42,51,	Vigoda	Cheryl	13030	54,
Venner	Lianne	8355	3,6,7,15,19,42,51,	Vigran	John	9535	3,6,7,15,19,42,51,
Ventura		619	22,31,	Viken	Barbara	10716	42,51,
Ventura	Maxina	11079	22,42,51,	Vikram Babu	Dominic	10130	3,6,7,15,19,42,51,
venturino		2442	2,4,19,31,	Villagomez	Sharon	5922	3,6,7,15,19,42,51,
Veomett	Ellen	5231	54,	Villanueva	Katerina	5167	54,
Veomett	Ellen	8649	3,6,7,15,19,42,51,	Villasenor		332	2,4,31,42,
Vera	Carolyn Stacy	6267	3,6,7,15,19,42,51,	Villaume		3086	54,
Veraldi	Anne	10794	42,51,	Viloria	Hida	10021	3,6,7,15,19,42,51,
Verburg		892	50,	Vincent		2347	34,42,43,44,48,
Verde	Rachel	13079	54,	Vincent	Rob	7157	3,6,7,15,19,42,51,
Vergara Mateo	Nuria	12631	54,	Vincent	Rickey	8817	3,6,7,15,19,42,51,
Vergil		2348	54,	Vincent	Jason	10670	42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Vincenti	Steve	13007	54,	Von Dohre	Bev	10997	3,9,10,13,14,19,22,42,51,
Vineeth	Y.	5628	3,6,7,15,19,42,51,	von Neefe		886	54,
Vining	Lance	10555	3,42,51,	Voracka		2005	2,4,6,7,11,15,18,19,31,42,4 3,44
Viola	Thomas	6621	3,6,7,15,19,42,51,	Voracka		2009	2,4,6,7,11,15,18,19,31,42,4 3,44
Visco	Steven J.	7109	3,6,7,15,19,42,51,	Voracka	Nicole	6530	3,6,7,15,19,42,51,
Visher	Laurel	9553	3,6,7,15,19,42,51,	Voronina	Julia	12906	54,
Vishnu		5151	54,	Voss	Alison	9339	3,6,7,15,19,42,51,
Vivas	Alejandro	6	5,9,27,	Vossoughi	Siamak	5569	3,6,7,15,19,42,51,
Vivas		1529	9,11,16,27,34,36,43,44,	VourosCallahan	Pamela	12839	54,
vlsiadis	andreas	12168	54,	Voyles	Tamara	7197	3,6,7,15,19,42,51,
Vlastone	Michael	2253	42,43,44,48,	Vrtiak	Melina	6731	3,6,7,15,19,42,51,
Vo	Julie	6998	3,6,7,15,19,42,51,	Vye	George	5559	3,6,7,15,19,42,51,
Vodehnal	Jaroslav	12317	54,	Wachenheim		1	1,4,12,15,16,22,36,42,44,4 8,50,
Vogel	Allison	6861	3,6,7,15,19,42,51,	Wachenheim	Scott	291	1,3,4,6,7,12,13,22,34,42,43 ,44,
Vogel	Dee	11042	42,51,	Wachenheim		333	1,5,12,31,32,34,36,42,44,
Vogler	Todd	6230	3,6,7,15,19,42,51,	Waddell	Christine	9348	3,6,7,15,19,42,51,
Vogt	Susan	13004	54,	Waddell	Susanna	11051	42,51,
Voils		674	54,	Wade	Virginia	6948	3,6,7,15,19,42,51,
Voils	Nancy	5291	54,	Wade	Juliette	7114	3,6,7,15,19,42,51,
Voinar		2478	1,2,4,11,13,42,43,	Wadsworth	Gail	7173	3,6,7,15,19,42,51,
Voinar	Barbara	10465	3,7,19,42,51,	Wagers	John	8861	3,6,7,15,19,42,51,
Volis	Lewis	5432	54,	Wagner		686	54,
Volkman	Loy	8731	3,6,7,15,19,42,51,	Wagner	Kirk	1371	54,
Von Abele	Melitta	10783	42,51,	Wagner	Charles	7443	3,6,7,15,19,42,51,
Von Dohre		2501	1,2,3,4,5,9,10,11,13,14,15, 16,19,22,24,33,42,43,44,46 ,48,49,50,52,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Wagner	Laurie	8491	3,6,7,15,19,42,51,	Walker	Jayne	8253	3,6,7,15,19,42,51,
Wagner	Christy	9282	3,6,7,15,19,42,51,	Walker	Alice	8680	3,6,7,15,19,42,51,
Wagner	John	9789	3,5,6,7,15,19,42,51,	Walker	Benjamin	9747	3,6,7,15,19,42,51,
Wagner	Gail	10392	3,7,15,19,42,51,	Walker	Melante	9881	3,6,7,15,19,42,51,
Wagner	DJ	12784	54,	Walker	Anne E.	9978	3,6,7,15,19,42,49,51,
Wahl		334	1,44,48,	Walker	Tom	10279	3,6,7,15,19,42,51,
Wahrhaftig		2459	2,4,15,42,44,	Walker	Kim	10316	3,6,7,15,19,42,51,
Wai	Lorraine	6043	3,6,7,15,19,42,51,	Walker	Laura	12659	54,
Waiss	Garrett	9962	3,6,7,15,19,42,51,	Walker	James	12850	54,
waite	marlene	12806	54,	Walker	Mary	13106	54,
Wakefield	Marie	12163	54,	Wall		908	11,27,50,
Walatka		625	54,	Wall	Janice	5900	3,6,7,15,19,42,51,
Walatka	Pamela	11063	42,51,	Wall	Patricia	9151	3,6,7,15,19,42,51,
Walch	Birgit	12276	54,	Wallace		404	54,
Walden	Michael	5266	54,	Wallace		489	19,
Walden	Ginnette	9276	3,6,7,15,19,42,51,	Wallace		3507	11,
Waldo	Kip	10468	3,7,19,42,51,	Wallace		3560	4,11,31,46,
Waldron		661	1,4,15,19,22,31,	Wallace	Janet	7027	3,6,7,15,19,42,51,
Waldron	Elizabeth	7870	3,6,7,15,19,42,51,	Wallace	Derek Chartrand	7301	3,6,7,15,19,42,51,
waldron	scott	12604	54,	Wallace	Brenda	8878	3,6,7,15,19,42,51,
Walker	Rachael	252	4,8,9,11,13,14,16,19,22,23,27,	Wallace	Holly	9265	3,6,7,15,19,42,51,
Walker		788	54,	Wallace	Holly	9028	3,6,7,15,19,42,51,
Walker		1200	11,22,43,44,	Wallace	Linda	12368	54,
Walker		1757	54,	Walle	Varia	9237	3,6,7,15,19,42,51,
Walker		1862	8,11,13,15,	Wallman		3067	6,7,29,31,43,44,50,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Wallman	Sonia	9655	3,6,7,15,19,42,51,	Waranoff		337	3,44,
Wallman	Henrik	10284	3,6,7,15,19,42,51,	Warburton		484	54,
Wallman	Michael	11028	42,51,	Warburton		3555	42,43,46,
Wallner	Martha	9088	3,6,7,15,19,42,51,	Warburton	Michael	7800	3,6,7,15,19,42,51,
Wally	Liz	6388	3,6,7,15,19,42,51,	Ward	James	8780	3,6,7,15,19,42,51,
walomoir@yahoo.com		9980	3,6,7,15,19,42,51,	Warden	Bix	8047	3,6,7,15,19,42,51,
Walrod		2171	50,	Ware	Cindy	8607	3,6,7,15,19,42,51,
Walrod		2509	2,4,	Warkentin	Wanda	7985	3,6,7,15,19,42,51,
Walrod	Lauren	8340	3,6,7,15,19,42,51,	Warner		1315	54,
Walsh	Tu	9104	3,6,7,15,19,42,51,	Warner	Brooke	6725	3,6,7,15,19,42,51,
Walter		2423	22,43,	Warner	Mary	7532	3,6,7,15,19,42,51,
Walter	Carolyn	5858	3,6,7,15,19,42,51,	Warner	Paula	10339	3,6,7,15,19,42,51,
Walters	Lea	9224	3,6,7,15,19,42,51,	Warner	Andrew	10773	42,51,
Walters	Linda	12048	54,	Warren	Allene	5454	54,
Walthall	Nicole	231	4,8,13,21,22,43,44,51,52,	Warrenburg	Kris	9721	3,6,7,15,19,42,51,
Walthall	Nicole	9177	3,6,7,15,19,42,51,	Warrick	Elizabeth	5415	54,
Waltner	Kalli	10150	3,6,7,15,19,42,51,	Warstler		2623	54,
Walton		931	32,46,	Warzyn	Janet	10517	3,19,42,51,
Walton	Chelsea E	7328	3,6,7,15,19,42,51,	Washborn		483	54,
Walton	Janet	13057	54,	Washburn		3115	1,6,31,36,37,
Walzer		704	54,	Washburn		3116	54,
Wandschneider	Margarita	12548	54,	Washburn		3117	54,
Wang	Paul	5445	54,	Washburn		3554	1,2,4,5,6,22,41,42,44,
Wang	Vivian	6251	3,6,7,15,19,42,51,	Washburn	Melissa	9663	3,6,7,15,19,42,51,
Wang	T.K.	12660	54,	Wastenev	D-D	6994	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Watanabe	Jeannie	5995	3,6,7,15,19,42,51,	Weare		2664	3,7,9,31,44,49,50,51,
Waterhouse	Brian	6867	3,6,7,15,19,42,51,	Weatherly	Judith	6474	3,6,7,15,19,42,51,
Waters	Nan	5533	3,6,7,15,19,42,51,	Weaver		2836	54,
Waters	Herman	8883	3,6,7,15,19,42,51,	Weaver	Stephen J.	9762	3,6,7,15,19,42,51,
Waters	Jessica C.	9301	3,6,7,15,19,42,51,	Webber	Alison Ascher	5168	54,
Watkins	Renee	8019	3,6,7,15,19,42,51,	Webel	Glo	9683	3,6,7,15,19,42,51,
Watkins	Anita	8347	3,6,7,15,19,42,51,	Weber	Nicole	12128	54,
Watkins	Casey	9259	3,6,7,15,19,42,51,	Webster		679	1,22,31,40,44,
Watson		2518	1,2,4,5,8,9,11,14,16,22,23, 31,43,48,	Webster		3063	54,
Watson	David	5680	3,6,7,14,15,19,27,32,42,51,	Webster	Monique	8033	3,6,7,15,19,42,51,
Watson	Judy	5703	3,6,7,15,19,42,51,	Webster	Rosemary	12654	54,
Watson	Diane	5745	3,6,7,15,19,42,51,	Wedge	Craig	5605	3,6,7,15,19,42,51,
Watson	Mary Lou	6151	3,6,7,15,19,42,51,	Wee	Lian-Hee	12031	54,
Watson	Sarah	7437	3,6,7,15,19,22,24,42,51,	Weems	Sheila	5691	3,6,7,15,19,42,51,
Watson	Nina	8037	3,6,7,15,19,42,51,	Wehrle	John	7459	3,6,7,15,19,42,51,
Watson	Phillipa	12065	54,	Weikel	Wendy	7959	3,6,7,15,19,42,51,
watson	john	12260	54,	Weikum	Duane	8988	3,6,7,15,19,42,51,
Watt	Susan Hope	5612	3,6,7,15,19,42,51,	Weil		2916	6,7,42,48,
Watt	Debbie	6590	3,6,7,15,19,42,51,	Weil	Gertrude	10281	3,6,7,15,19,22,23,40,42,51,
Watts		2417	8,11,22,24,31,43,44,	Weil	Gwendolen	13120	54,
Watts	Barbara	9059	3,6,7,15,19,42,51,	Weil	Emily	12321	54,
Watts	Elizabeth	9857	3,6,7,15,19,42,51,	Weiland		778	1,5,6,7,12,19,27,42,44,
Wauters	Kathryn	5625	3,6,7,15,19,42,51,	Weiland	Diane	9561	3,6,7,15,19,42,51,
Waxman		2756	1,7,22,31,43,44,48,	Weiland	Christina	9627	3,6,7,15,19,42,51,
Waxman	Elinor	8360	3,6,7,15,19,42,51,	Weilburg	Laura	12005	54,
				Weills	Anne	8070	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Weinblatt	Susan	6674	3,6,7,15,19,42,51,	Wells	Aimee	10331	3,6,7,15,19,42,51,
Weiner	Mark	11007	42,51,	Wells	R	13145	54,
Weinstein		871	1,5,6,7,15,18,19,21,22,44,	Wells	Matt	9345	3,6,7,15,19,42,51,
Weinstein		1100	17,22,42,	Wells	Gary	13137	54,
Weinstein		1653	22,31,42,	Wellton		720	54,
Weinstein	Miriam	8270	3,6,7,15,19,42,51,	Welson	Sally	3575	54,
Weintraub	Martin	5692	3,6,7,15,19,42,51,	Wengert	Kelly	9831	3,6,7,15,19,42,51,
Weir	Chris	6872	3,6,7,15,19,42,51,	Wenthur		1875	27,34,
Weisman		2455	31,	Wenzel	Lisa	7425	3,6,7,15,19,42,51,
Weiss		1192	5,	Werdmuller Von Elgg	Dennis	8938	3,6,7,15,19,42,51,
Weiss		1751	5,6,11,34,	Werner		491	9,
Weiss	Michael	5927	3,6,7,15,19,42,51,	Werner		3562	1,5,9,29,30,42,46,
Weiss	Steve	10236	3,6,7,15,19,42,51,	Wertheim	Mike	10565	3,42,51,
Weiss	Joseph	10244	3,6,7,15,19,42,51,	Werts	Patricia	5331	54,
Weiss	Margaret	10409	3,7,15,19,42,51,	Werum	Barbara	9392	3,5,6,7,15,19,42,51,
Weissmuller Price	Lydia	12084	54,	Wesolowski	Maureen	5211	54,
Welch	Rebecca	8532	3,6,7,15,19,42,51,	Wessa	Bridget	5394	54,
Welch	Yoko	8924	3,6,7,15,19,42,51,	Wesson-Cohen	Cammy	8555	3,6,7,15,19,42,51,
Welford	Jane	6167	3,6,7,15,19,42,51,	West	Linda	5618	3,6,7,15,19,42,51,
Welles	Jeanette	9992	3,6,7,15,19,51,	West	Carter	9529	3,6,7,15,19,42,51,
Wellington	Mary	12413	54,	West	Becky	9601	3,6,7,15,19,42,51,
Wells	Susan	5756	3,6,7,15,19,42,51,	West	Trish	11057	42,51,
Wells	James	9273	3,6,7,15,19,42,51,	Westbrook	Hannah	9511	3,6,7,15,19,42,51,
Wells	Jim	9504	3,6,7,15,19,42,51,	Westcott	Robert	13102	54,
Wells	Selena	9536	3,6,7,15,19,42,51,	Westendorp	Doug	12842	54,
Wells	Robin	9566	3,6,7,15,19,42,51,				

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Westgate	Victoria	10599	3,42,51,	Wheeler	S	10848	42,51,
Westhead	Sue	12496	54,	Wheeler	Suzanne	12621	54,
Westin	Tom	9395	3,6,7,15,19,42,51,	wheelock	ted	12482	54,
Westine	Katherine	10399	3,7,15,19,42,51,	Whelpley		3098	22,
Westlund	Karen L	6174	3,6,7,15,19,42,51,	Whelpley	Eileen	11072	42,51,
Westman	Betty	12487	54,	Whipp	Yoland	5437	54,
Westmoreland	Dana	10202	3,6,7,15,19,42,51,	Whitacre	Ryan	10436	3,7,19,42,51,
Weston	Amy	8819	3,6,7,15,19,42,51,	Whitaker		1869	27,42,43,44,
Weston	Carolyn	10647	42,51,	Whitaker	Dana	5225	54,
Westphal	Kelsey	8490	3,6,7,15,19,42,51,	Whitaker	Kimberlee	12497	54,
Wetherby	Lisa	5713	3,6,7,15,19,42,51,	Whitcomb	D.E.	9673	3,6,7,15,19,42,51,
Weyers		1125	54,	White		510	19,31,44,
Weyers		1732	34,44,	White		523	54,
Whaley	Patricia	7089	3,6,7,15,19,42,51,	White		964	31,34,42,
Whalin	Kathi	5127	54,	White		1379	2,4,27,
Wharton		1833	2,4,27,34,42,43,	White		1401	5,9,11,14,15,22,23,25,43,44,48,
Wheat	Ann	6672	3,6,7,15,19,42,51,	White		1515	54,
Wheeler		1197	54,	White	Karen	5799	3,6,7,15,19,42,51,
Wheeler		1761	54,	White	Mary B.	7148	3,6,7,15,19,42,51,
Wheeler		2872	9,13,14,19,22,24,48,	White	Kirk	9003	3,6,7,15,19,42,51,
Wheeler	Ray	5138	54,	White	Jane	9008	3,6,7,15,19,42,51,
Wheeler	Katie	6965	3,6,7,15,19,22,27,42,51,	White	Ryan	9352	3,6,7,15,19,42,51,
Wheeler	Katherine	6967	3,6,7,15,19,42,51,	White	Michelle	10009	3,6,7,15,19,42,51,
Wheeler	Wendy	7244	3,6,7,15,19,42,51,	White	William	10166	3,6,7,15,19,42,51,
Wheeler	Ray	10325	3,6,7,15,19,42,51,	White	Donna	10204	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
White	Sharyn	10774	42,51,	wilcox	wandis	12617	54,
White	Mani	10921	42,51,	Wilde	Ethan	9214	3,6,7,15,19,42,51,
Whitehead	Pam	12438	54,	Wilde	Sierra	9506	3,6,7,15,19,42,51,
Whitehorse	Stephanie	9932	3,6,7,15,19,42,51,	Wildwind	Landry	12692	54,
Whitehouse		2165	54,	Wiley	June	5246	54,
Whitehouse		2166	54,	Wilk	Joan	7207	3,6,7,15,19,42,51,
Whitfield	Carol	9092	3,6,7,15,19,42,51,	Wilkin	Kate	155	5,9,13,22,44,
Whitford		1344	46,47,	Wilkinson		541	4,31,
Whitney	Searle	7096	3,6,7,15,19,42,51,	Wilkinson	Gregory	6915	3,6,7,15,19,42,51,
Whitney	Kathleen	7677	3,6,7,15,19,42,51,	Wilkinson	Tony	9244	3,6,7,15,19,42,51,
Whitson		2506	5,6,	Wilkinson	Forest	9540	3,6,7,15,19,42,51,
Whitson	Helene	5155	54,	Wilkinson	Margy	10239	3,6,7,15,19,42,51,
Whitten	Gail	12091	54,	Wilkinson	Jason	10257	3,6,7,15,19,42,51,
Wi	Jung	10081	3,6,7,15,19,29,42,51,	Wilkinson	Jo	10259	3,6,7,15,19,42,51,
wick	jodi	13041	54,	Wilkinson	Donald	10303	3,6,7,15,19,42,51,
Widdas	Scott	12879	54,	Willcox	Ginger	6034	3,6,7,15,19,42,51,
Widelock		341	2,4,54,	Willems	Andrea	6436	3,6,7,15,19,42,51,
Widelock		2410	5,	Willems	Rev James	8753	3,6,7,15,19,42,51,
Wiegers	Brandy	10689	42,51,	Willes	Burl	3223	54,
Wiener	Gerry	8541	3,6,7,15,19,42,51,	Williams		426	1,4,31,
Wierzynski	Antoni	7651	3,6,7,15,19,42,51,	Williams		539	54,
Wiggs	Christopher	8670	3,6,7,15,19,42,51,	Williams		1349	54,
Wight	Susan	9641	3,6,7,15,19,42,51,	Williams		2047	54,
Wilber	Shannan	9708	3,6,7,15,19,42,51,	Williams		2868	2,4,6,42,46,48,
Wilbourn	Lia	6853	3,6,7,15,19,42,51,	Williams		3094	42,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Williams	Wini	5092	54,	Wills	Bonnie	6368	3,6,7,15,19,42,51,
Williams	Katiri	6525	3,6,7,15,19,42,51,	Wills	Sally	6923	3,6,7,15,19,42,51,
Williams	Kurt	6855	3,6,7,15,19,42,51,	Wills	Gabriele	7287	3,6,7,15,19,42,51,
Williams	Loni	7339	3,6,7,15,19,42,51,	Wills	Anita	10619	42,51,
Williams	Wini	7931	3,6,7,15,19,42,51,	Wilms		2471	42,
Williams	Aubrey	8601	3,6,7,15,19,42,51,	Wilsey	Frank	12370	54,
Williams	Daryl	8825	3,6,7,15,19,42,51,	Wilson	Karen	5658	3,6,7,15,19,42,51,
Williams	Dane	9632	3,6,7,15,19,42,51,	Wilson	Shelly	5886	3,6,7,15,19,42,51,
Williams	Maureen	9656	3,6,7,15,19,42,51,	Wilson	Skylar W.	6348	3,6,7,15,19,42,51,
Williams	Owen	9678	3,6,7,15,19,42,51,	Wilson	Miriam	6380	3,6,7,15,19,42,51,
Williams	Freddie	12174	54,	Wilson	Mondre	6806	3,6,7,15,19,42,51,
Williams	Joseph	12703	54,	Wilson	Dwight	6871	3,6,7,15,19,42,51,
Williamscraig		1182	1,3,5,11,14,16,18,23,31,48,	Wilson	Nance	8194	3,6,7,15,19,42,51,
Williamscraig		1745	2,3,4,5,9,11,13,14,15,22,31,43,44,48,	Wilson	David	8690	3,6,7,15,19,42,51,
Williamscraig	Brandon	10277	3,6,7,15,19,42,51,	Wilson	Sam	10718	42,51,
Williamson		1365	54,	Wilson	David	12007	54,
Williamson	Tom	7590	3,6,7,15,19,42,51,	Wilson	Monte	12408	54,
Williamson	Barbara	9331	3,6,7,15,19,42,51,	Winant	Celeste	9580	3,6,7,15,19,42,51,
Williamson	Resa	9914	3,6,7,15,19,27,42,51,	Wincorn	Warren	5383	54,
Williard	Sue	10854	42,51,	Wincorn	Peggy	5385	54,
Willis	Nancy	10448	3,7,19,42,51,	Winer	G	9017	3,6,7,15,19,42,51,
Willis	Jennifer	10721	42,51,	Wingert	Michael	6503	3,6,7,15,19,42,51,
Willits	Kristan	165	2,4,15,18,19,22,27,34,42,	Winik	Fred	10515	3,19,42,51,
Willits		343	2,15,22,31,34,	Winkler	Sherri	5780	3,6,7,15,19,42,51,
Willits		504	15,31,	Winkler	Ken	8375	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Winnett	Jason	8423	3,6,7,15,19,42,51,	Wolansky	Ariel	6241	3,6,7,15,19,42,51,
Winograd	Nathan & Jennifer	227	1,2,3,4,5,6,9,22,27,29,43,44,52,	Wolf		513	4,9,15,16,
Winograd		2686	54,	Wolf		3536	1,3,5,7,43,48,
Winograd	Jennifer	6469	3,6,7,15,19,42,51,	Wolf	Michael	5302	54,
Winskowski	Patricia	12834	54,	Wolf	Lynn	5671	3,6,7,15,19,42,51,
Winston	Jennifer	7771	3,6,7,15,19,42,51,	Wolf	Derek	6447	3,6,7,15,19,42,51,
Winston	Liz	8062	3,6,7,15,19,42,51,	Wolf	Carol	9915	3,6,7,15,19,42,51,
Winter		1091	27,31,32,	Wolf	Lynn	12169	54,
Winter		1619	2,4,27,31,	Wolfe	Marian	8944	3,6,7,15,19,42,51,
Winters		509	44,	Wolff		1818	42,43,48,50,
Winters	Verna	7984	3,6,7,15,19,42,51,	Wolff	Genevieve	10037	3,6,7,15,19,42,51,
Winters	Diane	10135	3,6,7,15,19,42,51,	Wolfram	Victor	8652	3,6,7,15,19,42,51,
Winters	Ian	10258	3,6,7,15,19,42,51,	wolk	Julie	10168	3,6,7,15,19,42,51,
wise	david	12750	54,	Woloschuk	Andrea	7670	3,6,7,15,19,42,51,
Wishon	Christine	8094	3,6,7,15,19,42,51,	Wolpert	Chris	9213	3,6,7,15,19,42,51,
Wisniewski	Katy	9173	3,6,7,15,19,42,51,	Wolter	Manuela	5861	3,6,7,15,19,42,51,
Witham	Lisa	12810	54,	wolter	manuela	12142	54,
Witkowski		9084	3,6,7,15,19,42,51,	Wolters	Laura	12349	54,
Witte	Karin	9218	3,6,7,15,19,42,51,	Women Against Sexual Slavery		8221	3,6,7,15,19,42,51,
Wittmer	Sarah	8200	3,6,7,15,19,42,51,	Wonder	Dorothy P	7659	3,6,7,15,19,42,51,
Wittmer	Helen	8250	3,6,7,15,19,42,51,	Wong		1061	54,
Wlosowicz	Teresa	12278	54,	Wong		3559	5,6,31,34,43,46,
wmceka		1060	5,42,44,50,	Wong	Kathryn	5233	54,
Woffter	Kathy	5346	54,	Wong	Betty	6299	3,6,7,15,19,42,51,
Wojtas	Barbara	12464	54,	Wong	Crystal	6301	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Wong	Leona	6303	3,6,7,15,19,42,51,	Woolsey	Sally	5142	54,
Wong	Michelle	7886	3,6,7,15,19,42,51,	Woolsey	Sally	8884	3,6,7,15,19,42,51,
Wong	Nathan	10087	3,6,7,15,19,42,51,	Workman	W.	7813	3,6,7,15,19,42,51,
Woo	Jennifer	7828	3,6,7,15,19,42,51,	Worth	Shane	12213	54,
Wood		498	54,	Worth	G.	12360	9,
Wood		550	1,4,15,	Worton	Mario	7834	3,6,7,15,19,42,51,
Wood		3175	1,2,3,4,6,7,16,19,21,27,31, 42,44,53,	Wotkyns		1398	54,
Wood		3570	2,4,18,19,44,	Wrasse Hill	Diane A	5207	54,
Wood	Helen	5505	3,6,7,9,15,16,17,19,21,27,4 2,51	Wreford	Julie	12392	54,
Wood	Samantha Greenwood	6194	3,6,7,15,19,42,51,	Wren	Barranca	9463	3,6,7,15,19,42,51,
Wood	Virginia	12684	54,	Wright		346	6,44,
wood	shelva	12729	54,	Wright		451	11,
Woodcock		344	2,4,6,11,18,19,22,44,	Wright		1851	4,11,22,42,
Woodcock	William E.	10032	3,6,7,15,19,42,51,	Wright		2602	2,4,11,24,
Woodcock	Charlene	10149	3,6,7,15,19,22,42,51,	Wright		2780	2,4,9,22,31,34,41,
Woodford		647	15,31,	Wright		3522	5,6,8,21,43,44,
Wood-Littleton		1946	22,42,43,	Wright	Rebecca	5288	54,
Woodruff	Kathy Anne	10749	42,51,	Wright	Cory	6173	3,6,7,15,19,42,51,
Woods	Debbe	5786	3,6,7,15,19,42,51,	Wright	Alfreda	6515	3,6,7,15,19,22,42,51,
Woods	Diane	10847	27,42,51,	Wright	Matthew	7327	3,6,7,15,19,42,51,
Woodward	Bud	5952	3,6,7,15,19,42,51,	Wright	Gordon	7681	3,6,7,15,19,42,51,
Woodward	Marlon	10699	42,51,	Wright	Alexandria	7965	3,6,7,15,19,42,51,
Woolard	Ken	12902	54,	Wright	Buzz	8178	3,6,7,15,19,42,51,
Woolems	Shana	5869	3,6,7,15,19,42,51,	Wright	Melissa	9252	3,6,7,15,19,42,51,
				Wright	Barry	9293	3,6,7,15,19,42,51,
				Wright	Suzanne	9328	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Wright	Melvyn	10451	3,7,19,42,51,	Yates	Tatiana	6863	3,6,7,15,19,42,51,
Wright	Lara	10466	3,7,19,42,51,	Yeaton	Joanne M	146	1,2,4,11,14,15,18,22,31,34,42,44,
Wright	Georgia	11047	9,10,42,51,	Yee	Steven	9921	3,6,7,15,19,42,51,
Wright	Marjorie	12282	54,	Yeghiazarian	Termeh	8234	3,6,7,15,19,42,51,
Wright	Elizabeth	10763	42,51,	Yehling	Ryan	12013	54,
Wu	Stanley	8441	3,6,7,15,19,42,51,	Yenter	Vendetta	5701	3,6,7,15,19,42,51,
Wuerfel	Nancy	6208	3,6,7,15,19,42,51,	Yip		796	11,44,
Wulfson		959	42,	Yoder	Louie	5949	3,6,7,15,19,42,51,
Wulfson		1574	11,44,	Yoder	Elaine	9147	3,6,7,15,19,42,51,
Wyle	Chris	7562	3,6,7,15,19,42,51,	Yokers	Andre	12019	54,
Wynhausen	Alexis	9400	3,6,7,15,19,42,51,	Yolles	Sandra	7553	3,6,7,15,19,42,51,
Wynns	George	10979	42,51,	Yothers	Hilary	9873	3,6,7,15,19,42,51,
Xiao	Tong	5224	54,	Younce	Jackie	5643	3,6,7,15,19,42,51,
Y	E	7898	3,6,7,15,19,42,51,	Young		882	54,
Yaco	L	10987	42,51,	Young	Pam	5332	54,
Yada	Terry	12773	54,	Young	Heather	6045	3,6,7,15,19,42,51,
Yaffe	Hannah	9053	3,6,7,15,19,42,51,	Young	Kathleen	6223	3,6,7,15,19,42,51,
Yagy	Faye	5959	3,6,7,15,19,42,51,	Young	Al	8082	3,6,7,15,19,42,51,
Yakoban	Steve	13074	54,	Young	Jenna	8930	3,6,7,15,19,42,51,
Yaksic	Milan	12127	54,	Young	Heather	9432	3,6,7,15,19,42,51,
Yang	Jenny	6465	3,6,7,15,19,42,51,	Young	Toby	12255	54,
Yano	Candace	6698	3,6,7,15,19,42,51,	Young	Colleen	13042	54,
Yanov	Kate	10488	3,7,19,42,51,	Young	Lorna	12924	54,
Yantselovskiy	Alexandr	12126	54,	Young-Ginzburg		2321	8,42,43,44,
yardening		1909	1,4,7,8,11,13,15,22,23,24,34,42,43,44,	Young-Ginzburg		2325	22,23,24,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Yount		1859	54,	Zegas		1046	22,27,
Yronwode		638	54,	Zegas		1591	2,4,22,27,
Yu	Marian	9834	3,6,7,15,19,42,51,	Zeiger	Felicia	10756	22,24,42,51,
Yuen	Shirley	8125	3,6,7,15,19,42,51,	Zeitlin	Cary	9448	3,6,7,15,19,42,51,
Yung	Wong Jin	7191	3,6,7,15,19,42,51,	Zeldes	Sandy	10757	42,51,
Yuratich	Todd	7745	3,6,7,15,19,42,51,	Zeller	Rudy	7441	3,6,7,15,19,42,51,
Yurman	Rich	8017	3,6,7,15,19,42,51,	Zeller	Rudy	7489	3,6,7,15,19,42,51,
Zaccheo	Aleardo	8196	3,6,7,15,19,42,51,	Zellerbach	Laura	7151	3,6,7,15,19,42,51,
Zachritz	Jordan	8968	3,6,7,15,19,42,51,	Zendarski	Art	10940	42,51,
Zaidi	Syed Muhammad	8615	3,6,7,15,19,42,51,	Zentgraf		1863	31,34,46,
Zaitlin	Jan	9596	3,6,7,15,19,42,51,	Zevin		893	1,4,6,7,31,42,44,
Zak		2989	31,48,	Zhou	Yvonne	6046	3,6,7,15,19,42,51,
Zaman	Omar	7994	3,6,7,15,19,42,51,	Zimbardo	Tanya	7600	3,6,7,15,19,42,51,
Zamarra	Lynn	9083	3,6,7,15,19,42,51,	Zimmerman		2721	1,2,4,9,11,19,31,
Zampini	Cassandra	12367	54,	Zimmerman	Eva	6756	3,6,7,15,19,42,51,
Zaninovic	Paola	7120	3,6,7,15,19,42,51,	Zimmerman	Simon	7317	3,6,7,15,19,42,51,
Zanoli	Marina	12004	54,	Zimmerman	Pamela	9056	3,6,7,15,19,42,51,
zappa		802	22,24,45,46,	Zimmerman	Marla	12473	54,
Zappa	Stephanie	9110	3,6,7,15,19,42,46,47,51,	Zimny		2762	54,
Zappas		2575	1,2,4,11,31,42,	Zimny	Rylan	13160	54,
Zarchin	Natalie	7006	3,6,7,15,19,42,51,	Zink	Amy	8610	3,6,7,15,19,42,51,
Zarlow	Willow	7367	3,6,7,15,19,42,51,	Zinser	Billie	5036	54,
Zarlow	Renee	10553	3,42,51,	Zipp	Alanna	9486	3,6,7,15,19,42,51,
Zatkin	Dalia	7206	3,6,7,15,19,42,51,	Zittrain	Jeff	9146	3,6,7,15,19,42,51,
Zavalney	Katrina	9874	3,6,7,15,19,42,51,	Zivnuska	Eric	8662	3,6,7,15,19,42,51,
Zbitnoff		632	54,	Zlotopolski	Alfred	12	9,18,27,48,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
Zlotopolski		1306	9,15,27,48,	Хребтова	Евгения	12653	54,
Zollars		722	4,22,31,	Шабалова			
Zolno	Steve	10542	3,42,51,	Ярославль	Анна	12431	54,
Zoloth	Barbara	8561	3,6,7,15,19,42,51,			543	1,46,
Zorn	Patty and Manfred	9190	3,6,7,15,19,42,51,			1387	22,27,
Zouvelos	Gregory	7281	3,6,7,15,19,42,51,			1518	54,
Zuardo	Tara	8642	3,6,7,15,19,42,51,		Ron	5542	3,6,7,15,19,42,51,
Zuber		348	31,44,		Michael	5568	3,6,7,15,19,42,51,
Zuber		2210	11,14,15,22,27,43,44,48,		Eva	5604	3,6,7,15,19,42,51,
Zuber	Devin	6565	3,6,7,15,19,42,51,		Sue	5608	3,6,7,15,19,42,51,
Zucker	Rachael	594	1,4,		Karen	5617	3,6,7,15,19,42,51,
Zucker		1268	54,		Sarah	5627	3,6,7,15,19,42,51,
Zucker		2530	1,2,3,4,5,6,8,11,16,18,19,2 1,22,23,27,31,34,41,43,44,		Mary	5630	3,6,7,15,19,42,51,
Zucker	Randy	3278	3,6,9,10,13,14,21,22,24,42, 53,		Susan	5638	3,6,7,15,19,42,51,
Zuckerman	Barry	12704	54,		Mel	5640	3,6,7,15,19,42,51,
Zukor	Karen	5363	54,		Angela	5653	3,6,7,15,19,42,51,
Zumhagen-Yekple	Karen	8646	3,6,7,15,19,42,51,		Kay	5664	3,6,7,15,19,42,51,
Zuspan	Laura	7654	3,6,7,15,19,42,51,		Pam	5665	3,6,7,15,19,42,51,
Zwager	Kelly Ann	5767	3,6,7,15,19,42,51,		Green Party of Alameda County	5688	3,6,7,15,19,42,51,
Zwielein		349	25,26,		Jill	5689	3,6,7,15,19,42,51,
Zwigoff	Terry	10726	42,51,		Maia	5730	3,6,7,15,19,42,51,
Zydel		1826	9,11,13,14,		Lois	5736	3,6,7,15,19,42,51,
Zydel	Chris	6904	3,4,6,7,13,14,15,16,19,22,2 3,24,42,48,51,		Anya	5744	3,6,7,15,19,42,51,
Златковић	Милан	12670	54,		Darla	5746	3,6,7,15,19,42,51,
					Nina	5749	3,6,7,15,19,42,51,
					Ashley	5772	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
	Shila	5796	3,6,7,15,19,42,51,		Joanna	6113	3,6,7,15,19,42,51,
	CM	5814	3,6,7,15,19,42,51,		AAH	6116	3,6,7,15,19,42,51,
	Martha	5822	3,6,7,15,19,42,51,		Alli	6134	3,6,7,15,19,42,51,
	Audrey	5847	3,6,7,15,19,42,51,		Dawn	6150	3,6,7,15,19,42,51,
	Taniel	5851	3,6,7,15,19,42,51,		Pattie	6168	3,6,7,15,19,42,51,
	Catherine	5862	3,6,7,15,19,42,51,		Alisa	6171	3,6,7,15,19,42,51,
	Karianne	5888	3,6,7,15,19,22,42,51,		Colin	6175	3,6,7,15,19,42,51,
	Ananda	5891	3,6,7,15,19,42,51,		Annemarie	6177	3,6,7,15,19,42,51,
	Courtney	5914	3,6,7,15,19,42,51,		Sarah	6181	3,6,7,15,19,42,51,
	Sara	5930	3,6,7,15,19,42,51,		Jennifer	6193	3,6,7,15,19,42,51,
	Barbara	5935	3,6,7,15,19,42,51,		Siobhan	6201	3,6,7,15,19,42,51,
	Callia	5958	3,6,7,15,19,42,51,		Steve	6215	3,6,7,15,19,42,51,
	Kajsa	5973	3,6,7,15,19,42,51,		Shara	6250	3,6,7,15,19,42,51,
	PJ	6003	3,6,7,15,19,42,51,		Elizabeth	6273	3,6,7,15,19,42,51,
	Margaret	6026	3,6,7,15,19,42,51,		Roberta	6287	3,6,7,15,19,42,51,
	Maria	6032	3,6,7,15,19,42,51,		Jack	6308	3,6,7,15,19,42,51,
	Avril	6047	3,6,7,15,19,42,51,		Shirley	6311	3,6,7,15,19,42,51,
	Penny	6048	3,6,7,15,19,42,51,		Monica	6316	3,6,7,15,19,42,51,
	Gaye	6055	3,6,7,15,19,42,51,		Kerri	6346	3,6,7,15,19,42,51,
	Jen	6062	3,6,7,15,19,42,51,		Adrian	6350	3,6,7,15,19,42,51,
	Stacy	6064	3,6,7,15,19,42,51,		Johnny	6393	3,6,7,15,19,42,51,
	Sheri	6067	3,6,7,15,19,42,51,		Carolyn	6398	3,6,7,15,19,42,51,
	Jessica	6068	3,6,7,14,15,19,20,22,42,51,		Brandon	6405	3,6,7,15,19,42,51,
	Jennifer	6082	3,6,7,15,19,42,51,		CeCe	6413	3,6,7,15,19,42,51,
	Aiste	6097	3,6,7,15,19,42,51,		Virginia	6450	3,6,7,15,19,42,51,
	Donya	6099	3,6,7,15,19,42,51,		Lee	6462	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
	Ben	6473	3,6,7,15,19,42,51,		Karyn	6812	3,6,7,15,19,42,51,
	Keith	6494	3,6,7,15,19,42,51,		Teo	6897	3,6,7,15,19,42,51,
	Laura	6495	3,6,7,15,19,42,51,		Serena	6928	3,6,7,15,19,42,51,
	Heather	6506	3,6,7,15,19,42,51,		ivan	6936	3,6,7,15,19,42,51,
	Mia	6507	3,6,7,15,19,42,51,		Jeste	6954	3,6,7,15,19,42,51,
	Angela	6518	3,6,7,15,19,42,51,		Keri	6955	3,6,7,15,19,42,51,
	Annemarie	6526	3,6,7,15,19,42,51,		Max	6959	3,6,7,15,19,42,51,
	Jane	6532	3,6,7,15,19,42,51,		Karl	6961	3,6,7,15,19,42,51,
	John	6535	3,6,7,15,19,42,51,		Dina	6973	3,6,7,15,19,42,51,
	Lynn	6537	3,6,7,15,19,42,51,		Meghan	6984	3,6,7,15,19,42,51,
	Jeff	6551	3,6,7,15,19,42,51,		W	7003	3,6,7,15,19,42,51,
	Gene	6568	3,6,7,15,19,42,51,		Virginia	7005	3,6,7,15,19,42,51,
	Francis	6569	3,6,7,15,19,42,51,		Lisa	7016	3,6,7,15,19,42,51,
	Luana	6585	3,6,7,15,19,42,51,		Belinda	7041	3,6,7,15,19,42,51,
	Karen	6588	3,6,7,15,19,42,51,		Sean	7042	3,6,7,15,19,42,51,
	Kevin	6635	3,6,7,15,19,42,51,		Liz	7059	3,6,7,15,19,42,51,
	Amy	6646	3,6,7,15,19,42,51,		Raymon	7060	3,6,7,15,19,42,51,
	Kay	6648	3,6,7,15,19,42,51,		Francine	7069	3,6,7,15,19,42,51,
	Jeannett	6653	3,6,7,15,19,42,51,		Stephanie	7076	3,6,7,15,19,42,51,
	Gail	6682	3,6,7,15,19,42,51,		Aaron	7084	3,6,7,15,19,42,51,
	Carolyn	6726	3,6,7,15,19,42,51,		Fernando	7098	3,6,7,15,19,42,51,
	Shannon	6729	3,6,7,15,19,42,51,		Juliana	7113	3,6,7,15,19,42,51,
	Amanda	6774	3,6,7,15,19,42,51,		Kelly	7115	3,6,7,15,19,42,51,
	Mon	6778	3,6,7,15,19,42,51,		Paula	7147	3,6,7,15,19,42,51,
	Paula	6798	3,6,7,15,19,42,51,		Mike	7170	3,6,7,15,19,42,51,
	Alberto	6801	3,6,7,15,19,42,51,		Lisa	7171	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
	Jennifer	7186	3,6,7,15,19,42,51,		Blossom	7608	3,6,7,15,19,42,51,
	Orlando	7190	3,6,7,15,19,42,51,		Karen	7617	3,6,7,15,19,42,51,
	Colleen	7222	3,6,7,15,19,42,51,		Guneeta	7666	3,6,7,15,19,42,51,
	Josh	7228	3,6,7,15,19,42,51,		Nichole	7697	3,6,7,15,19,42,51,
	Shawn	7234	3,6,7,15,19,42,51,		Greg	7720	3,6,7,15,19,42,51,
	Io	7247	3,6,7,15,19,42,51,		Paloma	7725	3,6,7,15,19,42,51,
	Lalita	7269	3,6,7,15,19,42,51,		Spencer	7740	3,6,7,15,19,42,51,
	Saqib	7290	3,6,7,15,19,42,51,		Jake	7750	3,6,7,15,19,42,51,
	Nancy	7315	3,6,7,15,19,42,51,		Ashley	7765	3,6,7,15,19,42,51,
	Juliette	7359	3,6,7,15,19,42,51,		Clem	7790	3,6,7,15,19,42,51,
	Mahfam	7364	3,6,7,15,19,42,51,		Rebecca	7802	3,6,7,15,19,42,51,
	Tom	7399	3,6,7,15,19,42,51,		Caitlin	7823	3,6,7,15,19,42,51,
	Alaina	7400	3,6,7,15,19,42,51,		Alannah	7839	3,6,7,15,19,42,51,
	Jeff	7414	3,6,7,15,19,42,51,		Stephanie	7841	3,6,7,15,19,42,51,
	Pauline	7429	3,6,7,15,19,42,51,		Penny	7848	3,6,7,15,19,42,51,
	Ivana	7448	3,6,7,15,19,42,51,		uHugo	7850	3,6,7,15,19,36,37,42,51,
	Meagan	7457	3,6,7,15,19,42,51,		Gina	7857	3,6,7,15,19,42,51,
	Scott	7468	3,6,7,15,19,42,51,		Christina	7872	3,6,7,15,19,42,51,
	Jack	7496	3,6,7,15,19,42,51,		Michael	7882	3,6,7,15,19,42,51,
	Kathleen	7519	3,6,7,15,19,42,51,		Martha	7897	3,6,7,15,19,42,51,
	Anupama	7537	3,6,7,15,19,42,51,		Danielle	7910	3,6,7,15,19,42,51,
	William	7547	3,6,7,15,19,42,51,		Maureen	7911	3,6,7,15,19,42,51,
	Sette	7558	3,6,7,15,19,42,51,		Naomi	7912	3,6,7,15,19,42,51,
	Tom	7570	3,6,7,15,19,42,51,		Daniel	7915	3,6,7,15,19,42,51,
	Naima	7576	3,6,7,15,19,42,51,		Patricia	7919	3,6,7,15,19,42,51,
	Kim	7584	3,6,7,15,19,42,51,		Allan	7945	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
	Pamela	7970	3,6,7,15,19,42,51,		Maya	8391	3,6,7,15,19,42,51,
	Ray	7997	3,6,7,15,19,42,51,		Jose	8406	3,6,7,15,19,42,51,
	Kimberly	8003	3,6,7,15,19,42,51,		Eleanor	8408	3,6,7,15,19,42,51,
	Lucas	8006	3,6,7,15,19,42,51,		Sarah	8409	3,6,7,15,19,42,51,
	Junk this one	8009	3,6,7,15,19,42,51,		Kyana	8414	3,6,7,15,19,42,51,
	Claudia	8031	3,6,7,15,19,42,51,		Mary	8465	3,6,7,15,19,42,51,
	Vinona	8060	3,6,7,15,19,42,51,		Erik	8472	3,6,7,15,19,42,51,
	Heather	8097	3,6,7,15,19,42,51,		Erin	8476	3,6,7,15,19,42,51,
	William	8131	3,6,7,15,19,42,51,		Ash	8488	3,6,7,15,19,42,51,
	Kate	8134	3,6,7,15,19,42,51,		Melissa	8496	3,6,7,15,19,42,51,
	Kyra	8136	3,6,7,15,19,42,51,		Elizabeth	8497	3,6,7,15,19,42,51,
	Andrea	8160	3,6,7,15,19,42,51,		Maggie	8500	3,6,7,15,19,42,51,
	Rosy	8163	3,6,7,15,19,42,51,		Jacqueline	8534	3,6,7,15,19,42,51,
	Susan	8171	3,6,7,15,19,42,51,		Mara	8554	3,6,7,15,19,42,51,
	Anna	8190	3,6,7,15,19,27,42,51,		Dave	8566	3,6,7,15,19,42,51,
	Irene	8206	3,6,7,15,19,42,51,		Helen	8571	3,6,7,15,19,42,51,
	Jarom	8210	3,6,7,15,19,42,51,		Paul	8596	3,6,7,15,19,42,51,
	Jessica	8228	3,6,7,15,19,42,51,		Lisa	8619	3,6,7,15,19,42,51,
	Willy	8231	3,6,7,15,19,42,51,		Jamie	8628	3,6,7,15,19,42,51,
	Mary	8254	3,6,7,15,19,42,51,		Lauren	8629	3,6,7,15,19,42,51,
	Alex	8260	3,6,7,15,19,42,51,		Janie	8633	3,6,7,15,19,42,51,
	Andrea	8264	3,6,7,15,19,42,51,		Brandon	8634	3,6,7,15,19,42,51,
	Jeannie	8275	3,6,7,15,19,42,51,		Tenaya	8638	3,6,7,15,19,42,51,
	Nyra	8281	3,6,7,15,19,42,51,		Denise	8647	3,6,7,15,19,42,51,
	Shayna	8331	3,6,7,15,19,42,51,		Ilana	8656	3,6,7,15,19,42,51,
	Francine	8366	3,6,7,15,19,42,51,		Irene	8669	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
	Gordon	8692	3,6,7,15,19,42,51,		Kim	9112	3,6,7,15,19,42,51,
	Katte	8701	3,6,7,15,19,42,51,		Colleen	9124	3,6,7,15,19,42,51,
	Ann	8723	3,6,7,15,19,42,51,		Selene	9132	3,6,7,15,19,42,51,
	Paula	8727	3,6,7,15,19,42,51,		CA	9142	3,6,7,15,19,42,51,
	Rose	8730	3,6,7,15,19,42,51,		ElisitA	9144	3,6,7,15,19,42,51,
	Andrea	8739	3,6,7,15,19,42,51,		C	9148	3,6,7,15,19,42,51,
	Gabriel	8747	3,6,7,15,19,42,51,		Amanda	9169	3,6,7,15,19,42,51,
	Stefen	8756	3,6,7,15,19,42,51,		Linda	9170	3,6,7,15,19,42,51,
	Kelley	8791	3,6,7,15,19,42,51,		Jenna	9193	3,6,7,15,19,42,51,
	Talia	8792	3,6,7,15,19,42,51,		Elsa	9202	3,6,7,15,19,42,51,
	Jen	8793	3,6,7,15,19,42,51,		Angela	9206	3,6,7,15,19,42,51,
	Alyx	8799	3,6,7,15,19,42,51,		Cat	9209	3,6,7,15,19,42,51,
	Sharon	8831	3,6,7,15,19,42,51,		Susan	9242	3,6,7,15,19,42,51,
	Alexis	8832	3,6,7,15,19,42,51,		Laura	9247	3,6,7,15,19,42,51,
	Victoria	8840	3,6,7,15,19,42,51,		Cecil	9268	3,6,7,15,19,42,51,
	Richard	8841	3,6,7,15,19,42,51,		Mckenna	9280	3,6,7,15,19,42,51,
	Galina	8870	3,6,7,15,19,42,51,		Edward	9294	3,6,7,15,19,42,51,
	Rachel	8907	3,6,7,15,19,42,51,		Joanna	9295	3,6,7,15,19,42,51,
	DS	8911	3,6,7,15,19,42,51,		Jessica	9296	3,6,7,15,19,42,51,
	Mary	8919	3,6,7,15,19,42,51,		Christopher	9313	3,6,7,15,19,42,51,
	Winnie	8926	3,6,7,15,19,42,51,		Lindsay	9317	3,6,7,15,19,42,51,
	Jessy	8932	3,6,7,15,19,42,51,		Kate	9347	3,6,7,15,19,42,51,
	Lynn	8982	3,6,7,15,19,42,51,		Alinya	9360	3,6,7,15,19,42,51,
	Joni	9081	3,6,7,15,19,42,51,		Elizabeth	9379	3,6,7,15,19,42,51,
	Karen	9105	3,6,7,15,19,42,51,		Betsy	9396	3,6,7,15,19,42,51,
	Elisa	9108	3,6,7,15,19,42,51,		Michael	9408	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
	Kerri	9409	3,6,7,15,19,42,51,		Debra	9887	3,6,7,15,19,42,51,
	Chris	9435	3,6,7,15,19,42,51,		Danielle	9904	3,6,7,15,19,22,42,51,
	Julie	9450	3,6,7,15,19,42,51,		Angie	9928	3,6,7,15,19,42,51,
	Amy	9457	3,6,7,15,19,27,42,51,		Maria	9942	3,6,7,15,19,42,51,
	Fen	9469	3,6,7,15,19,42,51,		Annie	9966	3,6,7,15,19,42,51,
	Leah	9510	3,6,7,15,19,42,51,		Carol	9985	3,6,7,15,19,42,51,
	Courtney	9571	3,6,7,15,19,42,51,		Amy	9996	3,6,7,15,19,51,
	Katrina	9575	3,6,7,15,19,42,51,		Mylissa	10004	3,6,7,15,19,42,51,
	CA	9583	3,6,7,15,19,42,51,		Maria	10019	3,6,7,15,19,42,51,
	Luigi	9610	3,6,7,15,19,42,51,		Dema	10043	3,6,7,15,19,42,51,
	Riley	9614	3,6,7,15,19,42,51,		Marissa	10055	3,6,7,15,19,42,51,
	JB	9622	3,6,7,15,19,42,51,		Jess	10057	3,6,7,15,19,42,51,
	Monica	9629	3,6,7,15,19,42,51,		James	10077	3,6,7,15,19,42,51,
	Marissa	9630	3,6,7,15,19,42,51,		Alys	10078	3,6,7,15,19,42,51,
	Amanda	9669	3,6,7,15,19,42,51,		Leila	10083	3,6,7,15,19,42,51,
	Lori	9712	3,6,7,15,19,42,51,		Kira	10089	3,6,7,15,19,42,51,
	Olivia	9725	3,6,7,15,19,42,51,		Jeremy	10091	3,6,7,15,19,42,51,
	Jeda	9734	3,6,7,15,19,42,51,		Carmen	10092	3,6,7,15,19,42,51,
	Hanna	9774	3,6,7,15,19,42,51,		Lauren	10109	3,6,7,15,19,42,51,
	Brian	9784	3,6,7,15,19,42,51,		Corey	10122	3,6,7,15,19,42,51,
	Elizabeth	9787	3,6,7,15,19,42,51,		Brendan	10137	3,6,7,15,19,42,51,
	Todd	9801	3,6,7,15,19,42,51,		Noah	10139	3,6,7,15,19,42,51,
	Jan	9812	3,6,7,15,19,42,51,		Heather	10141	3,6,7,15,19,42,51,
	Amanda	9817	3,6,7,15,19,42,51,		Cristina	10171	3,6,7,15,19,42,51,
	Alexis	9837	3,6,7,15,19,42,51,		Annie	10208	3,6,7,15,19,42,51,
	Torreyanna	9848	3,6,7,15,19,42,51,		Phillip	10212	3,6,7,15,19,42,51,

Commenter Last Name	Commenter First Name	Primary Key	Issues Raised	Commenter Last Name	Commenter First Name	Primary Key	Issues Raised
	Richard	10251	3,6,7,15,19,42,51,		Evin	10707	42,51,
	Cristina	10292	3,6,7,15,19,42,51,		Charles	10734	42,51,
	Priscilla	10307	3,6,7,15,19,42,51,		Karen	10736	42,51,
	Ali	10320	3,6,7,15,19,42,51,		Trina	10742	42,51,
	Karen	10333	3,6,7,15,19,42,51,		Jason	10769	42,51,
	Shahla	10353	3,6,7,15,19,42,51,		Laia	10797	42,51,
	Margaret	10364	3,6,7,15,19,42,51,		David	10807	42,51,
	Jeriidso	10365	3,6,7,15,19,27,42,51,		Lila	10824	42,51,
	D	10379	3,6,7,15,19,42,51,		Angela	10841	42,51,
	Araxi	10404	3,7,15,19,42,51,		Brunabarresi	10901	42,51,
	Jim	10410	3,7,15,19,42,51,		Deirdre	10913	42,51,
	Maureen	10463	3,7,19,42,51,		Shirley	10922	42,51,
	Marci	10473	3,7,19,42,51,		Joy-Lily	10950	42,51,
	Cynthia	10474	3,7,19,42,51,		Rose	10961	42,51,
	Chalom	10482	3,7,19,42,51,		John	10990	22,27,42,51,
	Frank	10495	3,19,42,51,		Mikki	11013	42,51,
	Lynne	10522	3,19,42,51,		Rozyve	11017	42,51,
	Laura	10543	3,42,51,		Vicky	11031	42,51,
	Lori	10564	3,42,51,		Judith	11050	42,51,
	France	10585	3,42,51,		Barbara	11085	42,51,
	Dandelion	10617	42,51,		Madeline	11086	13,42,51,
	Let the Hills Burn	10633	42,51,		Alissa	11087	42,51,
	Morgan	10664	42,51,		Trish	11094	42,51,
	Irene	10673	42,51,		Homer	12006	5,
	Vanessa	10680	42,51,				
	Lois	10693	42,51,				

Section Three Responses to Comments

Biological Resources Issues

The sections below (Issue 1 through Issue 7) include responses to all comments received on the draft EIS related to biological resources. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 1: Tree Clearing and Habitats

The following commenters (identified by PK) raised concerns about the effects of the proposed and connected actions on tree clearing and habitats: 1, 3, 5, 7, 10, 11, 13, 14, 15, 17, 22, 23, 27, 28, 30, 32, 36, 40, 41, 42, 45, 47, 53, 55, 56, 58, 61, 71, 82, 95, 99, 101, 113, 114, 117, 119, 122, 127, 130, 138, 146, 150, 153, 154, 156, 158, 162, 163, 169, 170, 174, 175, 177, 184, 185, 186, 187, 190, 192, 195, 196, 199, 200, 203, 207, 208, 211, 214, 216, 217, 223, 227, 228, 230, 234, 243, 247, 249, 250, 257, 259, 263, 264, 266, 273, 291, 309, 317, 322, 323, 325, 331, 333, 334, 339, 353, 426, 432, 437, 475, 487, 488, 505, 507, 516, 520, 543, 550, 559, 572, 579, 589, 592, 594, 611, 628, 661, 675, 679, 688, 689, 692, 696, 759, 777, 778, 780, 793, 799, 807, 809, 811, 822, 823, 841, 853, 864, 871, 879, 889, 890, 891, 893, 895, 898, 903, 917, 919, 939, 952, 954, 968, 977, 979, 988, 993, 995, 998, 1004, 1017, 1022, 1024, 1027, 1045, 1052, 1083, 1086, 1087, 1098, 1117, 1130, 1160, 1178, 1182, 1199, 1205, 1210, 1216, 1247, 1249, 1262, 1264, 1266, 1267, 1271, 1276, 1281, 1283, 1284, 1285, 1288, 1294, 1297, 1304, 1307, 1309, 1316, 1323, 1348, 1369, 1383, 1386, 1395, 1396, 1400, 1405, 1411, 1413, 1417, 1425, 1428, 1433, 1444, 1448, 1452, 1465, 1473, 1479, 1487, 1490, 1494, 1503, 1505, 1546, 1579, 1582, 1646, 1785, 1788, 1805, 1841, 1852, 1854, 1855, 1883, 1884, 1893, 1903, 1908, 1909, 1913, 1915, 1937, 1965, 1968, 1987, 2050, 2063, 2088, 2095, 2124, 2134, 2153, 2159, 2173, 2204, 2250, 2263, 2291, 2303, 2310, 2339, 2344, 2349, 2378, 2384, 2394, 2399, 2424, 2435, 2439, 2448, 2451, 2454, 2458, 2461, 2463, 2465, 2467, 2478, 2482, 2486, 2494, 2501, 2502, 2507, 2514, 2516, 2518, 2520, 2527, 2530, 2535, 2536, 2537, 2542, 2544, 2549, 2551, 2555, 2563, 2575, 2639, 2689, 2692, 2699, 2716, 2719, 2721, 2730, 2751, 2756, 2770, 2793, 2831, 2832, 2865, 2866, 2875, 2876, 2879, 2891, 2897, 2922, 2923, 2933, 2941, 2947, 2954, 2973, 3022, 3053, 3059, 3084, 3085, 3087, , 3115, 3122, 3128, 3146, 3158, 3175, 3176, 3177, 3180, 3198, 3200, 3214, 3249, 3504, 3506, 3509, 3515, 3519, 3523, 3526, 3527, 3528, 3531, 3536, 3541, 3546, 3548, 3554, 3558, 3562.

- New Sections 5.1.2.2.2 and 5.1.4.2.2 Long-term Impacts from Habitat Loss or Alteration were added to the EIS to address impacts to non-listed vegetation and common wildlife, respectively.
- Section 5.1.5.2 of the EIS has been amended to include additional discussion on wildlife corridors.
- New Section 5.1.6.2.2 Impacts from Change in Fire Regime has been added to the EIS. Additional discussion has been provided from the U.S. Fish and Wildlife Service (USFWS)

Biological Opinion (BO) to outline the required mitigation measures to protect threatened and endangered species.

- Section 5.1.4.3 of the EIS was modified to clarify that if colonies of snowy egret, great egret, black-crowned night heron, great-blue heron, or other colonial nesting birds are present, trees containing nests would not be removed at any time of the year.
- Additional detail was added to Section 5.1.4 of the final EIS indicating that tree removal would not occur during raptor and songbird nesting season.
- Section 5.1.4.2.2 of the EIS has been amended to include a discussion of foraging habitat for pollinators, birds, etc. and a discussion on monarchs.
- Shrub thinning and effects on Alameda whipsnake and its critical habitat were evaluated by USFWS. The BO requires creation of suitable habitat and compensation based on alterations to critical habitat, as described in Section 5.1.6.2.2 of the draft EIS.
- Section 5.1.2.2 of the EIS has been revised to add potential effects on mycorrhizal fungi.
- Section 5.1 of the EIS has been revised to include conclusions from the BO to describe the USFWS' findings on potential cumulative impacts to species and habitat. In addition, Section 6.2 included an analysis of the cumulative effect of the proposed and connected actions.

Issue 2: Tree Clearing and Herbicide Use

The following commenters (identified by PK) raised Issue 2: 26, 27, 40, 41, 44, 45, 47, 53, 55, 56, 58, 62, 66, 93, 95, 101, 119, 123, 127, 135, 139, 143, 146, 150, 151, 156, 159, 160, 163, 164, 165, 167, 169, 170, 175, 176, 177, 178, 182, 183, 184, 185, 186, 187, 190, 196, 199, 201, 207, 208, 209, 211, 216, 217, 220, 225, 227, 228, 237, 239, 243, 245, 253, 254, 257, 259, 261, 263, 264, 268, 269, 270, 271, 275, 277, 278, 281, 283, 286, 288, 298, 304, 306, 308, 309, 312, 316, 319, 320, 322, 325, 326, 328, 329, 332, 335, 339, 341, 343, 344, 481, 495, 502, 600, 1185, 1190, 1205, 1207, 1208, 1211, 1216, 1220, 1223, 1225, 1227, 1229, 1238, 1245, 1247, 1249, 1251, 1262, 1264, 1266, 1271, 1276, 1279, 1281, 1284, 1285, 1288, 1293, 1294, 1295, 1296, 1297, 1302, 1303, 1307, 1309, 1311, 1312, 1316, 1323, 1339, 1348, 1352, 1353, 1355, 1361, 1369, 1372, 1376, 1379, 1384, 1386, 1395, 1396, 1400, 1405, 1411, 1413, 1417, 1423, 1425, 1428, 1433, 1436, 1441, 1444, 1448, 1452, 1456, 1462, 1465, 1473, 1477, 1479, 1487, 1490, 1494, 1504, 1505, 1522, 1533, 1542, 1545, 1546, 1554, 1556, 1558, 1560, 1562, 1565, 1567, 1571, 1573, 1576, 1579, 1582, 1583, 1587, 1588, 1591, 1594, 1604, 1612, 1615, 1619, 1626, 1628, 1631, 1633, 1638, 1641, 1644, 1656, 1660, 1667, 1671, 1673, 1679, 1684, 1686, 1695, 1701, 1703, 1705, 1707, 1709, 1712, 1713, 1715, 1719, 1726, 1736, 1739, 1743, 1745, 1750, 1759, 1768, 1797, 1833, 1843, 1848, 1884, 1957, 1987, 2003, 2005, 2009, 2021, 2043, 2088, 2124, 2137, 2141, 2153, 2159, 2167, 2176, 2201, 2204, 2215, 2244, 2250, 2263, 2344, 2386, 2394, 2425, 2429, 2431, 2432, 2434, 2442, 2459, 2465, 2467, 2468, 2470, 2473, 2475, 2478, 2482, 2486, 2488, 2495, 2498, 2499, 2501, 2502, 2503, 2507, 2509, 2511, 2518, 2519, 2525, 2527, 2530, 2531, 2533, 2535, 2536, 2537, 2540, 2541, 2542, 2545, 2546, 2549, 2555, 2557, 2559, 2567, 2569, 2570, 2572, 2575, 2579, 2583, 2588, 2591, 2594, 2602, 2607, 2609, 2611, 2631, 2633, 2639, 2645, 2672, 2678, 2682, 2689, 2692, 2695, 2721, 2736, 2739, 2747, 2770, 2780, 2787, 2793, 2797, 2798, 2800, 2822, 2824, 2860, 2868, 2869, 2871, 2875, 2876, 2888, 2891, 2897, 2901, 2951, 2954, 2986, 3018, 3024, 3049, 3059, 3068, 3073, 3076, 3081, 3084, 3087, 3095, 3096, 3099, 3100, 3104, 3122, 3128, 3142, 3143, 3163, 3165, 3175, 3177, 3184, 3185,

3188, 3191, 3193, 3198, 3200, 3214, 3249, 3509, 3519, 3523, 3525, 3528, 3531, 3537, 3538, 3539, 3542, 3543, 3546, 3554, 3564, 3566, 3567, 3570.

- Section 3.4 of the final EIS was amended to clarify the number of trees to be removed from the proposed and connected project areas.
- Section 3.4.2 of the draft EIS adequately addressed the planned herbicides for use in the different proposed and connected action areas.
- Section 3.3.3.5 of the draft EIS considered but eliminated from further study, options for the management of tree resprouts from stumps without using herbicides given financial and technical infeasibility. Complete stump removal was not considered given the stumps and associated root systems are used for erosion control following tree removal.
- Applicable herbicide regulations are adequately addressed in Section 4.11.1 of the draft EIS and the sub applicant's current policies that guide herbicide application in the proposed and connected action areas are adequately addressed in Section 4.11.3.3 of the draft EIS.
- Section 5.10.3.1 of the EIS has been clarified to state "Stump application of all herbicides would be conducted by a State of California Qualified Applicator or by staff under their supervision."
- Section 5.1.3.3.2 of the EIS has been revised to be consistent with BO requirements regarding herbicide use and listed species.
- Section 5.10.2 of the draft EIS adequately addressed the determination that the proposed and connected actions would be in compliance with applicable federal, state, and local statutes and regulations with regard to herbicide use.
- Section 5.10.2.3.1 of the EIS has been amended to include language from Appendix F on the use and effects of adjuvants in herbicide application.
- Section 5.10.3 of the EIS was clarified to state that maintenance spraying would follow the same rules as the initial treatment.
- Section 5.4.2.2 of the draft EIS adequately described that small volumes of diluted herbicide solutions would be applied to tree stumps to prevent regrowth and foliar spraying would not be used to convert shrub areas to grass, but might be used sparingly during maintenance to prevent regrowth. DHS/FEMA expects that the applicants will comply with all federal, state, and local requirements to control the use of the herbicides proposed for use, including requirements to protect watersheds, streams, and groundwater.

Issue 3: Species (includes Sudden Oak Death Syndrome)

The following commenters (identified by PK) raised Issue 3: 7, 10, 26, 28, 35, 39, 40, 41, 45, 55, 66, 68, 135, 139, 150, 162, 163, 164, 167, 169, 186, 200, 205, 223, 227, 228, 230, 243, 250, 257, 266, 268, 269, 275, 277, 278, 280, 291, 295, 303, 304, 323, 337, 455, 557, 561, 595, 633, 655, 696, 721, 792, 1032, 1038, 1145, 1182, 1247, 1307, 1413, 1430, 1436, 1546, 1576, 1695, 1719, 1745, 1788, 1852, 1879, 2013, 2038, 2072, 2137, 2186, 2244, 2439, 2443, 2476, 2477, 2493, 2501, 2504, 2514, 2530, 2538, 2570, 2633, 2664, 2682, 2702, 2783, 2820, 2954, 3032, 3061, 3076, 3084, 3085, 3108, 3158, 3165, 3175, 3176, 3177, 3184, 3185, 3250, 3251, 3252, 3253,

3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3504, 3526, 3536, 5502, 5503, 5504, 5505, 5506, 5507, 5508, 5509, 5510, 5511, 5512, 5513, 5514, 5515, 5516, 5517, 5518, 5519, 5520, 5521, 5522, 5523, 5524, 5525, 5526, 5527, 5528, 5529, 5530, 5531, 5532, 5533, 5534, 5535, 5536, 5537, 5538, 5539, 5540, 5541, 5542, 5543, 5544, 5545, 5546, 5547, 5548, 5549, 5550, 5551, 5552, 5553, 5554, 5555, 5556, 5557, 5558, 5559, 5560, 5561, 5562, 5563, 5564, 5565, 5566, 5567, 5568, 5569, 5570, 5571, 5572, 5573, 5574, 5575, 5576, 5577, 5578, 5579, 5580, 5581, 5582, 5583, 5584, 5585, 5586, 5587, 5588, 5589, 5590, 5591, 5592, 5593, 5594, 5595, 5596, 5597, 5598, 5599, 5600, 5601, 5602, 5603, 5604, 5605, 5606, 5607, 5608, 5609, 5610, 5611, 5612, 5613, 5614, 5615, 5616, 5617, 5618, 5619, 5620, 5621, 5622, 5623, 5624, 5625, 5626, 5627, 5628, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5636, 5637, 5638, 5639, 5640, 5641, 5642, 5643, 5644, 5645, 5646, 5647, 5648, 5649, 5650, 5651, 5652, 5653, 5654, 5655, 5656, 5657, 5658, 5659, 5660, 5661, 5662, 5663, 5664, 5665, 5666, 5667, 5668, 5669, 5670, 5671, 5672, 5673, 5674, 5675, 5676, 5677, 5678, 5679, 5680, 5681, 5682, 5683, 5684, 5685, 5686, 5687, 5688, 5689, 5690, 5691, 5692, 5693, 5694, 5695, 5696, 5697, 5698, 5699, 5700, 5701, 5702, 5703, 5704, 5705, 5706, 5707, 5708, 5709, 5710, 5711, 5712, 5713, 5714, 5715, 5716, 5717, 5718, 5719, 5720, 5721, 5722, 5723, 5724, 5725, 5726, 5727, 5728, 5729, 5730, 5731, 5732, 5733, 5734, 5735, 5736, 5737, 5738, 5739, 5740, 5741, 5742, 5743, 5744, 5745, 5746, 5747, 5748, 5749, 5750, 5751, 5752, 5753, 5754, 5755, 5756, 5757, 5758, 5759, 5760, 5761, 5762, 5763, 5764, 5765, 5766, 5767, 5768, 5769, 5770, 5771, 5772, 5773, 5774, 5775, 5776, 5777, 5778, 5779, 5780, 5781, 5782, 5783, 5784, 5785, 5786, 5787, 5788, 5789, 5790, 5791, 5792, 5793, 5794, 5795, 5796, 5797, 5798, 5799, 5800, 5801, 5802, 5803, 5804, 5805, 5806, 5807, 5808, 5809, 5810, 5811, 5812, 5813, 5814, 5815, 5816, 5817, 5818, 5819, 5820, 5821, 5822, 5823, 5824, 5825, 5826, 5827, 5828, 5829, 5830, 5831, 5832, 5833, 5834, 5835, 5836, 5837, 5838, 5839, 5840, 5841, 5842, 5843, 5844, 5845, 5846, 5847, 5848, 5849, 5850, 5851, 5852, 5853, 5854, 5855, 5856, 5857, 5858, 5859, 5860, 5861, 5862, 5863, 5864, 5865, 5866, 5867, 5868, 5869, 5870, 5871, 5872, 5873, 5874, 5875, 5876, 5877, 5878, 5879, 5880, 5881, 5882, 5883, 5884, 5885, 5886, 5887, 5888, 5889, 5890, 5891, 5892, 5893, 5894, 5895, 5896, 5897, 5898, 5899, 5900, 5901, 5902, 5903, 5904, 5905, 5906, 5907, 5908, 5909, 5910, 5911, 5912, 5913, 5914, 5915, 5916, 5917, 5918, 5919, 5920, 5921, 5922, 5923, 5924, 5925, 5926, 5927, 5928, 5929, 5930, 5931, 5932, 5933, 5934, 5935, 5936, 5937, 5938, 5939, 5940, 5941, 5942, 5943, 5944, 5945, 5946, 5947, 5948, 5949, 5950, 5951, 5952, 5953, 5954, 5955, 5956, 5957, 5958, 5959, 5960, 5961, 5962, 5963, 5964, 5965, 5966, 5967, 5968, 5969, 5970, 5971, 5972, 5973, 5974, 5975, 5976, 5977, 5978, 5979, 5980, 5981, 5982, 5983, 5984, 5985, 5986, 5987, 5988, 5989, 5990, 5991, 5992, 5993, 5994, 5995, 5996, 5997, 5998, 5999, 6000, 6001, 6002, 6003, 6004, 6005, 6006, 6007, 6008, 6009, 6010, 6011, 6012, 6013, 6014, 6015, 6016, 6017, 6018, 6019, 6020, 6021, 6022, 6023, 6024, 6025, 6026, 6027, 6028, 6029, 6030, 6031, 6032, 6033, 6034, 6035, 6036, 6037, 6038, 6039, 6040, 6041, 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6051, 6052, 6053, 6054, 6055, 6056, 6057, 6058, 6059, 6060, 6061, 6062, 6063, 6064, 6065, 6066, 6067, 6068, 6069, 6070, 6071, 6072, 6073, 6074, 6075, 6076, 6077, 6078, 6079, 6080, 6081, 6082, 6083, 6084, 6085, 6086, 6087, 6088, 6089, 6090, 6091, 6092, 6093, 6094, 6095, 6096, 6097, 6098, 6099, 6100, 6101, 6102, 6103, 6104, 6105, 6106, 6107, 6108, 6109, 6110, 6111, 6112, 6113, 6114, 6115, 6116, 6117, 6118, 6119, 6120, 6121, 6122, 6123, 6124, 6125, 6126, 6127, 6128, 6129, 6130, 6131, 6132, 6133, 6134, 6135, 6136, 6137, 6138, 6139, 6140, 6141, 6142, 6143, 6144, 6145, 6146, 6147, 6148, 6149, 6150, 6151, 6152, 6153, 6154, 6155, 6156, 6157, 6158, 6159,

6160, 6161, 6162, 6163, 6164, 6165, 6166, 6167, 6168, 6169, 6170, 6171, 6172, 6173, 6174, 6175, 6176, 6177, 6178, 6179, 6180, 6181, 6182, 6183, 6184, 6185, 6186, 6187, 6188, 6189, 6190, 6191, 6192, 6193, 6194, 6195, 6196, 6197, 6198, 6199, 6200, 6201, 6202, 6203, 6204, 6205, 6206, 6207, 6208, 6209, 6210, 6211, 6212, 6213, 6214, 6215, 6216, 6217, 6218, 6219, 6220, 6221, 6222, 6223, 6224, 6225, 6226, 6227, 6228, 6229, 6230, 6231, 6232, 6233, 6234, 6235, 6236, 6237, 6238, 6239, 6240, 6241, 6242, 6243, 6244, 6245, 6246, 6247, 6248, 6249, 6250, 6251, 6252, 6253, 6254, 6255, 6256, 6257, 6258, 6259, 6260, 6261, 6262, 6263, 6264, 6265, 6266, 6267, 6268, 6269, 6270, 6271, 6272, 6273, 6274, 6275, 6276, 6277, 6278, 6279, 6280, 6281, 6282, 6283, 6284, 6285, 6286, 6287, 6288, 6289, 6290, 6291, 6292, 6293, 6294, 6295, 6296, 6297, 6298, 6299, 6300, 6301, 6302, 6303, 6304, 6305, 6306, 6307, 6308, 6309, 6310, 6311, 6312, 6313, 6314, 6315, 6316, 6317, 6318, 6319, 6320, 6321, 6322, 6323, 6324, 6325, 6326, 6327, 6328, 6329, 6330, 6331, 6332, 6333, 6334, 6335, 6336, 6337, 6338, 6339, 6340, 6341, 6342, 6343, 6344, 6345, 6346, 6347, 6348, 6349, 6350, 6351, 6352, 6353, 6354, 6355, 6356, 6357, 6358, 6359, 6360, 6361, 6362, 6363, 6364, 6365, 6366, 6367, 6368, 6369, 6370, 6371, 6372, 6373, 6374, 6375, 6376, 6377, 6378, 6379, 6380, 6381, 6382, 6383, 6384, 6385, 6386, 6387, 6388, 6389, 6390, 6391, 6392, 6393, 6394, 6395, 6396, 6397, 6398, 6399, 6400, 6401, 6402, 6403, 6404, 6405, 6406, 6407, 6408, 6409, 6410, 6411, 6412, 6413, 6414, 6415, 6416, 6417, 6418, 6419, 6420, 6421, 6422, 6423, 6424, 6425, 6426, 6427, 6428, 6429, 6430, 6431, 6432, 6433, 6434, 6435, 6436, 6437, 6438, 6439, 6440, 6441, 6442, 6443, 6444, 6445, 6446, 6447, 6448, 6449, 6450, 6451, 6452, 6453, 6454, 6455, 6456, 6457, 6458, 6459, 6460, 6461, 6462, 6463, 6464, 6465, 6466, 6467, 6468, 6469, 6470, 6471, 6472, 6473, 6474, 6475, 6476, 6477, 6478, 6479, 6480, 6481, 6482, 6483, 6484, 6485, 6486, 6487, 6488, 6489, 6490, 6491, 6492, 6493, 6494, 6495, 6496, 6497, 6498, 6499, 6500, 6501, 6502, 6503, 6504, 6505, 6506, 6507, 6508, 6509, 6510, 6511, 6512, 6513, 6514, 6515, 6516, 6517, 6518, 6519, 6520, 6521, 6522, 6523, 6524, 6525, 6526, 6527, 6528, 6529, 6530, 6531, 6532, 6533, 6534, 6535, 6536, 6537, 6538, 6539, 6540, 6541, 6542, 6543, 6544, 6545, 6546, 6547, 6548, 6549, 6550, 6551, 6552, 6553, 6554, 6555, 6556, 6557, 6558, 6559, 6560, 6561, 6562, 6563, 6564, 6565, 6566, 6567, 6568, 6569, 6570, 6571, 6572, 6573, 6574, 6575, 6576, 6577, 6578, 6579, 6580, 6581, 6582, 6583, 6584, 6585, 6586, 6587, 6588, 6589, 6590, 6591, 6592, 6593, 6594, 6595, 6596, 6597, 6598, 6599, 6600, 6601, 6602, 6603, 6604, 6605, 6606, 6607, 6608, 6609, 6610, 6611, 6612, 6613, 6614, 6615, 6616, 6617, 6618, 6619, 6620, 6621, 6622, 6623, 6624, 6625, 6626, 6627, 6628, 6629, 6630, 6631, 6632, 6633, 6634, 6635, 6636, 6637, 6638, 6639, 6640, 6641, 6642, 6643, 6644, 6645, 6646, 6647, 6648, 6649, 6650, 6651, 6652, 6653, 6654, 6655, 6656, 6657, 6658, 6659, 6660, 6661, 6662, 6663, 6664, 6665, 6666, 6667, 6668, 6669, 6670, 6671, 6672, 6673, 6674, 6675, 6676, 6677, 6678, 6679, 6680, 6681, 6682, 6683, 6684, 6685, 6686, 6687, 6688, 6689, 6690, 6691, 6692, 6693, 6694, 6695, 6696, 6697, 6698, 6699, 6700, 6701, 6702, 6703, 6704, 6705, 6706, 6707, 6708, 6709, 6710, 6711, 6712, 6713, 6714, 6715, 6716, 6717, 6718, 6719, 6720, 6721, 6722, 6723, 6724, 6725, 6726, 6727, 6728, 6729, 6730, 6731, 6732, 6733, 6734, 6735, 6736, 6737, 6738, 6739, 6740, 6741, 6742, 6743, 6744, 6745, 6746, 6747, 6748, 6749, 6750, 6751, 6752, 6753, 6754, 6755, 6756, 6757, 6758, 6759, 6760, 6761, 6762, 6763, 6764, 6765, 6766, 6767, 6768, 6769, 6770, 6771, 6772, 6773, 6774, 6775, 6776, 6777, 6778, 6779, 6780, 6781, 6782, 6783, 6784, 6785, 6786, 6787, 6788, 6789, 6790, 6791, 6792, 6793, 6794, 6795, 6796, 6797, 6798, 6799, 6800, 6801, 6802, 6803, 6804, 6805, 6806, 6807, 6808, 6809, 6810, 6811, 6812, 6813, 6814, 6815, 6816, 6817, 6818, 6819, 6820, 6821, 6822, 6823, 6824, 6825, 6826, 6827, 6828, 6829, 6830, 6831, 6832, 6833, 6834, 6835, 6836, 6837, 6838, 6839, 6840, 6841, 6842, 6843, 6844, 6845, 6846, 6847, 6848, 6849,

6850, 6851, 6852, 6853, 6854, 6855, 6856, 6857, 6858, 6859, 6860, 6861, 6862, 6863, 6864, 6865, 6866, 6867, 6868, 6869, 6870, 6871, 6872, 6873, 6874, 6875, 6876, 6877, 6878, 6879, 6880, 6881, 6882, 6883, 6884, 6885, 6886, 6887, 6888, 6889, 6890, 6891, 6892, 6893, 6894, 6895, 6896, 6897, 6898, 6899, 6900, 6901, 6902, 6903, 6904, 6905, 6906, 6907, 6908, 6909, 6910, 6911, 6912, 6913, 6914, 6915, 6916, 6917, 6918, 6919, 6920, 6921, 6922, 6923, 6924, 6925, 6926, 6927, 6928, 6929, 6930, 6931, 6932, 6933, 6934, 6935, 6936, 6937, 6938, 6939, 6940, 6941, 6942, 6943, 6944, 6945, 6946, 6947, 6948, 6949, 6950, 6951, 6952, 6953, 6954, 6955, 6956, 6957, 6958, 6959, 6960, 6961, 6962, 6963, 6964, 6965, 6966, 6967, 6968, 6969, 6970, 6971, 6972, 6973, 6974, 6975, 6976, 6977, 6978, 6979, 6980, 6981, 6982, 6983, 6984, 6985, 6986, 6987, 6988, 6989, 6990, 6991, 6992, 6993, 6994, 6995, 6996, 6997, 6998, 6999, 7000, 7001, 7002, 7003, 7004, 7005, 7006, 7007, 7008, 7009, 7010, 7011, 7012, 7013, 7014, 7015, 7016, 7017, 7018, 7019, 7020, 7021, 7022, 7023, 7024, 7025, 7026, 7027, 7028, 7029, 7030, 7031, 7032, 7033, 7034, 7035, 7036, 7037, 7038, 7039, 7040, 7041, 7042, 7043, 7044, 7045, 7046, 7047, 7048, 7049, 7050, 7051, 7052, 7053, 7054, 7055, 7056, 7057, 7058, 7059, 7060, 7061, 7062, 7063, 7064, 7065, 7066, 7067, 7068, 7069, 7070, 7071, 7072, 7073, 7074, 7075, 7076, 7077, 7078, 7079, 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089, 7090, 7091, 7092, 7093, 7094, 7095, 7096, 7097, 7098, 7099, 7100, 7101, 7102, 7103, 7104, 7105, 7106, 7107, 7108, 7109, 7110, 7111, 7112, 7113, 7114, 7115, 7116, 7117, 7118, 7119, 7120, 7121, 7122, 7123, 7124, 7125, 7126, 7127, 7128, 7129, 7130, 7131, 7132, 7133, 7134, 7135, 7136, 7137, 7138, 7139, 7140, 7141, 7142, 7143, 7144, 7145, 7146, 7147, 7148, 7149, 7150, 7151, 7152, 7153, 7154, 7155, 7156, 7157, 7158, 7159, 7160, 7161, 7162, 7163, 7164, 7165, 7166, 7167, 7168, 7169, 7170, 7171, 7172, 7173, 7174, 7175, 7176, 7177, 7178, 7179, 7180, 7181, 7182, 7183, 7184, 7185, 7186, 7187, 7188, 7189, 7190, 7191, 7192, 7193, 7194, 7195, 7196, 7197, 7198, 7199, 7200, 7201, 7202, 7203, 7204, 7205, 7206, 7207, 7208, 7209, 7210, 7211, 7212, 7213, 7214, 7215, 7216, 7217, 7218, 7219, 7220, 7221, 7222, 7223, 7224, 7225, 7226, 7227, 7228, 7229, 7230, 7231, 7232, 7233, 7234, 7235, 7236, 7237, 7238, 7239, 7240, 7241, 7242, 7243, 7244, 7245, 7246, 7247, 7248, 7249, 7250, 7251, 7252, 7253, 7254, 7255, 7256, 7257, 7258, 7259, 7260, 7261, 7262, 7263, 7264, 7265, 7266, 7267, 7268, 7269, 7270, 7271, 7272, 7273, 7274, 7275, 7276, 7277, 7278, 7279, 7280, 7281, 7282, 7283, 7284, 7285, 7286, 7287, 7288, 7289, 7290, 7291, 7292, 7293, 7294, 7295, 7296, 7297, 7298, 7299, 7300, 7301, 7302, 7303, 7304, 7305, 7306, 7307, 7308, 7309, 7310, 7311, 7312, 7313, 7314, 7315, 7316, 7317, 7318, 7319, 7320, 7321, 7322, 7323, 7324, 7325, 7326, 7327, 7328, 7329, 7330, 7331, 7332, 7333, 7334, 7335, 7336, 7337, 7338, 7339, 7340, 7341, 7342, 7343, 7344, 7345, 7346, 7347, 7348, 7349, 7350, 7351, 7352, 7353, 7354, 7355, 7356, 7357, 7358, 7359, 7360, 7361, 7362, 7363, 7364, 7365, 7366, 7367, 7368, 7369, 7370, 7371, 7372, 7373, 7374, 7375, 7376, 7377, 7378, 7379, 7380, 7381, 7382, 7383, 7384, 7385, 7386, 7387, 7388, 7389, 7390, 7391, 7392, 7393, 7394, 7395, 7396, 7397, 7398, 7399, 7400, 7401, 7402, 7403, 7404, 7405, 7406, 7407, 7408, 7409, 7410, 7411, 7412, 7413, 7414, 7415, 7416, 7417, 7418, 7419, 7420, 7421, 7422, 7423, 7424, 7425, 7426, 7427, 7428, 7429, 7430, 7431, 7432, 7433, 7434, 7435, 7436, 7437, 7438, 7439, 7440, 7441, 7442, 7443, 7444, 7445, 7446, 7447, 7448, 7449, 7450, 7451, 7452, 7453, 7454, 7455, 7456, 7457, 7458, 7459, 7460, 7461, 7462, 7463, 7464, 7465, 7466, 7467, 7468, 7469, 7470, 7471, 7472, 7473, 7474, 7475, 7476, 7477, 7478, 7479, 7480, 7481, 7482, 7483, 7484, 7485, 7486, 7487, 7488, 7489, 7490, 7491, 7492, 7493, 7494, 7495, 7496, 7497, 7498, 7499, 7500, 7501, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7509, 7510, 7511, 7512, 7513, 7514, 7515, 7516, 7517, 7518, 7519, 7520, 7521, 7522, 7523, 7524, 7525, 7526, 7527, 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539,

7540, 7541, 7542, 7543, 7544, 7545, 7546, 7547, 7548, 7549, 7550, 7551, 7552, 7553, 7554, 7555, 7556, 7557, 7558, 7559, 7560, 7561, 7562, 7563, 7564, 7565, 7566, 7567, 7568, 7569, 7570, 7571, 7572, 7573, 7574, 7575, 7576, 7577, 7578, 7579, 7580, 7581, 7582, 7583, 7584, 7585, 7586, 7587, 7588, 7589, 7590, 7591, 7592, 7593, 7594, 7595, 7596, 7597, 7598, 7599, 7600, 7601, 7602, 7603, 7604, 7605, 7606, 7607, 7608, 7609, 7610, 7611, 7612, 7613, 7614, 7615, 7616, 7617, 7618, 7619, 7620, 7621, 7622, 7623, 7624, 7625, 7626, 7627, 7628, 7629, 7630, 7631, 7632, 7633, 7634, 7635, 7636, 7637, 7638, 7639, 7640, 7641, 7642, 7643, 7644, 7645, 7646, 7647, 7648, 7649, 7650, 7651, 7652, 7653, 7654, 7655, 7656, 7657, 7658, 7659, 7660, 7661, 7662, 7663, 7664, 7665, 7666, 7667, 7668, 7669, 7670, 7671, 7672, 7673, 7674, 7675, 7676, 7677, 7678, 7679, 7680, 7681, 7682, 7683, 7684, 7685, 7686, 7687, 7688, 7689, 7690, 7691, 7692, 7693, 7694, 7695, 7696, 7697, 7698, 7699, 7700, 7701, 7702, 7703, 7704, 7705, 7706, 7707, 7708, 7709, 7710, 7711, 7712, 7713, 7714, 7715, 7716, 7717, 7718, 7719, 7720, 7721, 7722, 7723, 7724, 7725, 7726, 7727, 7728, 7729, 7730, 7731, 7732, 7733, 7734, 7735, 7736, 7737, 7738, 7739, 7740, 7741, 7742, 7743, 7744, 7745, 7746, 7747, 7748, 7749, 7750, 7751, 7752, 7753, 7754, 7755, 7756, 7757, 7758, 7759, 7760, 7761, 7762, 7763, 7764, 7765, 7766, 7767, 7768, 7769, 7770, 7771, 7772, 7773, 7774, 7775, 7776, 7777, 7778, 7779, 7780, 7781, 7782, 7783, 7784, 7785, 7786, 7787, 7788, 7789, 7790, 7791, 7792, 7793, 7794, 7795, 7796, 7797, 7798, 7799, 7800, 7801, 7802, 7803, 7804, 7805, 7806, 7807, 7808, 7809, 7810, 7811, 7812, 7813, 7814, 7815, 7816, 7817, 7818, 7819, 7820, 7821, 7822, 7823, 7824, 7825, 7826, 7827, 7828, 7829, 7830, 7831, 7832, 7833, 7834, 7835, 7836, 7837, 7838, 7839, 7840, 7841, 7842, 7843, 7844, 7845, 7846, 7847, 7848, 7849, 7850, 7851, 7852, 7853, 7854, 7855, 7856, 7857, 7858, 7859, 7860, 7861, 7862, 7863, 7864, 7865, 7866, 7867, 7868, 7869, 7870, 7871, 7872, 7873, 7874, 7875, 7876, 7877, 7878, 7879, 7880, 7881, 7882, 7883, 7884, 7885, 7886, 7887, 7888, 7889, 7890, 7891, 7892, 7893, 7894, 7895, 7896, 7897, 7898, 7899, 7900, 7901, 7902, 7903, 7904, 7905, 7906, 7907, 7908, 7909, 7910, 7911, 7912, 7913, 7914, 7915, 7916, 7917, 7918, 7919, 7920, 7921, 7922, 7923, 7924, 7925, 7926, 7927, 7928, 7929, 7930, 7931, 7932, 7933, 7934, 7935, 7936, 7937, 7938, 7939, 7940, 7941, 7942, 7943, 7944, 7945, 7946, 7947, 7948, 7949, 7950, 7951, 7952, 7953, 7954, 7955, 7956, 7957, 7958, 7959, 7960, 7961, 7962, 7963, 7964, 7965, 7966, 7967, 7968, 7969, 7970, 7971, 7972, 7973, 7974, 7975, 7976, 7977, 7978, 7979, 7980, 7981, 7982, 7983, 7984, 7985, 7986, 7987, 7988, 7989, 7990, 7991, 7992, 7993, 7994, 7995, 7996, 7997, 7998, 7999, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8009, 8010, 8011, 8012, 8013, 8014, 8015, 8016, 8017, 8018, 8019, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8029, 8030, 8031, 8032, 8033, 8034, 8035, 8036, 8037, 8038, 8039, 8040, 8041, 8042, 8043, 8044, 8045, 8046, 8047, 8048, 8049, 8050, 8051, 8052, 8053, 8054, 8055, 8056, 8057, 8058, 8059, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8068, 8069, 8070, 8071, 8072, 8073, 8074, 8075, 8076, 8077, 8078, 8079, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088, 8089, 8090, 8091, 8092, 8093, 8094, 8095, 8096, 8097, 8098, 8099, 8100, 8101, 8102, 8103, 8104, 8105, 8106, 8107, 8108, 8109, 8110, 8111, 8112, 8113, 8114, 8115, 8116, 8117, 8118, 8119, 8120, 8121, 8122, 8123, 8124, 8125, 8126, 8127, 8128, 8129, 8130, 8131, 8132, 8133, 8134, 8135, 8136, 8137, 8138, 8139, 8140, 8141, 8142, 8143, 8144, 8145, 8146, 8147, 8148, 8149, 8150, 8151, 8152, 8153, 8154, 8155, 8156, 8157, 8158, 8159, 8160, 8161, 8162, 8163, 8164, 8165, 8166, 8167, 8168, 8169, 8170, 8171, 8172, 8173, 8174, 8175, 8176, 8177, 8178, 8179, 8180, 8181, 8182, 8183, 8184, 8185, 8186, 8187, 8188, 8189, 8190, 8191, 8192, 8193, 8194, 8195, 8196, 8197, 8198, 8199, 8200, 8201, 8202, 8203, 8204, 8205, 8206, 8207, 8208, 8209, 8210, 8211, 8212, 8213, 8214, 8215, 8216, 8217, 8218, 8219, 8220, 8221, 8222, 8223, 8224, 8225, 8226, 8227, 8228, 8229,

8230, 8231, 8232, 8233, 8234, 8235, 8236, 8237, 8238, 8239, 8240, 8241, 8242, 8243, 8244, 8245, 8246, 8247, 8248, 8249, 8250, 8251, 8252, 8253, 8254, 8255, 8256, 8257, 8258, 8259, 8260, 8261, 8262, 8263, 8264, 8265, 8266, 8267, 8268, 8269, 8270, 8271, 8272, 8273, 8274, 8275, 8276, 8277, 8278, 8279, 8280, 8281, 8282, 8283, 8284, 8285, 8286, 8287, 8288, 8289, 8290, 8291, 8292, 8293, 8294, 8295, 8296, 8297, 8298, 8299, 8300, 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309, 8310, 8311, 8312, 8313, 8314, 8315, 8316, 8317, 8318, 8319, 8320, 8321, 8322, 8323, 8324, 8325, 8326, 8327, 8328, 8329, 8330, 8331, 8332, 8333, 8334, 8335, 8336, 8337, 8338, 8339, 8340, 8341, 8342, 8343, 8344, 8345, 8346, 8347, 8348, 8349, 8350, 8351, 8352, 8353, 8354, 8355, 8356, 8357, 8358, 8359, 8360, 8361, 8362, 8363, 8364, 8365, 8366, 8367, 8368, 8369, 8370, 8371, 8372, 8373, 8374, 8375, 8376, 8377, 8378, 8379, 8380, 8381, 8382, 8383, 8384, 8385, 8386, 8387, 8388, 8389, 8390, 8391, 8392, 8393, 8394, 8395, 8396, 8397, 8398, 8399, 8400, 8401, 8402, 8403, 8404, 8405, 8406, 8407, 8408, 8409, 8410, 8411, 8412, 8413, 8414, 8415, 8416, 8417, 8418, 8419, 8420, 8421, 8422, 8423, 8424, 8425, 8426, 8427, 8428, 8429, 8430, 8431, 8432, 8433, 8434, 8435, 8436, 8437, 8438, 8439, 8440, 8441, 8442, 8443, 8444, 8445, 8446, 8447, 8448, 8449, 8450, 8451, 8452, 8453, 8454, 8455, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463, 8464, 8465, 8466, 8467, 8468, 8469, 8470, 8471, 8472, 8473, 8474, 8475, 8476, 8477, 8478, 8479, 8480, 8481, 8482, 8483, 8484, 8485, 8486, 8487, 8488, 8489, 8490, 8491, 8492, 8493, 8494, 8495, 8496, 8497, 8498, 8499, 8500, 8501, 8502, 8503, 8504, 8505, 8506, 8507, 8508, 8509, 8510, 8511, 8512, 8513, 8514, 8515, 8516, 8517, 8518, 8519, 8520, 8521, 8522, 8523, 8524, 8525, 8526, 8527, 8528, 8529, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8537, 8538, 8539, 8540, 8541, 8542, 8543, 8544, 8545, 8546, 8547, 8548, 8549, 8550, 8551, 8552, 8553, 8554, 8555, 8556, 8557, 8558, 8559, 8560, 8561, 8562, 8563, 8564, 8565, 8566, 8567, 8568, 8569, 8570, 8571, 8572, 8573, 8574, 8575, 8576, 8577, 8578, 8579, 8580, 8581, 8582, 8583, 8584, 8585, 8586, 8587, 8588, 8589, 8590, 8591, 8592, 8593, 8594, 8595, 8596, 8597, 8598, 8599, 8600, 8601, 8602, 8603, 8604, 8605, 8606, 8607, 8608, 8609, 8610, 8611, 8612, 8613, 8614, 8615, 8616, 8617, 8618, 8619, 8620, 8621, 8622, 8623, 8624, 8625, 8626, 8627, 8628, 8629, 8630, 8631, 8632, 8633, 8634, 8635, 8636, 8637, 8638, 8639, 8640, 8641, 8642, 8643, 8644, 8645, 8646, 8647, 8648, 8649, 8650, 8651, 8652, 8653, 8654, 8655, 8656, 8657, 8658, 8659, 8660, 8661, 8662, 8663, 8664, 8665, 8666, 8667, 8668, 8669, 8670, 8671, 8672, 8673, 8674, 8675, 8676, 8677, 8678, 8679, 8680, 8681, 8682, 8683, 8684, 8685, 8686, 8687, 8688, 8689, 8690, 8691, 8692, 8693, 8694, 8695, 8696, 8697, 8698, 8699, 8700, 8701, 8702, 8703, 8704, 8705, 8706, 8707, 8708, 8709, 8710, 8711, 8712, 8713, 8714, 8715, 8716, 8717, 8718, 8719, 8720, 8721, 8722, 8723, 8724, 8725, 8726, 8727, 8728, 8729, 8730, 8731, 8732, 8733, 8734, 8735, 8736, 8737, 8738, 8739, 8740, 8741, 8742, 8743, 8744, 8745, 8746, 8747, 8748, 8749, 8750, 8751, 8752, 8753, 8754, 8755, 8756, 8757, 8758, 8759, 8760, 8761, 8762, 8763, 8764, 8765, 8766, 8767, 8768, 8769, 8770, 8771, 8772, 8773, 8774, 8775, 8776, 8777, 8778, 8779, 8780, 8781, 8782, 8783, 8784, 8785, 8786, 8787, 8788, 8789, 8790, 8791, 8792, 8793, 8794, 8795, 8796, 8797, 8798, 8799, 8800, 8801, 8802, 8803, 8804, 8805, 8806, 8807, 8808, 8809, 8810, 8811, 8812, 8813, 8814, 8815, 8816, 8817, 8818, 8819, 8820, 8821, 8822, 8823, 8824, 8825, 8826, 8827, 8828, 8829, 8830, 8831, 8832, 8833, 8834, 8835, 8836, 8837, 8838, 8839, 8840, 8841, 8842, 8843, 8844, 8845, 8846, 8847, 8848, 8849, 8850, 8851, 8852, 8853, 8854, 8855, 8856, 8857, 8858, 8859, 8860, 8861, 8862, 8863, 8864, 8865, 8866, 8867, 8868, 8869, 8870, 8871, 8872, 8873, 8874, 8875, 8876, 8877, 8878, 8879, 8880, 8881, 8882, 8883, 8884, 8885, 8886, 8887, 8888, 8889, 8890, 8891, 8892, 8893, 8894, 8895, 8896, 8897, 8898, 8899, 8900, 8901, 8902, 8903, 8904, 8905, 8906, 8907, 8908, 8909, 8910, 8911, 8912, 8913, 8914, 8915, 8916, 8917, 8918, 8919,

8920, 8921, 8922, 8923, 8924, 8925, 8926, 8927, 8928, 8929, 8930, 8931, 8932, 8933, 8934, 8935, 8936, 8937, 8938, 8939, 8940, 8941, 8942, 8943, 8944, 8945, 8946, 8947, 8948, 8949, 8950, 8951, 8952, 8953, 8954, 8955, 8956, 8957, 8958, 8959, 8960, 8961, 8962, 8963, 8964, 8965, 8966, 8967, 8968, 8969, 8970, 8971, 8972, 8973, 8974, 8975, 8976, 8977, 8978, 8979, 8980, 8981, 8982, 8983, 8984, 8985, 8986, 8987, 8988, 8989, 8990, 8991, 8992, 8993, 8994, 8995, 8996, 8997, 8998, 8999, 9000, 9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9011, 9012, 9013, 9014, 9015, 9016, 9017, 9018, 9019, 9020, 9021, 9022, 9023, 9024, 9025, 9026, 9027, 9028, 9029, 9030, 9031, 9032, 9033, 9034, 9035, 9036, 9037, 9038, 9039, 9040, 9041, 9042, 9043, 9044, 9045, 9046, 9047, 9048, 9049, 9050, 9051, 9052, 9053, 9054, 9055, 9056, 9057, 9058, 9059, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 9067, 9068, 9069, 9070, 9071, 9072, 9073, 9074, 9075, 9076, 9077, 9078, 9079, 9080, 9081, 9082, 9083, 9084, 9085, 9086, 9087, 9088, 9089, 9090, 9091, 9092, 9093, 9094, 9095, 9096, 9097, 9098, 9099, 9100, 9101, 9102, 9103, 9104, 9105, 9106, 9107, 9108, 9109, 9110, 9111, 9112, 9113, 9114, 9115, 9116, 9117, 9118, 9119, 9120, 9121, 9122, 9123, 9124, 9125, 9126, 9127, 9128, 9129, 9130, 9131, 9132, 9133, 9134, 9135, 9136, 9137, 9138, 9139, 9140, 9141, 9142, 9143, 9144, 9145, 9146, 9147, 9148, 9149, 9150, 9151, 9152, 9153, 9154, 9155, 9156, 9157, 9158, 9159, 9160, 9161, 9162, 9163, 9164, 9165, 9166, 9167, 9168, 9169, 9170, 9171, 9172, 9173, 9174, 9175, 9176, 9177, 9178, 9179, 9180, 9181, 9182, 9183, 9184, 9185, 9186, 9187, 9188, 9189, 9190, 9191, 9192, 9193, 9194, 9195, 9196, 9197, 9198, 9199, 9200, 9201, 9202, 9203, 9204, 9205, 9206, 9207, 9208, 9209, 9210, 9211, 9212, 9213, 9214, 9215, 9216, 9217, 9218, 9219, 9220, 9221, 9222, 9223, 9224, 9225, 9226, 9227, 9228, 9229, 9230, 9231, 9232, 9233, 9234, 9235, 9236, 9237, 9238, 9239, 9240, 9241, 9242, 9243, 9244, 9245, 9246, 9247, 9248, 9249, 9250, 9251, 9252, 9253, 9254, 9255, 9256, 9257, 9258, 9259, 9260, 9261, 9262, 9263, 9264, 9265, 9266, 9267, 9268, 9269, 9270, 9271, 9272, 9273, 9274, 9275, 9276, 9277, 9278, 9279, 9280, 9281, 9282, 9283, 9284, 9285, 9286, 9287, 9288, 9289, 9290, 9291, 9292, 9293, 9294, 9295, 9296, 9297, 9298, 9299, 9300, 9301, 9302, 9303, 9304, 9305, 9306, 9307, 9308, 9309, 9310, 9311, 9312, 9313, 9314, 9315, 9316, 9317, 9318, 9319, 9320, 9321, 9322, 9323, 9324, 9325, 9326, 9327, 9328, 9329, 9330, 9331, 9332, 9333, 9334, 9335, 9336, 9337, 9338, 9339, 9340, 9341, 9342, 9343, 9344, 9345, 9346, 9347, 9348, 9349, 9350, 9351, 9352, 9353, 9354, 9355, 9356, 9357, 9358, 9359, 9360, 9361, 9362, 9363, 9364, 9365, 9366, 9367, 9368, 9369, 9370, 9371, 9372, 9373, 9374, 9375, 9376, 9377, 9378, 9379, 9380, 9381, 9382, 9383, 9384, 9385, 9386, 9387, 9388, 9389, 9390, 9391, 9392, 9393, 9394, 9395, 9396, 9397, 9398, 9399, 9400, 9401, 9402, 9403, 9404, 9405, 9406, 9407, 9408, 9409, 9410, 9411, 9412, 9413, 9414, 9415, 9416, 9417, 9418, 9419, 9420, 9421, 9422, 9423, 9424, 9425, 9426, 9427, 9428, 9429, 9430, 9431, 9432, 9433, 9434, 9435, 9436, 9437, 9438, 9439, 9440, 9441, 9442, 9443, 9444, 9445, 9446, 9447, 9448, 9449, 9450, 9451, 9452, 9453, 9454, 9455, 9456, 9457, 9458, 9459, 9460, 9461, 9462, 9463, 9464, 9465, 9466, 9467, 9468, 9469, 9470, 9471, 9472, 9473, 9474, 9475, 9476, 9477, 9478, 9479, 9480, 9481, 9482, 9483, 9484, 9485, 9486, 9487, 9488, 9489, 9490, 9491, 9492, 9493, 9494, 9495, 9496, 9497, 9498, 9499, 9500, 9501, 9502, 9503, 9504, 9505, 9506, 9507, 9508, 9509, 9510, 9511, 9512, 9513, 9514, 9515, 9516, 9517, 9518, 9519, 9520, 9521, 9522, 9523, 9524, 9525, 9526, 9527, 9528, 9529, 9530, 9531, 9532, 9533, 9534, 9535, 9536, 9537, 9538, 9539, 9540, 9541, 9542, 9543, 9544, 9545, 9546, 9547, 9548, 9549, 9550, 9551, 9552, 9553, 9554, 9555, 9556, 9557, 9558, 9559, 9560, 9561, 9562, 9563, 9564, 9565, 9566, 9567, 9568, 9569, 9570, 9571, 9572, 9573, 9574, 9575, 9576, 9577, 9578, 9579, 9580, 9581, 9582, 9583, 9584, 9585, 9586, 9587, 9588, 9589, 9590, 9591, 9592, 9593, 9594, 9595, 9596, 9597, 9598, 9599, 9600, 9601, 9602, 9603, 9604, 9605, 9606, 9607, 9608, 9609,

9610, 9611, 9612, 9613, 9614, 9615, 9616, 9617, 9618, 9619, 9620, 9621, 9622, 9623, 9624, 9625, 9626, 9627, 9628, 9629, 9630, 9631, 9632, 9633, 9634, 9635, 9636, 9637, 9638, 9639, 9640, 9641, 9642, 9643, 9644, 9645, 9646, 9647, 9648, 9649, 9650, 9651, 9652, 9653, 9654, 9655, 9656, 9657, 9658, 9659, 9660, 9661, 9662, 9663, 9664, 9665, 9666, 9667, 9668, 9669, 9670, 9671, 9672, 9673, 9674, 9675, 9676, 9677, 9678, 9679, 9680, 9681, 9682, 9683, 9684, 9685, 9686, 9687, 9688, 9689, 9690, 9691, 9692, 9693, 9694, 9695, 9696, 9697, 9698, 9699, 9700, 9701, 9702, 9703, 9704, 9705, 9706, 9707, 9708, 9709, 9710, 9711, 9712, 9713, 9714, 9715, 9716, 9717, 9718, 9719, 9720, 9721, 9722, 9723, 9724, 9725, 9726, 9727, 9728, 9729, 9730, 9731, 9732, 9733, 9734, 9735, 9736, 9737, 9738, 9739, 9740, 9741, 9742, 9743, 9744, 9745, 9746, 9747, 9748, 9749, 9750, 9751, 9752, 9753, 9754, 9755, 9756, 9757, 9758, 9759, 9760, 9761, 9762, 9763, 9764, 9765, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9780, 9781, 9782, 9783, 9784, 9785, 9786, 9787, 9788, 9789, 9790, 9791, 9792, 9793, 9794, 9795, 9796, 9797, 9798, 9799, 9800, 9801, 9802, 9803, 9804, 9805, 9806, 9807, 9808, 9809, 9810, 9811, 9812, 9813, 9814, 9815, 9816, 9817, 9818, 9819, 9820, 9821, 9822, 9823, 9824, 9825, 9826, 9827, 9828, 9829, 9830, 9831, 9832, 9833, 9834, 9835, 9836, 9837, 9838, 9839, 9840, 9841, 9842, 9843, 9844, 9845, 9846, 9847, 9848, 9849, 9850, 9851, 9852, 9853, 9854, 9855, 9856, 9857, 9858, 9859, 9860, 9861, 9862, 9863, 9864, 9865, 9866, 9867, 9868, 9869, 9870, 9871, 9872, 9873, 9874, 9875, 9876, 9877, 9878, 9879, 9880, 9881, 9882, 9883, 9884, 9885, 9886, 9887, 9888, 9889, 9890, 9891, 9892, 9893, 9894, 9895, 9896, 9897, 9898, 9899, 9900, 9901, 9902, 9903, 9904, 9905, 9906, 9907, 9908, 9909, 9910, 9911, 9912, 9913, 9914, 9915, 9916, 9917, 9918, 9919, 9920, 9921, 9922, 9923, 9924, 9925, 9926, 9927, 9928, 9929, 9930, 9931, 9932, 9933, 9934, 9935, 9936, 9937, 9938, 9939, 9940, 9941, 9942, 9943, 9944, 9945, 9946, 9947, 9948, 9949, 9950, 9951, 9952, 9953, 9954, 9955, 9956, 9957, 9958, 9959, 9960, 9961, 9962, 9963, 9964, 9965, 9966, 9967, 9968, 9969, 9970, 9971, 9972, 9973, 9974, 9975, 9976, 9977, 9978, 9979, 9980, 9981, 9982, 9983, 9984, 9985, 9986, 9987, 9988, 9989, 9990, 9991, 9992, 9993, 9994, 9995, 9996, 9997, 9998, 9999, 10000, 10001, 10002, 10003, 10004, 10005, 10006, 10007, 10008, 10009, 10010, 10011, 10012, 10013, 10014, 10015, 10016, 10017, 10018, 10019, 10020, 10021, 10022, 10023, 10024, 10025, 10026, 10027, 10028, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10036, 10037, 10038, 10039, 10040, 10041, 10042, 10043, 10044, 10045, 10046, 10047, 10048, 10049, 10050, 10051, 10052, 10053, 10054, 10055, 10056, 10057, 10058, 10059, 10060, 10061, 10062, 10063, 10064, 10065, 10066, 10067, 10068, 10069, 10070, 10071, 10072, 10073, 10074, 10075, 10076, 10077, 10078, 10079, 10080, 10081, 10082, 10083, 10084, 10085, 10086, 10087, 10088, 10089, 10090, 10091, 10092, 10093, 10094, 10095, 10096, 10097, 10098, 10099, 10100, 10101, 10102, 10103, 10104, 10105, 10106, 10107, 10108, 10109, 10110, 10111, 10112, 10113, 10114, 10115, 10116, 10117, 10118, 10119, 10120, 10121, 10122, 10123, 10124, 10125, 10126, 10127, 10128, 10129, 10130, 10131, 10132, 10133, 10134, 10135, 10136, 10137, 10138, 10139, 10140, 10141, 10142, 10143, 10144, 10145, 10146, 10147, 10148, 10149, 10150, 10151, 10152, 10153, 10154, 10155, 10156, 10157, 10158, 10159, 10160, 10161, 10162, 10163, 10164, 10165, 10166, 10167, 10168, 10169, 10170, 10171, 10172, 10173, 10174, 10175, 10176, 10177, 10178, 10179, 10180, 10181, 10182, 10183, 10184, 10185, 10186, 10187, 10188, 10189, 10190, 10191, 10192, 10193, 10194, 10195, 10196, 10197, 10198, 10199, 10200, 10201, 10202, 10203, 10204, 10205, 10206, 10207, 10208, 10209, 10210, 10211, 10212, 10213, 10214, 10215, 10216, 10217, 10218, 10219, 10220, 10221, 10222, 10223, 10224, 10225, 10226, 10227, 10228, 10229, 10230, 10231, 10232, 10233, 10234, 10235, 10236, 10237, 10238, 10239, 10240, 10241, 10242, 10243, 10244, 10245, 10246, 10247, 10248, 10249, 10250, 10251, 10252, 10253, 10254, 10255, 10256, 10257, 10258, 10259,

10260, 10261, 10262, 10263, 10264, 10265, 10266, 10267, 10268, 10269, 10270, 10271, 10272, 10273, 10274, 10275, 10276, 10277, 10278, 10279, 10280, 10281, 10282, 10283, 10284, 10285, 10286, 10287, 10288, 10289, 10290, 10291, 10292, 10293, 10294, 10295, 10296, 10297, 10298, 10299, 10300, 10301, 10302, 10303, 10304, 10305, 10306, 10307, 10308, 10309, 10310, 10311, 10312, 10313, 10314, 10315, 10316, 10317, 10318, 10319, 10320, 10321, 10322, 10323, 10324, 10325, 10326, 10327, 10328, 10329, 10330, 10331, 10332, 10333, 10334, 10335, 10336, 10337, 10338, 10339, 10340, 10341, 10342, 10343, 10344, 10345, 10346, 10347, 10348, 10349, 10350, 10351, 10352, 10353, 10354, 10355, 10356, 10357, 10358, 10359, 10360, 10361, 10362, 10363, 10364, 10365, 10366, 10367, 10368, 10369, 10370, 10371, 10372, 10373, 10374, 10375, 10376, 10377, 10378, 10379, 10380, 10381, 10382, 10383, 10384, 10385, 10386, 10387, 10388, 10389, 10390, 10391, 10392, 10393, 10394, 10395, 10396, 10397, 10398, 10399, 10400, 10401, 10402, 10403, 10404, 10405, 10406, 10407, 10408, 10409, 10410, 10411, 10412, 10413, 10414, 10415, 10416, 10417, 10418, 10419, 10420, 10421, 10422, 10423, 10424, 10425, 10426, 10427, 10428, 10429, 10430, 10431, 10432, 10433, 10434, 10435, 10436, 10437, 10438, 10439, 10440, 10441, 10442, 10443, 10444, 10445, 10446, 10447, 10448, 10449, 10450, 10451, 10452, 10453, 10454, 10455, 10456, 10457, 10458, 10459, 10460, 10461, 10462, 10463, 10464, 10465, 10466, 10467, 10468, 10469, 10470, 10471, 10472, 10473, 10474, 10475, 10476, 10477, 10478, 10479, 10480, 10481, 10482, 10483, 10484, 10485, 10486, 10487, 10488, 10489, 10490, 10491, 10492, 10493, 10494, 10495, 10496, 10497, 10498, 10499, 10500, 10501, 10502, 10503, 10504, 10505, 10506, 10507, 10508, 10509, 10510, 10511, 10512, 10513, 10514, 10515, 10516, 10517, 10518, 10519, 10520, 10521, 10522, 10523, 10524, 10525, 10526, 10527, 10528, 10529, 10530, 10531, 10532, 10533, 10534, 10535, 10536, 10537, 10538, 10539, 10540, 10541, 10542, 10543, 10544, 10545, 10546, 10547, 10548, 10549, 10550, 10551, 10552, 10553, 10554, 10555, 10556, 10557, 10558, 10559, 10560, 10561, 10562, 10563, 10564, 10565, 10566, 10567, 10568, 10569, 10570, 10571, 10572, 10573, 10574, 10575, 10576, 10577, 10578, 10579, 10580, 10581, 10582, 10583, 10584, 10585, 10586, 10587, 10588, 10589, 10590, 10591, 10592, 10593, 10594, 10595, 10596, 10597, 10598, 10599, 10600, 10997.

- New Section 5.1.6.4 was added to analyze the potential for the spread of sudden oak disease in the proposed and connected action areas.

Issue 4: Herbicide Application and Species

The following commenters (identified by PK) raised Issue 4: 1, 3, 5, 10, 17, 22, 23, 26, 28, 31, 32, 34, 35, 36, 40, 44, 45, 47, 53, 55, 62, 66, 68, 69, 71, 82, 85, 93, 97, 101, 102, 105, 108, 114, 117, 119, 121, 123, 125, 127, 128, 135, 138, 139, 141, 145, 146, 149, 150, 151, 154, 156, 159, 160, 162, 163, 164, 165, 166, 167, 169, 172, 174, 175, 176, 177, 178, 186, 187, 190, 195, 196, 199, 200, 201, 205, 207, 208, 209, 210, 211, 213, 217, 218, 219, 220, 221, 223, 225, 227, 228, 231, 232, 234, 237, 239, 243, 245, 250, 252, 253, 257, 259, 261, 263, 264, 266, 268, 269, 270, 271, 273, 275, 278, 280, 281, 284, 288, 291, 293, 296, 298, 303, 304, 306, 308, 312, 314, 315, 319, 320, 329, 332, 335, 339, 341, 344, 351, 426, 443, 472, 481, 482, 495, 502, 513, 518, 541, 550, 573, 579, 584, 590, 591, 593, 594, 618, 635, 641, 643, 658, 661, 672, 675, 696, 722, 727, 729, 742, 744, 751, 777, 782, 799, 809, 815, 822, 831, 833, 841, 849, 873, 877, 885, 888, 891, 893, 898, 901, 917, 939, 952, 968, 973, 977, 988, 993, 995, 1003, 1004, 1009, 1022, 1024, 1083, 1087, 1098, 1114, 1117, 1136, 1156, 1160, 1163, 1185, 1190, 1205, 1207, 1208, 1211, 1216, 1220, 1223, 1225, 1227, 1229, 1238, 1245, 1247, 1249, 1251, 1262, 1264, 1265, 1266, 1271, 1276, 1279, 1281, 1284, 1285, 1288, 1293, 1294, 1295, 1296, 1297, 1302, 1303, 1307, 1309, 1311, 1312, 1316, 1323, 1339, 1348, 1352, 1353, 1355, 1361, 1369, 1372, 1376, 1379, 1384, 1386, 1395, 1396, 1400, 1405, 1411, 1413,

1417, 1423, 1425, 1428, 1433, 1436, 1441, 1444, 1448, 1452, 1456, 1462, 1465, 1473, 1477, 1479, 1487, 1490, 1494, 1504, 1505, 1522, 1533, 1542, 1545, 1546, 1554, 1556, 1558, 1560, 1562, 1565, 1567, 1571, 1573, 1576, 1579, 1582, 1583, 1585, 1587, 1588, 1591, 1594, 1604, 1612, 1615, 1619, 1626, 1628, 1631, 1633, 1638, 1641, 1644, 1649, 1656, 1660, 1667, 1669, 1671, 1673, 1679, 1684, 1686, 1695, 1701, 1703, 1705, 1707, 1709, 1712, 1713, 1715, 1719, 1726, 1736, 1739, 1741, 1743, 1745, 1750, 1759, 1768, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1788, 1789, 1790, 1791, 1792, 1797, 1799, 1807, 1813, 1815, 1821, 1833, 1836, 1839, 1841, 1843, 1848, 1851, 1852, 1855, 1879, 1884, 1893, 1909, 1912, 1913, 1915, 1937, 1957, 1968, 1987, 2003, 2005, 2009, 2020, 2021, 2028, 2034, 2043, 2063, 2088, 2095, 2124, 2132, 2137, 2141, 2146, 2147, 2153, 2159, 2167, 2173, 2176, 2186, 2201, 2204, 2206, 2212, 2215, 2221, 2244, 2250, 2259, 2263, 2276, 2277, 2279, 2283, 2287, 2299, 2313, 2317, 2332, 2344, 2349, 2355, 2362, 2364, 2368, 2372, 2382, 2384, 2390, 2394, 2425, 2429, 2431, 2432, 2434, 2442, 2450, 2459, 2463, 2465, 2467, 2468, 2470, 2473, 2475, 2478, 2482, 2486, 2488, 2495, 2496, 2498, 2499, 2501, 2502, 2503, 2507, 2509, 2511, 2517, 2518, 2525, 2527, 2530, 2535, 2536, 2537, 2540, 2541, 2542, 2545, 2546, 2549, 2555, 2559, 2563, 2567, 2568, 2570, 2572, 2575, 2579, 2583, 2588, 2591, 2594, 2602, 2607, 2609, 2611, 2631, 2639, 2645, 2672, 2678, 2682, 2689, 2692, 2693, 2695, 2721, 2736, 2739, 2747, 2770, 2780, 2787, 2793, 2797, 2798, 2800, 2822, 2824, 2860, 2868, 2869, 2871, 2875, 2876, 2888, 2891, 2897, 2901, 2911, 2951, 2954, 2986, 3018, 3024, 3049, 3059, 3068, 3073, 3081, 3084, 3087, 3095, 3096, 3099, 3100, 3104, 3122, 3128, 3142, 3143, 3163, 3175, 3176, 3177, 3188, 3191, 3193, 3198, 3200, 3214, 3249, 3509, 3519, 3523, 3525, 3528, 3531, 3537, 3538, 3539, 3542, 3543, 3546, 3554, 3556, 3560, 3564, 3565, 3566, 3567, 3570, 6904.

- Section 5.1.6.2.2 of the draft EIS adequately described the potential for bioaccumulation of herbicides in species and their habitat. This analysis is detailed in Appendix L and Appendix F. Appendix L notes that based on the chemical characteristics of the three herbicides of interest, bioaccumulation potential for these herbicides is expected to be low and likely insignificant. The expectation of little or no bioaccumulation of proposed herbicides contributes to predictions of minimal or insignificant dietary exposures for wildlife.
- Section 3.3.3.5 of the draft EIS considered but eliminated from further study, options for the management of tree resprouts from stumps without using herbicides given financial and technical infeasibility. Complete stump removal was not considered given the stumps and associated root systems are used for erosion control following tree removal.
- Section 3.4.2 of the draft EIS adequately addressed the planned herbicides for use in the different proposed and connected action areas.
- Applicable herbicide regulations are adequately addressed in Section 4.11.1 of the draft EIS and the sub applicant's current policies that guide herbicide application in the proposed and connected action areas are adequately addressed in Section 4.11.3.3 of the draft EIS.
- Section 5.1 of the draft EIS adequately addressed the controls that will be used to minimize the potential application of pesticides to non-target species, including special restrictions on uses near particularly sensitive species. Compliance with all requirements of federal, state, and local agencies, including requirements on the label, is required for herbicide use.
- Section 5.1.3.3.2 of the EIS has been revised to be consistent with BO requirements regarding herbicide use and listed species.

- Section 5.10.2 of the draft EIS adequately addressed the determination that the proposed and connected actions would be in compliance with applicable federal, state, and local statutes and regulations with regard to herbicide use.
- Section 5.10.2.3.1 of the EIS has been amended to include language from Appendix F on the use and effects of adjuvants in herbicide application.
- Section 5.10.3 of the EIS was clarified to state that maintenance spraying would follow the same rules as the initial treatment.
- Section 5.10.3.1 of the EIS has been clarified to state "Stump application of all herbicides would be conducted by a State of California Qualified Applicator or by staff under their supervision."
- Appendix F of the draft EIS adequately addressed the herbicides proposed for use, including information on each herbicide's potential toxicity and half-life.
- Appendix F included a description of the herbicide application methods that would be utilized for the proposed and connected actions and the projected application rates per acre for each of the proposed and connected action areas.
- Appendix F of the draft EIS adequately addressed the toxicity and fate and transport of the three herbicides proposed for use.
- Section 5.4.2.2 of the draft EIS adequately described that small volumes of diluted herbicide solutions would be applied to tree stumps to prevent regrowth and foliar spraying would not be used to convert shrub areas to grass, but might be used sparingly during maintenance to prevent regrowth. DHS/FEMA expects that the applicants will comply with all federal, state, and local requirements to control the use of the herbicides proposed for use, including requirements to protect watersheds, streams, and groundwater.
- Section 5.4 provided a detailed analysis of potential for impacts to watersheds, streams, and groundwater from the use of herbicides. In addition, text has been added to Section 5.4.2.2 clarifying that the herbicides proposed for use do not have the potential to impact groundwater.
- Section 5.4.1.2.1 of the EIS has been amended to clarify how protection of water resources and aquatic species would be ensured through the use of a 60-foot buffer near aquatic areas.
- The best management practices (BMPs) included in Section 5.4.4.2 of the draft EIS require compliance with all herbicide application requirements imposed by CDPR as well as the October 20, 2006, U.S. District Court for the Northern District of California injunction on herbicide use within California red-legged frog habitat. They include prohibitions on the foliar application of herbicides within 60 feet of standing or flowing water, prohibitions on herbicide application within 24 hours of expected rainfall (40% chance of rain or greater) and foliar application on days with winds in excess of 10 mph or less than 2 mph.
- Section 5.10.2.3.1 of the EIS has been amended to include a discussion on "superbugs."
- Section 5.1.4.2.3 of the EIS has been amended to clarify potential herbicide impacts related to sensitive and rare versus common species.

- Section 5.1.4.3.5 of the EIS has been amended to include a discussion of herbicide toxicity on honeybees.

Issue 5: Impact on Native and Non-Native Plants

The following commenters (identified by PK) raised Issue 5: 3, 5, 6, 10, 13, 15, 16, 17, 21, 22, 25, 26, 27, 31, 35, 40, 41, 45, 55, 56, 64, 92, 97, 99, 135, 137, 139, 155, 158, 159, 162, 163, 164, 167, 177, 186, 189, 200, 203, 207, 210, 217, 221, 222, 225, 227, 239, 243, 245, 250, 257, 259, 261, 264, 268, 270, 273, 303, 323, 333, 351, 352, 556, 561, 573, 584, 588, 606, 614, 627, 630, 633, 696, 727, 729, 742, 759, 773, 777, 778, 782, 792, 795, 799, 833, 841, 871, 877, 885, 917, 919, 941, 973, 974, 981, 995, 1032, 1038, 1045, 1060, 1062, 1068, 1081, 1086, 1106, 1117, 1132, 1136, 1145, 1173, 1182, 1188, 1192, 1194, 1204, 1235, 1242, 1247, 1309, 1323, 1339, 1354, 1358, 1369, 1376, 1384, 1395, 1396, 1400, 1401, 1433, 1436, 1546, 1567, 1621, 1641, 1649, 1679, 1690, 1695, 1719, 1726, 1729, 1745, 1751, 1753, 1756, 1764, 1765, 1879, 1883, 1884, 1987, 2013, 2063, 2088, 2133, 2137, 2153, 2206, 2215, 2222, 2244, 2259, 2277, 2279, 2283, 2287, 2299, 2313, 2317, 2344, 2349, 2394, 2410, 2424, 2431, 2433, 2443, 2457, 2458, 2466, 2470, 2480, 2493, 2501, 2502, 2504, 2506, 2511, 2514, 2515, 2516, 2517, 2518, 2520, 2522, 2523, 2524, 2530, 2536, 2537, 2541, 2545, 2546, 2547, 2552, 2554, 2555, 2557, 2559, 2562, 2563, 2565, 2566, 2567, 2569, 2570, 2572, 2573, 2677, 2693, 2711, 2716, 2777, 2804, 2862, 2911, 3014, 3068, 3076, 3085, 3101, 3108, 3122, 3177, 3184, 3185, 3501, 3504, 3505, 3506, 3508, 3513, 3515, 3516, 3521, 3522, 3536, 3542, 3544, 3549, 3551, 3554, 3556, 3559, 3562, 3563, 3564, 3566, 3567, 3571, 5521, 5550, 5554, 5885, 6527, 6896, 7333, 7397, 7554, 7881, 8967, 9371, 9392, 9423, 9789, 9821, 9855, 10155, 10170, 10191, 10560, 10594, 10595, 10730, 10759, 10851, 10925, 10931, 11054, 11073, 11093, 12006, 12210, 12273, 12649, 12655, 12665, 12678, 12747, 13156, 13197.

- Section 5.1.2.2 describes potential impacts to native and non-native vegetation communities and the best management practices, avoidance measures and mitigation measures that would be implemented to reduce the potential for adverse effects. As noted in the EIS damage to vegetation communities would be minimized through use of hand labor in some areas, use of existing access roads, and retaining wood chips and placing logs on site for sediment and erosion control.
- Section 4.2.2.2.5 of the EIS was amended to revise the reference to poison oak as non-native. In addition, further discussion of poison oak was added to Section 5.1.2.2.1 of the EIS.
- Section 5.1.4.2.2 of the EIS was amended to clarify that Monterey pine is not called a non-native species specifically but is grouped in with fire-prone species.

Issue 6: Biological Resources Analysis Methodology

The following commenters (identified by PK) raised Issue 6: 3, 5, 85, 97, 135, 154, 158, 164, 186, 189, 191, 196, 199, 200, 203, 210, 216, 223, 227, 228, 243, 249, 261, 270, 276, 277, 278, 288, 290, 291, 329, 344, 346, 351, 352, 595, 600, 727, 729, 742, 744, 773, 777, 778, 795, 799, 804, 812, 815, 817, 864, 870, 871, 877, 879, 881, 885, 893, 897, 919, 941, 952, 973, 974, 1031, 1045, 1062, 1068, 1081, 1086, 1106, 1117, 1130, 1132, 1136, 1156, 1173, 1194, 1218, 1220, 1223, 1234, 1247, 1262, 1264, 1266, 1271, 1276, 1281, 1284, 1285, 1288, 1294, 1295, 1296, 1297, 1300, 1302, 1303, 1307, 1309, 1311, 1312, 1316, 1323, 1339, 1354, 1372, 1376, 1383,

1389, 1391, 1395, 1396, 1400, 1405, 1411, 1417, 1423, 1425, 1428, 1433, 1444, 1448, 1452, 1456, 1465, 1473, 1479, 1483, 1487, 1490, 1494, 1503, 1524, 1546, 1576, 1656, 1671, 1675, 1751, 1753, 1788, 1860, 1871, 1918, 1928, 1977, 1987, 2005, 2009, 2013, 2017, 2057, 2088, 2124, 2132, 2133, 2147, 2153, 2159, 2170, 2186, 2204, 2206, 2212, 2215, 2222, 2225, 2250, 2291, 2332, 2368, 2382, 2394, 2424, 2440, 2447, 2453, 2500, 2506, 2515, 2520, 2530, 2536, 2537, 2545, 2547, 2549, 2552, 2555, 2559, 2567, 2616, 2633, 2716, 2868, 2869, 2878, 2902, 2916, 2923, 2926, 2933, 2941, 2947, 2951, 3028, 3032, 3053, 3061, 3067, 3075, 3076, 3084, 3085, 3087, 3090, 3099, 3101, 3104, 3108, 3115, 3119, 3122, 3125, 3163, 3175, 3176, 3177, 3180, 3184, 3185, 3249, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3505, 3510, 3511, 3522, 3528, 3531, 3542, 3544, 3546, 3547, 3549, 3551, 3554, 3556, 3559, 3564, 4001, 5502, 5503, 5504, 5505, 5506, 5507, 5508, 5509, 5510, 5511, 5512, 5513, 5514, 5515, 5516, 5517, 5518, 5519, 5520, 5521, 5522, 5523, 5524, 5525, 5526, 5527, 5528, 5529, 5530, 5531, 5532, 5533, 5534, 5535, 5536, 5537, 5538, 5539, 5540, 5541, 5542, 5543, 5544, 5545, 5546, 5547, 5548, 5549, 5550, 5551, 5552, 5553, 5554, 5555, 5556, 5557, 5558, 5559, 5560, 5561, 5562, 5563, 5564, 5565, 5566, 5567, 5568, 5569, 5570, 5571, 5572, 5573, 5574, 5575, 5576, 5577, 5578, 5579, 5580, 5581, 5582, 5583, 5584, 5585, 5586, 5587, 5588, 5589, 5590, 5591, 5592, 5593, 5594, 5595, 5596, 5597, 5598, 5599, 5600, 5601, 5602, 5603, 5604, 5605, 5606, 5607, 5608, 5609, 5610, 5611, 5612, 5613, 5614, 5615, 5616, 5617, 5618, 5619, 5620, 5621, 5622, 5623, 5624, 5625, 5626, 5627, 5628, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5636, 5637, 5638, 5639, 5640, 5641, 5642, 5643, 5644, 5645, 5646, 5647, 5648, 5649, 5650, 5651, 5652, 5653, 5654, 5655, 5656, 5657, 5658, 5659, 5660, 5661, 5662, 5663, 5664, 5665, 5666, 5667, 5668, 5669, 5670, 5671, 5672, 5673, 5674, 5675, 5676, 5677, 5678, 5679, 5680, 5681, 5682, 5683, 5684, 5685, 5686, 5687, 5688, 5689, 5690, 5691, 5692, 5693, 5694, 5695, 5696, 5697, 5698, 5699, 5700, 5701, 5702, 5703, 5704, 5705, 5706, 5707, 5708, 5709, 5710, 5711, 5712, 5713, 5714, 5715, 5716, 5717, 5718, 5719, 5720, 5721, 5722, 5723, 5724, 5725, 5726, 5727, 5728, 5729, 5730, 5731, 5732, 5733, 5734, 5735, 5736, 5737, 5738, 5739, 5740, 5741, 5742, 5743, 5744, 5745, 5746, 5747, 5748, 5749, 5750, 5751, 5752, 5753, 5754, 5755, 5756, 5757, 5758, 5759, 5760, 5761, 5762, 5763, 5764, 5765, 5766, 5767, 5768, 5769, 5770, 5771, 5772, 5773, 5774, 5775, 5776, 5777, 5778, 5779, 5780, 5781, 5782, 5783, 5784, 5785, 5786, 5787, 5788, 5789, 5790, 5791, 5792, 5793, 5794, 5795, 5796, 5797, 5798, 5799, 5800, 5801, 5802, 5803, 5804, 5805, 5806, 5807, 5808, 5809, 5810, 5811, 5812, 5813, 5814, 5815, 5816, 5817, 5818, 5819, 5820, 5821, 5822, 5823, 5824, 5825, 5826, 5827, 5828, 5829, 5830, 5831, 5832, 5833, 5834, 5835, 5836, 5837, 5838, 5839, 5840, 5841, 5842, 5843, 5844, 5845, 5846, 5847, 5848, 5849, 5850, 5851, 5852, 5853, 5854, 5855, 5856, 5857, 5858, 5859, 5860, 5861, 5862, 5863, 5864, 5865, 5866, 5867, 5868, 5869, 5870, 5871, 5872, 5873, 5874, 5875, 5876, 5877, 5878, 5879, 5880, 5881, 5882, 5883, 5884, 5885, 5886, 5887, 5888, 5889, 5890, 5891, 5892, 5893, 5894, 5895, 5896, 5897, 5898, 5899, 5900, 5901, 5902, 5903, 5904, 5905, 5906, 5907, 5908, 5909, 5910, 5911, 5912, 5913, 5914, 5915, 5916, 5917, 5918, 5919, 5920, 5921, 5922, 5923, 5924, 5925, 5926, 5927, 5928, 5929, 5930, 5931, 5932, 5933, 5934, 5935, 5936, 5937, 5938, 5939, 5940, 5941, 5942, 5943, 5944, 5945, 5946, 5947, 5948, 5949, 5950, 5951, 5952, 5953, 5954, 5955, 5956, 5957, 5958, 5959, 5960, 5961, 5962, 5963, 5964, 5965, 5966, 5967, 5968, 5969, 5970, 5971, 5972, 5973, 5974, 5975, 5976, 5977, 5978, 5979, 5980, 5981, 5982, 5983, 5984, 5985, 5986, 5987, 5988, 5989, 5990, 5991, 5992, 5993, 5994, 5995, 5996, 5997, 5998, 5999, 6000, 6001, 6002, 6003, 6004, 6005, 6006, 6007, 6008, 6009, 6010, 6011, 6012, 6013, 6014, 6015, 6016, 6017,

6018, 6019, 6020, 6021, 6022, 6023, 6024, 6025, 6026, 6027, 6028, 6029, 6030, 6031, 6032, 6033, 6034, 6035, 6036, 6037, 6038, 6039, 6040, 6041, 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6051, 6052, 6053, 6054, 6055, 6056, 6057, 6058, 6059, 6060, 6061, 6062, 6063, 6064, 6065, 6066, 6067, 6068, 6069, 6070, 6071, 6072, 6073, 6074, 6075, 6076, 6077, 6078, 6079, 6080, 6081, 6082, 6083, 6084, 6085, 6086, 6087, 6088, 6089, 6090, 6091, 6092, 6093, 6094, 6095, 6096, 6097, 6098, 6099, 6100, 6101, 6102, 6103, 6104, 6105, 6106, 6107, 6108, 6109, 6110, 6111, 6112, 6113, 6114, 6115, 6116, 6117, 6118, 6119, 6120, 6121, 6122, 6123, 6124, 6125, 6126, 6127, 6128, 6129, 6130, 6131, 6132, 6133, 6134, 6135, 6136, 6137, 6138, 6139, 6140, 6141, 6142, 6143, 6144, 6145, 6146, 6147, 6148, 6149, 6150, 6151, 6152, 6153, 6154, 6155, 6156, 6157, 6158, 6159, 6160, 6161, 6162, 6163, 6164, 6165, 6166, 6167, 6168, 6169, 6170, 6171, 6172, 6173, 6174, 6175, 6176, 6177, 6178, 6179, 6180, 6181, 6182, 6183, 6184, 6185, 6186, 6187, 6188, 6189, 6190, 6191, 6192, 6193, 6194, 6195, 6196, 6197, 6198, 6199, 6200, 6201, 6202, 6203, 6204, 6205, 6206, 6207, 6208, 6209, 6210, 6211, 6212, 6213, 6214, 6215, 6216, 6217, 6218, 6219, 6220, 6221, 6222, 6223, 6224, 6225, 6226, 6227, 6228, 6229, 6230, 6231, 6232, 6233, 6234, 6235, 6236, 6237, 6238, 6239, 6240, 6241, 6242, 6243, 6244, 6245, 6246, 6247, 6248, 6249, 6250, 6251, 6252, 6253, 6254, 6255, 6256, 6257, 6258, 6259, 6260, 6261, 6262, 6263, 6264, 6265, 6266, 6267, 6268, 6269, 6270, 6271, 6272, 6273, 6274, 6275, 6276, 6277, 6278, 6279, 6280, 6281, 6282, 6283, 6284, 6285, 6286, 6287, 6288, 6289, 6290, 6291, 6292, 6293, 6294, 6295, 6296, 6297, 6298, 6299, 6300, 6301, 6302, 6303, 6304, 6305, 6306, 6307, 6308, 6309, 6310, 6311, 6312, 6313, 6314, 6315, 6316, 6317, 6318, 6319, 6320, 6321, 6322, 6323, 6324, 6325, 6326, 6327, 6328, 6329, 6330, 6331, 6332, 6333, 6334, 6335, 6336, 6337, 6338, 6339, 6340, 6341, 6342, 6343, 6344, 6345, 6346, 6347, 6348, 6349, 6350, 6351, 6352, 6353, 6354, 6355, 6356, 6357, 6358, 6359, 6360, 6361, 6362, 6363, 6364, 6365, 6366, 6367, 6368, 6369, 6370, 6371, 6372, 6373, 6374, 6375, 6376, 6377, 6378, 6379, 6380, 6381, 6382, 6383, 6384, 6385, 6386, 6387, 6388, 6389, 6390, 6391, 6392, 6393, 6394, 6395, 6396, 6397, 6398, 6399, 6400, 6401, 6402, 6403, 6404, 6405, 6406, 6407, 6408, 6409, 6410, 6411, 6412, 6413, 6414, 6415, 6416, 6417, 6418, 6419, 6420, 6421, 6422, 6423, 6424, 6425, 6426, 6427, 6428, 6429, 6430, 6431, 6432, 6433, 6434, 6435, 6436, 6437, 6438, 6439, 6440, 6441, 6442, 6443, 6444, 6445, 6446, 6447, 6448, 6449, 6450, 6451, 6452, 6453, 6454, 6455, 6456, 6457, 6458, 6459, 6460, 6461, 6462, 6463, 6464, 6465, 6466, 6467, 6468, 6469, 6470, 6471, 6472, 6473, 6474, 6475, 6476, 6477, 6478, 6479, 6480, 6481, 6482, 6483, 6484, 6485, 6486, 6487, 6488, 6489, 6490, 6491, 6492, 6493, 6494, 6495, 6496, 6497, 6498, 6499, 6500, 6501, 6502, 6503, 6504, 6505, 6506, 6507, 6508, 6509, 6510, 6511, 6512, 6513, 6514, 6515, 6516, 6517, 6518, 6519, 6520, 6521, 6522, 6523, 6524, 6525, 6526, 6527, 6528, 6529, 6530, 6531, 6532, 6533, 6534, 6535, 6536, 6537, 6538, 6539, 6540, 6541, 6542, 6543, 6544, 6545, 6546, 6547, 6548, 6549, 6550, 6551, 6552, 6553, 6554, 6555, 6556, 6557, 6558, 6559, 6560, 6561, 6562, 6563, 6564, 6565, 6566, 6567, 6568, 6569, 6570, 6571, 6572, 6573, 6574, 6575, 6576, 6577, 6578, 6579, 6580, 6581, 6582, 6583, 6584, 6585, 6586, 6587, 6588, 6589, 6590, 6591, 6592, 6593, 6594, 6595, 6596, 6597, 6598, 6599, 6600, 6601, 6602, 6603, 6604, 6605, 6606, 6607, 6608, 6609, 6610, 6611, 6612, 6613, 6614, 6615, 6616, 6617, 6618, 6619, 6620, 6621, 6622, 6623, 6624, 6625, 6626, 6627, 6628, 6629, 6630, 6631, 6632, 6633, 6634, 6635, 6636, 6637, 6638, 6639, 6640, 6641, 6642, 6643, 6644, 6645, 6646, 6647, 6648, 6649, 6650, 6651, 6652, 6653, 6654, 6655, 6656, 6657, 6658, 6659, 6660, 6661, 6662, 6663, 6664, 6665, 6666, 6667, 6668, 6669, 6670, 6671, 6672, 6673, 6674, 6675, 6676, 6677, 6678, 6679, 6680, 6681, 6682, 6683, 6684, 6685, 6686, 6687, 6688, 6689, 6690, 6691, 6692, 6693, 6694, 6695, 6696, 6697, 6698, 6699, 6700, 6701, 6702, 6703, 6704, 6705, 6706, 6707,

6708, 6709, 6710, 6711, 6712, 6713, 6714, 6715, 6716, 6717, 6718, 6719, 6720, 6721, 6722, 6723, 6724, 6725, 6726, 6727, 6728, 6729, 6730, 6731, 6732, 6733, 6734, 6735, 6736, 6737, 6738, 6739, 6740, 6741, 6742, 6743, 6744, 6745, 6746, 6747, 6748, 6749, 6750, 6751, 6752, 6753, 6754, 6755, 6756, 6757, 6758, 6759, 6760, 6761, 6762, 6763, 6764, 6765, 6766, 6767, 6768, 6769, 6770, 6771, 6772, 6773, 6774, 6775, 6776, 6777, 6778, 6779, 6780, 6781, 6782, 6783, 6784, 6785, 6786, 6787, 6788, 6789, 6790, 6791, 6792, 6793, 6794, 6795, 6796, 6797, 6798, 6799, 6800, 6801, 6802, 6803, 6804, 6805, 6806, 6807, 6808, 6809, 6810, 6811, 6812, 6813, 6814, 6815, 6816, 6817, 6818, 6819, 6820, 6821, 6822, 6823, 6824, 6825, 6826, 6827, 6828, 6829, 6830, 6831, 6832, 6833, 6834, 6835, 6836, 6837, 6838, 6839, 6840, 6841, 6842, 6843, 6844, 6845, 6846, 6847, 6848, 6849, 6850, 6851, 6852, 6853, 6854, 6855, 6856, 6857, 6858, 6859, 6860, 6861, 6862, 6863, 6864, 6865, 6866, 6867, 6868, 6869, 6870, 6871, 6872, 6873, 6874, 6875, 6876, 6877, 6878, 6879, 6880, 6881, 6882, 6883, 6884, 6885, 6886, 6887, 6888, 6889, 6890, 6891, 6892, 6893, 6894, 6895, 6896, 6897, 6898, 6899, 6900, 6901, 6902, 6903, 6904, 6905, 6906, 6907, 6908, 6909, 6910, 6911, 6912, 6913, 6914, 6915, 6916, 6917, 6918, 6919, 6920, 6921, 6922, 6923, 6924, 6925, 6926, 6927, 6928, 6929, 6930, 6931, 6932, 6933, 6934, 6935, 6936, 6937, 6938, 6939, 6940, 6941, 6942, 6943, 6944, 6945, 6946, 6947, 6948, 6949, 6950, 6951, 6952, 6953, 6954, 6955, 6956, 6957, 6958, 6959, 6960, 6961, 6962, 6963, 6964, 6965, 6966, 6967, 6968, 6969, 6970, 6971, 6972, 6973, 6974, 6975, 6976, 6977, 6978, 6979, 6980, 6981, 6982, 6983, 6984, 6985, 6986, 6987, 6988, 6989, 6990, 6991, 6992, 6993, 6994, 6995, 6996, 6997, 6998, 6999, 7000, 7001, 7002, 7003, 7004, 7005, 7006, 7007, 7008, 7009, 7010, 7011, 7012, 7013, 7014, 7015, 7016, 7017, 7018, 7019, 7020, 7021, 7022, 7023, 7024, 7025, 7026, 7027, 7028, 7029, 7030, 7031, 7032, 7033, 7034, 7035, 7036, 7037, 7038, 7039, 7040, 7041, 7042, 7043, 7044, 7045, 7046, 7047, 7048, 7049, 7050, 7051, 7052, 7053, 7054, 7055, 7056, 7057, 7058, 7059, 7060, 7061, 7062, 7063, 7064, 7065, 7066, 7067, 7068, 7069, 7070, 7071, 7072, 7073, 7074, 7075, 7076, 7077, 7078, 7079, 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089, 7090, 7091, 7092, 7093, 7094, 7095, 7096, 7097, 7098, 7099, 7100, 7101, 7102, 7103, 7104, 7105, 7106, 7107, 7108, 7109, 7110, 7111, 7112, 7113, 7114, 7115, 7116, 7117, 7118, 7119, 7120, 7121, 7122, 7123, 7124, 7125, 7126, 7127, 7128, 7129, 7130, 7131, 7132, 7133, 7134, 7135, 7136, 7137, 7138, 7139, 7140, 7141, 7142, 7143, 7144, 7145, 7146, 7147, 7148, 7149, 7150, 7151, 7152, 7153, 7154, 7155, 7156, 7157, 7158, 7159, 7160, 7161, 7162, 7163, 7164, 7165, 7166, 7167, 7168, 7169, 7170, 7171, 7172, 7173, 7174, 7175, 7176, 7177, 7178, 7179, 7180, 7181, 7182, 7183, 7184, 7185, 7186, 7187, 7188, 7189, 7190, 7191, 7192, 7193, 7194, 7195, 7196, 7197, 7198, 7199, 7200, 7201, 7202, 7203, 7204, 7205, 7206, 7207, 7208, 7209, 7210, 7211, 7212, 7213, 7214, 7215, 7216, 7217, 7218, 7219, 7220, 7221, 7222, 7223, 7224, 7225, 7226, 7227, 7228, 7229, 7230, 7231, 7232, 7233, 7234, 7235, 7236, 7237, 7238, 7239, 7240, 7241, 7242, 7243, 7244, 7245, 7246, 7247, 7248, 7249, 7250, 7251, 7252, 7253, 7254, 7255, 7256, 7257, 7258, 7259, 7260, 7261, 7262, 7263, 7264, 7265, 7266, 7267, 7268, 7269, 7270, 7271, 7272, 7273, 7274, 7275, 7276, 7277, 7278, 7279, 7280, 7281, 7282, 7283, 7284, 7285, 7286, 7287, 7288, 7289, 7290, 7291, 7292, 7293, 7294, 7295, 7296, 7297, 7298, 7299, 7300, 7301, 7302, 7303, 7304, 7305, 7306, 7307, 7308, 7309, 7310, 7311, 7312, 7313, 7314, 7315, 7316, 7317, 7318, 7319, 7320, 7321, 7322, 7323, 7324, 7325, 7326, 7327, 7328, 7329, 7330, 7331, 7332, 7333, 7334, 7335, 7336, 7337, 7338, 7339, 7340, 7341, 7342, 7343, 7344, 7345, 7346, 7347, 7348, 7349, 7350, 7351, 7352, 7353, 7354, 7355, 7356, 7357, 7358, 7359, 7360, 7361, 7362, 7363, 7364, 7365, 7366, 7367, 7368, 7369, 7370, 7371, 7372, 7373, 7374, 7375, 7376, 7377, 7378, 7379, 7380, 7381, 7382, 7383, 7384, 7385, 7386, 7387, 7388, 7389, 7390, 7391, 7392, 7393, 7394, 7395, 7396, 7397,

7398, 7399, 7400, 7401, 7402, 7403, 7404, 7405, 7406, 7407, 7408, 7409, 7410, 7411, 7412, 7413, 7414, 7415, 7416, 7417, 7418, 7419, 7420, 7421, 7422, 7423, 7424, 7425, 7426, 7427, 7428, 7429, 7430, 7431, 7432, 7433, 7434, 7435, 7436, 7437, 7438, 7439, 7440, 7441, 7442, 7443, 7444, 7445, 7446, 7447, 7448, 7449, 7450, 7451, 7452, 7453, 7454, 7455, 7456, 7457, 7458, 7459, 7460, 7461, 7462, 7463, 7464, 7465, 7466, 7467, 7468, 7469, 7470, 7471, 7472, 7473, 7474, 7475, 7476, 7477, 7478, 7479, 7480, 7481, 7482, 7483, 7484, 7485, 7486, 7487, 7488, 7489, 7490, 7491, 7492, 7493, 7494, 7495, 7496, 7497, 7498, 7499, 7500, 7501, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7509, 7510, 7511, 7512, 7513, 7514, 7515, 7516, 7517, 7518, 7519, 7520, 7521, 7522, 7523, 7524, 7525, 7526, 7527, 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7544, 7545, 7546, 7547, 7548, 7549, 7550, 7551, 7552, 7553, 7554, 7555, 7556, 7557, 7558, 7559, 7560, 7561, 7562, 7563, 7564, 7565, 7566, 7567, 7568, 7569, 7570, 7571, 7572, 7573, 7574, 7575, 7576, 7577, 7578, 7579, 7580, 7581, 7582, 7583, 7584, 7585, 7586, 7587, 7588, 7589, 7590, 7591, 7592, 7593, 7594, 7595, 7596, 7597, 7598, 7599, 7600, 7601, 7602, 7603, 7604, 7605, 7606, 7607, 7608, 7609, 7610, 7611, 7612, 7613, 7614, 7615, 7616, 7617, 7618, 7619, 7620, 7621, 7622, 7623, 7624, 7625, 7626, 7627, 7628, 7629, 7630, 7631, 7632, 7633, 7634, 7635, 7636, 7637, 7638, 7639, 7640, 7641, 7642, 7643, 7644, 7645, 7646, 7647, 7648, 7649, 7650, 7651, 7652, 7653, 7654, 7655, 7656, 7657, 7658, 7659, 7660, 7661, 7662, 7663, 7664, 7665, 7666, 7667, 7668, 7669, 7670, 7671, 7672, 7673, 7674, 7675, 7676, 7677, 7678, 7679, 7680, 7681, 7682, 7683, 7684, 7685, 7686, 7687, 7688, 7689, 7690, 7691, 7692, 7693, 7694, 7695, 7696, 7697, 7698, 7699, 7700, 7701, 7702, 7703, 7704, 7705, 7706, 7707, 7708, 7709, 7710, 7711, 7712, 7713, 7714, 7715, 7716, 7717, 7718, 7719, 7720, 7721, 7722, 7723, 7724, 7725, 7726, 7727, 7728, 7729, 7730, 7731, 7732, 7733, 7734, 7735, 7736, 7737, 7738, 7739, 7740, 7741, 7742, 7743, 7744, 7745, 7746, 7747, 7748, 7749, 7750, 7751, 7752, 7753, 7754, 7755, 7756, 7757, 7758, 7759, 7760, 7761, 7762, 7763, 7764, 7765, 7766, 7767, 7768, 7769, 7770, 7771, 7772, 7773, 7774, 7775, 7776, 7777, 7778, 7779, 7780, 7781, 7782, 7783, 7784, 7785, 7786, 7787, 7788, 7789, 7790, 7791, 7792, 7793, 7794, 7795, 7796, 7797, 7798, 7799, 7800, 7801, 7802, 7803, 7804, 7805, 7806, 7807, 7808, 7809, 7810, 7811, 7812, 7813, 7814, 7815, 7816, 7817, 7818, 7819, 7820, 7821, 7822, 7823, 7824, 7825, 7826, 7827, 7828, 7829, 7830, 7831, 7832, 7833, 7834, 7835, 7836, 7837, 7838, 7839, 7840, 7841, 7842, 7843, 7844, 7845, 7846, 7847, 7848, 7849, 7850, 7851, 7852, 7853, 7854, 7855, 7856, 7857, 7858, 7859, 7860, 7861, 7862, 7863, 7864, 7865, 7866, 7867, 7868, 7869, 7870, 7871, 7872, 7873, 7874, 7875, 7876, 7877, 7878, 7879, 7880, 7881, 7882, 7883, 7884, 7885, 7886, 7887, 7888, 7889, 7890, 7891, 7892, 7893, 7894, 7895, 7896, 7897, 7898, 7899, 7900, 7901, 7902, 7903, 7904, 7905, 7906, 7907, 7908, 7909, 7910, 7911, 7912, 7913, 7914, 7915, 7916, 7917, 7918, 7919, 7920, 7921, 7922, 7923, 7924, 7925, 7926, 7927, 7928, 7929, 7930, 7931, 7932, 7933, 7934, 7935, 7936, 7937, 7938, 7939, 7940, 7941, 7942, 7943, 7944, 7945, 7946, 7947, 7948, 7949, 7950, 7951, 7952, 7953, 7954, 7955, 7956, 7957, 7958, 7959, 7960, 7961, 7962, 7963, 7964, 7965, 7966, 7967, 7968, 7969, 7970, 7971, 7972, 7973, 7974, 7975, 7976, 7977, 7978, 7979, 7980, 7981, 7982, 7983, 7984, 7985, 7986, 7987, 7988, 7989, 7990, 7991, 7992, 7993, 7994, 7995, 7996, 7997, 7998, 7999, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8009, 8010, 8011, 8012, 8013, 8014, 8015, 8016, 8017, 8018, 8019, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8029, 8030, 8031, 8032, 8033, 8034, 8035, 8036, 8037, 8038, 8039, 8040, 8041, 8042, 8043, 8044, 8045, 8046, 8047, 8048, 8049, 8050, 8051, 8052, 8053, 8054, 8055, 8056, 8057, 8058, 8059, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8068, 8069, 8070, 8071, 8072, 8073, 8074, 8075, 8076, 8077, 8078, 8079, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087,

8088, 8089, 8090, 8091, 8092, 8093, 8094, 8095, 8096, 8097, 8098, 8099, 8100, 8101, 8102, 8103, 8104, 8105, 8106, 8107, 8108, 8109, 8110, 8111, 8112, 8113, 8114, 8115, 8116, 8117, 8118, 8119, 8120, 8121, 8122, 8123, 8124, 8125, 8126, 8127, 8128, 8129, 8130, 8131, 8132, 8133, 8134, 8135, 8136, 8137, 8138, 8139, 8140, 8141, 8142, 8143, 8144, 8145, 8146, 8147, 8148, 8149, 8150, 8151, 8152, 8153, 8154, 8155, 8156, 8157, 8158, 8159, 8160, 8161, 8162, 8163, 8164, 8165, 8166, 8167, 8168, 8169, 8170, 8171, 8172, 8173, 8174, 8175, 8176, 8177, 8178, 8179, 8180, 8181, 8182, 8183, 8184, 8185, 8186, 8187, 8188, 8189, 8190, 8191, 8192, 8193, 8194, 8195, 8196, 8197, 8198, 8199, 8200, 8201, 8202, 8203, 8204, 8205, 8206, 8207, 8208, 8209, 8210, 8211, 8212, 8213, 8214, 8215, 8216, 8217, 8218, 8219, 8220, 8221, 8222, 8223, 8224, 8225, 8226, 8227, 8228, 8229, 8230, 8231, 8232, 8233, 8234, 8235, 8236, 8237, 8238, 8239, 8240, 8241, 8242, 8243, 8244, 8245, 8246, 8247, 8248, 8249, 8250, 8251, 8252, 8253, 8254, 8255, 8256, 8257, 8258, 8259, 8260, 8261, 8262, 8263, 8264, 8265, 8266, 8267, 8268, 8269, 8270, 8271, 8272, 8273, 8274, 8275, 8276, 8277, 8278, 8279, 8280, 8281, 8282, 8283, 8284, 8285, 8286, 8287, 8288, 8289, 8290, 8291, 8292, 8293, 8294, 8295, 8296, 8297, 8298, 8299, 8300, 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309, 8310, 8311, 8312, 8313, 8314, 8315, 8316, 8317, 8318, 8319, 8320, 8321, 8322, 8323, 8324, 8325, 8326, 8327, 8328, 8329, 8330, 8331, 8332, 8333, 8334, 8335, 8336, 8337, 8338, 8339, 8340, 8341, 8342, 8343, 8344, 8345, 8346, 8347, 8348, 8349, 8350, 8351, 8352, 8353, 8354, 8355, 8356, 8357, 8358, 8359, 8360, 8361, 8362, 8363, 8364, 8365, 8366, 8367, 8368, 8369, 8370, 8371, 8372, 8373, 8374, 8375, 8376, 8377, 8378, 8379, 8380, 8381, 8382, 8383, 8384, 8385, 8386, 8387, 8388, 8389, 8390, 8391, 8392, 8393, 8394, 8395, 8396, 8397, 8398, 8399, 8400, 8401, 8402, 8403, 8404, 8405, 8406, 8407, 8408, 8409, 8410, 8411, 8412, 8413, 8414, 8415, 8416, 8417, 8418, 8419, 8420, 8421, 8422, 8423, 8424, 8425, 8426, 8427, 8428, 8429, 8430, 8431, 8432, 8433, 8434, 8435, 8436, 8437, 8438, 8439, 8440, 8441, 8442, 8443, 8444, 8445, 8446, 8447, 8448, 8449, 8450, 8451, 8452, 8453, 8454, 8455, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463, 8464, 8465, 8466, 8467, 8468, 8469, 8470, 8471, 8472, 8473, 8474, 8475, 8476, 8477, 8478, 8479, 8480, 8481, 8482, 8483, 8484, 8485, 8486, 8487, 8488, 8489, 8490, 8491, 8492, 8493, 8494, 8495, 8496, 8497, 8498, 8499, 8500, 8501, 8502, 8503, 8504, 8505, 8506, 8507, 8508, 8509, 8510, 8511, 8512, 8513, 8514, 8515, 8516, 8517, 8518, 8519, 8520, 8521, 8522, 8523, 8524, 8525, 8526, 8527, 8528, 8529, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8537, 8538, 8539, 8540, 8541, 8542, 8543, 8544, 8545, 8546, 8547, 8548, 8549, 8550, 8551, 8552, 8553, 8554, 8555, 8556, 8557, 8558, 8559, 8560, 8561, 8562, 8563, 8564, 8565, 8566, 8567, 8568, 8569, 8570, 8571, 8572, 8573, 8574, 8575, 8576, 8577, 8578, 8579, 8580, 8581, 8582, 8583, 8584, 8585, 8586, 8587, 8588, 8589, 8590, 8591, 8592, 8593, 8594, 8595, 8596, 8597, 8598, 8599, 8600, 8601, 8602, 8603, 8604, 8605, 8606, 8607, 8608, 8609, 8610, 8611, 8612, 8613, 8614, 8615, 8616, 8617, 8618, 8619, 8620, 8621, 8622, 8623, 8624, 8625, 8626, 8627, 8628, 8629, 8630, 8631, 8632, 8633, 8634, 8635, 8636, 8637, 8638, 8639, 8640, 8641, 8642, 8643, 8644, 8645, 8646, 8647, 8648, 8649, 8650, 8651, 8652, 8653, 8654, 8655, 8656, 8657, 8658, 8659, 8660, 8661, 8662, 8663, 8664, 8665, 8666, 8667, 8668, 8669, 8670, 8671, 8672, 8673, 8674, 8675, 8676, 8677, 8678, 8679, 8680, 8681, 8682, 8683, 8684, 8685, 8686, 8687, 8688, 8689, 8690, 8691, 8692, 8693, 8694, 8695, 8696, 8697, 8698, 8699, 8700, 8701, 8702, 8703, 8704, 8705, 8706, 8707, 8708, 8709, 8710, 8711, 8712, 8713, 8714, 8715, 8716, 8717, 8718, 8719, 8720, 8721, 8722, 8723, 8724, 8725, 8726, 8727, 8728, 8729, 8730, 8731, 8732, 8733, 8734, 8735, 8736, 8737, 8738, 8739, 8740, 8741, 8742, 8743, 8744, 8745, 8746, 8747, 8748, 8749, 8750, 8751, 8752, 8753, 8754, 8755, 8756, 8757, 8758, 8759, 8760, 8761, 8762, 8763, 8764, 8765, 8766, 8767, 8768, 8769, 8770, 8771, 8772, 8773, 8774, 8775, 8776, 8777,

8778, 8779, 8780, 8781, 8782, 8783, 8784, 8785, 8786, 8787, 8788, 8789, 8790, 8791, 8792, 8793, 8794, 8795, 8796, 8797, 8798, 8799, 8800, 8801, 8802, 8803, 8804, 8805, 8806, 8807, 8808, 8809, 8810, 8811, 8812, 8813, 8814, 8815, 8816, 8817, 8818, 8819, 8820, 8821, 8822, 8823, 8824, 8825, 8826, 8827, 8828, 8829, 8830, 8831, 8832, 8833, 8834, 8835, 8836, 8837, 8838, 8839, 8840, 8841, 8842, 8843, 8844, 8845, 8846, 8847, 8848, 8849, 8850, 8851, 8852, 8853, 8854, 8855, 8856, 8857, 8858, 8859, 8860, 8861, 8862, 8863, 8864, 8865, 8866, 8867, 8868, 8869, 8870, 8871, 8872, 8873, 8874, 8875, 8876, 8877, 8878, 8879, 8880, 8881, 8882, 8883, 8884, 8885, 8886, 8887, 8888, 8889, 8890, 8891, 8892, 8893, 8894, 8895, 8896, 8897, 8898, 8899, 8900, 8901, 8902, 8903, 8904, 8905, 8906, 8907, 8908, 8909, 8910, 8911, 8912, 8913, 8914, 8915, 8916, 8917, 8918, 8919, 8920, 8921, 8922, 8923, 8924, 8925, 8926, 8927, 8928, 8929, 8930, 8931, 8932, 8933, 8934, 8935, 8936, 8937, 8938, 8939, 8940, 8941, 8942, 8943, 8944, 8945, 8946, 8947, 8948, 8949, 8950, 8951, 8952, 8953, 8954, 8955, 8956, 8957, 8958, 8959, 8960, 8961, 8962, 8963, 8964, 8965, 8966, 8967, 8968, 8969, 8970, 8971, 8972, 8973, 8974, 8975, 8976, 8977, 8978, 8979, 8980, 8981, 8982, 8983, 8984, 8985, 8986, 8987, 8988, 8989, 8990, 8991, 8992, 8993, 8994, 8995, 8996, 8997, 8998, 8999, 9000, 9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9011, 9012, 9013, 9014, 9015, 9016, 9017, 9018, 9019, 9020, 9021, 9022, 9023, 9024, 9025, 9026, 9027, 9028, 9029, 9030, 9031, 9032, 9033, 9034, 9035, 9036, 9037, 9038, 9039, 9040, 9041, 9042, 9043, 9044, 9045, 9046, 9047, 9048, 9049, 9050, 9051, 9052, 9053, 9054, 9055, 9056, 9057, 9058, 9059, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 9067, 9068, 9069, 9070, 9071, 9072, 9073, 9074, 9075, 9076, 9077, 9078, 9079, 9080, 9081, 9082, 9083, 9084, 9085, 9086, 9087, 9088, 9089, 9090, 9091, 9092, 9093, 9094, 9095, 9096, 9097, 9098, 9099, 9100, 9101, 9102, 9103, 9104, 9105, 9106, 9107, 9108, 9109, 9110, 9111, 9112, 9113, 9114, 9115, 9116, 9117, 9118, 9119, 9120, 9121, 9122, 9123, 9124, 9125, 9126, 9127, 9128, 9129, 9130, 9131, 9132, 9133, 9134, 9135, 9136, 9137, 9138, 9139, 9140, 9141, 9142, 9143, 9144, 9145, 9146, 9147, 9148, 9149, 9150, 9151, 9152, 9153, 9154, 9155, 9156, 9157, 9158, 9159, 9160, 9161, 9162, 9163, 9164, 9165, 9166, 9167, 9168, 9169, 9170, 9171, 9172, 9173, 9174, 9175, 9176, 9177, 9178, 9179, 9180, 9181, 9182, 9183, 9184, 9185, 9186, 9187, 9188, 9189, 9190, 9191, 9192, 9193, 9194, 9195, 9196, 9197, 9198, 9199, 9200, 9201, 9202, 9203, 9204, 9205, 9206, 9207, 9208, 9209, 9210, 9211, 9212, 9213, 9214, 9215, 9216, 9217, 9218, 9219, 9220, 9221, 9222, 9223, 9224, 9225, 9226, 9227, 9228, 9229, 9230, 9231, 9232, 9233, 9234, 9235, 9236, 9237, 9238, 9239, 9240, 9241, 9242, 9243, 9244, 9245, 9246, 9247, 9248, 9249, 9250, 9251, 9252, 9253, 9254, 9255, 9256, 9257, 9258, 9259, 9260, 9261, 9262, 9263, 9264, 9265, 9266, 9267, 9268, 9269, 9270, 9271, 9272, 9273, 9274, 9275, 9276, 9277, 9278, 9279, 9280, 9281, 9282, 9283, 9284, 9285, 9286, 9287, 9288, 9289, 9290, 9291, 9292, 9293, 9294, 9295, 9296, 9297, 9298, 9299, 9300, 9301, 9302, 9303, 9304, 9305, 9306, 9307, 9308, 9309, 9310, 9311, 9312, 9313, 9314, 9315, 9316, 9317, 9318, 9319, 9320, 9321, 9322, 9323, 9324, 9325, 9326, 9327, 9328, 9329, 9330, 9331, 9332, 9333, 9334, 9335, 9336, 9337, 9338, 9339, 9340, 9341, 9342, 9343, 9344, 9345, 9346, 9347, 9348, 9349, 9350, 9351, 9352, 9353, 9354, 9355, 9356, 9357, 9358, 9359, 9360, 9361, 9362, 9363, 9364, 9365, 9366, 9367, 9368, 9369, 9370, 9371, 9372, 9373, 9374, 9375, 9376, 9377, 9378, 9379, 9380, 9381, 9382, 9383, 9384, 9385, 9386, 9387, 9388, 9389, 9390, 9391, 9392, 9393, 9394, 9395, 9396, 9397, 9398, 9399, 9400, 9401, 9402, 9403, 9404, 9405, 9406, 9407, 9408, 9409, 9410, 9411, 9412, 9413, 9414, 9415, 9416, 9417, 9418, 9419, 9420, 9421, 9422, 9423, 9424, 9425, 9426, 9427, 9428, 9429, 9430, 9431, 9432, 9433, 9434, 9435, 9436, 9437, 9438, 9439, 9440, 9441, 9442, 9443, 9444, 9445, 9446, 9447, 9448, 9449, 9450, 9451, 9452, 9453, 9454, 9455, 9456, 9457, 9458, 9459, 9460, 9461, 9462, 9463, 9464, 9465, 9466, 9467,

9468, 9469, 9470, 9471, 9472, 9473, 9474, 9475, 9476, 9477, 9478, 9479, 9480, 9481, 9482, 9483, 9484, 9485, 9486, 9487, 9488, 9489, 9490, 9491, 9492, 9493, 9494, 9495, 9496, 9497, 9498, 9499, 9500, 9501, 9502, 9503, 9504, 9505, 9506, 9507, 9508, 9509, 9510, 9511, 9512, 9513, 9514, 9515, 9516, 9517, 9518, 9519, 9520, 9521, 9522, 9523, 9524, 9525, 9526, 9527, 9528, 9529, 9530, 9531, 9532, 9533, 9534, 9535, 9536, 9537, 9538, 9539, 9540, 9541, 9542, 9543, 9544, 9545, 9546, 9547, 9548, 9549, 9550, 9551, 9552, 9553, 9554, 9555, 9556, 9557, 9558, 9559, 9560, 9561, 9562, 9563, 9564, 9565, 9566, 9567, 9568, 9569, 9570, 9571, 9572, 9573, 9574, 9575, 9576, 9577, 9578, 9579, 9580, 9581, 9582, 9583, 9584, 9585, 9586, 9587, 9588, 9589, 9590, 9591, 9592, 9593, 9594, 9595, 9596, 9597, 9598, 9599, 9600, 9601, 9602, 9603, 9604, 9605, 9606, 9607, 9608, 9609, 9610, 9611, 9612, 9613, 9614, 9615, 9616, 9617, 9618, 9619, 9620, 9621, 9622, 9623, 9624, 9625, 9626, 9627, 9628, 9629, 9630, 9631, 9632, 9633, 9634, 9635, 9636, 9637, 9638, 9639, 9640, 9641, 9642, 9643, 9644, 9645, 9646, 9647, 9648, 9649, 9650, 9651, 9652, 9653, 9654, 9655, 9656, 9657, 9658, 9659, 9660, 9661, 9662, 9663, 9664, 9665, 9666, 9667, 9668, 9669, 9670, 9671, 9672, 9673, 9674, 9675, 9676, 9677, 9678, 9679, 9680, 9681, 9682, 9683, 9684, 9685, 9686, 9687, 9688, 9689, 9690, 9691, 9692, 9693, 9694, 9695, 9696, 9697, 9698, 9699, 9700, 9701, 9702, 9703, 9704, 9705, 9706, 9707, 9708, 9709, 9710, 9711, 9712, 9713, 9714, 9715, 9716, 9717, 9718, 9719, 9720, 9721, 9722, 9723, 9724, 9725, 9726, 9727, 9728, 9729, 9730, 9731, 9732, 9733, 9734, 9735, 9736, 9737, 9738, 9739, 9740, 9741, 9742, 9743, 9744, 9745, 9746, 9747, 9748, 9749, 9750, 9751, 9752, 9753, 9754, 9755, 9756, 9757, 9758, 9759, 9760, 9761, 9762, 9763, 9764, 9765, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9780, 9781, 9782, 9783, 9784, 9785, 9786, 9787, 9788, 9789, 9790, 9791, 9792, 9793, 9794, 9795, 9796, 9797, 9798, 9799, 9800, 9801, 9802, 9803, 9804, 9805, 9806, 9807, 9808, 9809, 9810, 9811, 9812, 9813, 9814, 9815, 9816, 9817, 9818, 9819, 9820, 9821, 9822, 9823, 9824, 9825, 9826, 9827, 9828, 9829, 9830, 9831, 9832, 9833, 9834, 9835, 9836, 9837, 9838, 9839, 9840, 9841, 9842, 9843, 9844, 9845, 9846, 9847, 9848, 9849, 9850, 9851, 9852, 9853, 9854, 9855, 9856, 9857, 9858, 9859, 9860, 9861, 9862, 9863, 9864, 9865, 9866, 9867, 9868, 9869, 9870, 9871, 9872, 9873, 9874, 9875, 9876, 9877, 9878, 9879, 9880, 9881, 9882, 9883, 9884, 9885, 9886, 9887, 9888, 9889, 9890, 9891, 9892, 9893, 9894, 9895, 9896, 9897, 9898, 9899, 9900, 9901, 9902, 9903, 9904, 9905, 9906, 9907, 9908, 9909, 9910, 9911, 9912, 9913, 9914, 9915, 9916, 9917, 9918, 9919, 9920, 9921, 9922, 9923, 9924, 9925, 9926, 9927, 9928, 9929, 9930, 9931, 9932, 9933, 9934, 9935, 9936, 9937, 9938, 9939, 9940, 9941, 9942, 9943, 9944, 9945, 9946, 9947, 9948, 9949, 9950, 9951, 9952, 9953, 9954, 9955, 9956, 9957, 9958, 9959, 9960, 9961, 9962, 9963, 9964, 9965, 9966, 9967, 9968, 9969, 9970, 9971, 9972, 9973, 9974, 9975, 9976, 9977, 9978, 9979, 9980, 9981, 9982, 9983, 9984, 9985, 9986, 9987, 9988, 9989, 9990, 9991, 9992, 9993, 9994, 9995, 9996, 9997, 9998, 9999, 10000, 10001, 10002, 10003, 10004, 10005, 10006, 10007, 10008, 10009, 10010, 10011, 10012, 10013, 10014, 10015, 10016, 10017, 10018, 10019, 10020, 10021, 10022, 10023, 10024, 10025, 10026, 10027, 10028, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10036, 10037, 10038, 10039, 10040, 10041, 10042, 10043, 10044, 10045, 10046, 10047, 10048, 10049, 10050, 10051, 10052, 10053, 10054, 10055, 10056, 10057, 10058, 10059, 10060, 10061, 10062, 10063, 10064, 10065, 10066, 10067, 10068, 10069, 10070, 10071, 10072, 10073, 10074, 10075, 10076, 10077, 10078, 10079, 10080, 10081, 10082, 10083, 10084, 10085, 10086, 10087, 10088, 10089, 10090, 10091, 10092, 10093, 10094, 10095, 10096, 10097, 10098, 10099, 10100, 10101, 10102, 10103, 10104, 10105, 10106, 10107, 10108, 10109, 10110, 10111, 10112, 10113, 10114, 10115, 10116, 10117, 10118, 10119, 10120, 10121, 10122, 10123, 10124, 10125, 10126, 10127, 10128, 10129, 10130, 10131, 10132, 10133, 10134, 10135, 10136,

10137, 10138, 10139, 10140, 10141, 10142, 10143, 10144, 10145, 10146, 10147, 10148, 10149, 10150, 10151, 10152, 10153, 10154, 10155, 10156, 10157, 10158, 10159, 10160, 10161, 10162, 10163, 10164, 10165, 10166, 10167, 10168, 10169, 10170, 10171, 10172, 10173, 10174, 10175, 10176, 10177, 10178, 10179, 10180, 10181, 10182, 10183, 10184, 10185, 10186, 10187, 10188, 10189, 10190, 10191, 10192, 10193, 10194, 10195, 10196, 10197, 10198, 10199, 10200, 10201, 10202, 10203, 10204, 10205, 10206, 10207, 10208, 10209, 10210, 10211, 10212, 10213, 10214, 10215, 10216, 10217, 10218, 10219, 10220, 10221, 10222, 10223, 10224, 10225, 10226, 10227, 10228, 10229, 10230, 10231, 10232, 10233, 10234, 10235, 10236, 10237, 10238, 10239, 10240, 10241, 10242, 10243, 10244, 10245, 10246, 10247, 10248, 10249, 10250, 10251, 10252, 10253, 10254, 10255, 10256, 10257, 10258, 10259, 10260, 10261, 10262, 10263, 10264, 10265, 10266, 10267, 10268, 10269, 10270, 10271, 10272, 10273, 10274, 10275, 10276, 10277, 10278, 10279, 10280, 10281, 10282, 10283, 10284, 10285, 10286, 10287, 10288, 10289, 10290, 10291, 10292, 10293, 10294, 10295, 10296, 10297, 10298, 10299, 10300, 10301, 10302, 10303, 10304, 10305, 10306, 10307, 10308, 10309, 10310, 10311, 10312, 10313, 10314, 10315, 10316, 10317, 10318, 10319, 10320, 10321, 10322, 10323, 10324, 10325, 10326, 10327, 10328, 10329, 10330, 10331, 10332, 10333, 10334, 10335, 10336, 10337, 10338, 10339, 10340, 10341, 10342, 10343, 10344, 10345, 10346, 10347, 10348, 10349, 10350, 10351, 10352, 10353, 10354, 10355, 10356, 10357, 10358, 10359, 10360, 10361, 10362, 10363, 10364, 10365, 10366, 10367, 10368, 10369, 10370, 10371, 10372, 10373, 10374, 10375, 10376, 10377, 10378, 10379, 10380, 10381, 10382, 10383.

- Section 1 was amended to clarify that the analyses are based on the best available scientific information.
- The list of special status wildlife and plant species, CDFW designated sensitive natural communities, and CNPS listed special status plant species considered in Section 4.2 and 5.1 of the draft EIS was appropriate and adequate. The list was obtained from a search of the California Natural Diversity Database (CNDDDB) for all special status species occurrences within the project quadrangles (San Quentin, Richmond, Oakland West, Oakland East, Briones Valley, Las Trampas Ridge, San Leandro, and Hayward) along with the list obtained from the USFWS Sacramento Office. Additional plant inventories or surveys to identify the potential for special status plants or sensitive natural communities outside of the quadrangles in which the project area is located are unnecessary. The quadrangles are larger than the proposed and connected areas; therefore, data was gathered on areas adjacent to the project areas. The specific measures to protect pallid manzanita as required by the USFWS BO include requirements to survey specific areas for the presence of the species prior to the start of work.

Issue 7: Project Implementation

The following commenters (identified by PK) raised Issue 7: 3, 5, 7, 127, 169, 172, 180, 186, 187, 203, 211, 223, 228, 243, 249, 257, 259, 261, 263, 264, 266, 268, 269, 270, 275, 276, 277, 278, 280, 287, 288, 290, 291, 296, 351, 352, 600, 727, 729, 742, 744, 773, 777, 778, 795, 799, 804, 812, 815, 817, 864, 870, 871, 877, 879, 881, 885, 893, 897, 919, 941, 952, 973, 974, 1031, 1045, 1062, 1068, 1081, 1086, 1106, 1117, 1130, 1132, 1136, 1156, 1173, 1235, 1726, 1753, 1828, 1829, 1830, 1861, 1871, 1879, 1888, 1909, 1913, 1915, 1937, 1968, 1987, 2005, 2009, 2013, 2017, 2057, 2088, 2095, 2132, 2147, 2153, 2170, 2173, 2186, 2204, 2206, 2212, 2215, 2259, 2279, 2283, 2287, 2291, 2313, 2317, 2332, 2355, 2358, 2364, 2368, 2382, 2390, 2394,

2432, 2451, 2462, 2507, 2516, 2520, 2536, 2546, 2572, 2579, 2583, 2596, 2606, 2611, 2616, 2633, 2645, 2650, 2664, 2678, 2695, 2702, 2706, 2723, 2726, 2739, 2747, 2756, 2767, 2866, 2870, 2878, 2916, 2922, 2923, 2926, 2933, 2941, 2947, 2951, 2954, 3028, 3032, 3053, 3061, 3067, 3076, 3084, 3085, 3087, 3090, 3099, 3101, 3104, 3108, 3119, 3125, 3163, 3165, 3175, 3176, 3177, 3180, 3184, 3185, 3192, 3515, 3536, 5502, 5503, 5504, 5505, 5506, 5507, 5508, 5509, 5510, 5511, 5512, 5513, 5514, 5515, 5516, 5517, 5518, 5519, 5520, 5521, 5522, 5523, 5524, 5525, 5526, 5527, 5528, 5529, 5530, 5531, 5532, 5533, 5534, 5535, 5536, 5537, 5538, 5539, 5540, 5541, 5542, 5543, 5544, 5545, 5546, 5547, 5548, 5549, 5550, 5551, 5552, 5553, 5554, 5555, 5556, 5557, 5558, 5559, 5560, 5561, 5562, 5563, 5564, 5565, 5566, 5567, 5568, 5569, 5570, 5571, 5572, 5573, 5574, 5575, 5576, 5577, 5578, 5579, 5580, 5581, 5582, 5583, 5584, 5585, 5586, 5587, 5588, 5589, 5590, 5591, 5592, 5593, 5594, 5595, 5596, 5597, 5598, 5599, 5600, 5601, 5602, 5603, 5604, 5605, 5606, 5607, 5608, 5609, 5610, 5611, 5612, 5613, 5614, 5615, 5616, 5617, 5618, 5619, 5620, 5621, 5622, 5623, 5624, 5625, 5626, 5627, 5628, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5636, 5637, 5638, 5639, 5640, 5641, 5642, 5643, 5644, 5645, 5646, 5647, 5648, 5649, 5650, 5651, 5652, 5653, 5654, 5655, 5656, 5657, 5658, 5659, 5660, 5661, 5662, 5663, 5664, 5665, 5666, 5667, 5668, 5669, 5670, 5671, 5672, 5673, 5674, 5675, 5676, 5677, 5678, 5679, 5680, 5681, 5682, 5683, 5684, 5685, 5686, 5687, 5688, 5689, 5690, 5691, 5692, 5693, 5694, 5695, 5696, 5697, 5698, 5699, 5700, 5701, 5702, 5703, 5704, 5705, 5706, 5707, 5708, 5709, 5710, 5711, 5712, 5713, 5714, 5715, 5716, 5717, 5718, 5719, 5720, 5721, 5722, 5723, 5724, 5725, 5726, 5727, 5728, 5729, 5730, 5731, 5732, 5733, 5734, 5735, 5736, 5737, 5738, 5739, 5740, 5741, 5742, 5743, 5744, 5745, 5746, 5747, 5748, 5749, 5750, 5751, 5752, 5753, 5754, 5755, 5756, 5757, 5758, 5759, 5760, 5761, 5762, 5763, 5764, 5765, 5766, 5767, 5768, 5769, 5770, 5771, 5772, 5773, 5774, 5775, 5776, 5777, 5778, 5779, 5780, 5781, 5782, 5783, 5784, 5785, 5786, 5787, 5788, 5789, 5790, 5791, 5792, 5793, 5794, 5795, 5796, 5797, 5798, 5799, 5800, 5801, 5802, 5803, 5804, 5805, 5806, 5807, 5808, 5809, 5810, 5811, 5812, 5813, 5814, 5815, 5816, 5817, 5818, 5819, 5820, 5821, 5822, 5823, 5824, 5825, 5826, 5827, 5828, 5829, 5830, 5831, 5832, 5833, 5834, 5835, 5836, 5837, 5838, 5839, 5840, 5841, 5842, 5843, 5844, 5845, 5846, 5847, 5848, 5849, 5850, 5851, 5852, 5853, 5854, 5855, 5856, 5857, 5858, 5859, 5860, 5861, 5862, 5863, 5864, 5865, 5866, 5867, 5868, 5869, 5870, 5871, 5872, 5873, 5874, 5875, 5876, 5877, 5878, 5879, 5880, 5881, 5882, 5883, 5884, 5885, 5886, 5887, 5888, 5889, 5890, 5891, 5892, 5893, 5894, 5895, 5896, 5897, 5898, 5899, 5900, 5901, 5902, 5903, 5904, 5905, 5906, 5907, 5908, 5909, 5910, 5911, 5912, 5913, 5914, 5915, 5916, 5917, 5918, 5919, 5920, 5921, 5922, 5923, 5924, 5925, 5926, 5927, 5928, 5929, 5930, 5931, 5932, 5933, 5934, 5935, 5936, 5937, 5938, 5939, 5940, 5941, 5942, 5943, 5944, 5945, 5946, 5947, 5948, 5949, 5950, 5951, 5952, 5953, 5954, 5955, 5956, 5957, 5958, 5959, 5960, 5961, 5962, 5963, 5964, 5965, 5966, 5967, 5968, 5969, 5970, 5971, 5972, 5973, 5974, 5975, 5976, 5977, 5978, 5979, 5980, 5981, 5982, 5983, 5984, 5985, 5986, 5987, 5988, 5989, 5990, 5991, 5992, 5993, 5994, 5995, 5996, 5997, 5998, 5999, 6000, 6001, 6002, 6003, 6004, 6005, 6006, 6007, 6008, 6009, 6010, 6011, 6012, 6013, 6014, 6015, 6016, 6017, 6018, 6019, 6020, 6021, 6022, 6023, 6024, 6025, 6026, 6027, 6028, 6029, 6030, 6031, 6032, 6033, 6034, 6035, 6036, 6037, 6038, 6039, 6040, 6041, 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6051, 6052, 6053, 6054, 6055, 6056, 6057, 6058, 6059, 6060, 6061, 6062, 6063, 6064, 6065, 6066, 6067, 6068, 6069, 6070, 6071, 6072, 6073, 6074, 6075, 6076, 6077, 6078, 6079, 6080, 6081, 6082, 6083, 6084, 6085, 6086, 6087, 6088, 6089, 6090, 6091, 6092, 6093, 6094, 6095, 6096, 6097, 6098, 6099, 6100, 6101, 6102, 6103, 6104, 6105, 6106, 6107, 6108, 6109, 6110, 6111, 6112, 6113, 6114, 6115, 6116, 6117, 6118, 6119, 6120, 6121, 6122, 6123,

6124, 6125, 6126, 6127, 6128, 6129, 6130, 6131, 6132, 6133, 6134, 6135, 6136, 6137, 6138, 6139, 6140, 6141, 6142, 6143, 6144, 6145, 6146, 6147, 6148, 6149, 6150, 6151, 6152, 6153, 6154, 6155, 6156, 6157, 6158, 6159, 6160, 6161, 6162, 6163, 6164, 6165, 6166, 6167, 6168, 6169, 6170, 6171, 6172, 6173, 6174, 6175, 6176, 6177, 6178, 6179, 6180, 6181, 6182, 6183, 6184, 6185, 6186, 6187, 6188, 6189, 6190, 6191, 6192, 6193, 6194, 6195, 6196, 6197, 6198, 6199, 6200, 6201, 6202, 6203, 6204, 6205, 6206, 6207, 6208, 6209, 6210, 6211, 6212, 6213, 6214, 6215, 6216, 6217, 6218, 6219, 6220, 6221, 6222, 6223, 6224, 6225, 6226, 6227, 6228, 6229, 6230, 6231, 6232, 6233, 6234, 6235, 6236, 6237, 6238, 6239, 6240, 6241, 6242, 6243, 6244, 6245, 6246, 6247, 6248, 6249, 6250, 6251, 6252, 6253, 6254, 6255, 6256, 6257, 6258, 6259, 6260, 6261, 6262, 6263, 6264, 6265, 6266, 6267, 6268, 6269, 6270, 6271, 6272, 6273, 6274, 6275, 6276, 6277, 6278, 6279, 6280, 6281, 6282, 6283, 6284, 6285, 6286, 6287, 6288, 6289, 6290, 6291, 6292, 6293, 6294, 6295, 6296, 6297, 6298, 6299, 6300, 6301, 6302, 6303, 6304, 6305, 6306, 6307, 6308, 6309, 6310, 6311, 6312, 6313, 6314, 6315, 6316, 6317, 6318, 6319, 6320, 6321, 6322, 6323, 6324, 6325, 6326, 6327, 6328, 6329, 6330, 6331, 6332, 6333, 6334, 6335, 6336, 6337, 6338, 6339, 6340, 6341, 6342, 6343, 6344, 6345, 6346, 6347, 6348, 6349, 6350, 6351, 6352, 6353, 6354, 6355, 6356, 6357, 6358, 6359, 6360, 6361, 6362, 6363, 6364, 6365, 6366, 6367, 6368, 6369, 6370, 6371, 6372, 6373, 6374, 6375, 6376, 6377, 6378, 6379, 6380, 6381, 6382, 6383, 6384, 6385, 6386, 6387, 6388, 6389, 6390, 6391, 6392, 6393, 6394, 6395, 6396, 6397, 6398, 6399, 6400, 6401, 6402, 6403, 6404, 6405, 6406, 6407, 6408, 6409, 6410, 6411, 6412, 6413, 6414, 6415, 6416, 6417, 6418, 6419, 6420, 6421, 6422, 6423, 6424, 6425, 6426, 6427, 6428, 6429, 6430, 6431, 6432, 6433, 6434, 6435, 6436, 6437, 6438, 6439, 6440, 6441, 6442, 6443, 6444, 6445, 6446, 6447, 6448, 6449, 6450, 6451, 6452, 6453, 6454, 6455, 6456, 6457, 6458, 6459, 6460, 6461, 6462, 6463, 6464, 6465, 6466, 6467, 6468, 6469, 6470, 6471, 6472, 6473, 6474, 6475, 6476, 6477, 6478, 6479, 6480, 6481, 6482, 6483, 6484, 6485, 6486, 6487, 6488, 6489, 6490, 6491, 6492, 6493, 6494, 6495, 6496, 6497, 6498, 6499, 6500, 6501, 6502, 6503, 6504, 6505, 6506, 6507, 6508, 6509, 6510, 6511, 6512, 6513, 6514, 6515, 6516, 6517, 6518, 6519, 6520, 6521, 6522, 6523, 6524, 6525, 6526, 6527, 6528, 6529, 6530, 6531, 6532, 6533, 6534, 6535, 6536, 6537, 6538, 6539, 6540, 6541, 6542, 6543, 6544, 6545, 6546, 6547, 6548, 6549, 6550, 6551, 6552, 6553, 6554, 6555, 6556, 6557, 6558, 6559, 6560, 6561, 6562, 6563, 6564, 6565, 6566, 6567, 6568, 6569, 6570, 6571, 6572, 6573, 6574, 6575, 6576, 6577, 6578, 6579, 6580, 6581, 6582, 6583, 6584, 6585, 6586, 6587, 6588, 6589, 6590, 6591, 6592, 6593, 6594, 6595, 6596, 6597, 6598, 6599, 6600, 6601, 6602, 6603, 6604, 6605, 6606, 6607, 6608, 6609, 6610, 6611, 6612, 6613, 6614, 6615, 6616, 6617, 6618, 6619, 6620, 6621, 6622, 6623, 6624, 6625, 6626, 6627, 6628, 6629, 6630, 6631, 6632, 6633, 6634, 6635, 6636, 6637, 6638, 6639, 6640, 6641, 6642, 6643, 6644, 6645, 6646, 6647, 6648, 6649, 6650, 6651, 6652, 6653, 6654, 6655, 6656, 6657, 6658, 6659, 6660, 6661, 6662, 6663, 6664, 6665, 6666, 6667, 6668, 6669, 6670, 6671, 6672, 6673, 6674, 6675, 6676, 6677, 6678, 6679, 6680, 6681, 6682, 6683, 6684, 6685, 6686, 6687, 6688, 6689, 6690, 6691, 6692, 6693, 6694, 6695, 6696, 6697, 6698, 6699, 6700, 6701, 6702, 6703, 6704, 6705, 6706, 6707, 6708, 6709, 6710, 6711, 6712, 6713, 6714, 6715, 6716, 6717, 6718, 6719, 6720, 6721, 6722, 6723, 6724, 6725, 6726, 6727, 6728, 6729, 6730, 6731, 6732, 6733, 6734, 6735, 6736, 6737, 6738, 6739, 6740, 6741, 6742, 6743, 6744, 6745, 6746, 6747, 6748, 6749, 6750, 6751, 6752, 6753, 6754, 6755, 6756, 6757, 6758, 6759, 6760, 6761, 6762, 6763, 6764, 6765, 6766, 6767, 6768, 6769, 6770, 6771, 6772, 6773, 6774, 6775, 6776, 6777, 6778, 6779, 6780, 6781, 6782, 6783, 6784, 6785, 6786, 6787, 6788, 6789, 6790, 6791, 6792, 6793, 6794, 6795, 6796, 6797, 6798, 6799, 6800, 6801, 6802, 6803, 6804, 6805, 6806, 6807, 6808, 6809, 6810, 6811, 6812, 6813,

6814, 6815, 6816, 6817, 6818, 6819, 6820, 6821, 6822, 6823, 6824, 6825, 6826, 6827, 6828, 6829, 6830, 6831, 6832, 6833, 6834, 6835, 6836, 6837, 6838, 6839, 6840, 6841, 6842, 6843, 6844, 6845, 6846, 6847, 6848, 6849, 6850, 6851, 6852, 6853, 6854, 6855, 6856, 6857, 6858, 6859, 6860, 6861, 6862, 6863, 6864, 6865, 6866, 6867, 6868, 6869, 6870, 6871, 6872, 6873, 6874, 6875, 6876, 6877, 6878, 6879, 6880, 6881, 6882, 6883, 6884, 6885, 6886, 6887, 6888, 6889, 6890, 6891, 6892, 6893, 6894, 6895, 6896, 6897, 6898, 6899, 6900, 6901, 6902, 6903, 6904, 6905, 6906, 6907, 6908, 6909, 6910, 6911, 6912, 6913, 6914, 6915, 6916, 6917, 6918, 6919, 6920, 6921, 6922, 6923, 6924, 6925, 6926, 6927, 6928, 6929, 6930, 6931, 6932, 6933, 6934, 6935, 6936, 6937, 6938, 6939, 6940, 6941, 6942, 6943, 6944, 6945, 6946, 6947, 6948, 6949, 6950, 6951, 6952, 6953, 6954, 6955, 6956, 6957, 6958, 6959, 6960, 6961, 6962, 6963, 6964, 6965, 6966, 6967, 6968, 6969, 6970, 6971, 6972, 6973, 6974, 6975, 6976, 6977, 6978, 6979, 6980, 6981, 6982, 6983, 6984, 6985, 6986, 6987, 6988, 6989, 6990, 6991, 6992, 6993, 6994, 6995, 6996, 6997, 6998, 6999, 7000, 7001, 7002, 7003, 7004, 7005, 7006, 7007, 7008, 7009, 7010, 7011, 7012, 7013, 7014, 7015, 7016, 7017, 7018, 7019, 7020, 7021, 7022, 7023, 7024, 7025, 7026, 7027, 7028, 7029, 7030, 7031, 7032, 7033, 7034, 7035, 7036, 7037, 7038, 7039, 7040, 7041, 7042, 7043, 7044, 7045, 7046, 7047, 7048, 7049, 7050, 7051, 7052, 7053, 7054, 7055, 7056, 7057, 7058, 7059, 7060, 7061, 7062, 7063, 7064, 7065, 7066, 7067, 7068, 7069, 7070, 7071, 7072, 7073, 7074, 7075, 7076, 7077, 7078, 7079, 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089, 7090, 7091, 7092, 7093, 7094, 7095, 7096, 7097, 7098, 7099, 7100, 7101, 7102, 7103, 7104, 7105, 7106, 7107, 7108, 7109, 7110, 7111, 7112, 7113, 7114, 7115, 7116, 7117, 7118, 7119, 7120, 7121, 7122, 7123, 7124, 7125, 7126, 7127, 7128, 7129, 7130, 7131, 7132, 7133, 7134, 7135, 7136, 7137, 7138, 7139, 7140, 7141, 7142, 7143, 7144, 7145, 7146, 7147, 7148, 7149, 7150, 7151, 7152, 7153, 7154, 7155, 7156, 7157, 7158, 7159, 7160, 7161, 7162, 7163, 7164, 7165, 7166, 7167, 7168, 7169, 7170, 7171, 7172, 7173, 7174, 7175, 7176, 7177, 7178, 7179, 7180, 7181, 7182, 7183, 7184, 7185, 7186, 7187, 7188, 7189, 7190, 7191, 7192, 7193, 7194, 7195, 7196, 7197, 7198, 7199, 7200, 7201, 7202, 7203, 7204, 7205, 7206, 7207, 7208, 7209, 7210, 7211, 7212, 7213, 7214, 7215, 7216, 7217, 7218, 7219, 7220, 7221, 7222, 7223, 7224, 7225, 7226, 7227, 7228, 7229, 7230, 7231, 7232, 7233, 7234, 7235, 7236, 7237, 7238, 7239, 7240, 7241, 7242, 7243, 7244, 7245, 7246, 7247, 7248, 7249, 7250, 7251, 7252, 7253, 7254, 7255, 7256, 7257, 7258, 7259, 7260, 7261, 7262, 7263, 7264, 7265, 7266, 7267, 7268, 7269, 7270, 7271, 7272, 7273, 7274, 7275, 7276, 7277, 7278, 7279, 7280, 7281, 7282, 7283, 7284, 7285, 7286, 7287, 7288, 7289, 7290, 7291, 7292, 7293, 7294, 7295, 7296, 7297, 7298, 7299, 7300, 7301, 7302, 7303, 7304, 7305, 7306, 7307, 7308, 7309, 7310, 7311, 7312, 7313, 7314, 7315, 7316, 7317, 7318, 7319, 7320, 7321, 7322, 7323, 7324, 7325, 7326, 7327, 7328, 7329, 7330, 7331, 7332, 7333, 7334, 7335, 7336, 7337, 7338, 7339, 7340, 7341, 7342, 7343, 7344, 7345, 7346, 7347, 7348, 7349, 7350, 7351, 7352, 7353, 7354, 7355, 7356, 7357, 7358, 7359, 7360, 7361, 7362, 7363, 7364, 7365, 7366, 7367, 7368, 7369, 7370, 7371, 7372, 7373, 7374, 7375, 7376, 7377, 7378, 7379, 7380, 7381, 7382, 7383, 7384, 7385, 7386, 7387, 7388, 7389, 7390, 7391, 7392, 7393, 7394, 7395, 7396, 7397, 7398, 7399, 7400, 7401, 7402, 7403, 7404, 7405, 7406, 7407, 7408, 7409, 7410, 7411, 7412, 7413, 7414, 7415, 7416, 7417, 7418, 7419, 7420, 7421, 7422, 7423, 7424, 7425, 7426, 7427, 7428, 7429, 7430, 7431, 7432, 7433, 7434, 7435, 7436, 7437, 7438, 7439, 7440, 7441, 7442, 7443, 7444, 7445, 7446, 7447, 7448, 7449, 7450, 7451, 7452, 7453, 7454, 7455, 7456, 7457, 7458, 7459, 7460, 7461, 7462, 7463, 7464, 7465, 7466, 7467, 7468, 7469, 7470, 7471, 7472, 7473, 7474, 7475, 7476, 7477, 7478, 7479, 7480, 7481, 7482, 7483, 7484, 7485, 7486, 7487, 7488, 7489, 7490, 7491, 7492, 7493, 7494, 7495, 7496, 7497, 7498, 7499, 7500, 7501, 7502, 7503,

7504, 7505, 7506, 7507, 7508, 7509, 7510, 7511, 7512, 7513, 7514, 7515, 7516, 7517, 7518, 7519, 7520, 7521, 7522, 7523, 7524, 7525, 7526, 7527, 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7544, 7545, 7546, 7547, 7548, 7549, 7550, 7551, 7552, 7553, 7554, 7555, 7556, 7557, 7558, 7559, 7560, 7561, 7562, 7563, 7564, 7565, 7566, 7567, 7568, 7569, 7570, 7571, 7572, 7573, 7574, 7575, 7576, 7577, 7578, 7579, 7580, 7581, 7582, 7583, 7584, 7585, 7586, 7587, 7588, 7589, 7590, 7591, 7592, 7593, 7594, 7595, 7596, 7597, 7598, 7599, 7600, 7601, 7602, 7603, 7604, 7605, 7606, 7607, 7608, 7609, 7610, 7611, 7612, 7613, 7614, 7615, 7616, 7617, 7618, 7619, 7620, 7621, 7622, 7623, 7624, 7625, 7626, 7627, 7628, 7629, 7630, 7631, 7632, 7633, 7634, 7635, 7636, 7637, 7638, 7639, 7640, 7641, 7642, 7643, 7644, 7645, 7646, 7647, 7648, 7649, 7650, 7651, 7652, 7653, 7654, 7655, 7656, 7657, 7658, 7659, 7660, 7661, 7662, 7663, 7664, 7665, 7666, 7667, 7668, 7669, 7670, 7671, 7672, 7673, 7674, 7675, 7676, 7677, 7678, 7679, 7680, 7681, 7682, 7683, 7684, 7685, 7686, 7687, 7688, 7689, 7690, 7691, 7692, 7693, 7694, 7695, 7696, 7697, 7698, 7699, 7700, 7701, 7702, 7703, 7704, 7705, 7706, 7707, 7708, 7709, 7710, 7711, 7712, 7713, 7714, 7715, 7716, 7717, 7718, 7719, 7720, 7721, 7722, 7723, 7724, 7725, 7726, 7727, 7728, 7729, 7730, 7731, 7732, 7733, 7734, 7735, 7736, 7737, 7738, 7739, 7740, 7741, 7742, 7743, 7744, 7745, 7746, 7747, 7748, 7749, 7750, 7751, 7752, 7753, 7754, 7755, 7756, 7757, 7758, 7759, 7760, 7761, 7762, 7763, 7764, 7765, 7766, 7767, 7768, 7769, 7770, 7771, 7772, 7773, 7774, 7775, 7776, 7777, 7778, 7779, 7780, 7781, 7782, 7783, 7784, 7785, 7786, 7787, 7788, 7789, 7790, 7791, 7792, 7793, 7794, 7795, 7796, 7797, 7798, 7799, 7800, 7801, 7802, 7803, 7804, 7805, 7806, 7807, 7808, 7809, 7810, 7811, 7812, 7813, 7814, 7815, 7816, 7817, 7818, 7819, 7820, 7821, 7822, 7823, 7824, 7825, 7826, 7827, 7828, 7829, 7830, 7831, 7832, 7833, 7834, 7835, 7836, 7837, 7838, 7839, 7840, 7841, 7842, 7843, 7844, 7845, 7846, 7847, 7848, 7849, 7850, 7851, 7852, 7853, 7854, 7855, 7856, 7857, 7858, 7859, 7860, 7861, 7862, 7863, 7864, 7865, 7866, 7867, 7868, 7869, 7870, 7871, 7872, 7873, 7874, 7875, 7876, 7877, 7878, 7879, 7880, 7881, 7882, 7883, 7884, 7885, 7886, 7887, 7888, 7889, 7890, 7891, 7892, 7893, 7894, 7895, 7896, 7897, 7898, 7899, 7900, 7901, 7902, 7903, 7904, 7905, 7906, 7907, 7908, 7909, 7910, 7911, 7912, 7913, 7914, 7915, 7916, 7917, 7918, 7919, 7920, 7921, 7922, 7923, 7924, 7925, 7926, 7927, 7928, 7929, 7930, 7931, 7932, 7933, 7934, 7935, 7936, 7937, 7938, 7939, 7940, 7941, 7942, 7943, 7944, 7945, 7946, 7947, 7948, 7949, 7950, 7951, 7952, 7953, 7954, 7955, 7956, 7957, 7958, 7959, 7960, 7961, 7962, 7963, 7964, 7965, 7966, 7967, 7968, 7969, 7970, 7971, 7972, 7973, 7974, 7975, 7976, 7977, 7978, 7979, 7980, 7981, 7982, 7983, 7984, 7985, 7986, 7987, 7988, 7989, 7990, 7991, 7992, 7993, 7994, 7995, 7996, 7997, 7998, 7999, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8009, 8010, 8011, 8012, 8013, 8014, 8015, 8016, 8017, 8018, 8019, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8029, 8030, 8031, 8032, 8033, 8034, 8035, 8036, 8037, 8038, 8039, 8040, 8041, 8042, 8043, 8044, 8045, 8046, 8047, 8048, 8049, 8050, 8051, 8052, 8053, 8054, 8055, 8056, 8057, 8058, 8059, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8068, 8069, 8070, 8071, 8072, 8073, 8074, 8075, 8076, 8077, 8078, 8079, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088, 8089, 8090, 8091, 8092, 8093, 8094, 8095, 8096, 8097, 8098, 8099, 8100, 8101, 8102, 8103, 8104, 8105, 8106, 8107, 8108, 8109, 8110, 8111, 8112, 8113, 8114, 8115, 8116, 8117, 8118, 8119, 8120, 8121, 8122, 8123, 8124, 8125, 8126, 8127, 8128, 8129, 8130, 8131, 8132, 8133, 8134, 8135, 8136, 8137, 8138, 8139, 8140, 8141, 8142, 8143, 8144, 8145, 8146, 8147, 8148, 8149, 8150, 8151, 8152, 8153, 8154, 8155, 8156, 8157, 8158, 8159, 8160, 8161, 8162, 8163, 8164, 8165, 8166, 8167, 8168, 8169, 8170, 8171, 8172, 8173, 8174, 8175, 8176, 8177, 8178, 8179, 8180, 8181, 8182, 8183, 8184, 8185, 8186, 8187, 8188, 8189, 8190, 8191, 8192, 8193,

8194, 8195, 8196, 8197, 8198, 8199, 8200, 8201, 8202, 8203, 8204, 8205, 8206, 8207, 8208, 8209, 8210, 8211, 8212, 8213, 8214, 8215, 8216, 8217, 8218, 8219, 8220, 8221, 8222, 8223, 8224, 8225, 8226, 8227, 8228, 8229, 8230, 8231, 8232, 8233, 8234, 8235, 8236, 8237, 8238, 8239, 8240, 8241, 8242, 8243, 8244, 8245, 8246, 8247, 8248, 8249, 8250, 8251, 8252, 8253, 8254, 8255, 8256, 8257, 8258, 8259, 8260, 8261, 8262, 8263, 8264, 8265, 8266, 8267, 8268, 8269, 8270, 8271, 8272, 8273, 8274, 8275, 8276, 8277, 8278, 8279, 8280, 8281, 8282, 8283, 8284, 8285, 8286, 8287, 8288, 8289, 8290, 8291, 8292, 8293, 8294, 8295, 8296, 8297, 8298, 8299, 8300, 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309, 8310, 8311, 8312, 8313, 8314, 8315, 8316, 8317, 8318, 8319, 8320, 8321, 8322, 8323, 8324, 8325, 8326, 8327, 8328, 8329, 8330, 8331, 8332, 8333, 8334, 8335, 8336, 8337, 8338, 8339, 8340, 8341, 8342, 8343, 8344, 8345, 8346, 8347, 8348, 8349, 8350, 8351, 8352, 8353, 8354, 8355, 8356, 8357, 8358, 8359, 8360, 8361, 8362, 8363, 8364, 8365, 8366, 8367, 8368, 8369, 8370, 8371, 8372, 8373, 8374, 8375, 8376, 8377, 8378, 8379, 8380, 8381, 8382, 8383, 8384, 8385, 8386, 8387, 8388, 8389, 8390, 8391, 8392, 8393, 8394, 8395, 8396, 8397, 8398, 8399, 8400, 8401, 8402, 8403, 8404, 8405, 8406, 8407, 8408, 8409, 8410, 8411, 8412, 8413, 8414, 8415, 8416, 8417, 8418, 8419, 8420, 8421, 8422, 8423, 8424, 8425, 8426, 8427, 8428, 8429, 8430, 8431, 8432, 8433, 8434, 8435, 8436, 8437, 8438, 8439, 8440, 8441, 8442, 8443, 8444, 8445, 8446, 8447, 8448, 8449, 8450, 8451, 8452, 8453, 8454, 8455, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463, 8464, 8465, 8466, 8467, 8468, 8469, 8470, 8471, 8472, 8473, 8474, 8475, 8476, 8477, 8478, 8479, 8480, 8481, 8482, 8483, 8484, 8485, 8486, 8487, 8488, 8489, 8490, 8491, 8492, 8493, 8494, 8495, 8496, 8497, 8498, 8499, 8500, 8501, 8502, 8503, 8504, 8505, 8506, 8507, 8508, 8509, 8510, 8511, 8512, 8513, 8514, 8515, 8516, 8517, 8518, 8519, 8520, 8521, 8522, 8523, 8524, 8525, 8526, 8527, 8528, 8529, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8537, 8538, 8539, 8540, 8541, 8542, 8543, 8544, 8545, 8546, 8547, 8548, 8549, 8550, 8551, 8552, 8553, 8554, 8555, 8556, 8557, 8558, 8559, 8560, 8561, 8562, 8563, 8564, 8565, 8566, 8567, 8568, 8569, 8570, 8571, 8572, 8573, 8574, 8575, 8576, 8577, 8578, 8579, 8580, 8581, 8582, 8583, 8584, 8585, 8586, 8587, 8588, 8589, 8590, 8591, 8592, 8593, 8594, 8595, 8596, 8597, 8598, 8599, 8600, 8601, 8602, 8603, 8604, 8605, 8606, 8607, 8608, 8609, 8610, 8611, 8612, 8613, 8614, 8615, 8616, 8617, 8618, 8619, 8620, 8621, 8622, 8623, 8624, 8625, 8626, 8627, 8628, 8629, 8630, 8631, 8632, 8633, 8634, 8635, 8636, 8637, 8638, 8639, 8640, 8641, 8642, 8643, 8644, 8645, 8646, 8647, 8648, 8649, 8650, 8651, 8652, 8653, 8654, 8655, 8656, 8657, 8658, 8659, 8660, 8661, 8662, 8663, 8664, 8665, 8666, 8667, 8668, 8669, 8670, 8671, 8672, 8673, 8674, 8675, 8676, 8677, 8678, 8679, 8680, 8681, 8682, 8683, 8684, 8685, 8686, 8687, 8688, 8689, 8690, 8691, 8692, 8693, 8694, 8695, 8696, 8697, 8698, 8699, 8700, 8701, 8702, 8703, 8704, 8705, 8706, 8707, 8708, 8709, 8710, 8711, 8712, 8713, 8714, 8715, 8716, 8717, 8718, 8719, 8720, 8721, 8722, 8723, 8724, 8725, 8726, 8727, 8728, 8729, 8730, 8731, 8732, 8733, 8734, 8735, 8736, 8737, 8738, 8739, 8740, 8741, 8742, 8743, 8744, 8745, 8746, 8747, 8748, 8749, 8750, 8751, 8752, 8753, 8754, 8755, 8756, 8757, 8758, 8759, 8760, 8761, 8762, 8763, 8764, 8765, 8766, 8767, 8768, 8769, 8770, 8771, 8772, 8773, 8774, 8775, 8776, 8777, 8778, 8779, 8780, 8781, 8782, 8783, 8784, 8785, 8786, 8787, 8788, 8789, 8790, 8791, 8792, 8793, 8794, 8795, 8796, 8797, 8798, 8799, 8800, 8801, 8802, 8803, 8804, 8805, 8806, 8807, 8808, 8809, 8810, 8811, 8812, 8813, 8814, 8815, 8816, 8817, 8818, 8819, 8820, 8821, 8822, 8823, 8824, 8825, 8826, 8827, 8828, 8829, 8830, 8831, 8832, 8833, 8834, 8835, 8836, 8837, 8838, 8839, 8840, 8841, 8842, 8843, 8844, 8845, 8846, 8847, 8848, 8849, 8850, 8851, 8852, 8853, 8854, 8855, 8856, 8857, 8858, 8859, 8860, 8861, 8862, 8863, 8864, 8865, 8866, 8867, 8868, 8869, 8870, 8871, 8872, 8873, 8874, 8875, 8876, 8877, 8878, 8879, 8880, 8881, 8882, 8883,

8884, 8885, 8886, 8887, 8888, 8889, 8890, 8891, 8892, 8893, 8894, 8895, 8896, 8897, 8898, 8899, 8900, 8901, 8902, 8903, 8904, 8905, 8906, 8907, 8908, 8909, 8910, 8911, 8912, 8913, 8914, 8915, 8916, 8917, 8918, 8919, 8920, 8921, 8922, 8923, 8924, 8925, 8926, 8927, 8928, 8929, 8930, 8931, 8932, 8933, 8934, 8935, 8936, 8937, 8938, 8939, 8940, 8941, 8942, 8943, 8944, 8945, 8946, 8947, 8948, 8949, 8950, 8951, 8952, 8953, 8954, 8955, 8956, 8957, 8958, 8959, 8960, 8961, 8962, 8963, 8964, 8965, 8966, 8967, 8968, 8969, 8970, 8971, 8972, 8973, 8974, 8975, 8976, 8977, 8978, 8979, 8980, 8981, 8982, 8983, 8984, 8985, 8986, 8987, 8988, 8989, 8990, 8991, 8992, 8993, 8994, 8995, 8996, 8997, 8998, 8999, 9000, 9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9011, 9012, 9013, 9014, 9015, 9016, 9017, 9018, 9019, 9020, 9021, 9022, 9023, 9024, 9025, 9026, 9027, 9028, 9029, 9030, 9031, 9032, 9033, 9034, 9035, 9036, 9037, 9038, 9039, 9040, 9041, 9042, 9043, 9044, 9045, 9046, 9047, 9048, 9049, 9050, 9051, 9052, 9053, 9054, 9055, 9056, 9057, 9058, 9059, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 9067, 9068, 9069, 9070, 9071, 9072, 9073, 9074, 9075, 9076, 9077, 9078, 9079, 9080, 9081, 9082, 9083, 9084, 9085, 9086, 9087, 9088, 9089, 9090, 9091, 9092, 9093, 9094, 9095, 9096, 9097, 9098, 9099, 9100, 9101, 9102, 9103, 9104, 9105, 9106, 9107, 9108, 9109, 9110, 9111, 9112, 9113, 9114, 9115, 9116, 9117, 9118, 9119, 9120, 9121, 9122, 9123, 9124, 9125, 9126, 9127, 9128, 9129, 9130, 9131, 9132, 9133, 9134, 9135, 9136, 9137, 9138, 9139, 9140, 9141, 9142, 9143, 9144, 9145, 9146, 9147, 9148, 9149, 9150, 9151, 9152, 9153, 9154, 9155, 9156, 9157, 9158, 9159, 9160, 9161, 9162, 9163, 9164, 9165, 9166, 9167, 9168, 9169, 9170, 9171, 9172, 9173, 9174, 9175, 9176, 9177, 9178, 9179, 9180, 9181, 9182, 9183, 9184, 9185, 9186, 9187, 9188, 9189, 9190, 9191, 9192, 9193, 9194, 9195, 9196, 9197, 9198, 9199, 9200, 9201, 9202, 9203, 9204, 9205, 9206, 9207, 9208, 9209, 9210, 9211, 9212, 9213, 9214, 9215, 9216, 9217, 9218, 9219, 9220, 9221, 9222, 9223, 9224, 9225, 9226, 9227, 9228, 9229, 9230, 9231, 9232, 9233, 9234, 9235, 9236, 9237, 9238, 9239, 9240, 9241, 9242, 9243, 9244, 9245, 9246, 9247, 9248, 9249, 9250, 9251, 9252, 9253, 9254, 9255, 9256, 9257, 9258, 9259, 9260, 9261, 9262, 9263, 9264, 9265, 9266, 9267, 9268, 9269, 9270, 9271, 9272, 9273, 9274, 9275, 9276, 9277, 9278, 9279, 9280, 9281, 9282, 9283, 9284, 9285, 9286, 9287, 9288, 9289, 9290, 9291, 9292, 9293, 9294, 9295, 9296, 9297, 9298, 9299, 9300, 9301, 9302, 9303, 9304, 9305, 9306, 9307, 9308, 9309, 9310, 9311, 9312, 9313, 9314, 9315, 9316, 9317, 9318, 9319, 9320, 9321, 9322, 9323, 9324, 9325, 9326, 9327, 9328, 9329, 9330, 9331, 9332, 9333, 9334, 9335, 9336, 9337, 9338, 9339, 9340, 9341, 9342, 9343, 9344, 9345, 9346, 9347, 9348, 9349, 9350, 9351, 9352, 9353, 9354, 9355, 9356, 9357, 9358, 9359, 9360, 9361, 9362, 9363, 9364, 9365, 9366, 9367, 9368, 9369, 9370, 9371, 9372, 9373, 9374, 9375, 9376, 9377, 9378, 9379, 9380, 9381, 9382, 9383, 9384, 9385, 9386, 9387, 9388, 9389, 9390, 9391, 9392, 9393, 9394, 9395, 9396, 9397, 9398, 9399, 9400, 9401, 9402, 9403, 9404, 9405, 9406, 9407, 9408, 9409, 9410, 9411, 9412, 9413, 9414, 9415, 9416, 9417, 9418, 9419, 9420, 9421, 9422, 9423, 9424, 9425, 9426, 9427, 9428, 9429, 9430, 9431, 9432, 9433, 9434, 9435, 9436, 9437, 9438, 9439, 9440, 9441, 9442, 9443, 9444, 9445, 9446, 9447, 9448, 9449, 9450, 9451, 9452, 9453, 9454, 9455, 9456, 9457, 9458, 9459, 9460, 9461, 9462, 9463, 9464, 9465, 9466, 9467, 9468, 9469, 9470, 9471, 9472, 9473, 9474, 9475, 9476, 9477, 9478, 9479, 9480, 9481, 9482, 9483, 9484, 9485, 9486, 9487, 9488, 9489, 9490, 9491, 9492, 9493, 9494, 9495, 9496, 9497, 9498, 9499, 9500, 9501, 9502, 9503, 9504, 9505, 9506, 9507, 9508, 9509, 9510, 9511, 9512, 9513, 9514, 9515, 9516, 9517, 9518, 9519, 9520, 9521, 9522, 9523, 9524, 9525, 9526, 9527, 9528, 9529, 9530, 9531, 9532, 9533, 9534, 9535, 9536, 9537, 9538, 9539, 9540, 9541, 9542, 9543, 9544, 9545, 9546, 9547, 9548, 9549, 9550, 9551, 9552, 9553, 9554, 9555, 9556, 9557, 9558, 9559, 9560, 9561, 9562, 9563, 9564, 9565, 9566, 9567, 9568, 9569, 9570, 9571, 9572, 9573,

9574, 9575, 9576, 9577, 9578, 9579, 9580, 9581, 9582, 9583, 9584, 9585, 9586, 9587, 9588, 9589, 9590, 9591, 9592, 9593, 9594, 9595, 9596, 9597, 9598, 9599, 9600, 9601, 9602, 9603, 9604, 9605, 9606, 9607, 9608, 9609, 9610, 9611, 9612, 9613, 9614, 9615, 9616, 9617, 9618, 9619, 9620, 9621, 9622, 9623, 9624, 9625, 9626, 9627, 9628, 9629, 9630, 9631, 9632, 9633, 9634, 9635, 9636, 9637, 9638, 9639, 9640, 9641, 9642, 9643, 9644, 9645, 9646, 9647, 9648, 9649, 9650, 9651, 9652, 9653, 9654, 9655, 9656, 9657, 9658, 9659, 9660, 9661, 9662, 9663, 9664, 9665, 9666, 9667, 9668, 9669, 9670, 9671, 9672, 9673, 9674, 9675, 9676, 9677, 9678, 9679, 9680, 9681, 9682, 9683, 9684, 9685, 9686, 9687, 9688, 9689, 9690, 9691, 9692, 9693, 9694, 9695, 9696, 9697, 9698, 9699, 9700, 9701, 9702, 9703, 9704, 9705, 9706, 9707, 9708, 9709, 9710, 9711, 9712, 9713, 9714, 9715, 9716, 9717, 9718, 9719, 9720, 9721, 9722, 9723, 9724, 9725, 9726, 9727, 9728, 9729, 9730, 9731, 9732, 9733, 9734, 9735, 9736, 9737, 9738, 9739, 9740, 9741, 9742, 9743, 9744, 9745, 9746, 9747, 9748, 9749, 9750, 9751, 9752, 9753, 9754, 9755, 9756, 9757, 9758, 9759, 9760, 9761, 9762, 9763, 9764, 9765, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9780, 9781, 9782, 9783, 9784, 9785, 9786, 9787, 9788, 9789, 9790, 9791, 9792, 9793, 9794, 9795, 9796, 9797, 9798, 9799, 9800, 9801, 9802, 9803, 9804, 9805, 9806, 9807, 9808, 9809, 9810, 9811, 9812, 9813, 9814, 9815, 9816, 9817, 9818, 9819, 9820, 9821, 9822, 9823, 9824, 9825, 9826, 9827, 9828, 9829, 9830, 9831, 9832, 9833, 9834, 9835, 9836, 9837, 9838, 9839, 9840, 9841, 9842, 9843, 9844, 9845, 9846, 9847, 9848, 9849, 9850, 9851, 9852, 9853, 9854, 9855, 9856, 9857, 9858, 9859, 9860, 9861, 9862, 9863, 9864, 9865, 9866, 9867, 9868, 9869, 9870, 9871, 9872, 9873, 9874, 9875, 9876, 9877, 9878, 9879, 9880, 9881, 9882, 9883, 9884, 9885, 9886, 9887, 9888, 9889, 9890, 9891, 9892, 9893, 9894, 9895, 9896, 9897, 9898, 9899, 9900, 9901, 9902, 9903, 9904, 9905, 9906, 9907, 9908, 9909, 9910, 9911, 9912, 9913, 9914, 9915, 9916, 9917, 9918, 9919, 9920, 9921, 9922, 9923, 9924, 9925, 9926, 9927, 9928, 9929, 9930, 9931, 9932, 9933, 9934, 9935, 9936, 9937, 9938, 9939, 9940, 9941, 9942, 9943, 9944, 9945, 9946, 9947, 9948, 9949, 9950, 9951, 9952, 9953, 9954, 9955, 9956, 9957, 9958, 9959, 9960, 9961, 9962, 9963, 9964, 9965, 9966, 9967, 9968, 9969, 9970, 9971, 9972, 9973, 9974, 9975, 9976, 9977, 9978, 9979, 9980, 9981, 9982, 9983, 9984, 9985, 9986, 9987, 9988, 9989, 9990, 9991, 9992, 9993, 9994, 9995, 9996, 9997, 9998, 9999, 10000, 10001, 10002, 10003, 10004, 10005, 10006, 10007, 10008, 10009, 10010, 10011, 10012, 10013, 10014, 10015, 10016, 10017, 10018, 10019, 10020, 10021, 10022, 10023, 10024, 10025, 10026, 10027, 10028, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10036, 10037, 10038, 10039, 10040, 10041, 10042, 10043, 10044, 10045, 10046, 10047, 10048, 10049, 10050, 10051, 10052, 10053, 10054, 10055, 10056, 10057, 10058, 10059, 10060, 10061, 10062, 10063, 10064, 10065, 10066, 10067, 10068, 10069, 10070, 10071, 10072, 10073, 10074, 10075, 10076, 10077, 10078, 10079, 10080, 10081, 10082, 10083, 10084, 10085, 10086, 10087, 10088, 10089, 10090, 10091, 10092, 10093, 10094, 10095, 10096, 10097, 10098, 10099, 10100, 10101, 10102, 10103, 10104, 10105, 10106, 10107, 10108, 10109, 10110, 10111, 10112, 10113, 10114, 10115, 10116, 10117, 10118, 10119, 10120, 10121, 10122, 10123, 10124, 10125, 10126, 10127, 10128, 10129, 10130, 10131, 10132, 10133, 10134, 10135, 10136, 10137, 10138, 10139, 10140, 10141, 10142, 10143, 10144, 10145, 10146, 10147, 10148, 10149, 10150, 10151, 10152, 10153, 10154, 10155, 10156, 10157, 10158, 10159, 10160, 10161, 10162, 10163, 10164, 10165, 10166, 10167, 10168, 10169, 10170, 10171, 10172, 10173, 10174, 10175, 10176, 10177, 10178, 10179, 10180, 10181, 10182, 10183, 10184, 10185, 10186, 10187, 10188, 10189, 10190, 10191, 10192, 10193, 10194, 10195, 10196, 10197, 10198, 10199, 10200, 10201, 10202, 10203, 10204, 10205, 10206, 10207, 10208, 10209, 10210, 10211, 10212, 10213, 10214, 10215, 10216, 10217, 10218, 10219, 10220, 10221, 10222, 10223, 10224, 10225, 10226, 10227, 10228,

10229, 10230, 10231, 10232, 10233, 10234, 10235, 10236, 10237, 10238, 10239, 10240, 10241, 10242, 10243, 10244, 10245, 10246, 10247, 10248, 10249, 10250, 10251, 10252, 10253, 10254, 10255, 10256, 10257, 10258, 10259, 10260, 10261, 10262, 10263, 10264, 10265, 10266, 10267, 10268, 10269, 10270, 10271, 10272, 10273, 10274, 10275, 10276, 10277, 10278, 10279, 10280, 10281, 10282, 10283, 10284, 10285, 10286, 10287, 10288, 10289, 10290, 10291, 10292, 10293, 10294, 10295, 10296, 10297, 10298, 10299, 10300, 10301, 10302, 10303, 10304, 10305, 10306, 10307, 10308, 10309, 10310, 10311, 10312, 10313, 10314, 10315, 10316, 10317, 10318, 10319, 10320, 10321, 10322, 10323, 10324, 10325, 10326, 10327, 10328, 10329, 10330, 10331, 10332, 10333, 10334, 10335, 10336, 10337, 10338, 10339, 10340, 10341, 10342, 10343, 10344, 10345, 10346, 10347, 10348, 10349, 10350, 10351, 10352, 10353, 10354, 10355, 10356, 10357, 10358, 10359, 10360, 10361, 10362, 10363, 10364, 10365, 10366, 10367, 10368, 10369, 10370, 10371, 10372, 10373, 10374, 10375, 10376, 10377, 10378, 10379, 10380, 10381, 10382, 10383, 10384, 10385, 10386, 10387, 10388, 10389, 10390, 10391, 10392, 10393, 10394, 10395, 10396, 10397, 10398, 10399, 10400, 10401, 10402, 10403, 10404, 10405, 10406, 10407, 10408, 10409, 10410, 10411, 10412, 10413, 10414, 10415, 10416, 10417, 10418, 10419, 10420, 10421, 10422, 10423, 10424, 10425, 10426, 10427, 10428, 10429, 10430, 10431, 10432, 10433, 10434, 10435, 10436, 10437, 10438, 10439, 10440, 10441, 10442, 10443, 10444, 10445, 10446, 10447, 10448, 10449, 10450, 10451, 10452, 10453, 10454, 10455, 10456, 10457, 10458, 10459, 10460, 10461, 10462, 10463, 10464, 10465, 10466, 10467, 10468, 10469, 10470, 10471, 10472, 10473, 10474, 10475, 10476, 10477, 10478, 10479, 10480, 10481, 10482, 10483, 10484, 10485, 10486, 10487, 10488, 10489.

- Section 5.1.2 of the EIS was revised to include additional detail on the Mitigation and Monitoring Plans (MMPs) planned for implementation to monitor and adapt to improve natural recruitment of native species in the proposed and connected action areas.
- Section 5.1.6.3.3 of the final EIS was amended to list additional mitigation measures to reflect those presented in the USFWS BO for California red-legged frog, Alameda whipsnake, and pallid manzanita. Mitigation measures for pallid manzanita were revised to reflect the EBRPD Pallid Manzanita Management Plan. NMFS reviewed the Biological Assessment and issued a letter of concurrence that the proposed action would not be likely to adversely affect steelhead from the project.
- Section 5.1.2.2 of the EIS was amended to include additional detail describing the MMPs that would guide the restoration and maintenance of areas disturbed by the proposed and connected actions.
- Section 5.1.6.1 of the draft EIS adequately addressed potential impacts to maritime chapparal and other sensitive vegetation communities.
- The description of BMPs and mitigation in Section 5.1 of the EIS was revised to clarify that sensitive habitat areas would be avoided by the proposed and connected actions. Mitigation Measure BR-3 requires that a biological monitor be made available to be on site and/or on-call during implementation activities. The mitigation measure includes descriptions of the measures to be implemented by the monitor.
- Section 5.1.2.2 of the EIS was amended to include new language regarding deer grazing effects after project implementation.

Fire and Fuels Issues

The sections below (Issue 8 through Issue 14) include responses to all comments received on the draft EIS related to fire and fuels issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 8: Modeling

The following commenters (identified by PK) raised Issue 8: 3, 11, 42, 45, 59, 62, 71, 79, 85, 97, 121, 135, 156, 160, 186, 200, 225, 231, 239, 242, 245, 252, 257, 278, 303, 304, 315, 435, 690, 1395, 1396, 1400, 1405, 1409, 1411, 1417, 1425, 1428, 1444, 1448, 1452, 1456, 1465, 1473, 1479, 1487, 1490, 1494, 1781, 1792, 1799, 1803, 1807, 1813, 1815, 1821, 1828, 1829, 1830, 1858, 1861, 1862, 1888, 1909, 1913, 1915, 1937, 1968, 1977, 2095, 2173, 2215, 2259, 2263, 2279, 2283, 2287, 2313, 2317, 2321, 2332, 2338, 2349, 2355, 2358, 2364, 2380, 2390, 2402, 2406, 2417, 2421, 2426, 2427, 2428, 2435, 2437, 2438, 2448, 2449, 2490, 2491, 2494, 2516, 2518, 2520, 2530, 2538, 2546, 2559, 2563, 2567, 2583, 2591, 2626, 2674, 2765, 2793, 2875, 2876, 2884, 2907, 2911, 2926, 2964, 2968, 3028, 3108, 3158, 3176, 3184, 3187, 3189, 3192, 3506, 3508, 3516, 3522, 3543, 3556, 3564.

- Section 4.3.2 of the EIS was amended to specifically state that the methodology used to analyze fire and fuel effects of the proposed project includes wildfire behavior characteristics such as topography, aspect, weather, and slope.
- Section 4.3.2.1.2 of the EIS was amended to more clearly define terms describing fire behavior in this analysis, such as flame length, crown fire, and spotting.
- Section 4.3.3.3 of the EIS was amended to clarify that the FLAM Map fire behavior prediction model used to calculate the wildfire hazard in each proposed and connected project area did consider vegetation types and topographical, fuel, and weather conditions.
- Section 5.2.3.2 of the EIS was added to the final EIS to further clarify the fire hazard reduction modeling results, which indicate that the proposed and connected actions would greatly reduce flame lengths, production of flaming embers, and the impact of wildfires on structures. Appendix M of the EIS included a full review of the fire and fuel modeling results on fire behavior. The documentation provided includes pre and post treatment fire behavior tables which show the change in 1, 5, and 10-year intervals.

Issue 9: Wood Chips

The following commenters (identified by PK) raised Issue 9: 6, 10, 12, 13, 22, 30, 31, 33, 35, 36, 38, 42, 45, 55, 56, 59, 66, 71, 92, 125, 138, 155, 156, 158, 159, 162, 163, 164, 169, 170, 177, 186, 190, 207, 210, 211, 212, 214, 216, 217, 220, 222, 227, 228, 234, 239, 245, 250, 252, 254, 257, 259, 263, 264, 266, 273, 275, 277, 278, 281, 283, 284, 303, 304, 322, 323, 325, 491, 495, 513, 556, 561, 572, 592, 595, 616, 649, 659, 665, 675, 696, 698, 715, 739, 751, 777, 782, 792, 804, 841, 865, 888, 904, 1014, 1032, 1038, 1087, 1145, 1148, 1297, 1300, 1306, 1353, 1376, 1401, 1413, 1436, 1529, 1546, 1679, 1688, 1695, 1719, 1741, 1745, 1750, 1766, 1788, 1789, 1790, 1791, 1803, 1825, 1826, 1856, 1879, 1921, 1934, 1987, 2034,

2088, 2133, 2134, 2137, 2152, 2156, 2178, 2215, 2244, 2263, 2267, 2338, 2344, 2349, 2380, 2390, 2394, 2443, 2447, 2448, 2462, 2463, 2466, 2494, 2501, 2514, 2515, 2518, 2525, 2529, 2537, 2541, 2559, 2563, 2570, 2596, 2633, 2659, 2664, 2682, 2692, 2693, 2695, 2702, 2711, 2716, 2721, 2767, 2780, 2801, 2804, 2808, 2811, 2812, 2826, 2828, 2831, 2833, 2837, 2841, 2843, 2846, 2849, 2857, 2860, 2861, 2867, 2872, 2873, 2880, 2881, 2911, 2931, 2933, 2937, 2954, 2968, 2979, 2991, 3002, 3007, 3024, 3032, 3037, 3043, 3056, 3068, 3073, 3076, 3091, 3108, 3135, 3142, 3143, 3176, 3185, 3186, 3198, 3200, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3504, 3505, 3509, 3521, 3531, 3538, 3556, 3562, 3567, 4001, 5505, 5521, 6492, 7070, 7389, 7577, 9226, 9394, 9522, 9620, 9684, 9722, 9822, 9836, 10018, 10131, 10215, 10314, 10903, 10997, 11001, 11047, 12114, 12360, 12425, 12519, 12562, 12709, 12788, 12870, 12874, 13134, 13152, 13217.

- Section 5.2.1 of the EIS was amended to clarify the proposed use of wood chip layers, and their potential to increase the percentage of organic matter in soil and lead to higher water infiltration.
- Sections 1 and 3 of the draft EIS adequately described the proposed and connected actions. Some of the activities that may occur with funds from other sources than FEMA include vegetation management activities, such as pile and area burning, which are not eligible activities for funding under FEMA’s Hazard Mitigation Grant Program. Although not funded by FEMA, these activities are included in the EIS analysis in combination with the proposed actions.
- Section 3.4.2.4 of the EIS was amended to describe prescribed burning more clearly as planned events that are not conducted unless trained fire personnel are on scene and fire apparatus and equipment are available and to list further safety procedures that will be followed.
- Section 5.5.3 of the draft EIS adequately described that implementation of the proposed and connected actions would have a less than significant effect on air quality due to prescribed burning and that all burning activities would still be required to be performed in conformance with all Bay Area Air Quality Management District’s rules and regulations, including “Burn Day” requirements.

Issue 10: Shrubs and Grasses

The following commenters (identified by PK) raised Issue 10: 10, 13, 31, 38, 42, 59, 71, 138, 162, 163, 164, 169, 177, 178, 186, 207, 220, 222, 225, 235, 239, 243, 245, 250, 257, 266, 269, 273, 277, 278, 284, 303, 304, 556, 561, 592, 595, 616, 649, 665, 675, 696, 777, 782, 804, 904, 1087, 1679, 1688, 1750, 1803, 1825, 1879, 1921, 1934, 1987, 2034, 2152, 2156, 2178, 2215, 2263, 2338, 2349, 2380, 2390, 2448, 2494, 2501, 2514, 2529, 2537, 2659, 2682, 2692, 2693, 2804, 2833, 2911, 2933, 2954, 3073, 3108, 3200, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3504, 3521, 3531, 6492, 7577, 9226, 9394, 9684, 9722, 9822, 10018, 10215, 10314, 10903, 10997, 11001, 11047, 12874.

- Section 5.2.3 of the EIS was amended to further explain how grass fuels differ in the rate of spread during a fire versus the targeted tree species under the proposed and connected actions.

Issue 11: Fire Risk Reduction

The following commenters (identified by PK) raised Issue 11: 3, 10, 13, 42, 45, 71, 79, 82, 85, 92, 97, 102, 114, 121, 122, 130, 133, 135, 136, 137, 138, 146, 151, 164, 167, 169, 174, 175, 177, 178, 182, 183, 185, 186, 191, 194, 200, 203, 205, 207, 208, 210, 222, 239, 243, 246, 252, 253, 257, 266, 268, 269, 270, 273, 278, 283, 298, 303, 304, 314, 317, 322, 323, 325, 339, 344, 352, 451, 481, 506, 696, 712, 715, 751, 753, 755, 758, 765, 773, 777, 782, 784, 789, 792, 793, 796, 799, 805, 812, 821, 823, 826, 842, 847, 854, 870, 873, 876, 879, 881, 888, 904, 908, 1017, 1028, 1032, 1038, 1087, 1142, 1145, 1148, 1173, 1182, 1188, 1189, 1200, 1204, 1208, 1218, 1220, 1227, 1247, 1251, 1253, 1262, 1264, 1266, 1279, 1284, 1285, 1288, 1294, 1297, 1348, 1369, 1386, 1395, 1396, 1401, 1403, 1413, 1503, 1505, 1529, 1531, 1538, 1542, 1546, 1574, 1583, 1646, 1695, 1719, 1729, 1739, 1741, 1745, 1750, 1751, 1755, 1756, 1759, 1764, 1765, 1773, 1774, 1775, 1781, 1782, 1783, 1784, 1788, 1789, 1790, 1791, 1799, 1807, 1813, 1815, 1821, 1825, 1826, 1828, 1829, 1830, 1843, 1851, 1856, 1858, 1861, 1862, 1865, 1879, 1883, 1884, 1888, 1908, 1909, 1913, 1915, 1921, 1937, 1959, 1965, 1968, 1977, 1987, 2003, 2005, 2009, 2017, 2021, 2024, 2034, 2063, 2095, 2112, 2124, 2134, 2137, 2146, 2152, 2153, 2159, 2167, 2173, 2178, 2191, 2194, 2201, 2210, 2215, 2222, 2225, 2244, 2250, 2259, 2263, 2267, 2279, 2283, 2287, 2296, 2299, 2313, 2338, 2344, 2349, 2355, 2358, 2364, 2368, 2372, 2380, 2390, 2394, 2402, 2406, 2417, 2421, 2422, 2426, 2427, 2428, 2430, 2433, 2434, 2435, 2436, 2437, 2438, 2440, 2449, 2453, 2456, 2475, 2478, 2480, 2482, 2486, 2490, 2491, 2497, 2501, 2504, 2505, 2511, 2514, 2516, 2517, 2518, 2520, 2527, 2529, 2530, 2535, 2536, 2537, 2538, 2541, 2542, 2546, 2548, 2552, 2559, 2563, 2575, 2602, 2649, 2650, 2677, 2692, 2702, 2716, 2721, 2730, 2770, 2777, 2783, 2804, 2807, 2826, 2833, 2866, 2897, 2911, 2926, 2931, 2941, 2951, 2968, 2973, 3014, 3028, 3053, 3085, 3122, 3142, 3146, 3153, 3158, 3163, 3165, 3172, 3176, 3184, 3189, 3192, 3193, 3200, 3501, 3506, 3507, 3508, 3509, 3511, 3513, 3519, 3521, 3523, 3524, 3525, 3528, 3531, 3538, 3540, 3543, 3545, 3550, 3556, 3560, 6206.

- Sections 1 and 3 of the EIS adequately describe how the proposed and connected project areas were selected by the subapplicants because of their high fire risk. The proposed and connected project areas have not been prioritized in terms of fire hazard level. All submitted recommended treatment areas need to be treated to achieve substantial reductions in hazards. Together, the proposed and connected actions would provide more effective protection by creating a continuous firebreak along the most vulnerable wildland-urban interfaces.
- Section 3 of the draft EIS adequately described the proposed and connected actions and the various vegetation management techniques, including tree removal, treatment of surface and ladder fuels, and thinning and understory clearance. Additional information has been added to clarify the requirement for long-term maintenance plans to ensure the success of hazardous fire risk reduction.
- Section 4.3.3.2.5 of the draft EIS adequately described the untreated flame lengths of 14 to 69 feet for Northern Coastal Scrub and Section 4.3.3.2.6 of the draft EIS adequately described untreated flame lengths of 14 to 69 feet for Coyote Brush Scrub. These sections describe the existing fire characteristics of those vegetation types before project

implementation. These are the only vegetation types with that range of potential flame lengths. Following project implementation flame lengths in treated scrub/shrub habitats are predicted to be considerably less.

- Section 5.2.1 of the EIS was amended to clarify that the focus of the proposed and connected actions is on hazardous fuel reduction rather than on managing native versus non-native species.
- Section 5.2.1 of the EIS was amended to better describe the focus of the proposed and connected actions, which is to reduce torching and crown fire.
- Section 5.2.1 of the EIS was also amended to describe how the rate of spread and even flame length in the understory may increase due to removal of overstory trees, but how this effort reduces torching and crown fires and thus overall risk.
- Section 5.2.3 of the draft EIS adequately addressed the calculated average flame length under the proposed and connected actions which is approximately 2 feet. Predicted flame lengths following treatment vary somewhat by location and vegetation type with 89 percent of the post-treatment areas falling into the low or moderate fire behavior categories. The model results indicate that the proposed treatment would result in a reduction in fire hazards.
- Section 5.11.1.2 of the draft EIS adequately addressed the finding that the absence of substantial vegetative fuel reduction under the no action alternative which would make a major wildlife more likely. In the case of a future higher severity wildfire, there would likely be significant adverse effects to public services, such as fire resources. Under the proposed and connected actions, the likelihood of a future fire would decrease; therefore, the project would not affect fire service provider's capacity to respond to demands for service.
- Sections 1 and 3 of the draft EIS adequately described the proposed and connected actions. Some of the activities that may occur with funds from other sources than FEMA include vegetation management activities, such as pile and area burning, which are not eligible activities for funding under FEMA's Hazard Mitigation Grant Program. Although not funded by FEMA, these activities are included in the EIS analysis in combination with the proposed actions.
- Section 3.4.2.4 of the EIS was amended to describe prescribed burning more clearly as planned events that are not conducted unless trained fire personnel are on scene and fire apparatus and equipment are available and to list further safety procedures that will be followed.
- Section 5.5.3 of the draft EIS adequately described that implementation of the proposed and connected actions would have a less than significant effect on air quality due to prescribed burning and that all burning activities would still be required to be performed in conformance with all Bay Area Air Quality Management District's rules and regulations, including "Burn Day" requirements.

Issue 12: Fuel Breaks and Defensible Space

The following commenters (identified by PK) raised Issue 12: 1, 3, 64, 68, 116, 121, 147, 178, 180, 186, 191, 254, 257, 268, 269, 270, 291, 300, 333, 339, 702, 755, 778, 804, 981, 995, 1000,

1567, 1612, 2131, 2215, 2222, 2225, 2462, 2511, 2537, 2546, 2559, 2602, 2650, 2692, 3184, 3524, 3531, 3556, 4003, 6598, 7376, 7649, 7983, 8576, 9284, 10314, 12332.

- Sections 1 and 3 of the EIS adequately describe how the proposed and connected project areas were selected by the subapplicants because of their high fire risk. The proposed and connected project areas have not been prioritized in terms of fire hazard level. All submitted recommended treatment areas need to be treated to achieve substantial reductions in hazards. Together, the proposed and connected actions would provide more effective protection by creating a continuous firebreak along the most vulnerable wildland-urban interfaces.
- Section 1 of the draft EIS described development of a fuel break on the UCB Campus and across the project area as one of the primary goals of the proposed and connected actions. Section 1 described this fuel break as being developed to create a continuous firebreak along vulnerable wildland-urban interfaces in the proposed and connected project areas.

Issue 13: Flammability

The following commenters (identified by PK) raised Issue 13: 3, 19, 28, 31, 35, 41, 71, 83, 102, 125, 138, 139, 155, 159, 162, 163, 167, 169, 177, 186, 189, 200, 207, 210, 221, 222, 225, 231, 235, 239, 242, 245, 246, 252, 257, 259, 261, 266, 269, 278, 283, 291, 295, 298, 303, 304, 325, 352, 406, 512, 526, 559, 561, 567, 592, 595, 655, 696, 715, 739, 792, 1032, 1038, 1145, 1148, 1243, 1405, 1411, 1417, 1425, 1428, 1436, 1444, 1448, 1452, 1465, 1473, 1479, 1487, 1490, 1494, 1606, 1646, 1695, 1719, 1741, 1745, 1750, 1759, 1764, 1765, 1773, 1788, 1789, 1790, 1791, 1826, 1828, 1829, 1830, 1861, 1862, 1883, 1884, 1888, 1909, 1913, 1915, 1934, 1937, 1968, 1973, 2001, 2063, 2088, 2095, 2137, 2146, 2153, 2173, 2215, 2244, 2338, 2349, 2355, 2358, 2364, 2372, 2380, 2390, 2394, 2448, 2462, 2478, 2486, 2494, 2501, 2801, 2804, 2841, 2843, 2846, 2849, 2857, 2860, 2861, 2867, 2872, 2873, 2878, 2880, 2881, 2926, 2931, 2933, 2937, 2941, 2951, 2968, 2979, 2991, 3002, 3007, 3024, 3028, 3037, 3043, 3056, 3068, 3073, 3085, 3091, 3108, 3143, 3176, 3186, 3189, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 5521, 5610, 6310, 6527, 6904, 7040, 7649, 9715, 10020, 10022, 10164, 10460, 10703, 10997, 11086, 12210.

- Section 4.3.3.2 of the draft EIS adequately addressed Tasmanian blue gum eucalyptus, the dominant eucalyptus species found in the East Bay Hills, and how it is adapted to high-frequency, low-intensity fires that clear understory material and rarely kill large trees in its native Australian landscape.
- Section 4.3.3.2 of the EIS adequately addressed that closed-canopy oak-bay woodlands with minimal surface fuels are the least hazardous of all vegetation types in the study area.
- Section 4.3.3.2.2 of the EIS was amended to provide additional detail on Monterey pine forests, which include some of the taller trees in the East Bay Hills. Section 4.3.3.2.4 of the fEIS was also amended to address how eucalyptus, the tallest trees in the East Bay Hills area, have the ability to release firebrands at great elevations and the likelihood of those firebrands to travel great distances.

- Section 4.3.3.2.4 of the EIS was amended to better describe the characteristics of a eucalyptus forest, and how various species of eucalyptus and their oils burn at much higher rates than others and their effectiveness in starting fires up to distances of several kilometers.
- Section 5.2.3 of the EIS was amended to address the fact that herbicides formulated with kerosene do not pose a fire risk.

Issue 14: Windbreaks

The following commenters (identified by PK) raised Issue 14: 31, 35, 41, 83, 92, 94, 102, 114, 117, 125, 138, 139, 146, 149, 159, 162, 163, 178, 186, 195, 200, 207, 225, 237, 252, 253, 304, 314, 325, 556, 561, 585, 595, 655, 792, 864, 1032, 1038, 1045, 1145, 1182, 1247, 1401, 1413, 1436, 1542, 1546, 1695, 1719, 1745, 1765, 1781, 1782, 1783, 1784, 1826, 1884, 1934, 1987, 2034, 2050, 2088, 2137, 2210, 2215, 2244, 2394, 2501, 2518, 2529, 2693, 2702, 2716, 2743, 2801, 2808, 2811, 2812, 2826, 2828, 2837, 2841, 2843, 2846, 2849, 2854, 2857, 2861, 2867, 2872, 2873, 2880, 2881, 2933, 2937, 2968, 2991, 3002, 3007, 3014, 3024, 3037, 3043, 3056, 3068, 3073, 3091, 3176, 3184, 3186, 3188, 3200, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3509, 3521, 5680, 6068, 6904, 7389, 7395, 10020, 10022, 10164, 10314, 10997, 12562.

- Section 5.6.2.3 of the draft EIS adequately addressed impacts on microclimate, including whether proposed vegetation removal which could expose areas to additional wind and wind-speed, thus potentially increasing the risk of fire spread.
- Section 3.4.2 of the draft EIS adequately described the Mitigation and Monitoring Plans (MMP) for the proposed and connected actions, which outline the maintenance and monitoring activities proposed for the 10-year duration of the project. The MMPs were also required by the Biological Opinion, which is now in new Appendix P.

Geology, Seismicity and Erosion Issues

The sections below (Issue 15 through Issue 17) include comment responses to all comments received on the draft EIS addressing geology, seismicity, and erosion issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 15: Tree Clearing and Erosion and Landslide Risk

The following commenters (identified by PK) raised Issue 15: 1, 10, 14, 17, 22, 26, 27, 35, 36, 38, 40, 41, 44, 45, 56, 61, 71, 76, 83, 92, 93, 94, 101, 108, 113, 114, 115, 117, 136, 137, 139, 146, 149, 151, 159, 162, 163, 164, 165, 166, 167, 174, 175, 185, 186, 196, 205, 207, 208, 216, 217, 226, 234, 235, 239, 242, 243, 246, 250, 253, 257, 268, 278, 300, 304, 317, 326, 331, 343, 351, 443, 504, 513, 550, 556, 567, 573, 584, 585, 589, 628, 633, 642, 647, 661, 675, 696, 730, 777, 792, 801, 807, 809, 822, 842, 864, 870, 871, 890, 903, 939, 952, 954, 974, 995, 1000, 1022, 1028, 1032, 1038, 1045, 1087, 1109, 1114, 1145, 1148, 1160, 1163, 1199, 1262, 1264, 1266, 1267, 1271, 1284, 1285, 1288, 1294, 1297, 1306, 1309, 1323, 1348, 1376, 1386, 1401, 1411,

1413, 1417, 1425, 1433, 1436, 1503, 1504, 1505, 1542, 1546, 1596, 1646, 1656, 1690, 1695, 1709, 1719, 1741, 1745, 1750, 1788, 1828, 1829, 1830, 1852, 1861, 1862, 1865, 1872, 1879, 1888, 1893, 1908, 1909, 1913, 1915, 1937, 1941, 1957, 1968, 2005, 2009, 2017, 2050, 2063, 2095, 2137, 2141, 2153, 2173, 2204, 2210, 2215, 2244, 2291, 2303, 2310, 2317, 2364, 2378, 2388, 2394, 2399, 2424, 2458, 2459, 2461, 2477, 2488, 2498, 2501, 2502, 2504, 2527, 2535, 2537, 2541, 2545, 2552, 2570, 2702, 2708, 2711, 2730, 2767, 2770, 2774, 2783, 2880, 2897, 2933, 2979, 2991, 3024, 3037, 3061, 3084, 3085, 3097, 3108, 3128, 3176, 3177, 3531, 3538, 3542, 3550, 3558, 3567, 5502, 5503, 5504, 5505, 5506, 5507, 5508, 5509, 5510, 5511, 5512, 5513, 5514, 5515, 5516, 5517, 5518, 5519, 5520, 5521, 5522, 5523, 5524, 5525, 5526, 5527, 5528, 5529, 5530, 5531, 5532, 5533, 5534, 5535, 5536, 5537, 5538, 5539, 5540, 5541, 5542, 5543, 5544, 5545, 5546, 5547, 5548, 5549, 5550, 5551, 5552, 5553, 5554, 5555, 5556, 5557, 5558, 5559, 5560, 5561, 5562, 5563, 5564, 5565, 5566, 5567, 5568, 5569, 5570, 5571, 5572, 5573, 5574, 5575, 5576, 5577, 5578, 5579, 5580, 5581, 5582, 5583, 5584, 5585, 5586, 5587, 5588, 5589, 5590, 5591, 5592, 5593, 5594, 5595, 5596, 5597, 5598, 5599, 5600, 5601, 5602, 5603, 5604, 5605, 5606, 5607, 5608, 5609, 5610, 5611, 5612, 5613, 5614, 5615, 5616, 5617, 5618, 5619, 5620, 5621, 5622, 5623, 5624, 5625, 5626, 5627, 5628, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5636, 5637, 5638, 5639, 5640, 5641, 5642, 5643, 5644, 5645, 5646, 5647, 5648, 5649, 5650, 5651, 5652, 5653, 5654, 5655, 5656, 5657, 5658, 5659, 5660, 5661, 5662, 5663, 5664, 5665, 5666, 5667, 5668, 5669, 5670, 5671, 5672, 5673, 5674, 5675, 5676, 5677, 5678, 5679, 5680, 5681, 5682, 5683, 5684, 5685, 5686, 5687, 5688, 5689, 5690, 5691, 5692, 5693, 5694, 5695, 5696, 5697, 5698, 5699, 5700, 5701, 5702, 5703, 5704, 5705, 5706, 5707, 5708, 5709, 5710, 5711, 5712, 5713, 5714, 5715, 5716, 5717, 5718, 5719, 5720, 5721, 5722, 5723, 5724, 5725, 5726, 5727, 5728, 5729, 5730, 5731, 5732, 5733, 5734, 5735, 5736, 5737, 5738, 5739, 5740, 5741, 5742, 5743, 5744, 5745, 5746, 5747, 5748, 5749, 5750, 5751, 5752, 5753, 5754, 5755, 5756, 5757, 5758, 5759, 5760, 5761, 5762, 5763, 5764, 5765, 5766, 5767, 5768, 5769, 5770, 5771, 5772, 5773, 5774, 5775, 5776, 5777, 5778, 5779, 5780, 5781, 5782, 5783, 5784, 5785, 5786, 5787, 5788, 5789, 5790, 5791, 5792, 5793, 5794, 5795, 5796, 5797, 5798, 5799, 5800, 5801, 5802, 5803, 5804, 5805, 5806, 5807, 5808, 5809, 5810, 5811, 5812, 5813, 5814, 5815, 5816, 5817, 5818, 5819, 5820, 5821, 5822, 5823, 5824, 5825, 5826, 5827, 5828, 5829, 5830, 5831, 5832, 5833, 5834, 5835, 5836, 5837, 5838, 5839, 5840, 5841, 5842, 5843, 5844, 5845, 5846, 5847, 5848, 5849, 5850, 5851, 5852, 5853, 5854, 5855, 5856, 5857, 5858, 5859, 5860, 5861, 5862, 5863, 5864, 5865, 5866, 5867, 5868, 5869, 5870, 5871, 5872, 5873, 5874, 5875, 5876, 5877, 5878, 5879, 5880, 5881, 5882, 5883, 5884, 5885, 5886, 5887, 5888, 5889, 5890, 5891, 5892, 5893, 5894, 5895, 5896, 5897, 5898, 5899, 5900, 5901, 5902, 5903, 5904, 5905, 5906, 5907, 5908, 5909, 5910, 5911, 5912, 5913, 5914, 5915, 5916, 5917, 5918, 5919, 5920, 5921, 5922, 5923, 5924, 5925, 5926, 5927, 5928, 5929, 5930, 5931, 5932, 5933, 5934, 5935, 5936, 5937, 5938, 5939, 5940, 5941, 5942, 5943, 5944, 5945, 5946, 5947, 5948, 5949, 5950, 5951, 5952, 5953, 5954, 5955, 5956, 5957, 5958, 5959, 5960, 5961, 5962, 5963, 5964, 5965, 5966, 5967, 5968, 5969, 5970, 5971, 5972, 5973, 5974, 5975, 5976, 5977, 5978, 5979, 5980, 5981, 5982, 5983, 5984, 5985, 5986, 5987, 5988, 5989, 5990, 5991, 5992, 5993, 5994, 5995, 5996, 5997, 5998, 5999, 6000, 6001, 6002, 6003, 6004, 6005, 6006, 6007, 6008, 6009, 6010, 6011, 6012, 6013, 6014, 6015, 6016, 6017, 6018, 6019, 6020, 6021, 6022, 6023, 6024, 6025, 6026, 6027, 6028, 6029, 6030, 6031, 6032, 6033, 6034, 6035, 6036, 6037, 6038, 6039, 6040, 6041, 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6051, 6052, 6053, 6054, 6055, 6056, 6057, 6058, 6059, 6060, 6061, 6062, 6063, 6064, 6065, 6066, 6067, 6068, 6069, 6070, 6071, 6072, 6073, 6074, 6075, 6076, 6077, 6078, 6079, 6080, 6081, 6082,

6773, 6774, 6775, 6776, 6777, 6778, 6779, 6780, 6781, 6782, 6783, 6784, 6785, 6786, 6787, 6788, 6789, 6790, 6791, 6792, 6793, 6794, 6795, 6796, 6797, 6798, 6799, 6800, 6801, 6802, 6803, 6804, 6805, 6806, 6807, 6808, 6809, 6810, 6811, 6812, 6813, 6814, 6815, 6816, 6817, 6818, 6819, 6820, 6821, 6822, 6823, 6824, 6825, 6826, 6827, 6828, 6829, 6830, 6831, 6832, 6833, 6834, 6835, 6836, 6837, 6838, 6839, 6840, 6841, 6842, 6843, 6844, 6845, 6846, 6847, 6848, 6849, 6850, 6851, 6852, 6853, 6854, 6855, 6856, 6857, 6858, 6859, 6860, 6861, 6862, 6863, 6864, 6865, 6866, 6867, 6868, 6869, 6870, 6871, 6872, 6873, 6874, 6875, 6876, 6877, 6878, 6879, 6880, 6881, 6882, 6883, 6884, 6885, 6886, 6887, 6888, 6889, 6890, 6891, 6892, 6893, 6894, 6895, 6896, 6897, 6898, 6899, 6900, 6901, 6902, 6903, 6904, 6905, 6906, 6907, 6908, 6909, 6910, 6911, 6912, 6913, 6914, 6915, 6916, 6917, 6918, 6919, 6920, 6921, 6922, 6923, 6924, 6925, 6926, 6927, 6928, 6929, 6930, 6931, 6932, 6933, 6934, 6935, 6936, 6937, 6938, 6939, 6940, 6941, 6942, 6943, 6944, 6945, 6946, 6947, 6948, 6949, 6950, 6951, 6952, 6953, 6954, 6955, 6956, 6957, 6958, 6959, 6960, 6961, 6962, 6963, 6964, 6965, 6966, 6967, 6968, 6969, 6970, 6971, 6972, 6973, 6974, 6975, 6976, 6977, 6978, 6979, 6980, 6981, 6982, 6983, 6984, 6985, 6986, 6987, 6988, 6989, 6990, 6991, 6992, 6993, 6994, 6995, 6996, 6997, 6998, 6999, 7000, 7001, 7002, 7003, 7004, 7005, 7006, 7007, 7008, 7009, 7010, 7011, 7012, 7013, 7014, 7015, 7016, 7017, 7018, 7019, 7020, 7021, 7022, 7023, 7024, 7025, 7026, 7027, 7028, 7029, 7030, 7031, 7032, 7033, 7034, 7035, 7036, 7037, 7038, 7039, 7040, 7041, 7042, 7043, 7044, 7045, 7046, 7047, 7048, 7049, 7050, 7051, 7052, 7053, 7054, 7055, 7056, 7057, 7058, 7059, 7060, 7061, 7062, 7063, 7064, 7065, 7066, 7067, 7068, 7069, 7070, 7071, 7072, 7073, 7074, 7075, 7076, 7077, 7078, 7079, 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089, 7090, 7091, 7092, 7093, 7094, 7095, 7096, 7097, 7098, 7099, 7100, 7101, 7102, 7103, 7104, 7105, 7106, 7107, 7108, 7109, 7110, 7111, 7112, 7113, 7114, 7115, 7116, 7117, 7118, 7119, 7120, 7121, 7122, 7123, 7124, 7125, 7126, 7127, 7128, 7129, 7130, 7131, 7132, 7133, 7134, 7135, 7136, 7137, 7138, 7139, 7140, 7141, 7142, 7143, 7144, 7145, 7146, 7147, 7148, 7149, 7150, 7151, 7152, 7153, 7154, 7155, 7156, 7157, 7158, 7159, 7160, 7161, 7162, 7163, 7164, 7165, 7166, 7167, 7168, 7169, 7170, 7171, 7172, 7173, 7174, 7175, 7176, 7177, 7178, 7179, 7180, 7181, 7182, 7183, 7184, 7185, 7186, 7187, 7188, 7189, 7190, 7191, 7192, 7193, 7194, 7195, 7196, 7197, 7198, 7199, 7200, 7201, 7202, 7203, 7204, 7205, 7206, 7207, 7208, 7209, 7210, 7211, 7212, 7213, 7214, 7215, 7216, 7217, 7218, 7219, 7220, 7221, 7222, 7223, 7224, 7225, 7226, 7227, 7228, 7229, 7230, 7231, 7232, 7233, 7234, 7235, 7236, 7237, 7238, 7239, 7240, 7241, 7242, 7243, 7244, 7245, 7246, 7247, 7248, 7249, 7250, 7251, 7252, 7253, 7254, 7255, 7256, 7257, 7258, 7259, 7260, 7261, 7262, 7263, 7264, 7265, 7266, 7267, 7268, 7269, 7270, 7271, 7272, 7273, 7274, 7275, 7276, 7277, 7278, 7279, 7280, 7281, 7282, 7283, 7284, 7285, 7286, 7287, 7288, 7289, 7290, 7291, 7292, 7293, 7294, 7295, 7296, 7297, 7298, 7299, 7300, 7301, 7302, 7303, 7304, 7305, 7306, 7307, 7308, 7309, 7310, 7311, 7312, 7313, 7314, 7315, 7316, 7317, 7318, 7319, 7320, 7321, 7322, 7323, 7324, 7325, 7326, 7327, 7328, 7329, 7330, 7331, 7332, 7333, 7334, 7335, 7336, 7337, 7338, 7339, 7340, 7341, 7342, 7343, 7344, 7345, 7346, 7347, 7348, 7349, 7350, 7351, 7352, 7353, 7354, 7355, 7356, 7357, 7358, 7359, 7360, 7361, 7362, 7363, 7364, 7365, 7366, 7367, 7368, 7369, 7370, 7371, 7372, 7373, 7374, 7375, 7376, 7377, 7378, 7379, 7380, 7381, 7382, 7383, 7384, 7385, 7386, 7387, 7388, 7389, 7390, 7391, 7392, 7393, 7394, 7395, 7396, 7397, 7398, 7399, 7400, 7401, 7402, 7403, 7404, 7405, 7406, 7407, 7408, 7409, 7410, 7411, 7412, 7413, 7414, 7415, 7416, 7417, 7418, 7419, 7420, 7421, 7422, 7423, 7424, 7425, 7426, 7427, 7428, 7429, 7430, 7431, 7432, 7433, 7434, 7435, 7436, 7437, 7438, 7439, 7440, 7441, 7442, 7443, 7444, 7445, 7446, 7447, 7448, 7449, 7450, 7451, 7452, 7453, 7454, 7455, 7456, 7457, 7458, 7459, 7460, 7461, 7462,

7463, 7464, 7465, 7466, 7467, 7468, 7469, 7470, 7471, 7472, 7473, 7474, 7475, 7476, 7477, 7478, 7479, 7480, 7481, 7482, 7483, 7484, 7485, 7486, 7487, 7488, 7489, 7490, 7491, 7492, 7493, 7494, 7495, 7496, 7497, 7498, 7499, 7500, 7501, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7509, 7510, 7511, 7512, 7513, 7514, 7515, 7516, 7517, 7518, 7519, 7520, 7521, 7522, 7523, 7524, 7525, 7526, 7527, 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7544, 7545, 7546, 7547, 7548, 7549, 7550, 7551, 7552, 7553, 7554, 7555, 7556, 7557, 7558, 7559, 7560, 7561, 7562, 7563, 7564, 7565, 7566, 7567, 7568, 7569, 7570, 7571, 7572, 7573, 7574, 7575, 7576, 7577, 7578, 7579, 7580, 7581, 7582, 7583, 7584, 7585, 7586, 7587, 7588, 7589, 7590, 7591, 7592, 7593, 7594, 7595, 7596, 7597, 7598, 7599, 7600, 7601, 7602, 7603, 7604, 7605, 7606, 7607, 7608, 7609, 7610, 7611, 7612, 7613, 7614, 7615, 7616, 7617, 7618, 7619, 7620, 7621, 7622, 7623, 7624, 7625, 7626, 7627, 7628, 7629, 7630, 7631, 7632, 7633, 7634, 7635, 7636, 7637, 7638, 7639, 7640, 7641, 7642, 7643, 7644, 7645, 7646, 7647, 7648, 7649, 7650, 7651, 7652, 7653, 7654, 7655, 7656, 7657, 7658, 7659, 7660, 7661, 7662, 7663, 7664, 7665, 7666, 7667, 7668, 7669, 7670, 7671, 7672, 7673, 7674, 7675, 7676, 7677, 7678, 7679, 7680, 7681, 7682, 7683, 7684, 7685, 7686, 7687, 7688, 7689, 7690, 7691, 7692, 7693, 7694, 7695, 7696, 7697, 7698, 7699, 7700, 7701, 7702, 7703, 7704, 7705, 7706, 7707, 7708, 7709, 7710, 7711, 7712, 7713, 7714, 7715, 7716, 7717, 7718, 7719, 7720, 7721, 7722, 7723, 7724, 7725, 7726, 7727, 7728, 7729, 7730, 7731, 7732, 7733, 7734, 7735, 7736, 7737, 7738, 7739, 7740, 7741, 7742, 7743, 7744, 7745, 7746, 7747, 7748, 7749, 7750, 7751, 7752, 7753, 7754, 7755, 7756, 7757, 7758, 7759, 7760, 7761, 7762, 7763, 7764, 7765, 7766, 7767, 7768, 7769, 7770, 7771, 7772, 7773, 7774, 7775, 7776, 7777, 7778, 7779, 7780, 7781, 7782, 7783, 7784, 7785, 7786, 7787, 7788, 7789, 7790, 7791, 7792, 7793, 7794, 7795, 7796, 7797, 7798, 7799, 7800, 7801, 7802, 7803, 7804, 7805, 7806, 7807, 7808, 7809, 7810, 7811, 7812, 7813, 7814, 7815, 7816, 7817, 7818, 7819, 7820, 7821, 7822, 7823, 7824, 7825, 7826, 7827, 7828, 7829, 7830, 7831, 7832, 7833, 7834, 7835, 7836, 7837, 7838, 7839, 7840, 7841, 7842, 7843, 7844, 7845, 7846, 7847, 7848, 7849, 7850, 7851, 7852, 7853, 7854, 7855, 7856, 7857, 7858, 7859, 7860, 7861, 7862, 7863, 7864, 7865, 7866, 7867, 7868, 7869, 7870, 7871, 7872, 7873, 7874, 7875, 7876, 7877, 7878, 7879, 7880, 7881, 7882, 7883, 7884, 7885, 7886, 7887, 7888, 7889, 7890, 7891, 7892, 7893, 7894, 7895, 7896, 7897, 7898, 7899, 7900, 7901, 7902, 7903, 7904, 7905, 7906, 7907, 7908, 7909, 7910, 7911, 7912, 7913, 7914, 7915, 7916, 7917, 7918, 7919, 7920, 7921, 7922, 7923, 7924, 7925, 7926, 7927, 7928, 7929, 7930, 7931, 7932, 7933, 7934, 7935, 7936, 7937, 7938, 7939, 7940, 7941, 7942, 7943, 7944, 7945, 7946, 7947, 7948, 7949, 7950, 7951, 7952, 7953, 7954, 7955, 7956, 7957, 7958, 7959, 7960, 7961, 7962, 7963, 7964, 7965, 7966, 7967, 7968, 7969, 7970, 7971, 7972, 7973, 7974, 7975, 7976, 7977, 7978, 7979, 7980, 7981, 7982, 7983, 7984, 7985, 7986, 7987, 7988, 7989, 7990, 7991, 7992, 7993, 7994, 7995, 7996, 7997, 7998, 7999, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8009, 8010, 8011, 8012, 8013, 8014, 8015, 8016, 8017, 8018, 8019, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8029, 8030, 8031, 8032, 8033, 8034, 8035, 8036, 8037, 8038, 8039, 8040, 8041, 8042, 8043, 8044, 8045, 8046, 8047, 8048, 8049, 8050, 8051, 8052, 8053, 8054, 8055, 8056, 8057, 8058, 8059, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8068, 8069, 8070, 8071, 8072, 8073, 8074, 8075, 8076, 8077, 8078, 8079, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088, 8089, 8090, 8091, 8092, 8093, 8094, 8095, 8096, 8097, 8098, 8099, 8100, 8101, 8102, 8103, 8104, 8105, 8106, 8107, 8108, 8109, 8110, 8111, 8112, 8113, 8114, 8115, 8116, 8117, 8118, 8119, 8120, 8121, 8122, 8123, 8124, 8125, 8126, 8127, 8128, 8129, 8130, 8131, 8132, 8133, 8134, 8135, 8136, 8137, 8138, 8139, 8140, 8141, 8142, 8143, 8144, 8145, 8146, 8147, 8148, 8149, 8150, 8151, 8152,

8153, 8154, 8155, 8156, 8157, 8158, 8159, 8160, 8161, 8162, 8163, 8164, 8165, 8166, 8167, 8168, 8169, 8170, 8171, 8172, 8173, 8174, 8175, 8176, 8177, 8178, 8179, 8180, 8181, 8182, 8183, 8184, 8185, 8186, 8187, 8188, 8189, 8190, 8191, 8192, 8193, 8194, 8195, 8196, 8197, 8198, 8199, 8200, 8201, 8202, 8203, 8204, 8205, 8206, 8207, 8208, 8209, 8210, 8211, 8212, 8213, 8214, 8215, 8216, 8217, 8218, 8219, 8220, 8221, 8222, 8223, 8224, 8225, 8226, 8227, 8228, 8229, 8230, 8231, 8232, 8233, 8234, 8235, 8236, 8237, 8238, 8239, 8240, 8241, 8242, 8243, 8244, 8245, 8246, 8247, 8248, 8249, 8250, 8251, 8252, 8253, 8254, 8255, 8256, 8257, 8258, 8259, 8260, 8261, 8262, 8263, 8264, 8265, 8266, 8267, 8268, 8269, 8270, 8271, 8272, 8273, 8274, 8275, 8276, 8277, 8278, 8279, 8280, 8281, 8282, 8283, 8284, 8285, 8286, 8287, 8288, 8289, 8290, 8291, 8292, 8293, 8294, 8295, 8296, 8297, 8298, 8299, 8300, 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309, 8310, 8311, 8312, 8313, 8314, 8315, 8316, 8317, 8318, 8319, 8320, 8321, 8322, 8323, 8324, 8325, 8326, 8327, 8328, 8329, 8330, 8331, 8332, 8333, 8334, 8335, 8336, 8337, 8338, 8339, 8340, 8341, 8342, 8343, 8344, 8345, 8346, 8347, 8348, 8349, 8350, 8351, 8352, 8353, 8354, 8355, 8356, 8357, 8358, 8359, 8360, 8361, 8362, 8363, 8364, 8365, 8366, 8367, 8368, 8369, 8370, 8371, 8372, 8373, 8374, 8375, 8376, 8377, 8378, 8379, 8380, 8381, 8382, 8383, 8384, 8385, 8386, 8387, 8388, 8389, 8390, 8391, 8392, 8393, 8394, 8395, 8396, 8397, 8398, 8399, 8400, 8401, 8402, 8403, 8404, 8405, 8406, 8407, 8408, 8409, 8410, 8411, 8412, 8413, 8414, 8415, 8416, 8417, 8418, 8419, 8420, 8421, 8422, 8423, 8424, 8425, 8426, 8427, 8428, 8429, 8430, 8431, 8432, 8433, 8434, 8435, 8436, 8437, 8438, 8439, 8440, 8441, 8442, 8443, 8444, 8445, 8446, 8447, 8448, 8449, 8450, 8451, 8452, 8453, 8454, 8455, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463, 8464, 8465, 8466, 8467, 8468, 8469, 8470, 8471, 8472, 8473, 8474, 8475, 8476, 8477, 8478, 8479, 8480, 8481, 8482, 8483, 8484, 8485, 8486, 8487, 8488, 8489, 8490, 8491, 8492, 8493, 8494, 8495, 8496, 8497, 8498, 8499, 8500, 8501, 8502, 8503, 8504, 8505, 8506, 8507, 8508, 8509, 8510, 8511, 8512, 8513, 8514, 8515, 8516, 8517, 8518, 8519, 8520, 8521, 8522, 8523, 8524, 8525, 8526, 8527, 8528, 8529, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8537, 8538, 8539, 8540, 8541, 8542, 8543, 8544, 8545, 8546, 8547, 8548, 8549, 8550, 8551, 8552, 8553, 8554, 8555, 8556, 8557, 8558, 8559, 8560, 8561, 8562, 8563, 8564, 8565, 8566, 8567, 8568, 8569, 8570, 8571, 8572, 8573, 8574, 8575, 8576, 8577, 8578, 8579, 8580, 8581, 8582, 8583, 8584, 8585, 8586, 8587, 8588, 8589, 8590, 8591, 8592, 8593, 8594, 8595, 8596, 8597, 8598, 8599, 8600, 8601, 8602, 8603, 8604, 8605, 8606, 8607, 8608, 8609, 8610, 8611, 8612, 8613, 8614, 8615, 8616, 8617, 8618, 8619, 8620, 8621, 8622, 8623, 8624, 8625, 8626, 8627, 8628, 8629, 8630, 8631, 8632, 8633, 8634, 8635, 8636, 8637, 8638, 8639, 8640, 8641, 8642, 8643, 8644, 8645, 8646, 8647, 8648, 8649, 8650, 8651, 8652, 8653, 8654, 8655, 8656, 8657, 8658, 8659, 8660, 8661, 8662, 8663, 8664, 8665, 8666, 8667, 8668, 8669, 8670, 8671, 8672, 8673, 8674, 8675, 8676, 8677, 8678, 8679, 8680, 8681, 8682, 8683, 8684, 8685, 8686, 8687, 8688, 8689, 8690, 8691, 8692, 8693, 8694, 8695, 8696, 8697, 8698, 8699, 8700, 8701, 8702, 8703, 8704, 8705, 8706, 8707, 8708, 8709, 8710, 8711, 8712, 8713, 8714, 8715, 8716, 8717, 8718, 8719, 8720, 8721, 8722, 8723, 8724, 8725, 8726, 8727, 8728, 8729, 8730, 8731, 8732, 8733, 8734, 8735, 8736, 8737, 8738, 8739, 8740, 8741, 8742, 8743, 8744, 8745, 8746, 8747, 8748, 8749, 8750, 8751, 8752, 8753, 8754, 8755, 8756, 8757, 8758, 8759, 8760, 8761, 8762, 8763, 8764, 8765, 8766, 8767, 8768, 8769, 8770, 8771, 8772, 8773, 8774, 8775, 8776, 8777, 8778, 8779, 8780, 8781, 8782, 8783, 8784, 8785, 8786, 8787, 8788, 8789, 8790, 8791, 8792, 8793, 8794, 8795, 8796, 8797, 8798, 8799, 8800, 8801, 8802, 8803, 8804, 8805, 8806, 8807, 8808, 8809, 8810, 8811, 8812, 8813, 8814, 8815, 8816, 8817, 8818, 8819, 8820, 8821, 8822, 8823, 8824, 8825, 8826, 8827, 8828, 8829, 8830, 8831, 8832, 8833, 8834, 8835, 8836, 8837, 8838, 8839, 8840, 8841, 8842,

8843, 8844, 8845, 8846, 8847, 8848, 8849, 8850, 8851, 8852, 8853, 8854, 8855, 8856, 8857, 8858, 8859, 8860, 8861, 8862, 8863, 8864, 8865, 8866, 8867, 8868, 8869, 8870, 8871, 8872, 8873, 8874, 8875, 8876, 8877, 8878, 8879, 8880, 8881, 8882, 8883, 8884, 8885, 8886, 8887, 8888, 8889, 8890, 8891, 8892, 8893, 8894, 8895, 8896, 8897, 8898, 8899, 8900, 8901, 8902, 8903, 8904, 8905, 8906, 8907, 8908, 8909, 8910, 8911, 8912, 8913, 8914, 8915, 8916, 8917, 8918, 8919, 8920, 8921, 8922, 8923, 8924, 8925, 8926, 8927, 8928, 8929, 8930, 8931, 8932, 8933, 8934, 8935, 8936, 8937, 8938, 8939, 8940, 8941, 8942, 8943, 8944, 8945, 8946, 8947, 8948, 8949, 8950, 8951, 8952, 8953, 8954, 8955, 8956, 8957, 8958, 8959, 8960, 8961, 8962, 8963, 8964, 8965, 8966, 8967, 8968, 8969, 8970, 8971, 8972, 8973, 8974, 8975, 8976, 8977, 8978, 8979, 8980, 8981, 8982, 8983, 8984, 8985, 8986, 8987, 8988, 8989, 8990, 8991, 8992, 8993, 8994, 8995, 8996, 8997, 8998, 8999, 9000, 9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9011, 9012, 9013, 9014, 9015, 9016, 9017, 9018, 9019, 9020, 9021, 9022, 9023, 9024, 9025, 9026, 9027, 9028, 9029, 9030, 9031, 9032, 9033, 9034, 9035, 9036, 9037, 9038, 9039, 9040, 9041, 9042, 9043, 9044, 9045, 9046, 9047, 9048, 9049, 9050, 9051, 9052, 9053, 9054, 9055, 9056, 9057, 9058, 9059, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 9067, 9068, 9069, 9070, 9071, 9072, 9073, 9074, 9075, 9076, 9077, 9078, 9079, 9080, 9081, 9082, 9083, 9084, 9085, 9086, 9087, 9088, 9089, 9090, 9091, 9092, 9093, 9094, 9095, 9096, 9097, 9098, 9099, 9100, 9101, 9102, 9103, 9104, 9105, 9106, 9107, 9108, 9109, 9110, 9111, 9112, 9113, 9114, 9115, 9116, 9117, 9118, 9119, 9120, 9121, 9122, 9123, 9124, 9125, 9126, 9127, 9128, 9129, 9130, 9131, 9132, 9133, 9134, 9135, 9136, 9137, 9138, 9139, 9140, 9141, 9142, 9143, 9144, 9145, 9146, 9147, 9148, 9149, 9150, 9151, 9152, 9153, 9154, 9155, 9156, 9157, 9158, 9159, 9160, 9161, 9162, 9163, 9164, 9165, 9166, 9167, 9168, 9169, 9170, 9171, 9172, 9173, 9174, 9175, 9176, 9177, 9178, 9179, 9180, 9181, 9182, 9183, 9184, 9185, 9186, 9187, 9188, 9189, 9190, 9191, 9192, 9193, 9194, 9195, 9196, 9197, 9198, 9199, 9200, 9201, 9202, 9203, 9204, 9205, 9206, 9207, 9208, 9209, 9210, 9211, 9212, 9213, 9214, 9215, 9216, 9217, 9218, 9219, 9220, 9221, 9222, 9223, 9224, 9225, 9226, 9227, 9228, 9229, 9230, 9231, 9232, 9233, 9234, 9235, 9236, 9237, 9238, 9239, 9240, 9241, 9242, 9243, 9244, 9245, 9246, 9247, 9248, 9249, 9250, 9251, 9252, 9253, 9254, 9255, 9256, 9257, 9258, 9259, 9260, 9261, 9262, 9263, 9264, 9265, 9266, 9267, 9268, 9269, 9270, 9271, 9272, 9273, 9274, 9275, 9276, 9277, 9278, 9279, 9280, 9281, 9282, 9283, 9284, 9285, 9286, 9287, 9288, 9289, 9290, 9291, 9292, 9293, 9294, 9295, 9296, 9297, 9298, 9299, 9300, 9301, 9302, 9303, 9304, 9305, 9306, 9307, 9308, 9309, 9310, 9311, 9312, 9313, 9314, 9315, 9316, 9317, 9318, 9319, 9320, 9321, 9322, 9323, 9324, 9325, 9326, 9327, 9328, 9329, 9330, 9331, 9332, 9333, 9334, 9335, 9336, 9337, 9338, 9339, 9340, 9341, 9342, 9343, 9344, 9345, 9346, 9347, 9348, 9349, 9350, 9351, 9352, 9353, 9354, 9355, 9356, 9357, 9358, 9359, 9360, 9361, 9362, 9363, 9364, 9365, 9366, 9367, 9368, 9369, 9370, 9371, 9372, 9373, 9374, 9375, 9376, 9377, 9378, 9379, 9380, 9381, 9382, 9383, 9384, 9385, 9386, 9387, 9388, 9389, 9390, 9391, 9392, 9393, 9394, 9395, 9396, 9397, 9398, 9399, 9400, 9401, 9402, 9403, 9404, 9405, 9406, 9407, 9408, 9409, 9410, 9411, 9412, 9413, 9414, 9415, 9416, 9417, 9418, 9419, 9420, 9421, 9422, 9423, 9424, 9425, 9426, 9427, 9428, 9429, 9430, 9431, 9432, 9433, 9434, 9435, 9436, 9437, 9438, 9439, 9440, 9441, 9442, 9443, 9444, 9445, 9446, 9447, 9448, 9449, 9450, 9451, 9452, 9453, 9454, 9455, 9456, 9457, 9458, 9459, 9460, 9461, 9462, 9463, 9464, 9465, 9466, 9467, 9468, 9469, 9470, 9471, 9472, 9473, 9474, 9475, 9476, 9477, 9478, 9479, 9480, 9481, 9482, 9483, 9484, 9485, 9486, 9487, 9488, 9489, 9490, 9491, 9492, 9493, 9494, 9495, 9496, 9497, 9498, 9499, 9500, 9501, 9502, 9503, 9504, 9505, 9506, 9507, 9508, 9509, 9510, 9511, 9512, 9513, 9514, 9515, 9516, 9517, 9518, 9519, 9520, 9521, 9522, 9523, 9524, 9525, 9526, 9527, 9528, 9529, 9530, 9531, 9532,

9533, 9534, 9535, 9536, 9537, 9538, 9539, 9540, 9541, 9542, 9543, 9544, 9545, 9546, 9547, 9548, 9549, 9550, 9551, 9552, 9553, 9554, 9555, 9556, 9557, 9558, 9559, 9560, 9561, 9562, 9563, 9564, 9565, 9566, 9567, 9568, 9569, 9570, 9571, 9572, 9573, 9574, 9575, 9576, 9577, 9578, 9579, 9580, 9581, 9582, 9583, 9584, 9585, 9586, 9587, 9588, 9589, 9590, 9591, 9592, 9593, 9594, 9595, 9596, 9597, 9598, 9599, 9600, 9601, 9602, 9603, 9604, 9605, 9606, 9607, 9608, 9609, 9610, 9611, 9612, 9613, 9614, 9615, 9616, 9617, 9618, 9619, 9620, 9621, 9622, 9623, 9624, 9625, 9626, 9627, 9628, 9629, 9630, 9631, 9632, 9633, 9634, 9635, 9636, 9637, 9638, 9639, 9640, 9641, 9642, 9643, 9644, 9645, 9646, 9647, 9648, 9649, 9650, 9651, 9652, 9653, 9654, 9655, 9656, 9657, 9658, 9659, 9660, 9661, 9662, 9663, 9664, 9665, 9666, 9667, 9668, 9669, 9670, 9671, 9672, 9673, 9674, 9675, 9676, 9677, 9678, 9679, 9680, 9681, 9682, 9683, 9684, 9685, 9686, 9687, 9688, 9689, 9690, 9691, 9692, 9693, 9694, 9695, 9696, 9697, 9698, 9699, 9700, 9701, 9702, 9703, 9704, 9705, 9706, 9707, 9708, 9709, 9710, 9711, 9712, 9713, 9714, 9715, 9716, 9717, 9718, 9719, 9720, 9721, 9722, 9723, 9724, 9725, 9726, 9727, 9728, 9729, 9730, 9731, 9732, 9733, 9734, 9735, 9736, 9737, 9738, 9739, 9740, 9741, 9742, 9743, 9744, 9745, 9746, 9747, 9748, 9749, 9750, 9751, 9752, 9753, 9754, 9755, 9756, 9757, 9758, 9759, 9760, 9761, 9762, 9763, 9764, 9765, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9780, 9781, 9782, 9783, 9784, 9785, 9786, 9787, 9788, 9789, 9790, 9791, 9792, 9793, 9794, 9795, 9796, 9797, 9798, 9799, 9800, 9801, 9802, 9803, 9804, 9805, 9806, 9807, 9808, 9809, 9810, 9811, 9812, 9813, 9814, 9815, 9816, 9817, 9818, 9819, 9820, 9821, 9822, 9823, 9824, 9825, 9826, 9827, 9828, 9829, 9830, 9831, 9832, 9833, 9834, 9835, 9836, 9837, 9838, 9839, 9840, 9841, 9842, 9843, 9844, 9845, 9846, 9847, 9848, 9849, 9850, 9851, 9852, 9853, 9854, 9855, 9856, 9857, 9858, 9859, 9860, 9861, 9862, 9863, 9864, 9865, 9866, 9867, 9868, 9869, 9870, 9871, 9872, 9873, 9874, 9875, 9876, 9877, 9878, 9879, 9880, 9881, 9882, 9883, 9884, 9885, 9886, 9887, 9888, 9889, 9890, 9891, 9892, 9893, 9894, 9895, 9896, 9897, 9898, 9899, 9900, 9901, 9902, 9903, 9904, 9905, 9906, 9907, 9908, 9909, 9910, 9911, 9912, 9913, 9914, 9915, 9916, 9917, 9918, 9919, 9920, 9921, 9922, 9923, 9924, 9925, 9926, 9927, 9928, 9929, 9930, 9931, 9932, 9933, 9934, 9935, 9936, 9937, 9938, 9939, 9940, 9941, 9942, 9943, 9944, 9945, 9946, 9947, 9948, 9949, 9950, 9951, 9952, 9953, 9954, 9955, 9956, 9957, 9958, 9959, 9960, 9961, 9962, 9963, 9964, 9965, 9966, 9967, 9968, 9969, 9970, 9971, 9972, 9973, 9974, 9975, 9976, 9977, 9978, 9979, 9980, 9981, 9982, 9983, 9984, 9985, 9986, 9987, 9988, 9989, 9990, 9991, 9992, 9993, 9994, 9995, 9996, 9997, 9998, 9999, 10000, 10001, 10002, 10003, 10004, 10005, 10006, 10007, 10008, 10009, 10010, 10011, 10012, 10013, 10014, 10015, 10016, 10017, 10018, 10019, 10020, 10021, 10022, 10023, 10024, 10025, 10026, 10027, 10028, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10036, 10037, 10038, 10039, 10040, 10041, 10042, 10043, 10044, 10045, 10046, 10047, 10048, 10049, 10050, 10051, 10052, 10053, 10054, 10055, 10056, 10057, 10058, 10059, 10060, 10061, 10062, 10063, 10064, 10065, 10066, 10067, 10068, 10069, 10070, 10071, 10072, 10073, 10074, 10075, 10076, 10077, 10078, 10079, 10080, 10081, 10082, 10083, 10084, 10085, 10086, 10087, 10088, 10089, 10090, 10091, 10092, 10093, 10094, 10095, 10096, 10097, 10098, 10099, 10100, 10101, 10102, 10103, 10104, 10105, 10106, 10107, 10108, 10109, 10110, 10111, 10112, 10113, 10114, 10115, 10116, 10117, 10118, 10119, 10120, 10121, 10122, 10123, 10124, 10125, 10126, 10127, 10128, 10129, 10130, 10131, 10132, 10133, 10134, 10135, 10136, 10137, 10138, 10139, 10140, 10141, 10142, 10143, 10144, 10145, 10146, 10147, 10148, 10149, 10150, 10151, 10152, 10153, 10154, 10155, 10156, 10157, 10158, 10159, 10160, 10161, 10162, 10163, 10164, 10165, 10166, 10167, 10168, 10169, 10170, 10171, 10172, 10173, 10174, 10175, 10176, 10177, 10178, 10179, 10180, 10181, 10182, 10183, 10184, 10185, 10186, 10187, 10188, 10189, 10190, 10191, 10192,

10193, 10194, 10195, 10196, 10197, 10198, 10199, 10200, 10201, 10202, 10203, 10204, 10205, 10206, 10207, 10208, 10209, 10210, 10211, 10212, 10213, 10214, 10215, 10216, 10217, 10218, 10219, 10220, 10221, 10222, 10223, 10224, 10225, 10226, 10227, 10228, 10229, 10230, 10231, 10232, 10233, 10234, 10235, 10236, 10237, 10238, 10239, 10240, 10241, 10242, 10243, 10244, 10245, 10246, 10247, 10248, 10249, 10250, 10251, 10252, 10253, 10254, 10255, 10256, 10257, 10258, 10259, 10260, 10261, 10262, 10263, 10264, 10265, 10266, 10267, 10268, 10269, 10270, 10271, 10272, 10273, 10274, 10275, 10276, 10277, 10278, 10279, 10280, 10281, 10282, 10283, 10284, 10285, 10286, 10287, 10288, 10289, 10290, 10291, 10292, 10293, 10294, 10295, 10296, 10297, 10298, 10299, 10300, 10301, 10302, 10303, 10304, 10305, 10306, 10307, 10308, 10309, 10310, 10311, 10312, 10313, 10314, 10315, 10316, 10317, 10318, 10319, 10320, 10321, 10322, 10323, 10324, 10325, 10326, 10327, 10328, 10329, 10330, 10331, 10332, 10333, 10334, 10335, 10336, 10337, 10338, 10339, 10340, 10341, 10342, 10343, 10344, 10345, 10346, 10347, 10348, 10349, 10350, 10351, 10352, 10353, 10354, 10355, 10356, 10357, 10358, 10359, 10360, 10361, 10362, 10363, 10364, 10365, 10366, 10367, 10368, 10369, 10370, 10371, 10372, 10373, 10374, 10375, 10376, 10377, 10378, 10379, 10380, 10381, 10382, 10383, 10384, 10385, 10386, 10387, 10388, 10389, 10390, 10391, 10392, 10393, 10394, 10395, 10396, 10397, 10398, 10399, 10400, 10401, 10402, 10403, 10404, 10405, 10406, 10407, 10408, 10409, 10410, 10411, 10412, 10413, 10414, 10415, 10416, 10417, 10418, 10419, 10420, 10421, 10422, 10423, 10424, 10425, 10426, 10427, 12095.

- Section 5.3.2.3 of the draft EIS adequately described avoidance and mitigation measures to reduce effects to soils resulting from soil erosion and loss of topsoil, including best management practices (BMPs) that will help prevent short- and long-term adverse effects to floodplains in neighborhoods adjacent to the proposed and connected project areas. Implementation of Mitigation Measure GEO-1 by all subapplicants, in addition to implementation of BMPs incorporated as part of the proposed and connected actions, would reduce potential adverse effects from soil erosion and landslides. In addition, a Storm Water Pollution Plan (SWPPP) would be developed by a Qualified SWPPP Developer and approved by the State Water Resources Control Board and adhered to for any of the proposed and connected actions proposing to cause more than 1 acre of bare soil. Section 5.4 of the EIS included information on the SWPPP.
- Section 5.3 of the draft EIS adequately analyzed the potential for non-point source surface erosion, that is non-landslide erosion, with the U.S. Forest Service (USFS) Water Erosion Prediction Project (WEPP) fuel management erosion analysis (FuME) model. The potential for erosion was estimated for existing forest vegetation conditions (assumed to be relatively undisturbed) and for conditions following implementation of the proposed and connected actions. For the no action alternative, the model generated values for background sedimentation. Background sedimentation takes into account the amount of erosion from undisturbed forest, the amount of erosion from a future potential wildfire in the absence of fuel management activities, and the amount of erosion attributable to no and low traffic road conditions. Use of the USFS WEPP model is commonly used for such applications.
- Section 5.1.2.2 of the draft EIS adequately addressed the short-term adverse impacts on other native vegetation communities, such as oak-bay woodland that could occur during implementation of the proposed and connected actions through the use of heavy machinery and removal or pruning of some native vegetation. In some areas, the understory trees and

shrubs would be protected during tall tree removal through the use of hand tools and manual labor rather than mechanized equipment. In general, damage to native vegetation communities would be minimized through use of hand labor in some areas, use of existing access roads, and retaining wood chips and placing logs on site for sediment and erosion control. That is, “standard best management practices” would be implemented to mitigate the potential for damage to non-fire prone fuels, minimize soil disturbance, and minimize surface erosion through varying control measures. Hence, the immediate response of root cohesion to vegetation removal at a given site would not be reduced to levels commensurate with a high-severity fire or timber harvest clear cut.

- Section 5.3.2.2.2 of the draft EIS adequately addressed the effects on landslides from implementation of the proposed and connected actions.
- Section 5.3.2.2.2 of draft EIS adequately addressed the removal and suppression of vegetation and resulting decay of root systems and how it can decrease the cohesive properties of soils and increase soil moisture content due to a lack of evapotranspiration. These conditions, in addition to steep slopes and the occurrence of wildfire, create conditions favorable to soil erosion and increase the risk of landslides. The strength, or cohesion, provided by below-ground roots stabilize shallow soils (~<2 m) during heavy rains through the build-up of positive pore water pressures. Root cohesion varies with species and density, but it is generally related to above ground biomass. Therefore, removal or disruption of vegetation would result in a decrease of below-ground cohesion.
- Section 5.1.2.2.1 of the draft adequately described the MMPs that will be implemented by each of the subapplicants to address impacts to vegetation communities. The MMPs would ensure that the implementation of the vegetation treatments would continue to reduce wildfire risk and promote species habitat by restoring native vegetation communities where applicable. The MMPs would rely on recruitment of native vegetation into the areas where non-native trees have been removed from the over-story canopy.
- Section 5.1.2.2.1 included a discussion of the adaptive management strategy that will be employed to ensure vegetation goals and habitat performance standards are met.

Issue 16: Tree Clearing and Soil Moisture and Chemistry (Includes Fog Drip)

The following commenters (identified by PK) raised Issue 16: 1, 17, 28, 35, 45, 71, 115, 117, 154, 162, 163, 166, 169, 170, 174, 186, 205, 242, 243, 246, 250, 252, 268, 304, 513, 635, 689, 822, 988, 1052, 1109, 1182, 1199, 1411, 1417, 1425, 1433, 1436, 1503, 1529, 1542, 1546, 1646, 1883, 1884, 1987, 2063, 2501, 2514, 2518, 2527, 2530, 2535, 2567, 3085, 3175, 3177, 3504, 3509, 3519, 3526, 5505, 6602, 6904, 7209, 7348, 7563, 8698, 12095 .

- Section 5.4.1.2.2 of the EIS was amended to analyze the impact of tree removal under the proposed and connected actions on surface area available to intercept fog and produce fog drip and its potential effect on surface water flows and groundwater levels.

Issue 17: Maintenance

The following commenters (identified by PK) raised Issue 17: 27, 164, 186, 351, 742, 759, 792, 809, 823, 826, 841, 842, 917, 952, 974, 981, 985, 1032, 1038, 1100, 1109, 1145, 1542, 1879, 2215, 2317, 2364, 2394, 2434, 2452, 2520, 2537, 2541, 3085, 3515, 3531, 3538, 5505, 9572.

- Section 5.3.2.2.2 of the EIS was amended to describe ongoing maintenance activities in the proposed and connected actions areas following implementation and how the fuel management actions would be lower in intensity and shorter in duration than the initial fuel management actions and as a result would be lower than the values indicated in Table 5.3-2. Thus, potential erosion impacts would be less severe.

Water Resources and Water Quality Issues

The sections below (Issue 18 through Issue 21) include comment responses to all comments received on the draft EIS addressing water resources and water quality issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 18: Erosion, Stream Sedimentation, and Flooding

The following commenters (identified by PK) raised Issue 18: 3, 12, 13, 16, 27, 47, 113, 146, 151, 164, 165, 166, 169, 170, 186, 190, 195, 205, 208, 226, 234, 239, 243, 246, 250, 273, 278, 284, 300, 329, 344, 505, 642, 643, 675, 782, 793, 799, 822, 864, 871, 903, 939, 1022, 1182, 1199, 1204, 1247, 1271, 1369, 1903, 2005, 2009, 2013, 2349, 2394, 2443, 2520, 2530, 2537, 2572, 2954, 3515, 3523, 3531, 3558, 3570, 9382, 9394, 9892, 9967.

- Section 5.4.3.2.2 of the EIS was amended to add additional language on the potential impacts associated with erosion and sedimentation, including increased flooding potential in adjacent parks and neighborhoods adjacent to parks.
- Section 5.4.4.3 of the EIS was amended to include additional best management practices and mitigation measures for erosion, sedimentation and increased turbidity.

Issue 19: Water Quality

The following commenters (identified by PK) raised Issue 19: 3, 5, 13, 17, 22, 23, 27, 30, 45, 53, 59, 71, 83, 101, 105, 138, 149, 151, 164, 165, 166, 169, 170, 172, 175, 185, 186, 190, 196, 205, 219, 223, 226, 234, 239, 243, 250, 252, 257, 264, 273, 284, 296, 298, 300, 303, 309, 328, 329, 331, 335, 344, 443, 448, 472, 489, 510, 561, 572, 592, 618, 654, 661, 675, 688, 689, 715, 742, 778, 782, 809, 822, 823, 826, 831, 841, 849, 864, 871, 890, 944, 973, 977, 979, 981, 985, 995, 1087, 1109, 1114, 1119, 1156, 1163, 1190, 1205, 1223, 1225, 1352, 1353, 1567, 1583, 1588, 1615, 1707, 1709, 1852, 1856, 1884, 1893, 1903, 1957, 2005, 2009, 2013, 2017, 2020, 2057, 2063, 2167, 2199, 2204, 2215, 2222, 2225, 2267, 2317, 2386, 2388, 2394, 2442, 2461, 2468, 2501, 2527, 2530, 2537, 2551, 2570, 2572, 2653, 2689, 2692, 2721, 2747, 2767, 2770, 2774, 2783, 2801, 2808, 2812, 2826, 2828, 2832, 2833, 2837, 2841, 2843, 2846, 2849, 2857, 2861, 2866, 2867, 2871, 2872, 2873, 2881, 2897, 2937, 2947, 2979, 3002, 3007, 3032, 3043, 3056,

3061, 3081, 3084, 3091, 3135, 3142, 3163, 3175, 3176, 3177, 3186, 3236, 3519, 3523, 3531, 3548, 3570, 5502, 5503, 5504, 5505, 5506, 5507, 5508, 5509, 5510, 5511, 5512, 5513, 5514, 5515, 5516, 5517, 5518, 5519, 5520, 5521, 5522, 5523, 5524, 5525, 5526, 5527, 5528, 5529, 5530, 5531, 5532, 5533, 5534, 5535, 5536, 5537, 5538, 5539, 5540, 5541, 5542, 5543, 5544, 5545, 5546, 5547, 5548, 5549, 5550, 5551, 5552, 5553, 5554, 5555, 5556, 5557, 5558, 5559, 5560, 5561, 5562, 5563, 5564, 5565, 5566, 5567, 5568, 5569, 5570, 5571, 5572, 5573, 5574, 5575, 5576, 5577, 5578, 5579, 5580, 5581, 5582, 5583, 5584, 5585, 5586, 5587, 5588, 5589, 5590, 5591, 5592, 5593, 5594, 5595, 5596, 5597, 5598, 5599, 5600, 5601, 5602, 5603, 5604, 5605, 5606, 5607, 5608, 5609, 5610, 5611, 5612, 5613, 5614, 5615, 5616, 5617, 5618, 5619, 5620, 5621, 5622, 5623, 5624, 5625, 5626, 5627, 5628, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5636, 5637, 5638, 5639, 5640, 5641, 5642, 5643, 5644, 5645, 5646, 5647, 5648, 5649, 5650, 5651, 5652, 5653, 5654, 5655, 5656, 5657, 5658, 5659, 5660, 5661, 5662, 5663, 5664, 5665, 5666, 5667, 5668, 5669, 5670, 5671, 5672, 5673, 5674, 5675, 5676, 5677, 5678, 5679, 5680, 5681, 5682, 5683, 5684, 5685, 5686, 5687, 5688, 5689, 5690, 5691, 5692, 5693, 5694, 5695, 5696, 5697, 5698, 5699, 5700, 5701, 5702, 5703, 5704, 5705, 5706, 5707, 5708, 5709, 5710, 5711, 5712, 5713, 5714, 5715, 5716, 5717, 5718, 5719, 5720, 5721, 5722, 5723, 5724, 5725, 5726, 5727, 5728, 5729, 5730, 5731, 5732, 5733, 5734, 5735, 5736, 5737, 5738, 5739, 5740, 5741, 5742, 5743, 5744, 5745, 5746, 5747, 5748, 5749, 5750, 5751, 5752, 5753, 5754, 5755, 5756, 5757, 5758, 5759, 5760, 5761, 5762, 5763, 5764, 5765, 5766, 5767, 5768, 5769, 5770, 5771, 5772, 5773, 5774, 5775, 5776, 5777, 5778, 5779, 5780, 5781, 5782, 5783, 5784, 5785, 5786, 5787, 5788, 5789, 5790, 5791, 5792, 5793, 5794, 5795, 5796, 5797, 5798, 5799, 5800, 5801, 5802, 5803, 5804, 5805, 5806, 5807, 5808, 5809, 5810, 5811, 5812, 5813, 5814, 5815, 5816, 5817, 5818, 5819, 5820, 5821, 5822, 5823, 5824, 5825, 5826, 5827, 5828, 5829, 5830, 5831, 5832, 5833, 5834, 5835, 5836, 5837, 5838, 5839, 5840, 5841, 5842, 5843, 5844, 5845, 5846, 5847, 5848, 5849, 5850, 5851, 5852, 5853, 5854, 5855, 5856, 5857, 5858, 5859, 5860, 5861, 5862, 5863, 5864, 5865, 5866, 5867, 5868, 5869, 5870, 5871, 5872, 5873, 5874, 5875, 5876, 5877, 5878, 5879, 5880, 5881, 5882, 5883, 5884, 5885, 5886, 5887, 5888, 5889, 5890, 5891, 5892, 5893, 5894, 5895, 5896, 5897, 5898, 5899, 5900, 5901, 5902, 5903, 5904, 5905, 5906, 5907, 5908, 5909, 5910, 5911, 5912, 5913, 5914, 5915, 5916, 5917, 5918, 5919, 5920, 5921, 5922, 5923, 5924, 5925, 5926, 5927, 5928, 5929, 5930, 5931, 5932, 5933, 5934, 5935, 5936, 5937, 5938, 5939, 5940, 5941, 5942, 5943, 5944, 5945, 5946, 5947, 5948, 5949, 5950, 5951, 5952, 5953, 5954, 5955, 5956, 5957, 5958, 5959, 5960, 5961, 5962, 5963, 5964, 5965, 5966, 5967, 5968, 5969, 5970, 5971, 5972, 5973, 5974, 5975, 5976, 5977, 5978, 5979, 5980, 5981, 5982, 5983, 5984, 5985, 5986, 5987, 5988, 5989, 5990, 5991, 5992, 5993, 5994, 5995, 5996, 5997, 5998, 5999, 6000, 6001, 6002, 6003, 6004, 6005, 6006, 6007, 6008, 6009, 6010, 6011, 6012, 6013, 6014, 6015, 6016, 6017, 6018, 6019, 6020, 6021, 6022, 6023, 6024, 6025, 6026, 6027, 6028, 6029, 6030, 6031, 6032, 6033, 6034, 6035, 6036, 6037, 6038, 6039, 6040, 6041, 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6051, 6052, 6053, 6054, 6055, 6056, 6057, 6058, 6059, 6060, 6061, 6062, 6063, 6064, 6065, 6066, 6067, 6068, 6069, 6070, 6071, 6072, 6073, 6074, 6075, 6076, 6077, 6078, 6079, 6080, 6081, 6082, 6083, 6084, 6085, 6086, 6087, 6088, 6089, 6090, 6091, 6092, 6093, 6094, 6095, 6096, 6097, 6098, 6099, 6100, 6101, 6102, 6103, 6104, 6105, 6106, 6107, 6108, 6109, 6110, 6111, 6112, 6113, 6114, 6115, 6116, 6117, 6118, 6119, 6120, 6121, 6122, 6123, 6124, 6125, 6126, 6127, 6128, 6129, 6130, 6131, 6132, 6133, 6134, 6135, 6136, 6137, 6138, 6139, 6140, 6141, 6142, 6143, 6144, 6145, 6146, 6147, 6148, 6149, 6150, 6151, 6152, 6153, 6154, 6155, 6156, 6157, 6158, 6159, 6160, 6161, 6162, 6163, 6164, 6165, 6166, 6167, 6168, 6169, 6170, 6171, 6172, 6173, 6174,

6175, 6176, 6177, 6178, 6179, 6180, 6181, 6182, 6183, 6184, 6185, 6186, 6187, 6188, 6189, 6190, 6191, 6192, 6193, 6194, 6195, 6196, 6197, 6198, 6199, 6200, 6201, 6202, 6203, 6204, 6205, 6206, 6207, 6208, 6209, 6210, 6211, 6212, 6213, 6214, 6215, 6216, 6217, 6218, 6219, 6220, 6221, 6222, 6223, 6224, 6225, 6226, 6227, 6228, 6229, 6230, 6231, 6232, 6233, 6234, 6235, 6236, 6237, 6238, 6239, 6240, 6241, 6242, 6243, 6244, 6245, 6246, 6247, 6248, 6249, 6250, 6251, 6252, 6253, 6254, 6255, 6256, 6257, 6258, 6259, 6260, 6261, 6262, 6263, 6264, 6265, 6266, 6267, 6268, 6269, 6270, 6271, 6272, 6273, 6274, 6275, 6276, 6277, 6278, 6279, 6280, 6281, 6282, 6283, 6284, 6285, 6286, 6287, 6288, 6289, 6290, 6291, 6292, 6293, 6294, 6295, 6296, 6297, 6298, 6299, 6300, 6301, 6302, 6303, 6304, 6305, 6306, 6307, 6308, 6309, 6310, 6311, 6312, 6313, 6314, 6315, 6316, 6317, 6318, 6319, 6320, 6321, 6322, 6323, 6324, 6325, 6326, 6327, 6328, 6329, 6330, 6331, 6332, 6333, 6334, 6335, 6336, 6337, 6338, 6339, 6340, 6341, 6342, 6343, 6344, 6345, 6346, 6347, 6348, 6349, 6350, 6351, 6352, 6353, 6354, 6355, 6356, 6357, 6358, 6359, 6360, 6361, 6362, 6363, 6364, 6365, 6366, 6367, 6368, 6369, 6370, 6371, 6372, 6373, 6374, 6375, 6376, 6377, 6378, 6379, 6380, 6381, 6382, 6383, 6384, 6385, 6386, 6387, 6388, 6389, 6390, 6391, 6392, 6393, 6394, 6395, 6396, 6397, 6398, 6399, 6400, 6401, 6402, 6403, 6404, 6405, 6406, 6407, 6408, 6409, 6410, 6411, 6412, 6413, 6414, 6415, 6416, 6417, 6418, 6419, 6420, 6421, 6422, 6423, 6424, 6425, 6426, 6427, 6428, 6429, 6430, 6431, 6432, 6433, 6434, 6435, 6436, 6437, 6438, 6439, 6440, 6441, 6442, 6443, 6444, 6445, 6446, 6447, 6448, 6449, 6450, 6451, 6452, 6453, 6454, 6455, 6456, 6457, 6458, 6459, 6460, 6461, 6462, 6463, 6464, 6465, 6466, 6467, 6468, 6469, 6470, 6471, 6472, 6473, 6474, 6475, 6476, 6477, 6478, 6479, 6480, 6481, 6482, 6483, 6484, 6485, 6486, 6487, 6488, 6489, 6490, 6491, 6492, 6493, 6494, 6495, 6496, 6497, 6498, 6499, 6500, 6501, 6502, 6503, 6504, 6505, 6506, 6507, 6508, 6509, 6510, 6511, 6512, 6513, 6514, 6515, 6516, 6517, 6518, 6519, 6520, 6521, 6522, 6523, 6524, 6525, 6526, 6527, 6528, 6529, 6530, 6531, 6532, 6533, 6534, 6535, 6536, 6537, 6538, 6539, 6540, 6541, 6542, 6543, 6544, 6545, 6546, 6547, 6548, 6549, 6550, 6551, 6552, 6553, 6554, 6555, 6556, 6557, 6558, 6559, 6560, 6561, 6562, 6563, 6564, 6565, 6566, 6567, 6568, 6569, 6570, 6571, 6572, 6573, 6574, 6575, 6576, 6577, 6578, 6579, 6580, 6581, 6582, 6583, 6584, 6585, 6586, 6587, 6588, 6589, 6590, 6591, 6592, 6593, 6594, 6595, 6596, 6597, 6598, 6599, 6600, 6601, 6602, 6603, 6604, 6605, 6606, 6607, 6608, 6609, 6610, 6611, 6612, 6613, 6614, 6615, 6616, 6617, 6618, 6619, 6620, 6621, 6622, 6623, 6624, 6625, 6626, 6627, 6628, 6629, 6630, 6631, 6632, 6633, 6634, 6635, 6636, 6637, 6638, 6639, 6640, 6641, 6642, 6643, 6644, 6645, 6646, 6647, 6648, 6649, 6650, 6651, 6652, 6653, 6654, 6655, 6656, 6657, 6658, 6659, 6660, 6661, 6662, 6663, 6664, 6665, 6666, 6667, 6668, 6669, 6670, 6671, 6672, 6673, 6674, 6675, 6676, 6677, 6678, 6679, 6680, 6681, 6682, 6683, 6684, 6685, 6686, 6687, 6688, 6689, 6690, 6691, 6692, 6693, 6694, 6695, 6696, 6697, 6698, 6699, 6700, 6701, 6702, 6703, 6704, 6705, 6706, 6707, 6708, 6709, 6710, 6711, 6712, 6713, 6714, 6715, 6716, 6717, 6718, 6719, 6720, 6721, 6722, 6723, 6724, 6725, 6726, 6727, 6728, 6729, 6730, 6731, 6732, 6733, 6734, 6735, 6736, 6737, 6738, 6739, 6740, 6741, 6742, 6743, 6744, 6745, 6746, 6747, 6748, 6749, 6750, 6751, 6752, 6753, 6754, 6755, 6756, 6757, 6758, 6759, 6760, 6761, 6762, 6763, 6764, 6765, 6766, 6767, 6768, 6769, 6770, 6771, 6772, 6773, 6774, 6775, 6776, 6777, 6778, 6779, 6780, 6781, 6782, 6783, 6784, 6785, 6786, 6787, 6788, 6789, 6790, 6791, 6792, 6793, 6794, 6795, 6796, 6797, 6798, 6799, 6800, 6801, 6802, 6803, 6804, 6805, 6806, 6807, 6808, 6809, 6810, 6811, 6812, 6813, 6814, 6815, 6816, 6817, 6818, 6819, 6820, 6821, 6822, 6823, 6824, 6825, 6826, 6827, 6828, 6829, 6830, 6831, 6832, 6833, 6834, 6835, 6836, 6837, 6838, 6839, 6840, 6841, 6842, 6843, 6844, 6845, 6846, 6847, 6848, 6849, 6850, 6851, 6852, 6853, 6854, 6855, 6856, 6857, 6858, 6859, 6860, 6861, 6862, 6863, 6864,

6865, 6866, 6867, 6868, 6869, 6870, 6871, 6872, 6873, 6874, 6875, 6876, 6877, 6878, 6879, 6880, 6881, 6882, 6883, 6884, 6885, 6886, 6887, 6888, 6889, 6890, 6891, 6892, 6893, 6894, 6895, 6896, 6897, 6898, 6899, 6900, 6901, 6902, 6903, 6904, 6905, 6906, 6907, 6908, 6909, 6910, 6911, 6912, 6913, 6914, 6915, 6916, 6917, 6918, 6919, 6920, 6921, 6922, 6923, 6924, 6925, 6926, 6927, 6928, 6929, 6930, 6931, 6932, 6933, 6934, 6935, 6936, 6937, 6938, 6939, 6940, 6941, 6942, 6943, 6944, 6945, 6946, 6947, 6948, 6949, 6950, 6951, 6952, 6953, 6954, 6955, 6956, 6957, 6958, 6959, 6960, 6961, 6962, 6963, 6964, 6965, 6966, 6967, 6968, 6969, 6970, 6971, 6972, 6973, 6974, 6975, 6976, 6977, 6978, 6979, 6980, 6981, 6982, 6983, 6984, 6985, 6986, 6987, 6988, 6989, 6990, 6991, 6992, 6993, 6994, 6995, 6996, 6997, 6998, 6999, 7000, 7001, 7002, 7003, 7004, 7005, 7006, 7007, 7008, 7009, 7010, 7011, 7012, 7013, 7014, 7015, 7016, 7017, 7018, 7019, 7020, 7021, 7022, 7023, 7024, 7025, 7026, 7027, 7028, 7029, 7030, 7031, 7032, 7033, 7034, 7035, 7036, 7037, 7038, 7039, 7040, 7041, 7042, 7043, 7044, 7045, 7046, 7047, 7048, 7049, 7050, 7051, 7052, 7053, 7054, 7055, 7056, 7057, 7058, 7059, 7060, 7061, 7062, 7063, 7064, 7065, 7066, 7067, 7068, 7069, 7070, 7071, 7072, 7073, 7074, 7075, 7076, 7077, 7078, 7079, 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089, 7090, 7091, 7092, 7093, 7094, 7095, 7096, 7097, 7098, 7099, 7100, 7101, 7102, 7103, 7104, 7105, 7106, 7107, 7108, 7109, 7110, 7111, 7112, 7113, 7114, 7115, 7116, 7117, 7118, 7119, 7120, 7121, 7122, 7123, 7124, 7125, 7126, 7127, 7128, 7129, 7130, 7131, 7132, 7133, 7134, 7135, 7136, 7137, 7138, 7139, 7140, 7141, 7142, 7143, 7144, 7145, 7146, 7147, 7148, 7149, 7150, 7151, 7152, 7153, 7154, 7155, 7156, 7157, 7158, 7159, 7160, 7161, 7162, 7163, 7164, 7165, 7166, 7167, 7168, 7169, 7170, 7171, 7172, 7173, 7174, 7175, 7176, 7177, 7178, 7179, 7180, 7181, 7182, 7183, 7184, 7185, 7186, 7187, 7188, 7189, 7190, 7191, 7192, 7193, 7194, 7195, 7196, 7197, 7198, 7199, 7200, 7201, 7202, 7203, 7204, 7205, 7206, 7207, 7208, 7209, 7210, 7211, 7212, 7213, 7214, 7215, 7216, 7217, 7218, 7219, 7220, 7221, 7222, 7223, 7224, 7225, 7226, 7227, 7228, 7229, 7230, 7231, 7232, 7233, 7234, 7235, 7236, 7237, 7238, 7239, 7240, 7241, 7242, 7243, 7244, 7245, 7246, 7247, 7248, 7249, 7250, 7251, 7252, 7253, 7254, 7255, 7256, 7257, 7258, 7259, 7260, 7261, 7262, 7263, 7264, 7265, 7266, 7267, 7268, 7269, 7270, 7271, 7272, 7273, 7274, 7275, 7276, 7277, 7278, 7279, 7280, 7281, 7282, 7283, 7284, 7285, 7286, 7287, 7288, 7289, 7290, 7291, 7292, 7293, 7294, 7295, 7296, 7297, 7298, 7299, 7300, 7301, 7302, 7303, 7304, 7305, 7306, 7307, 7308, 7309, 7310, 7311, 7312, 7313, 7314, 7315, 7316, 7317, 7318, 7319, 7320, 7321, 7322, 7323, 7324, 7325, 7326, 7327, 7328, 7329, 7330, 7331, 7332, 7333, 7334, 7335, 7336, 7337, 7338, 7339, 7340, 7341, 7342, 7343, 7344, 7345, 7346, 7347, 7348, 7349, 7350, 7351, 7352, 7353, 7354, 7355, 7356, 7357, 7358, 7359, 7360, 7361, 7362, 7363, 7364, 7365, 7366, 7367, 7368, 7369, 7370, 7371, 7372, 7373, 7374, 7375, 7376, 7377, 7378, 7379, 7380, 7381, 7382, 7383, 7384, 7385, 7386, 7387, 7388, 7389, 7390, 7391, 7392, 7393, 7394, 7395, 7396, 7397, 7398, 7399, 7400, 7401, 7402, 7403, 7404, 7405, 7406, 7407, 7408, 7409, 7410, 7411, 7412, 7413, 7414, 7415, 7416, 7417, 7418, 7419, 7420, 7421, 7422, 7423, 7424, 7425, 7426, 7427, 7428, 7429, 7430, 7431, 7432, 7433, 7434, 7435, 7436, 7437, 7438, 7439, 7440, 7441, 7442, 7443, 7444, 7445, 7446, 7447, 7448, 7449, 7450, 7451, 7452, 7453, 7454, 7455, 7456, 7457, 7458, 7459, 7460, 7461, 7462, 7463, 7464, 7465, 7466, 7467, 7468, 7469, 7470, 7471, 7472, 7473, 7474, 7475, 7476, 7477, 7478, 7479, 7480, 7481, 7482, 7483, 7484, 7485, 7486, 7487, 7488, 7489, 7490, 7491, 7492, 7493, 7494, 7495, 7496, 7497, 7498, 7499, 7500, 7501, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7509, 7510, 7511, 7512, 7513, 7514, 7515, 7516, 7517, 7518, 7519, 7520, 7521, 7522, 7523, 7524, 7525, 7526, 7527, 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7544, 7545, 7546, 7547, 7548, 7549, 7550, 7551, 7552, 7553, 7554,

7555, 7556, 7557, 7558, 7559, 7560, 7561, 7562, 7563, 7564, 7565, 7566, 7567, 7568, 7569, 7570, 7571, 7572, 7573, 7574, 7575, 7576, 7577, 7578, 7579, 7580, 7581, 7582, 7583, 7584, 7585, 7586, 7587, 7588, 7589, 7590, 7591, 7592, 7593, 7594, 7595, 7596, 7597, 7598, 7599, 7600, 7601, 7602, 7603, 7604, 7605, 7606, 7607, 7608, 7609, 7610, 7611, 7612, 7613, 7614, 7615, 7616, 7617, 7618, 7619, 7620, 7621, 7622, 7623, 7624, 7625, 7626, 7627, 7628, 7629, 7630, 7631, 7632, 7633, 7634, 7635, 7636, 7637, 7638, 7639, 7640, 7641, 7642, 7643, 7644, 7645, 7646, 7647, 7648, 7649, 7650, 7651, 7652, 7653, 7654, 7655, 7656, 7657, 7658, 7659, 7660, 7661, 7662, 7663, 7664, 7665, 7666, 7667, 7668, 7669, 7670, 7671, 7672, 7673, 7674, 7675, 7676, 7677, 7678, 7679, 7680, 7681, 7682, 7683, 7684, 7685, 7686, 7687, 7688, 7689, 7690, 7691, 7692, 7693, 7694, 7695, 7696, 7697, 7698, 7699, 7700, 7701, 7702, 7703, 7704, 7705, 7706, 7707, 7708, 7709, 7710, 7711, 7712, 7713, 7714, 7715, 7716, 7717, 7718, 7719, 7720, 7721, 7722, 7723, 7724, 7725, 7726, 7727, 7728, 7729, 7730, 7731, 7732, 7733, 7734, 7735, 7736, 7737, 7738, 7739, 7740, 7741, 7742, 7743, 7744, 7745, 7746, 7747, 7748, 7749, 7750, 7751, 7752, 7753, 7754, 7755, 7756, 7757, 7758, 7759, 7760, 7761, 7762, 7763, 7764, 7765, 7766, 7767, 7768, 7769, 7770, 7771, 7772, 7773, 7774, 7775, 7776, 7777, 7778, 7779, 7780, 7781, 7782, 7783, 7784, 7785, 7786, 7787, 7788, 7789, 7790, 7791, 7792, 7793, 7794, 7795, 7796, 7797, 7798, 7799, 7800, 7801, 7802, 7803, 7804, 7805, 7806, 7807, 7808, 7809, 7810, 7811, 7812, 7813, 7814, 7815, 7816, 7817, 7818, 7819, 7820, 7821, 7822, 7823, 7824, 7825, 7826, 7827, 7828, 7829, 7830, 7831, 7832, 7833, 7834, 7835, 7836, 7837, 7838, 7839, 7840, 7841, 7842, 7843, 7844, 7845, 7846, 7847, 7848, 7849, 7850, 7851, 7852, 7853, 7854, 7855, 7856, 7857, 7858, 7859, 7860, 7861, 7862, 7863, 7864, 7865, 7866, 7867, 7868, 7869, 7870, 7871, 7872, 7873, 7874, 7875, 7876, 7877, 7878, 7879, 7880, 7881, 7882, 7883, 7884, 7885, 7886, 7887, 7888, 7889, 7890, 7891, 7892, 7893, 7894, 7895, 7896, 7897, 7898, 7899, 7900, 7901, 7902, 7903, 7904, 7905, 7906, 7907, 7908, 7909, 7910, 7911, 7912, 7913, 7914, 7915, 7916, 7917, 7918, 7919, 7920, 7921, 7922, 7923, 7924, 7925, 7926, 7927, 7928, 7929, 7930, 7931, 7932, 7933, 7934, 7935, 7936, 7937, 7938, 7939, 7940, 7941, 7942, 7943, 7944, 7945, 7946, 7947, 7948, 7949, 7950, 7951, 7952, 7953, 7954, 7955, 7956, 7957, 7958, 7959, 7960, 7961, 7962, 7963, 7964, 7965, 7966, 7967, 7968, 7969, 7970, 7971, 7972, 7973, 7974, 7975, 7976, 7977, 7978, 7979, 7980, 7981, 7982, 7983, 7984, 7985, 7986, 7987, 7988, 7989, 7990, 7991, 7992, 7993, 7994, 7995, 7996, 7997, 7998, 7999, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8009, 8010, 8011, 8012, 8013, 8014, 8015, 8016, 8017, 8018, 8019, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8029, 8030, 8031, 8032, 8033, 8034, 8035, 8036, 8037, 8038, 8039, 8040, 8041, 8042, 8043, 8044, 8045, 8046, 8047, 8048, 8049, 8050, 8051, 8052, 8053, 8054, 8055, 8056, 8057, 8058, 8059, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8068, 8069, 8070, 8071, 8072, 8073, 8074, 8075, 8076, 8077, 8078, 8079, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088, 8089, 8090, 8091, 8092, 8093, 8094, 8095, 8096, 8097, 8098, 8099, 8100, 8101, 8102, 8103, 8104, 8105, 8106, 8107, 8108, 8109, 8110, 8111, 8112, 8113, 8114, 8115, 8116, 8117, 8118, 8119, 8120, 8121, 8122, 8123, 8124, 8125, 8126, 8127, 8128, 8129, 8130, 8131, 8132, 8133, 8134, 8135, 8136, 8137, 8138, 8139, 8140, 8141, 8142, 8143, 8144, 8145, 8146, 8147, 8148, 8149, 8150, 8151, 8152, 8153, 8154, 8155, 8156, 8157, 8158, 8159, 8160, 8161, 8162, 8163, 8164, 8165, 8166, 8167, 8168, 8169, 8170, 8171, 8172, 8173, 8174, 8175, 8176, 8177, 8178, 8179, 8180, 8181, 8182, 8183, 8184, 8185, 8186, 8187, 8188, 8189, 8190, 8191, 8192, 8193, 8194, 8195, 8196, 8197, 8198, 8199, 8200, 8201, 8202, 8203, 8204, 8205, 8206, 8207, 8208, 8209, 8210, 8211, 8212, 8213, 8214, 8215, 8216, 8217, 8218, 8219, 8220, 8221, 8222, 8223, 8224, 8225, 8226, 8227, 8228, 8229, 8230, 8231, 8232, 8233, 8234, 8235, 8236, 8237, 8238, 8239, 8240, 8241, 8242, 8243, 8244,

8245, 8246, 8247, 8248, 8249, 8250, 8251, 8252, 8253, 8254, 8255, 8256, 8257, 8258, 8259, 8260, 8261, 8262, 8263, 8264, 8265, 8266, 8267, 8268, 8269, 8270, 8271, 8272, 8273, 8274, 8275, 8276, 8277, 8278, 8279, 8280, 8281, 8282, 8283, 8284, 8285, 8286, 8287, 8288, 8289, 8290, 8291, 8292, 8293, 8294, 8295, 8296, 8297, 8298, 8299, 8300, 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309, 8310, 8311, 8312, 8313, 8314, 8315, 8316, 8317, 8318, 8319, 8320, 8321, 8322, 8323, 8324, 8325, 8326, 8327, 8328, 8329, 8330, 8331, 8332, 8333, 8334, 8335, 8336, 8337, 8338, 8339, 8340, 8341, 8342, 8343, 8344, 8345, 8346, 8347, 8348, 8349, 8350, 8351, 8352, 8353, 8354, 8355, 8356, 8357, 8358, 8359, 8360, 8361, 8362, 8363, 8364, 8365, 8366, 8367, 8368, 8369, 8370, 8371, 8372, 8373, 8374, 8375, 8376, 8377, 8378, 8379, 8380, 8381, 8382, 8383, 8384, 8385, 8386, 8387, 8388, 8389, 8390, 8391, 8392, 8393, 8394, 8395, 8396, 8397, 8398, 8399, 8400, 8401, 8402, 8403, 8404, 8405, 8406, 8407, 8408, 8409, 8410, 8411, 8412, 8413, 8414, 8415, 8416, 8417, 8418, 8419, 8420, 8421, 8422, 8423, 8424, 8425, 8426, 8427, 8428, 8429, 8430, 8431, 8432, 8433, 8434, 8435, 8436, 8437, 8438, 8439, 8440, 8441, 8442, 8443, 8444, 8445, 8446, 8447, 8448, 8449, 8450, 8451, 8452, 8453, 8454, 8455, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463, 8464, 8465, 8466, 8467, 8468, 8469, 8470, 8471, 8472, 8473, 8474, 8475, 8476, 8477, 8478, 8479, 8480, 8481, 8482, 8483, 8484, 8485, 8486, 8487, 8488, 8489, 8490, 8491, 8492, 8493, 8494, 8495, 8496, 8497, 8498, 8499, 8500, 8501, 8502, 8503, 8504, 8505, 8506, 8507, 8508, 8509, 8510, 8511, 8512, 8513, 8514, 8515, 8516, 8517, 8518, 8519, 8520, 8521, 8522, 8523, 8524, 8525, 8526, 8527, 8528, 8529, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8537, 8538, 8539, 8540, 8541, 8542, 8543, 8544, 8545, 8546, 8547, 8548, 8549, 8550, 8551, 8552, 8553, 8554, 8555, 8556, 8557, 8558, 8559, 8560, 8561, 8562, 8563, 8564, 8565, 8566, 8567, 8568, 8569, 8570, 8571, 8572, 8573, 8574, 8575, 8576, 8577, 8578, 8579, 8580, 8581, 8582, 8583, 8584, 8585, 8586, 8587, 8588, 8589, 8590, 8591, 8592, 8593, 8594, 8595, 8596, 8597, 8598, 8599, 8600, 8601, 8602, 8603, 8604, 8605, 8606, 8607, 8608, 8609, 8610, 8611, 8612, 8613, 8614, 8615, 8616, 8617, 8618, 8619, 8620, 8621, 8622, 8623, 8624, 8625, 8626, 8627, 8628, 8629, 8630, 8631, 8632, 8633, 8634, 8635, 8636, 8637, 8638, 8639, 8640, 8641, 8642, 8643, 8644, 8645, 8646, 8647, 8648, 8649, 8650, 8651, 8652, 8653, 8654, 8655, 8656, 8657, 8658, 8659, 8660, 8661, 8662, 8663, 8664, 8665, 8666, 8667, 8668, 8669, 8670, 8671, 8672, 8673, 8674, 8675, 8676, 8677, 8678, 8679, 8680, 8681, 8682, 8683, 8684, 8685, 8686, 8687, 8688, 8689, 8690, 8691, 8692, 8693, 8694, 8695, 8696, 8697, 8698, 8699, 8700, 8701, 8702, 8703, 8704, 8705, 8706, 8707, 8708, 8709, 8710, 8711, 8712, 8713, 8714, 8715, 8716, 8717, 8718, 8719, 8720, 8721, 8722, 8723, 8724, 8725, 8726, 8727, 8728, 8729, 8730, 8731, 8732, 8733, 8734, 8735, 8736, 8737, 8738, 8739, 8740, 8741, 8742, 8743, 8744, 8745, 8746, 8747, 8748, 8749, 8750, 8751, 8752, 8753, 8754, 8755, 8756, 8757, 8758, 8759, 8760, 8761, 8762, 8763, 8764, 8765, 8766, 8767, 8768, 8769, 8770, 8771, 8772, 8773, 8774, 8775, 8776, 8777, 8778, 8779, 8780, 8781, 8782, 8783, 8784, 8785, 8786, 8787, 8788, 8789, 8790, 8791, 8792, 8793, 8794, 8795, 8796, 8797, 8798, 8799, 8800, 8801, 8802, 8803, 8804, 8805, 8806, 8807, 8808, 8809, 8810, 8811, 8812, 8813, 8814, 8815, 8816, 8817, 8818, 8819, 8820, 8821, 8822, 8823, 8824, 8825, 8826, 8827, 8828, 8829, 8830, 8831, 8832, 8833, 8834, 8835, 8836, 8837, 8838, 8839, 8840, 8841, 8842, 8843, 8844, 8845, 8846, 8847, 8848, 8849, 8850, 8851, 8852, 8853, 8854, 8855, 8856, 8857, 8858, 8859, 8860, 8861, 8862, 8863, 8864, 8865, 8866, 8867, 8868, 8869, 8870, 8871, 8872, 8873, 8874, 8875, 8876, 8877, 8878, 8879, 8880, 8881, 8882, 8883, 8884, 8885, 8886, 8887, 8888, 8889, 8890, 8891, 8892, 8893, 8894, 8895, 8896, 8897, 8898, 8899, 8900, 8901, 8902, 8903, 8904, 8905, 8906, 8907, 8908, 8909, 8910, 8911, 8912, 8913, 8914, 8915, 8916, 8917, 8918, 8919, 8920, 8921, 8922, 8923, 8924, 8925, 8926, 8927, 8928, 8929, 8930, 8931, 8932, 8933, 8934,

8935, 8936, 8937, 8938, 8939, 8940, 8941, 8942, 8943, 8944, 8945, 8946, 8947, 8948, 8949, 8950, 8951, 8952, 8953, 8954, 8955, 8956, 8957, 8958, 8959, 8960, 8961, 8962, 8963, 8964, 8965, 8966, 8967, 8968, 8969, 8970, 8971, 8972, 8973, 8974, 8975, 8976, 8977, 8978, 8979, 8980, 8981, 8982, 8983, 8984, 8985, 8986, 8987, 8988, 8989, 8990, 8991, 8992, 8993, 8994, 8995, 8996, 8997, 8998, 8999, 9000, 9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9011, 9012, 9013, 9014, 9015, 9016, 9017, 9018, 9019, 9020, 9021, 9022, 9023, 9024, 9025, 9026, 9027, 9028, 9029, 9030, 9031, 9032, 9033, 9034, 9035, 9036, 9037, 9038, 9039, 9040, 9041, 9042, 9043, 9044, 9045, 9046, 9047, 9048, 9049, 9050, 9051, 9052, 9053, 9054, 9055, 9056, 9057, 9058, 9059, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 9067, 9068, 9069, 9070, 9071, 9072, 9073, 9074, 9075, 9076, 9077, 9078, 9079, 9080, 9081, 9082, 9083, 9084, 9085, 9086, 9087, 9088, 9089, 9090, 9091, 9092, 9093, 9094, 9095, 9096, 9097, 9098, 9099, 9100, 9101, 9102, 9103, 9104, 9105, 9106, 9107, 9108, 9109, 9110, 9111, 9112, 9113, 9114, 9115, 9116, 9117, 9118, 9119, 9120, 9121, 9122, 9123, 9124, 9125, 9126, 9127, 9128, 9129, 9130, 9131, 9132, 9133, 9134, 9135, 9136, 9137, 9138, 9139, 9140, 9141, 9142, 9143, 9144, 9145, 9146, 9147, 9148, 9149, 9150, 9151, 9152, 9153, 9154, 9155, 9156, 9157, 9158, 9159, 9160, 9161, 9162, 9163, 9164, 9165, 9166, 9167, 9168, 9169, 9170, 9171, 9172, 9173, 9174, 9175, 9176, 9177, 9178, 9179, 9180, 9181, 9182, 9183, 9184, 9185, 9186, 9187, 9188, 9189, 9190, 9191, 9192, 9193, 9194, 9195, 9196, 9197, 9198, 9199, 9200, 9201, 9202, 9203, 9204, 9205, 9206, 9207, 9208, 9209, 9210, 9211, 9212, 9213, 9214, 9215, 9216, 9217, 9218, 9219, 9220, 9221, 9222, 9223, 9224, 9225, 9226, 9227, 9228, 9229, 9230, 9231, 9232, 9233, 9234, 9235, 9236, 9237, 9238, 9239, 9240, 9241, 9242, 9243, 9244, 9245, 9246, 9247, 9248, 9249, 9250, 9251, 9252, 9253, 9254, 9255, 9256, 9257, 9258, 9259, 9260, 9261, 9262, 9263, 9264, 9265, 9266, 9267, 9268, 9269, 9270, 9271, 9272, 9273, 9274, 9275, 9276, 9277, 9278, 9279, 9280, 9281, 9282, 9283, 9284, 9285, 9286, 9287, 9288, 9289, 9290, 9291, 9292, 9293, 9294, 9295, 9296, 9297, 9298, 9299, 9300, 9301, 9302, 9303, 9304, 9305, 9306, 9307, 9308, 9309, 9310, 9311, 9312, 9313, 9314, 9315, 9316, 9317, 9318, 9319, 9320, 9321, 9322, 9323, 9324, 9325, 9326, 9327, 9328, 9329, 9330, 9331, 9332, 9333, 9334, 9335, 9336, 9337, 9338, 9339, 9340, 9341, 9342, 9343, 9344, 9345, 9346, 9347, 9348, 9349, 9350, 9351, 9352, 9353, 9354, 9355, 9356, 9357, 9358, 9359, 9360, 9361, 9362, 9363, 9364, 9365, 9366, 9367, 9368, 9369, 9370, 9371, 9372, 9373, 9374, 9375, 9376, 9377, 9378, 9379, 9380, 9381, 9382, 9383, 9384, 9385, 9386, 9387, 9388, 9389, 9390, 9391, 9392, 9393, 9394, 9395, 9396, 9397, 9398, 9399, 9400, 9401, 9402, 9403, 9404, 9405, 9406, 9407, 9408, 9409, 9410, 9411, 9412, 9413, 9414, 9415, 9416, 9417, 9418, 9419, 9420, 9421, 9422, 9423, 9424, 9425, 9426, 9427, 9428, 9429, 9430, 9431, 9432, 9433, 9434, 9435, 9436, 9437, 9438, 9439, 9440, 9441, 9442, 9443, 9444, 9445, 9446, 9447, 9448, 9449, 9450, 9451, 9452, 9453, 9454, 9455, 9456, 9457, 9458, 9459, 9460, 9461, 9462, 9463, 9464, 9465, 9466, 9467, 9468, 9469, 9470, 9471, 9472, 9473, 9474, 9475, 9476, 9477, 9478, 9479, 9480, 9481, 9482, 9483, 9484, 9485, 9486, 9487, 9488, 9489, 9490, 9491, 9492, 9493, 9494, 9495, 9496, 9497, 9498, 9499, 9500, 9501, 9502, 9503, 9504, 9505, 9506, 9507, 9508, 9509, 9510, 9511, 9512, 9513, 9514, 9515, 9516, 9517, 9518, 9519, 9520, 9521, 9522, 9523, 9524, 9525, 9526, 9527, 9528, 9529, 9530, 9531, 9532, 9533, 9534, 9535, 9536, 9537, 9538, 9539, 9540, 9541, 9542, 9543, 9544, 9545, 9546, 9547, 9548, 9549, 9550, 9551, 9552, 9553, 9554, 9555, 9556, 9557, 9558, 9559, 9560, 9561, 9562, 9563, 9564, 9565, 9566, 9567, 9568, 9569, 9570, 9571, 9572, 9573, 9574, 9575, 9576, 9577, 9578, 9579, 9580, 9581, 9582, 9583, 9584, 9585, 9586, 9587, 9588, 9589, 9590, 9591, 9592, 9593, 9594, 9595, 9596, 9597, 9598, 9599, 9600, 9601, 9602, 9603, 9604, 9605, 9606, 9607, 9608, 9609, 9610, 9611, 9612, 9613, 9614, 9615, 9616, 9617, 9618, 9619, 9620, 9621, 9622, 9623, 9624,

9625, 9626, 9627, 9628, 9629, 9630, 9631, 9632, 9633, 9634, 9635, 9636, 9637, 9638, 9639, 9640, 9641, 9642, 9643, 9644, 9645, 9646, 9647, 9648, 9649, 9650, 9651, 9652, 9653, 9654, 9655, 9656, 9657, 9658, 9659, 9660, 9661, 9662, 9663, 9664, 9665, 9666, 9667, 9668, 9669, 9670, 9671, 9672, 9673, 9674, 9675, 9676, 9677, 9678, 9679, 9680, 9681, 9682, 9683, 9684, 9685, 9686, 9687, 9688, 9689, 9690, 9691, 9692, 9693, 9694, 9695, 9696, 9697, 9698, 9699, 9700, 9701, 9702, 9703, 9704, 9705, 9706, 9707, 9708, 9709, 9710, 9711, 9712, 9713, 9714, 9715, 9716, 9717, 9718, 9719, 9720, 9721, 9722, 9723, 9724, 9725, 9726, 9727, 9728, 9729, 9730, 9731, 9732, 9733, 9734, 9735, 9736, 9737, 9738, 9739, 9740, 9741, 9742, 9743, 9744, 9745, 9746, 9747, 9748, 9749, 9750, 9751, 9752, 9753, 9754, 9755, 9756, 9757, 9758, 9759, 9760, 9761, 9762, 9763, 9764, 9765, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9780, 9781, 9782, 9783, 9784, 9785, 9786, 9787, 9788, 9789, 9790, 9791, 9792, 9793, 9794, 9795, 9796, 9797, 9798, 9799, 9800, 9801, 9802, 9803, 9804, 9805, 9806, 9807, 9808, 9809, 9810, 9811, 9812, 9813, 9814, 9815, 9816, 9817, 9818, 9819, 9820, 9821, 9822, 9823, 9824, 9825, 9826, 9827, 9828, 9829, 9830, 9831, 9832, 9833, 9834, 9835, 9836, 9837, 9838, 9839, 9840, 9841, 9842, 9843, 9844, 9845, 9846, 9847, 9848, 9849, 9850, 9851, 9852, 9853, 9854, 9855, 9856, 9857, 9858, 9859, 9860, 9861, 9862, 9863, 9864, 9865, 9866, 9867, 9868, 9869, 9870, 9871, 9872, 9873, 9874, 9875, 9876, 9877, 9878, 9879, 9880, 9881, 9882, 9883, 9884, 9885, 9886, 9887, 9888, 9889, 9890, 9891, 9892, 9893, 9894, 9895, 9896, 9897, 9898, 9899, 9900, 9901, 9902, 9903, 9904, 9905, 9906, 9907, 9908, 9909, 9910, 9911, 9912, 9913, 9914, 9915, 9916, 9917, 9918, 9919, 9920, 9921, 9922, 9923, 9924, 9925, 9926, 9927, 9928, 9929, 9930, 9931, 9932, 9933, 9934, 9935, 9936, 9937, 9938, 9939, 9940, 9941, 9942, 9943, 9944, 9945, 9946, 9947, 9948, 9949, 9950, 9951, 9952, 9953, 9954, 9955, 9956, 9957, 9958, 9959, 9960, 9961, 9962, 9963, 9964, 9965, 9966, 9967, 9968, 9969, 9970, 9971, 9972, 9973, 9974, 9975, 9976, 9977, 9978, 9979, 9980, 9981, 9982, 9983, 9984, 9985, 9986, 9987, 9988, 9989, 9990, 9991, 9992, 9993, 9994, 9995, 9996, 9997, 9998, 9999, 10000, 10001, 10002, 10003, 10004, 10005, 10006, 10007, 10008, 10009, 10010, 10011, 10012, 10013, 10014, 10015, 10016, 10017, 10018, 10019, 10020, 10021, 10022, 10023, 10024, 10025, 10026, 10027, 10028, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10036, 10037, 10038, 10039, 10040, 10041, 10042, 10043, 10044, 10045, 10046, 10047, 10048, 10049, 10050, 10051, 10052, 10053, 10054, 10055, 10056, 10057, 10058, 10059, 10060, 10061, 10062, 10063, 10064, 10065, 10066, 10067, 10068, 10069, 10070, 10071, 10072, 10073, 10074, 10075, 10076, 10077, 10078, 10079, 10080, 10081, 10082, 10083, 10084, 10085, 10086, 10087, 10088, 10089, 10090, 10091, 10092, 10093, 10094, 10095, 10096, 10097, 10098, 10099, 10100, 10101, 10102, 10103, 10104, 10105, 10106, 10107, 10108, 10109, 10110, 10111, 10112, 10113, 10114, 10115, 10116, 10117, 10118, 10119, 10120, 10121, 10122, 10123, 10124, 10125, 10126, 10127, 10128, 10129, 10130, 10131, 10132, 10133, 10134, 10135, 10136, 10137, 10138, 10139, 10140, 10141, 10142, 10143, 10144, 10145, 10146, 10147, 10148, 10149, 10150, 10151, 10152, 10153, 10154, 10155, 10156, 10157, 10158, 10159, 10160, 10161, 10162, 10163, 10164, 10165, 10166, 10167, 10168, 10169, 10170, 10171, 10172, 10173, 10174, 10175, 10176, 10177, 10178, 10179, 10180, 10181, 10182, 10183, 10184, 10185, 10186, 10187, 10188, 10189, 10190, 10191, 10192, 10193, 10194, 10195, 10196, 10197, 10198, 10199, 10200, 10201, 10202, 10203, 10204, 10205, 10206, 10207, 10208, 10209, 10210, 10211, 10212, 10213, 10214, 10215, 10216, 10217, 10218, 10219, 10220, 10221, 10222, 10223, 10224, 10225, 10226, 10227, 10228, 10229, 10230, 10231, 10232, 10233, 10234, 10235, 10236, 10237, 10238, 10239, 10240, 10241, 10242, 10243, 10244, 10245, 10246, 10247, 10248, 10249, 10250, 10251, 10252, 10253, 10254, 10255, 10256, 10257, 10258, 10259, 10260, 10261, 10262, 10263, 10264, 10265, 10266, 10267, 10268, 10269, 10270, 10271, 10272,

10273, 10274, 10275, 10276, 10277, 10278, 10279, 10280, 10281, 10282, 10283, 10284, 10285, 10286, 10287, 10288, 10289, 10290, 10291, 10292, 10293, 10294, 10295, 10296, 10297, 10298, 10299, 10300, 10301, 10302, 10303, 10304, 10305, 10306, 10307, 10308, 10309, 10310, 10311, 10312, 10313, 10314, 10315, 10316, 10317, 10318, 10319, 10320, 10321, 10322, 10323, 10324, 10325, 10326, 10327, 10328, 10329, 10330, 10331, 10332, 10333, 10334, 10335, 10336, 10337, 10338, 10339, 10340, 10341, 10342, 10343, 10344, 10345, 10346, 10347, 10348, 10349, 10350, 10351, 10352, 10353, 10354, 10355, 10356, 10357, 10358, 10359, 10360, 10361, 10362, 10363, 10364, 10365, 10366, 10367, 10368, 10369, 10370, 10371, 10372, 10373, 10374, 10375, 10376, 10377, 10378, 10379, 10380, 10381, 10382, 10383, 10384, 10385, 10386, 10387, 10388, 10389, 10390, 10391, 10392, 10393, 10394, 10395, 10396, 10397, 10398, 10399, 10400, 10401, 10402, 10403, 10404, 10405, 10406, 10407, 10408, 10409, 10410, 10411, 10412, 10413, 10414, 10415, 10416, 10417, 10418, 10419, 10420, 10421, 10422, 10423, 10424, 10425, 10426, 10427, 10428, 10429, 10430, 10431, 10432, 10433, 10434, 10435, 10436, 10437, 10438, 10439, 10440, 10441, 10442, 10443, 10444, 10445, 10446, 10447, 10448, 10449, 10450, 10451, 10452, 10453, 10454, 10455, 10456, 10457, 10458, 10459, 10460, 10461, 10462, 10463, 10464, 10465, 10466, 10467, 10468, 10469, 10470, 10471, 10472, 10473, 10474, 10475, 10476, 10477, 10478, 10479, 10480, 10481, 10482, 10483, 10484, 10485, 10486, 10487, 10488, 10489, 10490, 10491, 10492, 10493, 10494, 10495, 10496, 10497, 10498, 10499, 10500, 10501, 10502, 10503, 10504, 10505, 10506, 10507, 10508, 10509, 10510, 10511, 10512, 10513, 10514, 10515, 10516, 10517, 10518, 10519, 10520, 10521, 10522, 10523, 10524, 10525, 10611, 10997, 12153, 12273, 12463, 12739, 13152.

- Section 5.4.1.2.1 of the EIS was amended to include additional discussion on herbicide application techniques that would reduce potential impacts to surface water quality.
- Section 5.4.2.2 of the EIS was amended to clarify that the use of herbicides under the proposed and connected actions would not impact groundwater and that the proposed project would adhere to CDPH's current program in place to prevent groundwater contamination. The subapplicants will follow all CDPH and EPA regulations regarding pesticide application, including the 60-foot buffer for foliar application of herbicides around standing and running water.
- Section 5.1 of the draft EIS adequately addressed conditions related to herbicide use including protection of a 60-foot buffer around surface waters. These conditions are a required component of compliance with the Endangered Species Act consultation and are enforced through the Biological Opinion issued for the project.

Issue 20: Flooding

The following commenters (identified by PK) raised Issue 20: 3, 122, 166, 234, 246, 250, 273, 730, 864, 1646, 1903, 2451, 2535, 6068, 9394.

- Section 5.4.3.2.2 of the EIS was amended to add additional language on the potential impacts associated with erosion and sedimentation, including increased flooding potential in adjacent parks and neighborhoods adjacent to parks.

Issue 21: Water Quantity (Drought Conditions and Fog Drip)

The following commenters (identified by PK) raised Issue 21: 3, 13, 36, 45, 53, 71, 169, 186, 231, 234, 239, 243, 250, 273, 300, 309, 325, 561, 595, 822, 871, 1131, 1262, 1264, 1267, 1503, 1987, 2050, 2530, 2692, 3061, 3175, 3177, 3198, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3522, 3523, 5505, 8338, 9654, 9961, 12364, 12562, 12923.

- Section 5.4.1.2.2 of the EIS was amended to analyze the impact of tree removal under the proposed and connected actions on surface area available to intercept fog and produce fog drip and its potential effect on surface water flows and groundwater levels.

Air Quality, Climate, and Microclimate Issues

The sections below (Issue 22 through Issue 24) include responses to all comments received on the draft EIS addressing air quality, climate, and microclimate issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 22: Vegetation Removal and CO2 and GHG

The following commenters (identified by PK) raised Issue 22: 1, 3, 10, 11, 15, 16, 17, 19, 21, 25, 26, 30, 31, 32, 34, 35, 36, 38, 40, 41, 42, 44, 45, 47, 53, 56, 59, 62, 68, 71, 79, 80, 81, 82, 85, 86, 92, 99, 102, 111, 114, 116, 117, 121, 126, 128, 130, 135, 136, 139, 142, 146, 151, 155, 156, 158, 159, 160, 162, 163, 164, 165, 166, 169, 175, 183, 186, 189, 200, 207, 211, 216, 219, 220, 223, 226, 227, 231, 234, 239, 243, 245, 252, 255, 257, 263, 264, 266, 273, 275, 277, 278, 291, 303, 304, 312, 315, 325, 343, 344, 407, 424, 487, 488, 518, 556, 558, 561, 579, 592, 595, 619, 623, 628, 633, 637, 661, 662, 665, 672, 675, 679, 722, 742, 745, 751, 761, 780, 782, 784, 792, 793, 799, 802, 809, 822, 833, 836, 842, 854, 864, 865, 871, 872, 890, 895, 935, 977, 984, 985, 1017, 1027, 1032, 1038, 1045, 1046, 1052, 1070, 1087, 1100, 1119, 1145, 1200, 1205, 1216, 1262, 1264, 1267, 1271, 1312, 1316, 1369, 1383, 1387, 1395, 1396, 1397, 1401, 1405, 1411, 1417, 1425, 1428, 1436, 1441, 1444, 1448, 1452, 1465, 1469, 1473, 1479, 1483, 1487, 1490, 1494, 1546, 1550, 1554, 1560, 1565, 1583, 1591, 1600, 1635, 1646, 1653, 1656, 1688, 1695, 1719, 1745, 1750, 1776, 1777, 1778, 1779, 1780, 1792, 1799, 1803, 1805, 1807, 1821, 1828, 1829, 1830, 1851, 1855, 1858, 1861, 1888, 1893, 1909, 1913, 1915, 1925, 1937, 1946, 1968, 1973, 1977, 1986, 1987, 2024, 2025, 2063, 2086, 2095, 2137, 2173, 2210, 2215, 2222, 2225, 2238, 2244, 2259, 2267, 2279, 2283, 2287, 2291, 2299, 2303, 2310, 2313, 2317, 2325, 2332, 2339, 2349, 2355, 2358, 2364, 2372, 2376, 2378, 2388, 2390, 2402, 2406, 2417, 2421, 2423, 2426, 2427, 2428, 2435, 2436, 2437, 2438, 2443, 2449, 2476, 2490, 2491, 2501, 2502, 2504, 2511, 2518, 2525, 2527, 2530, 2551, 2555, 2559, 2563, 2591, 2626, 2643, 2653, 2656, 2678, 2682, 2692, 2702, 2708, 2716, 2743, 2756, 2765, 2767, 2774, 2780, 2793, 2801, 2808, 2812, 2824, 2837, 2841, 2843, 2846, 2849, 2857, 2861, 2866, 2871, 2872, 2873, 2878, 2880, 2881, 2884, 2907, 2911, 2937, 2941, 2954, 2964, 2968, 2973, 2978, 2986, 2991, 3028, 3037, 3049, 3061, 3084, 3087, 3096, 3098, 3100, 3104, 3108, 3109, 3128, 3135, 3184, 3198, 3250, 3251, 3252,

3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3501, 3509, 3517, 3519, 3523, 3525, 3548, 3554, 3556, 5521, 5646, 5748, 5766, 5842, 5888, 5898, 6016, 6056, 6066, 6068, 6089, 6091, 6095, 6353, 6504, 6515, 6544, 6550, 6645, 6656, 6667, 6896, 6901, 6904, 6913, 6965, 7128, 7209, 7348, 7437, 7563, 7571, 7572, 7577, 7748, 7983, 8536, 8589, 8877, 9238, 9322, 9394, 9418, 9438, 9572, 9647, 9684, 9739, 9771, 9856, 9866, 9904, 9961, 9967, 10111, 10149, 10159, 10228, 10275, 10281, 10314, 10467, 10520, 10611, 10637, 10663, 10756, 10936, 10984, 10990, 10997, 11043, 11048, 11079, 12053, 12095, 12193, 12212, 12273, 12376, 12395, 12402, 12488, 12513, 12528, 12569, 12589, 12655, 12785, 12845, 12890, 12934, 12966, 12987, 13002, 13044, 13136, 13152, 13216, 13217, 13238.

- Section 4.6.1 of the draft EIS adequately addressed the regulatory setting for the analysis including standards for criteria pollutant emissions and hazardous air pollutants. However, Section 4.6.1 of the EIS was updated to reflect the current status of national and local thresholds for analysis, including conformance requirements.
- Section 4.6.2 adequately addressed the existing air quality conditions including existing air quality and meteorological conditions, existing compliance with standards, and a description of sensitive receptors that occur near the project areas.
- Section 4.6 of the EIS was amended to further clarify the regulatory thresholds and standards used in the analysis of air quality effects.
- Section 4.7 of the EIS was amended to update the regulatory thresholds and standards used in the analysis of effects on global climate change and greenhouse gas emissions.
- Section 4.7.3 of the draft EIS adequately addressed the existing climate conditions in the project areas including carbon sequestration, microclimate (including fog drip), and climate change.
- Section 5.5 of the EIS was updated to present the analysis of effects on air quality from the no action and the proposed and connected action alternatives. The description of potential air quality effects in Section 5.5.2 of the EIS was also clarified.
- Additional information was added to Section 4.6.1.3 and Section 5.5.2 of the EIS on the effects of vegetation on air quality.
- Sections 4.6, 4.7, 5.5 and 5.6 of the EIS were amended to clarify the effects of tree cutting on both the local environment and on global climate change. Each sub-grantee is required to follow state and local laws and regulations; therefore, FEMA expects each will perform the necessary CEQA review to implement its proposed project.
- Section 5.5.2 of the draft EIS adequately addressed the potential impact on air quality from burning of cut material as proposed under the proposed and connected actions. Section 5.5.3 of the draft EIS adequately addressed the required mitigation measures for project compliance if grantees pursue burning. Section 5.6 of the draft EIS adequately addressed the effects of burning on greenhouse gas emissions.
- Section 5.5 of the draft EIS adequately addressed the effect of wood chip decomposition on criteria pollutant emissions and Section 5.6 of the draft EIS adequately addressed the effect

of wood chip decomposition on greenhouse gas emissions. Minor edits were made to improve the clarity of these discussions.

- Section 5.5.2 of the EIS was amended to clarify that the proposed project would not exceed threshold levels for criteria pollutant emissions regardless of whether the work is accomplished within 3 years or over 10 years.
- Mitigation measures for air quality effects were adequately addressed in Section 5.5.3 of the draft EIS.

Issue 23: General Impacts of Equipment Use and Burning

The following commenters (identified by PK) raised Issue 23: 3, 10, 164, 186, 239, 252, 253, 264, 266, 304, 1182, 1247, 1401, 1828, 1829, 1830, 1858, 1861, 1888, 1909, 1913, 1915, 1937, 1968, 2088, 2095, 2173, 2174, 2215, 2259, 2267, 2279, 2283, 2287, 2299, 2313, 2317, 2325, 2332, 2355, 2358, 2364, 2372, 2390, 2448, 2518, 2530, 2559, 2650, 2653, 2656, 2897, 3032, 3108, 3109, 3200, 3509, 3525, 3556, 6904, 7844, 10281.

- Section 4.6 of the draft EIS adequately addressed the criteria for criteria pollutant emissions from hauling equipment, including particulate matter that can affect human health.
- Section 5.5 of the draft EIS adequately evaluated the potential impacts on air quality from the use of heavy equipment and burning during implementation of the proposed and connected actions.
- Section 5.5 of the draft EIS adequately addressed the air quality effects of particulates from diesel engines used to conduct proposed and connected actions for work and hauling debris and trees from the site.
- Section 5.5.3 of the draft EIS adequately addressed the required mitigation measures for project compliance if grantees pursue burning.
- Section 5.6 of the draft EIS adequately addressed the effects of burning on greenhouse gas emissions.
- Section 4.7 of the EIS was amended to clarify the thresholds used to evaluate potential effects of greenhouse gas emissions.
- Section 5.6 of the draft EIS adequately analyzed potential impacts on greenhouse gas emissions and global climate change from the equipment proposed to be used to implement the project including hauling equipment.
- Section 4.6.1 of the EIS was updated to reflect the current status of national and local thresholds for analysis, including conformance requirements.
- Section 5.5.2 of the EIS was amended to clarify that the proposed project would not exceed threshold levels for criteria pollutant emissions regardless of whether the work is accomplished within 3 years or over 10 years.
- Section 5.6.2.2 of the EIS was amended to clarify which portions of the estimated greenhouse gas emissions from the proposed and connected actions would be due to wood decomposition.

Issue 24: General Microclimate Effects Including Shade Loss and Temperature

The following commenters (identified by PK) raised Issue 24: 10, 28, 35, 36, 38, 41, 59, 62, 71, 76, 82, 164, 186, 203, 223, 242, 243, 257, 261, 283, 561, 595, 642, 655, 662, 792, 793, 802, 811, 836, 890, 919, 998, 1032, 1038, 1052, 1145, 1216, 1247, 1430, 1503, 1546, 1688, 1781, 1782, 1783, 1784, 1785, 1803, 1821, 1828, 1829, 1830, 1858, 1861, 1888, 1909, 1913, 1915, 1937, 1968, 1973, 1987, 2095, 2173, 2215, 2225, 2259, 2267, 2279, 2283, 2287, 2299, 2313, 2317, 2325, 2332, 2349, 2355, 2358, 2364, 2372, 2390, 2406, 2417, 2421, 2422, 2426, 2427, 2428, 2435, 2437, 2438, 2443, 2449, 2490, 2491, 2501, 2520, 2529, 2567, 2602, 2692, 2693, 2702, 2743, 2801, 2808, 2812, 2826, 2828, 2837, 2841, 2843, 2846, 2849, 2857, 2861, 2872, 2873, 2880, 2881, 2931, 2937, 2968, 2973, 3002, 3007, 3024, 3037, 3043, 3056, 3068, 3087, 3091, 3128, 3142, 3146, 3186, 3198, 3200, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3511, 3521, 6901, 6904, 7437, 7572, 8372, 8675, 9086, 9476, 10020, 10022, 10030, 10164, 10314, 10756, 11043, 11062, 11098, 11100, 11108, 12649, 12655, 12870, 13134, 13217.

- Section 4.7.3.3.2 of the EIS was amended by moving information from Section 5.6 to clarify the discussion on fog drip and precipitation.
- Section 5.6 of the EIS was amended to clarify the analysis of potential impacts of the no action and the proposed and connected actions on climate and microclimate, including carbon sequestration, greenhouse gas emissions, and fog drip.
- Section 5.6 of the EIS was amended to move information from past scientific studies on fog drip to the relevant section in Section 4.7.
- Section 5.5.2 of the EIS was amended to address the effects of tree thinning and removal on air quality.

Historic Properties Issues

The sections below (Issue 25 and Issue 26) include responses to all comments received on the draft EIS addressing historic properties issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 25: Artifact and Burial Finds and Monitoring

The following commenters (identified by PK) raised Issue 25: 184, 349, 1189, 1400, 1401, 2643, 2733, 2777, 2875, 2876, 2879, 2941, 3073, 3087, 3158.

- Section 4.6 of the draft EIS adequately addressed the affected environment for historic properties and Section 5.7 of the draft EIS adequately addressed the potential environmental consequences and mitigation measures for historic properties under the proposed and connected actions.

- Section 5.7.4 of the EIS was amended to include additional mitigation measures for historic properties. During ground disturbing activities (e.g., construction of temporary access roads) the subapplicants will employ a cultural resource monitor to check for the presence of artifacts or burials. In addition, per the SHPO concurrence letter, EBRPD best management practices will be implemented to ensure avoidance of adverse effects.
- Language has been added to Sections 4.6 and 5.7 of the EIS to clarify that consultation with the State Historic Preservation Officer (SHPO) does not identify eucalyptus as a historical aspect of the project area; therefore, there would not be an adverse effect on archeological or built-environment historic properties from its removal.

Issue 26: Methodology

The following commenter (identified by PK) raised Issue 26: 349.

- Section 5.7.4 of the EIS was amended to include additional mitigation measures for historic properties. During ground disturbing activities (e.g., construction of temporary access roads) the subapplicants will employ a cultural resource monitor to check for the presence of artifacts or burials. In addition, per the SHPO concurrence letter, EBRPD best management practices will be implemented to ensure avoidance of adverse effects.

Aesthetics and Visual Quality Issues

The sections below (Issue 27 and Issue 28) include responses to all comments received on the draft EIS addressing aesthetics and visual quality issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 27: Impacts to Viewscapes

The following commenters (identified by PK) raised Issue 27: 3, 6, 10, 12, 16, 27, 28, 47, 55, 56, 61, 64, 66, 68, 78, 82, 83, 135, 141, 145, 150, 153, 164, 165, 169, 170, 174, 175, 184, 186, 200, 211, 225, 227, 239, 243, 249, 252, 257, 261, 262, 268, 270, 273, 280, 283, 284, 285, 300, 493, 561, 637, 656, 662, 665, 675, 689, 712, 715, 753, 761, 762, 769, 774, 778, 780, 784, 789, 793, 795, 799, 803, 807, 811, 822, 823, 826, 828, 829, 833, 838, 853, 854, 864, 865, 870, 873, 889, 899, 901, 908, 941, 944, 952, 979, 998, 1009, 1013, 1016, 1020, 1024, 1027, 1028, 1046, 1052, 1064, 1066, 1072, 1077, 1091, 1114, 1127, 1160, 1163, 1170, 1171, 1185, 1202, 1207, 1234, 1245, 1279, 1306, 1379, 1384, 1387, 1395, 1524, 1529, 1531, 1562, 1588, 1590, 1591, 1598, 1599, 1602, 1617, 1619, 1628, 1630, 1634, 1641, 1656, 1686, 1695, 1701, 1709, 1719, 1723, 1733, 1734, 1743, 1755, 1781, 1782, 1783, 1784, 1833, 1860, 1869, 1875, 1893, 1918, 1928, 2013, 2021, 2024, 2070, 2084, 2088, 2135, 2137, 2144, 2149, 2158, 2193, 2210, 2221, 2244, 2273, 2275, 2298, 2306, 2317, 2330, 2349, 2368, 2384, 2388, 2394, 2431, 2454, 2461, 2470, 2474, 2507, 2530, 2570, 2588, 2730, 2777, 2783, 2793, 2866, 2922, 2941, 3018, 3024, 3073, 3108, 3135, 3142, 3158, 3175, 3177, 3192, 3198, 3525, 5505, 5515, 5521, 5528, 5610, 5680, 6601, 6656, 6960, 6965, 7023, 7255, 7333, 7563, 8190, 8338, 8363, 8981, 9067, 9099, 9201, 9250, 9286, 9418, 9433, 9437, 9457, 9480, 9539, 9594, 9637, 9654, 9715, 9836, 9849,

9850, 9856, 9866, 9875, 9908, 9914, 10000, 10112, 10114, 10213, 10215, 10234, 10269, 10275, 10356, 10365, 10464, 10467, 10595, 10847, 10990, 11039, 12475.

- Section 5.8.4 of the draft EIS adequately addressed how implementation of the proposed and connected actions would cause a significant adverse effect on aesthetics and visual quality due to changes to long views from homes and recreation sites caused by removal of vegetation at some of the proposed and connected project areas.
- Section 5.8.3 of the EIS was updated to clarify the potential for expanded views of the Lawrence Berkeley National Laboratory from fire roads in the Strawberry Canyon area.
- Section 5.8 of the EIS was updated to clarify the methodology utilized to identify sites used to measure potential viewscape impacts that would provide readers with an indication of the viewscape effects at that location and the similar locations where the same types of effects would occur. In addition, clarification was made about the selection of sites for the representative photo simulations.

Issue 28: Impacts to Privacy Screening

The following commenters (identified by PK) raised Issue 28: 3, 10, 164, 184, 186, 2368, 2394.

- Section 5.8.4 of the EIS was revised to clarify that while native vegetation reestablishment will help to improve screening conditions in the future, implementation of the proposed and connected actions and ongoing maintenance following implementation of those actions will prevent forest density from returning to existing conditions in order to prevent fuel loads in the project area from returning to their currently unsafe levels. As a result mitigation for these changes was determined to be infeasible given the need to achieve fuel reduction in the study area.

Socioeconomic Issues

The sections below (Issue 29 and Issue 30) include responses to all comments received on the draft EIS addressing socioeconomic and environmental justice issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 29: Property Values and Other Economic Values

The following commenters (identified by PK) raised Issue 29: 61, 71, 83, 160, 164, 186, 213, 227, 234, 261, 266, 268, 613, 807, 809, 924, 956, 1546, 1918, 2024, 2034, 2116, 2167, 2199, 2394, 2559, 2563, 2567, 2805, 2858, 2870, 3024, 3067, 3192, 3561, 3562, 3565, 6492, 10081, 10545, 10792, 10842, 11074, 12450, 12475.

- Sections 4.10 and 5.9 of the draft EIS adequately addressed the affected environment and environmental consequences and mitigation measures for socioeconomic effects of the proposed project, including property values. Appendix H of the draft EIS provided additional qualitative analysis through a literature review on wildfire effects on property values.

- Section 5.9.2 of the EIS was amended to clarify the proposed and connected actions potential effects on property values, including the subjective nature of property values, the potential property value effects due to risk of fire to life and real property to approximately 4,590 homes throughout the East Bay Hills area, and the temporary nature of potential property value impacts due to the planned phasing of vegetation removal activity, which will minimize landscape and viewshed impacts.

Issue 30: Environmental Justice Issues

The following commenters (identified by PK) raised Issue 30: 213, 2563, 2567, 3561, 3562, 3565, 12450.

- Sections 4.10 and 5.9 of the draft EIS adequately addressed the affected environment and environmental consequences on minority or low-income populations with implementation of the proposed project

Human Health and Safety

The sections below (Issue 31 through Issue 33) include responses to all comments received on the draft EIS addressing human health and safety issues from herbicide use. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 31: Herbicide Health Impacts

The following commenters (identified by PK) raised Issue 31: 3, 7, 10, 14, 16, 21, 23, 26, 28, 30, 34, 35, 36, 38, 39, 42, 44, 45, 47, 53, 56, 58, 59, 62, 82, 85, 92, 95, 101, 102, 105, 106, 113, 114, 115, 117, 121, 128, 135, 137, 138, 139, 141, 145, 146, 149, 150, 151, 154, 158, 160, 162, 163, 164, 166, 167, 169, 170, 174, 175, 183, 185, 186, 187, 191, 192, 198, 199, 201, 203, 205, 207, 208, 210, 212, 214, 218, 219, 220, 221, 239, 242, 243, 254, 257, 264, 266, 268, 269, 270, 273, 275, 278, 281, 283, 284, 303, 304, 309, 312, 323, 324, 325, 326, 328, 329, 332, 333, 335, 343, 348, 351, 424, 426, 428, 439, 474, 475, 504, 505, 507, 510, 518, 541, 558, 579, 590, 591, 592, 593, 618, 619, 635, 641, 644, 645, 646, 647, 654, 656, 659, 660, 661, 679, 722, 727, 729, 784, 792, 801, 805, 809, 812, 822, 827, 831, 833, 842, 849, 853, 854, 890, 893, 901, 921, 926, 964, 974, 977, 988, 1032, 1038, 1045, 1091, 1109, 1122, 1145, 1156, 1182, 1190, 1202, 1205, 1236, 1249, 1279, 1295, 1361, 1384, 1389, 1413, 1462, 1525, 1546, 1565, 1583, 1596, 1619, 1638, 1653, 1656, 1660, 1673, 1686, 1695, 1703, 1707, 1719, 1723, 1745, 1774, 1863, 1872, 2005, 2009, 2017, 2020, 2028, 2043, 2061, 2124, 2134, 2137, 2146, 2159, 2167, 2176, 2215, 2222, 2225, 2244, 2250, 2394, 2399, 2402, 2406, 2414, 2417, 2421, 2422, 2424, 2426, 2427, 2428, 2433, 2435, 2436, 2437, 2439, 2442, 2443, 2448, 2449, 2450, 2451, 2452, 2454, 2455, 2458, 2467, 2468, 2476, 2490, 2491, 2499, 2511, 2518, 2527, 2530, 2535, 2536, 2537, 2540, 2541, 2542, 2545, 2546, 2547, 2548, 2552, 2559, 2563, 2567, 2575, 2583, 2591, 2594, 2626, 2664, 2692, 2702, 2708, 2711, 2716, 2721, 2730, 2736, 2743, 2751, 2756, 2765, 2767, 2774,

2780, 2793, 2824, 2870, 2907, 2933, 2941, 2947, 2954, 2964, 2968, 2973, 2976, 2989, 2991, 3012, 3014, 3020, 3028, 3049, 3067, 3081, 3087, 3095, 3099, 3104, 3108, 3115, 3122, 3128, 3140, 3142, 3143, 3146, 3151, 3163, 3175, 3177, 3236, 3249, 3501, 3508, 3519, 3523, 3527, 3528, 3531, 3537, 3538, 3539, 3542, 3543, 3545, 3551, 3557, 3558, 3559, 3560, 3564, 3565, 4003, 4005, 4007.

- A comprehensive analysis of the human health and safety risks was included in the draft EIS in Section 5.10 and Appendix F. Minor amendments have been made in those sections to clarify the text with respect to specific issues as noted in the following bullets.
- The EIS was amended to include required mitigation measures for herbicide application that resulted from the ESA consultation and that are found in the Biological Opinion.
- The draft EIS contained a complete Screening Level Human Health and Ecological Risk Evaluation in Appendix F and the results were summarized in Sections 5.1.2.2, 5.1.3.2 and 5.10.2.3. This evaluation provided a screening level human health and ecological risk assessment that evaluated the herbicides proposed for use, potential receptors (those who might be exposed), potential exposure pathways, toxicity information, and estimated risk characterization. The evaluation utilized USDA Forest Service risk assessment worksheets to evaluate exposure scenarios relevant to the proposed and connected actions using site-specific parameters as much as possible to estimate exposure point concentrations and hazards for human and ecological receptors. Additional risk assessment is not required.
- Section 5.10 of the draft EIS adequately addresses the human health risk for current and future herbicide handlers and vegetation management workers onsite during implementation of the proposed and connected actions. These workers would have the most direct exposure path to the herbicides and represent the worst case exposure condition. Any other workers not included in this group potentially exposed to herbicides would be exposed at a lower intensity and would not experience health risk in excess of the values presented in Section 5.10.2 of the draft EIS.
- Section 5.10 of the draft EIS adequately addresses health impacts to all people, which includes persons protected by ADA. Proposed mitigation measures would also apply to all persons.
- Section 5.10.2.3 of the EIS was clarified to state "None of the herbicides proposed for use in this project were identified as carcinogens (cancer-causing); therefore, only noncancer hazards were evaluated." Section 4.1 of Appendix F of the draft EIS stated that the herbicides proposed for use do not include carcinogens.
- Section 5.10.2.3.1 of the EIS was amended to refer the reader to Appendix F and to indicate that glyphosate has a relatively low oral and dermal acute toxicity. Table 4-1 in Appendix F of the draft EIS identified the primary effects of Roundup (Glyphosate) to include irritation to eyes, skin, and the upper respiratory tract.
- Section 5.10.2.3.4 of the draft EIS adequately addresses the potential for exposure to contaminated vegetation and fruits.

- Section 5.10.3.1 of the EIS was amended to clarify how trail closures would be announced with signage to inform the public at least 24 hours prior to application.
- Section 5.1.1.2 of Appendix F of the draft final has been revised to remove an indication that fruits would be removed following application of herbicide because that action was not proposed as a mitigation measure.
- Section 3.4.2 of the draft EIS described the planned herbicides for use in the different proposed and connected action areas. The Screening Level Human Health and Ecological Risk Evaluation presented in Appendix F evaluated all of the herbicides proposed for use as a part of the proposed and connected actions and includes toxicity information specific to each herbicide.
- Section 3.3.3 of the draft EIS adequately described the wildfire hazard reduction measures that were eliminated from further consideration. These measures included the management of resprouts from stumps without using herbicides including manual removal, covering stumps with opaque plastic sheeting, coating stumps with natural tar. As was described in Section 3.3.3, management of resprouts without herbicides would not meet the purpose and need and was eliminated from further study given the prohibitive expense of manual removal, the infeasibility of covering the stumps with opaque plastic sheeting, or coating stumps with natural tar.
- Section 4.11.1 of the draft EIS described the applicable herbicide regulations and the sub applicant's current policies that guide herbicide application in the proposed and connected action areas were described in Section 4.11.3.3 of the draft EIS.
- Section 5.1.3.3 and Section 5.10.2.1 of the draft EIS indicated that all rules, regulations, best practices, and restrictions as imposed by the California Department of Pesticide Regulation would be followed during herbicide application. In addition, all instructions, restrictions, use limitations disposal methods, and spill remediation methods described on each herbicide label would be followed.
- The herbicide application approach planned for the proposed and connected action was detailed in Sections 5.1, 5.4, 5.10, and Appendix F of the draft EIS. These sections included descriptions of the mitigation measures proposed to reduce the potential for any adverse impacts on biological resources, water resources, and human health and safety.

Issue 32: Drinking Water Contamination (including public water supply)

The following commenters (identified by PK) raised Issue 32: 13, 26, 35, 44, 45, 58, 61, 135, 138, 162, 163, 164, 167, 169, 172, 185, 186, 239, 243, 250, 270, 273, 275, 278, 309, 331, 333, 335, 351, 715, 782, 847, 864, 931, 1072, 1087, 1091, 1292, 1353, 2020, 2034, 2057, 2215, 2463, 5680, 9427, 10366, 10663, 13152.

- Section 5.4.4 of the EIS was amended to provide an overview of the best management practices (BMPs) and mitigation measures that would mitigate potential adverse impacts to local streams and water bodies from herbicide application based on the results of the ESA consultation.

- As described in Section 5.4 of the draft EIS, the subapplicants will follow all CDPR and EPA regulations regarding pesticide applications. Unforeseen events that could impact water quality would be addressed through a Spill Prevention, Control, and Countermeasure Plan that would be developed for this project.

Issue 33: Disease Vectors

The following commenters (identified by PK) raised Issue 33: 7, 13, 135, 169, 170, 200, 203, 257, 273, 309, 329, 487, 1987, 2174, 2349, 2501, 2954.

- Section 5.1.4.2.2 was amended to add information about effects on raptors, which eat rodents that may be disease vectors.
- New Section 5.1.6.4 was added to analyze the potential for the spread of sudden oak disease in the proposed and connected action areas.
- Section 5.1.6.3.3 of the final EIS was amended to list additional mitigation measures to reflect those presented in the USFWS BO for pallid manzanita. Mitigation measures for pallid manzanita were revised to reflect the EBRPD Pallid Manzanita Management Plan.

Public Services, Utilities, and Recreation Issues

The sections below (Issue 34 and Issue 35) include responses to all comments received on the draft EIS addressing public services, utilities, and recreation issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 34: Recreational and Educational Uses

The following commenters (identified by PK) raised Issue 34: 3, 5, 7, 10, 11, 27, 47, 53, 66, 71, 78, 82, 117, 122, 135, 146, 164, 165, 166, 169, 170, 174, 175, 186, 200, 213, 219, 225, 273, 285, 291, 312, 314, 322, 328, 333, 343, 411, 432, 475, 488, 516, 520, 589, 646, 658, 675, 692, 809, 822, 836, 888, 919, 921, 964, 968, 993, 1009, 1119, 1122, 1127, 1160, 1162, 1171, 1202, 1204, 1355, 1465, 1473, 1478, 1525, 1529, 1535, 1556, 1565, 1578, 1579, 1582, 1604, 1615, 1621, 1626, 1644, 1660, 1667, 1671, 1673, 1682, 1686, 1690, 1692, 1694, 1701, 1709, 1711, 1732, 1743, 1751, 1833, 1843, 1863, 1864, 1875, 1903, 1909, 1925, 1965, 1987, 2021, 2061, 2070, 2071, 2084, 2086, 2088, 2123, 2134, 2144, 2146, 2149, 2167, 2193, 2199, 2201, 2215, 2222, 2225, 2273, 2275, 2306, 2347, 2349, 2388, 2390, 2394, 2451, 2465, 2488, 2507, 2530, 2540, 2544, 2545, 2546, 2548, 2549, 2559, 2653, 2677, 2692, 2693, 2716, 2719, 2780, 2783, 2793, 2865, 2947, 3032, 3096, 3097, 3146, 3153, 3191, 3523, 3526, 3541, 3542, 3543, 3545, 3546, 3558, 3559, 5610, 6492, 6544, 6586, 6606, 7630, 7748, 8702, 9233, 9284, 9480, 9625, 9684, 9836, 9866, 9875, 9975, 10114, 10189, 10213, 10988.

- Section 4.12 of the draft EIS adequately addressed the affected environment and Section 5.13 of the draft EIS adequately addressed the environmental consequences and mitigation measures for public services and utilities. These sections adequately addressed emergency

(fire, police, etc.) service response times under both the no action and proposed and connected actions.

- Sections 4.11 and 5.10 of the draft EIS adequately addressed the affected environment and environmental consequences and mitigation measures for human health and safety from the use of herbicides. This analysis included all persons, including recreationists.
- Section 5.8.3.8 of the EIS was amended to address the visibility of the Laurence Berkeley National Laboratory from nearby trails under the proposed and connected actions. Aesthetic value and the visual quality of an area are subjective. Section 5.8 of the draft EIS adequately addressed the effects from the proposed and connected actions for various viewpoints of and from the proposed and connected action areas, including before and after visual simulations.
- Based on information provided through public comments, the conclusion in the draft EIS that there would be no significant effect from temporary closures of the Upper Jordan Fire Trail was revised. The draft EIS assumed that these trails were not heavily used during the week, versus the weekends, and that there would be no significant effect on recreational users (pedestrian or bicyclists). Under the proposed and connected actions, recreational use along the Upper Jordan Fire Trail in Frowning Ridge–PDM (UCB) and the major trail connecting the Caldecott Ballfields in the proposed Caldecott Tunnel-PDM (Oakland) may be limited or closed during implementation of the proposed action (treatment period) if it is determined that there is a safety risk to the public. Section 5.11.2.2.1 of the EIS and other applicable sections (i.e., Section 5.13 Transportation) were amended to state that there will be a temporary adverse effect on users of these two trail systems if they are closed.
- Section 5.11.2.3 of the EIS was amended to provide additional avoidance mitigation measures regarding trail closures and to provide a reference to Section 5.10.3 of the EIS, which summarizes the human health and safety herbicide application best management practices planned to safeguard recreationists.
- Sections 4.4 and 5.3 of the draft EIS adequately addressed the affected environment and environmental consequences and mitigation measures regarding landslide effects under the proposed and connected actions. This analysis considers landslide effects on all persons, including recreationists.

Issue 35: Burial of Utilities

No comments were received regarding the burial of utilities; therefore, no changes were made to the EIS.

Land Use and Planning Issues

The sections below (Issue 36 and Issue 37) include responses to all comments received on the draft EIS addressing land use and planning issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 36: Planning and Induced Growth

The following commenters (identified by PK) raised issue 36: 1, 164, 167, 186, 205, 208, 211, 314, 323, 333, 351, 822, 954, 1106, 1178, 1204, 1529, 1556, 1578, 1768, 2034, 2191, 2267, 2692, 3115, 3176, 6586, 7850, 9581, 10545, 12053, 12485, 12668, 12796, 12918, 12966, 13001, 13002, 13044, 13197.

- The UCB 2020 Long Range Development Plan (LRDP) is a separate project from the proposed project and would be implemented by UCB whether the proposed and connected actions are funded by FEMA or not. Implementation of the LRDP was considered in the cumulative effects section of the draft EIS.
- Section 4.13.1.5 of the draft EIS adequately addressed the conservation requirements for the UCB Ecological Study Area under the UCB 2020 Long Range Development Plan (LRDP) as a regulatory land use document to be adhered to by the proposed project. The proposed and connected actions would support or be consistent with the applicable land use policies in UCB's 2020 LRPD. See Fire and Fuels Issues, for additional information on consistency with UCB's fire management provisions.
- Section 4.13.1.5 and Section 6 of the EIS were amended to reflect changes in the UCB 2020 LRDP that retract the proposal for development in the Hill Campus area. The draft LRDP originally identified the Claremont Canyon Regional Preserve project area, which included the Claremont-PDM proposed project area, as a possible site for faculty housing and a campus retreat center. However, after receiving public comment on the LRDP's environmental impact report, UCB decided to eliminate this portion of the proposed plan. The LRDP was amended before it was adopted by the UC Regents to eliminate any proposal for housing in the Hills Campus. No other development project associated with the LRDP is currently proposed in the vicinity of any of the project areas proposed for FEMA funding.

Issue 37: Zoning

The following commenters (identified by PK) raised Issue 37: 1178, 2692, 3115, 7850, 10545, 12485, 12668, 12796, 12918, 12966, 13001, 13002, 13044, 13197.

- Section 5.12 of the draft EIS adequately describes the compatibility of the proposed and connected actions with existing land uses in and adjacent to the project areas and how the proposed and connected actions would comply with land use policies. As stated, there would be no land use effects from implementation of the proposed and connected actions and in many cases would have beneficial effects.

Transportation Issues

The sections below (Issue 38 and Issue 39) include responses to all comments received on the draft EIS addressing transportation issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 38: Road Closures

The following commenters (identified by PK) raised Issue 38: 94, 221, 257, 278.

- Section 5.13 of the draft EIS adequately addresses potential road closures under the proposed and connected actions. Some roads would need to be closed temporarily during implementation; however, traffic would only be minimally affected and would not be a significant impact. Closures would be recommended to take place during non-commuting hours or identified time periods where traffic is lower than normal. Adequate warnings to motorists, pedestrians, and bicycle riders will be provided whenever a road or trail is blocked, partially blocked, or closed.
- Several comments were received and categorized as a recreation issue regarding closures of recreational trail during implementation of the proposed and connected actions. Section 5.13.3.4 of the final EIS has been amended to state that temporary closures of trails under the proposed and connected actions would have a temporary adverse effect on recreational use of the trails. See Public Services, Utilities and Recreation Issues for additional information.

Issue 39: Economic Transportation Effects

No comments were received regarding economic transportation effects; therefore, no changes were made to the EIS.

Noise Issues

This section addresses comments received on the draft EIS raising noise issues. The discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 40: Comments about Noise

The following commenters (identified by PK) raised Issue 40: 10, 159, 164, 186, 195, 243, 257, 505, 675, 679, 2708, 10281.

- Sections 4.15 and 5.14 of the draft EIS adequately addressed the affected environment and environmental consequences and mitigation associated with noise from implementation of the proposed and connected actions. The draft EIS addressed noise issues and considered that implementation of the proposed and connected actions would cause temporary significant and unavoidable noise impacts associated with the direct implementation of fire mitigation measures (e.g., cutting, skidding, chipping, and trimming) and that noise impacts would also occur from access road construction.
- In response to comments received on the duration of noise impacts, Section 4.15 of the EIS was clarified to better describe the proposed timeframe for implementation of the proposed and connected actions.

Cumulative Impacts Issues

This section addresses comments received on the draft EIS raising cumulative impact issues. The discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 41: Comments about Cumulative Impacts

The following commenters (identified by PK) raised Issue 41: 3, 31, 42, 186, 1196, 1199, 1204, 1205, 1207, 1208, 1216, 1222, 1225, 1227, 1262, 1263, 1293, 1296, 1353, 1358, 1567, 1583, 1638, 1705, 2215, 2432, 2448, 2494, 2512, 2513, 2527, 2530, 2536, 2542, 2545, 2549, 2551, 2552, 2555, 2559, 2733, 2780, 3076, 3502, 3503, 3519, 3523, 3525, 3526, 3528, 3539, 3542, 3546, 3548, 3549, 3554, 3556.

- In response to general comments on cumulative impacts related to the UC Berkeley Long Range Development Plan, Section 6 of the EIS was updated to clarify that the Long Range Development Plan no longer proposes a new housing development in the Hill Campus area and to remove that action from the cumulative projects considered in the EIS.
- Section 3.4.2 of the EIS was updated to provide additional detail on the MMPs that outline the maintenance and monitoring activities proposed for the 10-year duration of the project. The MMPs were also described in the Biological Opinion, which is included in a new Appendix P.
- Section 3.4.1 and Section 6 of the draft EIS described activities proposed by UCB beyond the proposed and connected actions.

Project Alternatives Issues

The sections below (Issue 42 through Issue 44) include responses to all comments received on the draft EIS addressing concerns about project alternatives. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 42: Insufficient Project Alternatives

The following commenters (identified by PK) raised Issue 42: 1, 3, 5, 7, 10, 11, 13, 14, 22, 26, 28, 35, 38, 39, 40, 41, 44, 45, 53, 56, 58, 59, 62, 71, 80, 85, 86, 93, 95, 97, 99, 103, 111, 112, 116, 121, 123, 126, 130, 133, 135, 142, 143, 146, 151, 156, 158, 159, 160, 162, 164, 165, 166, 167, 169, 172, 177, 184, 186, 200, 214, 218, 219, 221, 222, 237, 239, 243, 254, 257, 262, 264, 266, 268, 269, 273, 277, 278, 281, 284, 285, 287, 288, 290, 291, 300, 322, 328, 332, 333, 335, 424, 432, 433, 439, 520, 544, 561, 595, 609, 649, 696, 702, 712, 715, 717, 737, 742, 755, 760, 769, 775, 778, 784, 794, 803, 809, 812, 818, 819, 820, 822, 826, 831, 832, 835, 844, 852, 864, 866, 870, 872, 879, 881, 891, 893, 895, 897, 903, 904, 906, 914, 915, 919, 928, 948, 952, 959, 961, 964, 966, 974, 979, 981, 990, 995, 998, 1000, 1003, 1019, 1024, 1045, 1056, 1060, 1078, 1087, 1093, 1096, 1100, 1103, 1104, 1106, 1114, 1124, 1130, 1132, 1137, 1157, 1159, 1163,

1202, 1208, 1218, 1234, 1245, 1247, 1253, 1262, 1276, 1281, 1283, 1284, 1285, 1288, 1293, 1294, 1295, 1296, 1297, 1302, 1303, 1339, 1354, 1381, 1391, 1403, 1423, 1456, 1462, 1469, 1558, 1564, 1567, 1587, 1588, 1596, 1612, 1624, 1633, 1649, 1653, 1663, 1675, 1682, 1688, 1695, 1705, 1709, 1713, 1719, 1726, 1730, 1736, 1759, 1781, 1782, 1783, 1784, 1788, 1789, 1790, 1791, 1792, 1799, 1807, 1818, 1819, 1821, 1828, 1829, 1830, 1832, 1833, 1836, 1839, 1848, 1851, 1852, 1854, 1855, 1856, 1858, 1861, 1869, 1871, 1879, 1883, 1884, 1888, 1900, 1901, 1903, 1905, 1908, 1909, 1913, 1915, 1918, 1921, 1934, 1937, 1946, 1959, 1962, 1965, 1968, 1977, 1981, 1987, 1995, 2003, 2005, 2009, 2013, 2017, 2021, 2024, 2028, 2038, 2043, 2050, 2061, 2067, 2072, 2074, 2075, 2088, 2095, 2099, 2108, 2112, 2116, 2122, 2123, 2130, 2131, 2132, 2133, 2134, 2137, 2143, 2152, 2153, 2156, 2174, 2178, 2183, 2185, 2186, 2191, 2193, 2199, 2206, 2212, 2215, 2225, 2244, 2253, 2259, 2263, 2277, 2279, 2283, 2287, 2291, 2299, 2306, 2313, 2321, 2330, 2332, 2341, 2342, 2344, 2347, 2349, 2350, 2355, 2358, 2362, 2364, 2372, 2376, 2378, 2380, 2382, 2386, 2390, 2394, 2402, 2424, 2431, 2432, 2445, 2447, 2448, 2451, 2459, 2465, 2470, 2471, 2476, 2478, 2486, 2488, 2494, 2495, 2501, 2502, 2503, 2507, 2511, 2520, 2525, 2537, 2541, 2544, 2547, 2549, 2551, 2555, 2559, 2563, 2572, 2575, 2579, 2583, 2587, 2591, 2616, 2626, 2653, 2682, 2693, 2695, 2706, 2723, 2726, 2739, 2763, 2765, 2774, 2777, 2783, 2787, 2792, 2793, 2798, 2800, 2805, 2866, 2868, 2869, 2884, 2888, 2902, 2904, 2907, 2911, 2916, 2941, 2947, 2954, 2964, 2968, 2979, 3022, 3028, 3053, 3061, 3073, 3081, 3087, 3090, 3094, 3095, 3099, 3100, 3101, 3104, 3108, 3109, 3119, 3125, 3128, 3135, 3140, 3142, 3151, 3158, 3163, 3165, 3175, 3176, 3177, 3185, 3189, 3191, 3192, 3193, 3194, 3198, 3217, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3501, 3510, 3531, 3538, 3541, 3544, 3547, 3548, 3553, 3554, 3555, 3556, 3558, 3562, 3563, 3569, 3572, 3600, 4006, 5502, 5503, 5504, 5505, 5506, 5507, 5508, 5509, 5510, 5511, 5512, 5513, 5514, 5515, 5516, 5517, 5518, 5519, 5520, 5521, 5522, 5523, 5524, 5525, 5526, 5527, 5528, 5529, 5530, 5531, 5532, 5533, 5534, 5535, 5536, 5537, 5538, 5539, 5540, 5541, 5542, 5543, 5544, 5545, 5546, 5547, 5548, 5549, 5550, 5551, 5552, 5553, 5554, 5555, 5556, 5557, 5558, 5559, 5560, 5561, 5562, 5563, 5564, 5565, 5566, 5567, 5568, 5569, 5570, 5571, 5572, 5573, 5574, 5575, 5576, 5577, 5578, 5579, 5580, 5581, 5582, 5583, 5584, 5585, 5586, 5587, 5588, 5589, 5590, 5591, 5592, 5593, 5594, 5595, 5596, 5597, 5598, 5599, 5600, 5601, 5602, 5603, 5604, 5605, 5606, 5607, 5608, 5609, 5610, 5611, 5612, 5613, 5614, 5615, 5616, 5617, 5618, 5619, 5620, 5621, 5622, 5623, 5624, 5625, 5626, 5627, 5628, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5636, 5637, 5638, 5639, 5640, 5641, 5642, 5643, 5644, 5645, 5646, 5647, 5648, 5649, 5650, 5651, 5652, 5653, 5654, 5655, 5656, 5657, 5658, 5659, 5660, 5661, 5662, 5663, 5664, 5665, 5666, 5667, 5668, 5669, 5670, 5671, 5672, 5673, 5674, 5675, 5676, 5677, 5678, 5679, 5680, 5681, 5682, 5683, 5684, 5685, 5686, 5687, 5688, 5689, 5690, 5691, 5692, 5693, 5694, 5695, 5696, 5697, 5698, 5699, 5700, 5701, 5702, 5703, 5704, 5705, 5706, 5707, 5708, 5709, 5710, 5711, 5712, 5713, 5714, 5715, 5716, 5717, 5718, 5719, 5720, 5721, 5722, 5723, 5724, 5725, 5726, 5727, 5728, 5729, 5730, 5731, 5732, 5733, 5734, 5735, 5736, 5737, 5738, 5739, 5740, 5741, 5742, 5743, 5744, 5745, 5746, 5747, 5748, 5749, 5750, 5751, 5752, 5753, 5754, 5755, 5756, 5757, 5758, 5759, 5760, 5761, 5762, 5763, 5764, 5765, 5766, 5767, 5768, 5769, 5770, 5771, 5772, 5773, 5774, 5775, 5776, 5777, 5778, 5779, 5780, 5781, 5782, 5783, 5784, 5785, 5786, 5787, 5788, 5789, 5790, 5791, 5792, 5793, 5794, 5795, 5796, 5797, 5798, 5799, 5800, 5801, 5802, 5803, 5804, 5805, 5806, 5807, 5808, 5809, 5810, 5811, 5812, 5813, 5814, 5815, 5816, 5817, 5818, 5819, 5820, 5821, 5822, 5823, 5824, 5825, 5826, 5827, 5828, 5829, 5830, 5831, 5832, 5833, 5834, 5835, 5836,

5837, 5838, 5839, 5840, 5841, 5842, 5843, 5844, 5845, 5846, 5847, 5848, 5849, 5850, 5851, 5852, 5853, 5854, 5855, 5856, 5857, 5858, 5859, 5860, 5861, 5862, 5863, 5864, 5865, 5866, 5867, 5868, 5869, 5870, 5871, 5872, 5873, 5874, 5875, 5876, 5877, 5878, 5879, 5880, 5881, 5882, 5883, 5884, 5885, 5886, 5887, 5888, 5889, 5890, 5891, 5892, 5893, 5894, 5895, 5896, 5897, 5898, 5899, 5900, 5901, 5902, 5903, 5904, 5905, 5906, 5907, 5908, 5909, 5910, 5911, 5912, 5913, 5914, 5915, 5916, 5917, 5918, 5919, 5920, 5921, 5922, 5923, 5924, 5925, 5926, 5927, 5928, 5929, 5930, 5931, 5932, 5933, 5934, 5935, 5936, 5937, 5938, 5939, 5940, 5941, 5942, 5943, 5944, 5945, 5946, 5947, 5948, 5949, 5950, 5951, 5952, 5953, 5954, 5955, 5956, 5957, 5958, 5959, 5960, 5961, 5962, 5963, 5964, 5965, 5966, 5967, 5968, 5969, 5970, 5971, 5972, 5973, 5974, 5975, 5976, 5977, 5978, 5979, 5980, 5981, 5982, 5983, 5984, 5985, 5986, 5987, 5988, 5989, 5990, 5991, 5992, 5993, 5994, 5995, 5996, 5997, 5998, 5999, 6000, 6001, 6002, 6003, 6004, 6005, 6006, 6007, 6008, 6009, 6010, 6011, 6012, 6013, 6014, 6015, 6016, 6017, 6018, 6019, 6020, 6021, 6022, 6023, 6024, 6025, 6026, 6027, 6028, 6029, 6030, 6031, 6032, 6033, 6034, 6035, 6036, 6037, 6038, 6039, 6040, 6041, 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6051, 6052, 6053, 6054, 6055, 6056, 6057, 6058, 6059, 6060, 6061, 6062, 6063, 6064, 6065, 6066, 6067, 6068, 6069, 6070, 6071, 6072, 6073, 6074, 6075, 6076, 6077, 6078, 6079, 6080, 6081, 6082, 6083, 6084, 6085, 6086, 6087, 6088, 6089, 6090, 6091, 6092, 6093, 6094, 6095, 6096, 6097, 6098, 6099, 6100, 6101, 6102, 6103, 6104, 6105, 6106, 6107, 6108, 6109, 6110, 6111, 6112, 6113, 6114, 6115, 6116, 6117, 6118, 6119, 6120, 6121, 6122, 6123, 6124, 6125, 6126, 6127, 6128, 6129, 6130, 6131, 6132, 6133, 6134, 6135, 6136, 6137, 6138, 6139, 6140, 6141, 6142, 6143, 6144, 6145, 6146, 6147, 6148, 6149, 6150, 6151, 6152, 6153, 6154, 6155, 6156, 6157, 6158, 6159, 6160, 6161, 6162, 6163, 6164, 6165, 6166, 6167, 6168, 6169, 6170, 6171, 6172, 6173, 6174, 6175, 6176, 6177, 6178, 6179, 6180, 6181, 6182, 6183, 6184, 6185, 6186, 6187, 6188, 6189, 6190, 6191, 6192, 6193, 6194, 6195, 6196, 6197, 6198, 6199, 6200, 6201, 6202, 6203, 6204, 6205, 6206, 6207, 6208, 6209, 6210, 6211, 6212, 6213, 6214, 6215, 6216, 6217, 6218, 6219, 6220, 6221, 6222, 6223, 6224, 6225, 6226, 6227, 6228, 6229, 6230, 6231, 6232, 6233, 6234, 6235, 6236, 6237, 6238, 6239, 6240, 6241, 6242, 6243, 6244, 6245, 6246, 6247, 6248, 6249, 6250, 6251, 6252, 6253, 6254, 6255, 6256, 6257, 6258, 6259, 6260, 6261, 6262, 6263, 6264, 6265, 6266, 6267, 6268, 6269, 6270, 6271, 6272, 6273, 6274, 6275, 6276, 6277, 6278, 6279, 6280, 6281, 6282, 6283, 6284, 6285, 6286, 6287, 6288, 6289, 6290, 6291, 6292, 6293, 6294, 6295, 6296, 6297, 6298, 6299, 6300, 6301, 6302, 6303, 6304, 6305, 6306, 6307, 6308, 6309, 6310, 6311, 6312, 6313, 6314, 6315, 6316, 6317, 6318, 6319, 6320, 6321, 6322, 6323, 6324, 6325, 6326, 6327, 6328, 6329, 6330, 6331, 6332, 6333, 6334, 6335, 6336, 6337, 6338, 6339, 6340, 6341, 6342, 6343, 6344, 6345, 6346, 6347, 6348, 6349, 6350, 6351, 6352, 6353, 6354, 6355, 6356, 6357, 6358, 6359, 6360, 6361, 6362, 6363, 6364, 6365, 6366, 6367, 6368, 6369, 6370, 6371, 6372, 6373, 6374, 6375, 6376, 6377, 6378, 6379, 6380, 6381, 6382, 6383, 6384, 6385, 6386, 6387, 6388, 6389, 6390, 6391, 6392, 6393, 6394, 6395, 6396, 6397, 6398, 6399, 6400, 6401, 6402, 6403, 6404, 6405, 6406, 6407, 6408, 6409, 6410, 6411, 6412, 6413, 6414, 6415, 6416, 6417, 6418, 6419, 6420, 6421, 6422, 6423, 6424, 6425, 6426, 6427, 6428, 6429, 6430, 6431, 6432, 6433, 6434, 6435, 6436, 6437, 6438, 6439, 6440, 6441, 6442, 6443, 6444, 6445, 6446, 6447, 6448, 6449, 6450, 6451, 6452, 6453, 6454, 6455, 6456, 6457, 6458, 6459, 6460, 6461, 6462, 6463, 6464, 6465, 6466, 6467, 6468, 6469, 6470, 6471, 6472, 6473, 6474, 6475, 6476, 6477, 6478, 6479, 6480, 6481, 6482, 6483, 6484, 6485, 6486, 6487, 6488, 6489, 6490, 6491, 6492, 6493, 6494, 6495, 6496, 6497, 6498, 6499, 6500, 6501, 6502, 6503, 6504, 6505, 6506, 6507, 6508, 6509, 6510, 6511, 6512, 6513, 6514, 6515, 6516, 6517, 6518, 6519, 6520, 6521, 6522, 6523, 6524, 6525, 6526,

6527, 6528, 6529, 6530, 6531, 6532, 6533, 6534, 6535, 6536, 6537, 6538, 6539, 6540, 6541, 6542, 6543, 6544, 6545, 6546, 6547, 6548, 6549, 6550, 6551, 6552, 6553, 6554, 6555, 6556, 6557, 6558, 6559, 6560, 6561, 6562, 6563, 6564, 6565, 6566, 6567, 6568, 6569, 6570, 6571, 6572, 6573, 6574, 6575, 6576, 6577, 6578, 6579, 6580, 6581, 6582, 6583, 6584, 6585, 6586, 6587, 6588, 6589, 6590, 6591, 6592, 6593, 6594, 6595, 6596, 6597, 6598, 6599, 6600, 6601, 6602, 6603, 6604, 6605, 6606, 6607, 6608, 6609, 6610, 6611, 6612, 6613, 6614, 6615, 6616, 6617, 6618, 6619, 6620, 6621, 6622, 6623, 6624, 6625, 6626, 6627, 6628, 6629, 6630, 6631, 6632, 6633, 6634, 6635, 6636, 6637, 6638, 6639, 6640, 6641, 6642, 6643, 6644, 6645, 6646, 6647, 6648, 6649, 6650, 6651, 6652, 6653, 6654, 6655, 6656, 6657, 6658, 6659, 6660, 6661, 6662, 6663, 6664, 6665, 6666, 6667, 6668, 6669, 6670, 6671, 6672, 6673, 6674, 6675, 6676, 6677, 6678, 6679, 6680, 6681, 6682, 6683, 6684, 6685, 6686, 6687, 6688, 6689, 6690, 6691, 6692, 6693, 6694, 6695, 6696, 6697, 6698, 6699, 6700, 6701, 6702, 6703, 6704, 6705, 6706, 6707, 6708, 6709, 6710, 6711, 6712, 6713, 6714, 6715, 6716, 6717, 6718, 6719, 6720, 6721, 6722, 6723, 6724, 6725, 6726, 6727, 6728, 6729, 6730, 6731, 6732, 6733, 6734, 6735, 6736, 6737, 6738, 6739, 6740, 6741, 6742, 6743, 6744, 6745, 6746, 6747, 6748, 6749, 6750, 6751, 6752, 6753, 6754, 6755, 6756, 6757, 6758, 6759, 6760, 6761, 6762, 6763, 6764, 6765, 6766, 6767, 6768, 6769, 6770, 6771, 6772, 6773, 6774, 6775, 6776, 6777, 6778, 6779, 6780, 6781, 6782, 6783, 6784, 6785, 6786, 6787, 6788, 6789, 6790, 6791, 6792, 6793, 6794, 6795, 6796, 6797, 6798, 6799, 6800, 6801, 6802, 6803, 6804, 6805, 6806, 6807, 6808, 6809, 6810, 6811, 6812, 6813, 6814, 6815, 6816, 6817, 6818, 6819, 6820, 6821, 6822, 6823, 6824, 6825, 6826, 6827, 6828, 6829, 6830, 6831, 6832, 6833, 6834, 6835, 6836, 6837, 6838, 6839, 6840, 6841, 6842, 6843, 6844, 6845, 6846, 6847, 6848, 6849, 6850, 6851, 6852, 6853, 6854, 6855, 6856, 6857, 6858, 6859, 6860, 6861, 6862, 6863, 6864, 6865, 6866, 6867, 6868, 6869, 6870, 6871, 6872, 6873, 6874, 6875, 6876, 6877, 6878, 6879, 6880, 6881, 6882, 6883, 6884, 6885, 6886, 6887, 6888, 6889, 6890, 6891, 6892, 6893, 6894, 6895, 6896, 6897, 6898, 6899, 6900, 6901, 6902, 6903, 6904, 6905, 6906, 6907, 6908, 6909, 6910, 6911, 6912, 6913, 6914, 6915, 6916, 6917, 6918, 6919, 6920, 6921, 6922, 6923, 6924, 6925, 6926, 6927, 6928, 6929, 6930, 6931, 6932, 6933, 6934, 6935, 6936, 6937, 6938, 6939, 6940, 6941, 6942, 6943, 6944, 6945, 6946, 6947, 6948, 6949, 6950, 6951, 6952, 6953, 6954, 6955, 6956, 6957, 6958, 6959, 6960, 6961, 6962, 6963, 6964, 6965, 6966, 6967, 6968, 6969, 6970, 6971, 6972, 6973, 6974, 6975, 6976, 6977, 6978, 6979, 6980, 6981, 6982, 6983, 6984, 6985, 6986, 6987, 6988, 6989, 6990, 6991, 6992, 6993, 6994, 6995, 6996, 6997, 6998, 6999, 7000, 7001, 7002, 7003, 7004, 7005, 7006, 7007, 7008, 7009, 7010, 7011, 7012, 7013, 7014, 7015, 7016, 7017, 7018, 7019, 7020, 7021, 7022, 7023, 7024, 7025, 7026, 7027, 7028, 7029, 7030, 7031, 7032, 7033, 7034, 7035, 7036, 7037, 7038, 7039, 7040, 7041, 7042, 7043, 7044, 7045, 7046, 7047, 7048, 7049, 7050, 7051, 7052, 7053, 7054, 7055, 7056, 7057, 7058, 7059, 7060, 7061, 7062, 7063, 7064, 7065, 7066, 7067, 7068, 7069, 7070, 7071, 7072, 7073, 7074, 7075, 7076, 7077, 7078, 7079, 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089, 7090, 7091, 7092, 7093, 7094, 7095, 7096, 7097, 7098, 7099, 7100, 7101, 7102, 7103, 7104, 7105, 7106, 7107, 7108, 7109, 7110, 7111, 7112, 7113, 7114, 7115, 7116, 7117, 7118, 7119, 7120, 7121, 7122, 7123, 7124, 7125, 7126, 7127, 7128, 7129, 7130, 7131, 7132, 7133, 7134, 7135, 7136, 7137, 7138, 7139, 7140, 7141, 7142, 7143, 7144, 7145, 7146, 7147, 7148, 7149, 7150, 7151, 7152, 7153, 7154, 7155, 7156, 7157, 7158, 7159, 7160, 7161, 7162, 7163, 7164, 7165, 7166, 7167, 7168, 7169, 7170, 7171, 7172, 7173, 7174, 7175, 7176, 7177, 7178, 7179, 7180, 7181, 7182, 7183, 7184, 7185, 7186, 7187, 7188, 7189, 7190, 7191, 7192, 7193, 7194, 7195, 7196, 7197, 7198, 7199, 7200, 7201, 7202, 7203, 7204, 7205, 7206, 7207, 7208, 7209, 7210, 7211, 7212, 7213, 7214, 7215, 7216,

7217, 7218, 7219, 7220, 7221, 7222, 7223, 7224, 7225, 7226, 7227, 7228, 7229, 7230, 7231, 7232, 7233, 7234, 7235, 7236, 7237, 7238, 7239, 7240, 7241, 7242, 7243, 7244, 7245, 7246, 7247, 7248, 7249, 7250, 7251, 7252, 7253, 7254, 7255, 7256, 7257, 7258, 7259, 7260, 7261, 7262, 7263, 7264, 7265, 7266, 7267, 7268, 7269, 7270, 7271, 7272, 7273, 7274, 7275, 7276, 7277, 7278, 7279, 7280, 7281, 7282, 7283, 7284, 7285, 7286, 7287, 7288, 7289, 7290, 7291, 7292, 7293, 7294, 7295, 7296, 7297, 7298, 7299, 7300, 7301, 7302, 7303, 7304, 7305, 7306, 7307, 7308, 7309, 7310, 7311, 7312, 7313, 7314, 7315, 7316, 7317, 7318, 7319, 7320, 7321, 7322, 7323, 7324, 7325, 7326, 7327, 7328, 7329, 7330, 7331, 7332, 7333, 7334, 7335, 7336, 7337, 7338, 7339, 7340, 7341, 7342, 7343, 7344, 7345, 7346, 7347, 7348, 7349, 7350, 7351, 7352, 7353, 7354, 7355, 7356, 7357, 7358, 7359, 7360, 7361, 7362, 7363, 7364, 7365, 7366, 7367, 7368, 7369, 7370, 7371, 7372, 7373, 7374, 7375, 7376, 7377, 7378, 7379, 7380, 7381, 7382, 7383, 7384, 7385, 7386, 7387, 7388, 7389, 7390, 7391, 7392, 7393, 7394, 7395, 7396, 7397, 7398, 7399, 7400, 7401, 7402, 7403, 7404, 7405, 7406, 7407, 7408, 7409, 7410, 7411, 7412, 7413, 7414, 7415, 7416, 7417, 7418, 7419, 7420, 7421, 7422, 7423, 7424, 7425, 7426, 7427, 7428, 7429, 7430, 7431, 7432, 7433, 7434, 7435, 7436, 7437, 7438, 7439, 7440, 7441, 7442, 7443, 7444, 7445, 7446, 7447, 7448, 7449, 7450, 7451, 7452, 7453, 7454, 7455, 7456, 7457, 7458, 7459, 7460, 7461, 7462, 7463, 7464, 7465, 7466, 7467, 7468, 7469, 7470, 7471, 7472, 7473, 7474, 7475, 7476, 7477, 7478, 7479, 7480, 7481, 7482, 7483, 7484, 7485, 7486, 7487, 7488, 7489, 7490, 7491, 7492, 7493, 7494, 7495, 7496, 7497, 7498, 7499, 7500, 7501, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7509, 7510, 7511, 7512, 7513, 7514, 7515, 7516, 7517, 7518, 7519, 7520, 7521, 7522, 7523, 7524, 7525, 7526, 7527, 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7544, 7545, 7546, 7547, 7548, 7549, 7550, 7551, 7552, 7553, 7554, 7555, 7556, 7557, 7558, 7559, 7560, 7561, 7562, 7563, 7564, 7565, 7566, 7567, 7568, 7569, 7570, 7571, 7572, 7573, 7574, 7575, 7576, 7577, 7578, 7579, 7580, 7581, 7582, 7583, 7584, 7585, 7586, 7587, 7588, 7589, 7590, 7591, 7592, 7593, 7594, 7595, 7596, 7597, 7598, 7599, 7600, 7601, 7602, 7603, 7604, 7605, 7606, 7607, 7608, 7609, 7610, 7611, 7612, 7613, 7614, 7615, 7616, 7617, 7618, 7619, 7620, 7621, 7622, 7623, 7624, 7625, 7626, 7627, 7628, 7629, 7630, 7631, 7632, 7633, 7634, 7635, 7636, 7637, 7638, 7639, 7640, 7641, 7642, 7643, 7644, 7645, 7646, 7647, 7648, 7649, 7650, 7651, 7652, 7653, 7654, 7655, 7656, 7657, 7658, 7659, 7660, 7661, 7662, 7663, 7664, 7665, 7666, 7667, 7668, 7669, 7670, 7671, 7672, 7673, 7674, 7675, 7676, 7677, 7678, 7679, 7680, 7681, 7682, 7683, 7684, 7685, 7686, 7687, 7688, 7689, 7690, 7691, 7692, 7693, 7694, 7695, 7696, 7697, 7698, 7699, 7700, 7701, 7702, 7703, 7704, 7705, 7706, 7707, 7708, 7709, 7710, 7711, 7712, 7713, 7714, 7715, 7716, 7717, 7718, 7719, 7720, 7721, 7722, 7723, 7724, 7725, 7726, 7727, 7728, 7729, 7730, 7731, 7732, 7733, 7734, 7735, 7736, 7737, 7738, 7739, 7740, 7741, 7742, 7743, 7744, 7745, 7746, 7747, 7748, 7749, 7750, 7751, 7752, 7753, 7754, 7755, 7756, 7757, 7758, 7759, 7760, 7761, 7762, 7763, 7764, 7765, 7766, 7767, 7768, 7769, 7770, 7771, 7772, 7773, 7774, 7775, 7776, 7777, 7778, 7779, 7780, 7781, 7782, 7783, 7784, 7785, 7786, 7787, 7788, 7789, 7790, 7791, 7792, 7793, 7794, 7795, 7796, 7797, 7798, 7799, 7800, 7801, 7802, 7803, 7804, 7805, 7806, 7807, 7808, 7809, 7810, 7811, 7812, 7813, 7814, 7815, 7816, 7817, 7818, 7819, 7820, 7821, 7822, 7823, 7824, 7825, 7826, 7827, 7828, 7829, 7830, 7831, 7832, 7833, 7834, 7835, 7836, 7837, 7838, 7839, 7840, 7841, 7842, 7843, 7844, 7845, 7846, 7847, 7848, 7849, 7850, 7851, 7852, 7853, 7854, 7855, 7856, 7857, 7858, 7859, 7860, 7861, 7862, 7863, 7864, 7865, 7866, 7867, 7868, 7869, 7870, 7871, 7872, 7873, 7874, 7875, 7876, 7877, 7878, 7879, 7880, 7881, 7882, 7883, 7884, 7885, 7886, 7887, 7888, 7889, 7890, 7891, 7892, 7893, 7894, 7895, 7896, 7897, 7898, 7899, 7900, 7901, 7902, 7903, 7904, 7905, 7906,

7907, 7908, 7909, 7910, 7911, 7912, 7913, 7914, 7915, 7916, 7917, 7918, 7919, 7920, 7921, 7922, 7923, 7924, 7925, 7926, 7927, 7928, 7929, 7930, 7931, 7932, 7933, 7934, 7935, 7936, 7937, 7938, 7939, 7940, 7941, 7942, 7943, 7944, 7945, 7946, 7947, 7948, 7949, 7950, 7951, 7952, 7953, 7954, 7955, 7956, 7957, 7958, 7959, 7960, 7961, 7962, 7963, 7964, 7965, 7966, 7967, 7968, 7969, 7970, 7971, 7972, 7973, 7974, 7975, 7976, 7977, 7978, 7979, 7980, 7981, 7982, 7983, 7984, 7985, 7986, 7987, 7988, 7989, 7990, 7991, 7992, 7993, 7994, 7995, 7996, 7997, 7998, 7999, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8009, 8010, 8011, 8012, 8013, 8014, 8015, 8016, 8017, 8018, 8019, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8029, 8030, 8031, 8032, 8033, 8034, 8035, 8036, 8037, 8038, 8039, 8040, 8041, 8042, 8043, 8044, 8045, 8046, 8047, 8048, 8049, 8050, 8051, 8052, 8053, 8054, 8055, 8056, 8057, 8058, 8059, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8068, 8069, 8070, 8071, 8072, 8073, 8074, 8075, 8076, 8077, 8078, 8079, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088, 8089, 8090, 8091, 8092, 8093, 8094, 8095, 8096, 8097, 8098, 8099, 8100, 8101, 8102, 8103, 8104, 8105, 8106, 8107, 8108, 8109, 8110, 8111, 8112, 8113, 8114, 8115, 8116, 8117, 8118, 8119, 8120, 8121, 8122, 8123, 8124, 8125, 8126, 8127, 8128, 8129, 8130, 8131, 8132, 8133, 8134, 8135, 8136, 8137, 8138, 8139, 8140, 8141, 8142, 8143, 8144, 8145, 8146, 8147, 8148, 8149, 8150, 8151, 8152, 8153, 8154, 8155, 8156, 8157, 8158, 8159, 8160, 8161, 8162, 8163, 8164, 8165, 8166, 8167, 8168, 8169, 8170, 8171, 8172, 8173, 8174, 8175, 8176, 8177, 8178, 8179, 8180, 8181, 8182, 8183, 8184, 8185, 8186, 8187, 8188, 8189, 8190, 8191, 8192, 8193, 8194, 8195, 8196, 8197, 8198, 8199, 8200, 8201, 8202, 8203, 8204, 8205, 8206, 8207, 8208, 8209, 8210, 8211, 8212, 8213, 8214, 8215, 8216, 8217, 8218, 8219, 8220, 8221, 8222, 8223, 8224, 8225, 8226, 8227, 8228, 8229, 8230, 8231, 8232, 8233, 8234, 8235, 8236, 8237, 8238, 8239, 8240, 8241, 8242, 8243, 8244, 8245, 8246, 8247, 8248, 8249, 8250, 8251, 8252, 8253, 8254, 8255, 8256, 8257, 8258, 8259, 8260, 8261, 8262, 8263, 8264, 8265, 8266, 8267, 8268, 8269, 8270, 8271, 8272, 8273, 8274, 8275, 8276, 8277, 8278, 8279, 8280, 8281, 8282, 8283, 8284, 8285, 8286, 8287, 8288, 8289, 8290, 8291, 8292, 8293, 8294, 8295, 8296, 8297, 8298, 8299, 8300, 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309, 8310, 8311, 8312, 8313, 8314, 8315, 8316, 8317, 8318, 8319, 8320, 8321, 8322, 8323, 8324, 8325, 8326, 8327, 8328, 8329, 8330, 8331, 8332, 8333, 8334, 8335, 8336, 8337, 8338, 8339, 8340, 8341, 8342, 8343, 8344, 8345, 8346, 8347, 8348, 8349, 8350, 8351, 8352, 8353, 8354, 8355, 8356, 8357, 8358, 8359, 8360, 8361, 8362, 8363, 8364, 8365, 8366, 8367, 8368, 8369, 8370, 8371, 8372, 8373, 8374, 8375, 8376, 8377, 8378, 8379, 8380, 8381, 8382, 8383, 8384, 8385, 8386, 8387, 8388, 8389, 8390, 8391, 8392, 8393, 8394, 8395, 8396, 8397, 8398, 8399, 8400, 8401, 8402, 8403, 8404, 8405, 8406, 8407, 8408, 8409, 8410, 8411, 8412, 8413, 8414, 8415, 8416, 8417, 8418, 8419, 8420, 8421, 8422, 8423, 8424, 8425, 8426, 8427, 8428, 8429, 8430, 8431, 8432, 8433, 8434, 8435, 8436, 8437, 8438, 8439, 8440, 8441, 8442, 8443, 8444, 8445, 8446, 8447, 8448, 8449, 8450, 8451, 8452, 8453, 8454, 8455, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463, 8464, 8465, 8466, 8467, 8468, 8469, 8470, 8471, 8472, 8473, 8474, 8475, 8476, 8477, 8478, 8479, 8480, 8481, 8482, 8483, 8484, 8485, 8486, 8487, 8488, 8489, 8490, 8491, 8492, 8493, 8494, 8495, 8496, 8497, 8498, 8499, 8500, 8501, 8502, 8503, 8504, 8505, 8506, 8507, 8508, 8509, 8510, 8511, 8512, 8513, 8514, 8515, 8516, 8517, 8518, 8519, 8520, 8521, 8522, 8523, 8524, 8525, 8526, 8527, 8528, 8529, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8537, 8538, 8539, 8540, 8541, 8542, 8543, 8544, 8545, 8546, 8547, 8548, 8549, 8550, 8551, 8552, 8553, 8554, 8555, 8556, 8557, 8558, 8559, 8560, 8561, 8562, 8563, 8564, 8565, 8566, 8567, 8568, 8569, 8570, 8571, 8572, 8573, 8574, 8575, 8576, 8577, 8578, 8579, 8580, 8581, 8582, 8583, 8584, 8585, 8586, 8587, 8588, 8589, 8590, 8591, 8592, 8593, 8594, 8595, 8596,

8597, 8598, 8599, 8600, 8601, 8602, 8603, 8604, 8605, 8606, 8607, 8608, 8609, 8610, 8611, 8612, 8613, 8614, 8615, 8616, 8617, 8618, 8619, 8620, 8621, 8622, 8623, 8624, 8625, 8626, 8627, 8628, 8629, 8630, 8631, 8632, 8633, 8634, 8635, 8636, 8637, 8638, 8639, 8640, 8641, 8642, 8643, 8644, 8645, 8646, 8647, 8648, 8649, 8650, 8651, 8652, 8653, 8654, 8655, 8656, 8657, 8658, 8659, 8660, 8661, 8662, 8663, 8664, 8665, 8666, 8667, 8668, 8669, 8670, 8671, 8672, 8673, 8674, 8675, 8676, 8677, 8678, 8679, 8680, 8681, 8682, 8683, 8684, 8685, 8686, 8687, 8688, 8689, 8690, 8691, 8692, 8693, 8694, 8695, 8696, 8697, 8698, 8699, 8700, 8701, 8702, 8703, 8704, 8705, 8706, 8707, 8708, 8709, 8710, 8711, 8712, 8713, 8714, 8715, 8716, 8717, 8718, 8719, 8720, 8721, 8722, 8723, 8724, 8725, 8726, 8727, 8728, 8729, 8730, 8731, 8732, 8733, 8734, 8735, 8736, 8737, 8738, 8739, 8740, 8741, 8742, 8743, 8744, 8745, 8746, 8747, 8748, 8749, 8750, 8751, 8752, 8753, 8754, 8755, 8756, 8757, 8758, 8759, 8760, 8761, 8762, 8763, 8764, 8765, 8766, 8767, 8768, 8769, 8770, 8771, 8772, 8773, 8774, 8775, 8776, 8777, 8778, 8779, 8780, 8781, 8782, 8783, 8784, 8785, 8786, 8787, 8788, 8789, 8790, 8791, 8792, 8793, 8794, 8795, 8796, 8797, 8798, 8799, 8800, 8801, 8802, 8803, 8804, 8805, 8806, 8807, 8808, 8809, 8810, 8811, 8812, 8813, 8814, 8815, 8816, 8817, 8818, 8819, 8820, 8821, 8822, 8823, 8824, 8825, 8826, 8827, 8828, 8829, 8830, 8831, 8832, 8833, 8834, 8835, 8836, 8837, 8838, 8839, 8840, 8841, 8842, 8843, 8844, 8845, 8846, 8847, 8848, 8849, 8850, 8851, 8852, 8853, 8854, 8855, 8856, 8857, 8858, 8859, 8860, 8861, 8862, 8863, 8864, 8865, 8866, 8867, 8868, 8869, 8870, 8871, 8872, 8873, 8874, 8875, 8876, 8877, 8878, 8879, 8880, 8881, 8882, 8883, 8884, 8885, 8886, 8887, 8888, 8889, 8890, 8891, 8892, 8893, 8894, 8895, 8896, 8897, 8898, 8899, 8900, 8901, 8902, 8903, 8904, 8905, 8906, 8907, 8908, 8909, 8910, 8911, 8912, 8913, 8914, 8915, 8916, 8917, 8918, 8919, 8920, 8921, 8922, 8923, 8924, 8925, 8926, 8927, 8928, 8929, 8930, 8931, 8932, 8933, 8934, 8935, 8936, 8937, 8938, 8939, 8940, 8941, 8942, 8943, 8944, 8945, 8946, 8947, 8948, 8949, 8950, 8951, 8952, 8953, 8954, 8955, 8956, 8957, 8958, 8959, 8960, 8961, 8962, 8963, 8964, 8965, 8966, 8967, 8968, 8969, 8970, 8971, 8972, 8973, 8974, 8975, 8976, 8977, 8978, 8979, 8980, 8981, 8982, 8983, 8984, 8985, 8986, 8987, 8988, 8989, 8990, 8991, 8992, 8993, 8994, 8995, 8996, 8997, 8998, 8999, 9000, 9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9011, 9012, 9013, 9014, 9015, 9016, 9017, 9018, 9019, 9020, 9021, 9022, 9023, 9024, 9025, 9026, 9027, 9028, 9029, 9030, 9031, 9032, 9033, 9034, 9035, 9036, 9037, 9038, 9039, 9040, 9041, 9042, 9043, 9044, 9045, 9046, 9047, 9048, 9049, 9050, 9051, 9052, 9053, 9054, 9055, 9056, 9057, 9058, 9059, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 9067, 9068, 9069, 9070, 9071, 9072, 9073, 9074, 9075, 9076, 9077, 9078, 9079, 9080, 9081, 9082, 9083, 9084, 9085, 9086, 9087, 9088, 9089, 9090, 9091, 9092, 9093, 9094, 9095, 9096, 9097, 9098, 9099, 9100, 9101, 9102, 9103, 9104, 9105, 9106, 9107, 9108, 9109, 9110, 9111, 9112, 9113, 9114, 9115, 9116, 9117, 9118, 9119, 9120, 9121, 9122, 9123, 9124, 9125, 9126, 9127, 9128, 9129, 9130, 9131, 9132, 9133, 9134, 9135, 9136, 9137, 9138, 9139, 9140, 9141, 9142, 9143, 9144, 9145, 9146, 9147, 9148, 9149, 9150, 9151, 9152, 9153, 9154, 9155, 9156, 9157, 9158, 9159, 9160, 9161, 9162, 9163, 9164, 9165, 9166, 9167, 9168, 9169, 9170, 9171, 9172, 9173, 9174, 9175, 9176, 9177, 9178, 9179, 9180, 9181, 9182, 9183, 9184, 9185, 9186, 9187, 9188, 9189, 9190, 9191, 9192, 9193, 9194, 9195, 9196, 9197, 9198, 9199, 9200, 9201, 9202, 9203, 9204, 9205, 9206, 9207, 9208, 9209, 9210, 9211, 9212, 9213, 9214, 9215, 9216, 9217, 9218, 9219, 9220, 9221, 9222, 9223, 9224, 9225, 9226, 9227, 9228, 9229, 9230, 9231, 9232, 9233, 9234, 9235, 9236, 9237, 9238, 9239, 9240, 9241, 9242, 9243, 9244, 9245, 9246, 9247, 9248, 9249, 9250, 9251, 9252, 9253, 9254, 9255, 9256, 9257, 9258, 9259, 9260, 9261, 9262, 9263, 9264, 9265, 9266, 9267, 9268, 9269, 9270, 9271, 9272, 9273, 9274, 9275, 9276, 9277, 9278, 9279, 9280, 9281, 9282, 9283, 9284, 9285, 9286,

9287, 9288, 9289, 9290, 9291, 9292, 9293, 9294, 9295, 9296, 9297, 9298, 9299, 9300, 9301, 9302, 9303, 9304, 9305, 9306, 9307, 9308, 9309, 9310, 9311, 9312, 9313, 9314, 9315, 9316, 9317, 9318, 9319, 9320, 9321, 9322, 9323, 9324, 9325, 9326, 9327, 9328, 9329, 9330, 9331, 9332, 9333, 9334, 9335, 9336, 9337, 9338, 9339, 9340, 9341, 9342, 9343, 9344, 9345, 9346, 9347, 9348, 9349, 9350, 9351, 9352, 9353, 9354, 9355, 9356, 9357, 9358, 9359, 9360, 9361, 9362, 9363, 9364, 9365, 9366, 9367, 9368, 9369, 9370, 9371, 9372, 9373, 9374, 9375, 9376, 9377, 9378, 9379, 9380, 9381, 9382, 9383, 9384, 9385, 9386, 9387, 9388, 9389, 9390, 9391, 9392, 9393, 9394, 9395, 9396, 9397, 9398, 9399, 9400, 9401, 9402, 9403, 9404, 9405, 9406, 9407, 9408, 9409, 9410, 9411, 9412, 9413, 9414, 9415, 9416, 9417, 9418, 9419, 9420, 9421, 9422, 9423, 9424, 9425, 9426, 9427, 9428, 9429, 9430, 9431, 9432, 9433, 9434, 9435, 9436, 9437, 9438, 9439, 9440, 9441, 9442, 9443, 9444, 9445, 9446, 9447, 9448, 9449, 9450, 9451, 9452, 9453, 9454, 9455, 9456, 9457, 9458, 9459, 9460, 9461, 9462, 9463, 9464, 9465, 9466, 9467, 9468, 9469, 9470, 9471, 9472, 9473, 9474, 9475, 9476, 9477, 9478, 9479, 9480, 9481, 9482, 9483, 9484, 9485, 9486, 9487, 9488, 9489, 9490, 9491, 9492, 9493, 9494, 9495, 9496, 9497, 9498, 9499, 9500, 9501, 9502, 9503, 9504, 9505, 9506, 9507, 9508, 9509, 9510, 9511, 9512, 9513, 9514, 9515, 9516, 9517, 9518, 9519, 9520, 9521, 9522, 9523, 9524, 9525, 9526, 9527, 9528, 9529, 9530, 9531, 9532, 9533, 9534, 9535, 9536, 9537, 9538, 9539, 9540, 9541, 9542, 9543, 9544, 9545, 9546, 9547, 9548, 9549, 9550, 9551, 9552, 9553, 9554, 9555, 9556, 9557, 9558, 9559, 9560, 9561, 9562, 9563, 9564, 9565, 9566, 9567, 9568, 9569, 9570, 9571, 9572, 9573, 9574, 9575, 9576, 9577, 9578, 9579, 9580, 9581, 9582, 9583, 9584, 9585, 9586, 9587, 9588, 9589, 9590, 9591, 9592, 9593, 9594, 9595, 9596, 9597, 9598, 9599, 9600, 9601, 9602, 9603, 9604, 9605, 9606, 9607, 9608, 9609, 9610, 9611, 9612, 9613, 9614, 9615, 9616, 9617, 9618, 9619, 9620, 9621, 9622, 9623, 9624, 9625, 9626, 9627, 9628, 9629, 9630, 9631, 9632, 9633, 9634, 9635, 9636, 9637, 9638, 9639, 9640, 9641, 9642, 9643, 9644, 9645, 9646, 9647, 9648, 9649, 9650, 9651, 9652, 9653, 9654, 9655, 9656, 9657, 9658, 9659, 9660, 9661, 9662, 9663, 9664, 9665, 9666, 9667, 9668, 9669, 9670, 9671, 9672, 9673, 9674, 9675, 9676, 9677, 9678, 9679, 9680, 9681, 9682, 9683, 9684, 9685, 9686, 9687, 9688, 9689, 9690, 9691, 9692, 9693, 9694, 9695, 9696, 9697, 9698, 9699, 9700, 9701, 9702, 9703, 9704, 9705, 9706, 9707, 9708, 9709, 9710, 9711, 9712, 9713, 9714, 9715, 9716, 9717, 9718, 9719, 9720, 9721, 9722, 9723, 9724, 9725, 9726, 9727, 9728, 9729, 9730, 9731, 9732, 9733, 9734, 9735, 9736, 9737, 9738, 9739, 9740, 9741, 9742, 9743, 9744, 9745, 9746, 9747, 9748, 9749, 9750, 9751, 9752, 9753, 9754, 9755, 9756, 9757, 9758, 9759, 9760, 9761, 9762, 9763, 9764, 9765, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9780, 9781, 9782, 9783, 9784, 9785, 9786, 9787, 9788, 9789, 9790, 9791, 9792, 9793, 9794, 9795, 9796, 9797, 9798, 9799, 9800, 9801, 9802, 9803, 9804, 9805, 9806, 9807, 9808, 9809, 9810, 9811, 9812, 9813, 9814, 9815, 9816, 9817, 9818, 9819, 9820, 9821, 9822, 9823, 9824, 9825, 9826, 9827, 9828, 9829, 9830, 9831, 9832, 9833, 9834, 9835, 9836, 9837, 9838, 9839, 9840, 9841, 9842, 9843, 9844, 9845, 9846, 9847, 9848, 9849, 9850, 9851, 9852, 9853, 9854, 9855, 9856, 9857, 9858, 9859, 9860, 9861, 9862, 9863, 9864, 9865, 9866, 9867, 9868, 9869, 9870, 9871, 9872, 9873, 9874, 9875, 9876, 9877, 9878, 9879, 9880, 9881, 9882, 9883, 9884, 9885, 9886, 9887, 9888, 9889, 9890, 9891, 9892, 9893, 9894, 9895, 9896, 9897, 9898, 9899, 9900, 9901, 9902, 9903, 9904, 9905, 9906, 9907, 9908, 9909, 9910, 9911, 9912, 9913, 9914, 9915, 9916, 9917, 9918, 9919, 9920, 9921, 9922, 9923, 9924, 9925, 9926, 9927, 9928, 9929, 9930, 9931, 9932, 9933, 9934, 9935, 9936, 9937, 9938, 9939, 9940, 9941, 9942, 9943, 9944, 9945, 9946, 9947, 9948, 9949, 9950, 9951, 9952, 9953, 9954, 9955, 9956, 9957, 9958, 9959, 9960, 9961, 9962, 9963, 9964, 9965, 9966, 9967, 9968, 9969, 9970, 9971, 9972, 9973, 9974, 9975, 9976,

9977, 9978, 9979, 9980, 9981, 9982, 9983, 9984, 9985, 9986, 9987, 9988, 9999, 10000, 10001, 10002, 10003, 10004, 10005, 10006, 10007, 10008, 10009, 10010, 10011, 10012, 10013, 10014, 10015, 10016, 10017, 10018, 10019, 10020, 10021, 10022, 10023, 10024, 10025, 10026, 10027, 10028, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10036, 10037, 10038, 10039, 10040, 10041, 10042, 10043, 10044, 10045, 10046, 10047, 10048, 10049, 10050, 10051, 10052, 10053, 10054, 10055, 10056, 10057, 10058, 10059, 10060, 10061, 10062, 10063, 10064, 10065, 10066, 10067, 10068, 10069, 10070, 10071, 10072, 10073, 10074, 10075, 10076, 10077, 10078, 10079, 10080, 10081, 10082, 10083, 10084, 10085, 10086, 10087, 10088, 10089, 10090, 10091, 10092, 10093, 10094, 10095, 10096, 10097, 10098, 10099, 10100, 10101, 10102, 10103, 10104, 10105, 10106, 10107, 10108, 10109, 10110, 10111, 10112, 10113, 10114, 10115, 10116, 10117, 10118, 10119, 10120, 10121, 10122, 10123, 10124, 10125, 10126, 10127, 10128, 10129, 10130, 10131, 10132, 10133, 10134, 10135, 10136, 10137, 10138, 10139, 10140, 10141, 10142, 10143, 10144, 10145, 10146, 10147, 10148, 10149, 10150, 10151, 10152, 10153, 10154, 10155, 10156, 10157, 10158, 10159, 10160, 10161, 10162, 10163, 10164, 10165, 10166, 10167, 10168, 10169, 10170, 10171, 10172, 10173, 10174, 10175, 10176, 10177, 10178, 10179, 10180, 10181, 10182, 10183, 10184, 10185, 10186, 10187, 10188, 10189, 10190, 10191, 10192, 10193, 10194, 10195, 10196, 10197, 10198, 10199, 10200, 10201, 10202, 10203, 10204, 10205, 10206, 10207, 10208, 10209, 10210, 10211, 10212, 10213, 10214, 10215, 10216, 10217, 10218, 10219, 10220, 10221, 10222, 10223, 10224, 10225, 10226, 10227, 10228, 10229, 10230, 10231, 10232, 10233, 10234, 10235, 10236, 10237, 10238, 10239, 10240, 10241, 10242, 10243, 10244, 10245, 10246, 10247, 10248, 10249, 10250, 10251, 10252, 10253, 10254, 10255, 10256, 10257, 10258, 10259, 10260, 10261, 10262, 10263, 10264, 10265, 10266, 10267, 10268, 10269, 10270, 10271, 10272, 10273, 10274, 10275, 10276, 10277, 10278, 10279, 10280, 10281, 10282, 10283, 10284, 10285, 10286, 10287, 10288, 10289, 10290, 10291, 10292, 10293, 10294, 10295, 10296, 10297, 10298, 10299, 10300, 10301, 10302, 10303, 10304, 10305, 10306, 10307, 10308, 10309, 10310, 10311, 10312, 10313, 10314, 10315, 10316, 10317, 10318, 10319, 10320, 10321, 10322, 10323, 10324, 10325, 10326, 10327, 10328, 10329, 10330, 10331, 10332, 10333, 10334, 10335, 10336, 10337, 10338, 10339, 10340, 10341, 10342, 10343, 10344, 10345, 10346, 10347, 10348, 10349, 10350, 10351, 10352, 10353, 10354, 10355, 10356, 10357, 10358, 10359, 10360, 10361, 10362, 10363, 10364, 10365, 10366, 10367, 10368, 10369, 10370, 10371, 10372, 10373, 10374, 10375, 10376, 10377, 10378, 10379, 10380, 10381, 10382, 10383, 10384, 10385, 10386, 10387, 10388, 10389, 10390, 10391, 10392, 10393, 10394, 10395, 10396, 10397, 10398, 10399, 10400, 10401, 10402, 10403, 10404, 10405, 10406, 10407, 10408, 10409, 10410, 10411, 10412, 10413, 10414, 10415, 10416, 10417, 10418, 10419, 10420, 10421, 10422, 10423, 10424, 10425, 10426, 10427, 10428, 10429, 10430, 10431, 10432, 10433, 10434, 10435, 10436, 10437, 10438, 10439, 10440, 10441, 10442, 10443, 10444, 10445, 10446, 10447, 10448, 10449, 10450, 10451, 10452, 10453, 10454, 10455, 10456, 10457, 10458, 10459, 10460, 10461, 10462, 10463, 10464, 10465, 10466, 10467, 10468, 10469, 10470, 10471, 10472, 10473, 10474, 10475, 10476, 10477, 10478, 10479, 10480, 10481, 10482, 10483, 10484, 10485, 10486, 10487, 10488, 10489, 10490, 10491, 10492, 10493, 10494, 10495, 10496, 10497, 10498, 10499, 10500, 10501, 10502, 10503, 10504, 10505, 10506, 10507, 10508, 10509, 10510, 10511, 10512, 10513, 10514, 10515, 10516, 10517, 10518, 10519, 10520, 10521, 10522, 10523, 10524, 10525, 10526, 10527, 10528, 10529, 10530, 10531, 10532, 10533, 10534, 10535, 10536, 10537, 10538, 10539, 10540, 10541, 10542, 10543, 10544, 10545, 10546, 10547, 10548, 10549, 10550, 10551, 10552, 10553, 10554, 10555, 10556, 10557, 10558, 10559, 10560, 10561, 10562, 10563, 10564, 10565, 10566, 10567, 10568, 10569, 10570, 10571, 10572, 10573, 10574, 10575, 10576, 10577, 10578, 10579, 10580, 10581, 10582, 10583, 10584, 10585, 10586,

10587, 10588, 10589, 10590, 10591, 10592, 10593, 10594, 10595, 10596, 10597, 10598, 10599, 10600, 10601, 10602, 10603, 10604, 10605, 10606, 10607, 10608, 10609, 10610, 10611, 10612, 10613, 10614, 10615, 10616, 10617, 10618, 10619, 10620, 10621, 10622, 10623, 10624, 10625, 10626, 10627, 10628, 10629, 10630, 10631, 10632, 10633, 10634, 10635, 10636, 10637, 10638, 10639, 10640, 10641, 10642, 10643, 10644, 10645, 10646, 10647, 10648, 10649, 10650, 10651, 10652, 10653, 10654, 10655, 10656, 10657, 10658, 10659, 10660, 10661, 10662, 10663, 10664, 10665, 10666, 10667, 10668, 10669, 10670, 10671, 10672, 10673, 10674, 10675, 10676, 10677, 10678, 10679, 10680, 10681, 10682, 10683, 10684, 10685, 10686, 10687, 10688, 10689, 10690, 10691, 10692, 10693, 10694, 10695, 10696, 10697, 10698, 10699, 10700, 10701, 10702, 10703, 10704, 10705, 10706, 10707, 10708, 10709, 10710, 10711, 10712, 10713, 10714, 10715, 10716, 10717, 10718, 10719, 10720, 10721, 10722, 10723, 10724, 10725, 10726, 10727, 10728, 10729, 10730, 10731, 10732, 10733, 10734, 10735, 10736, 10737, 10738, 10739, 10740, 10741, 10742, 10743, 10744, 10745, 10746, 10747, 10748, 10749, 10750, 10751, 10752, 10753, 10754, 10755, 10756, 10757, 10758, 10759, 10760, 10761, 10762, 10763, 10764, 10765, 10766, 10767, 10768, 10769, 10770, 10771, 10772, 10773, 10774, 10775, 10776, 10777, 10778, 10779, 10780, 10781, 10782, 10783, 10784, 10785, 10786, 10787, 10788, 10789, 10790, 10791, 10792, 10793, 10794, 10795, 10796, 10797, 10798, 10799, 10800, 10801, 10802, 10803, 10804, 10805, 10806, 10807, 10808, 10809, 10810, 10811, 10812, 10813, 10814, 10815, 10816, 10817, 10818, 10819, 10820, 10821, 10822, 10823, 10824, 10825, 10826, 10827, 10828, 10829, 10830, 10831, 10832, 10833, 10834, 10835, 10836, 10837, 10838, 10839, 10840, 10841, 10842, 10843, 10844, 10845, 10846, 10847, 10848, 10849, 10850, 10851, 10852, 10853, 10854, 10855, 10856, 10857, 10858, 10859, 10860, 10861, 10862, 10863, 10864, 10865, 10866, 10867, 10868, 10869, 10870, 10871, 10872, 10873, 10874, 10875, 10876, 10877, 10878, 10879, 10880, 10881, 10882, 10883, 10884, 10885, 10886, 10887, 10888, 10889, 10890, 10891, 10892, 10893, 10894, 10895, 10896, 10897, 10898, 10899, 10900, 10901, 10902, 10903, 10904, 10905, 10906, 10907, 10908, 10909, 10910, 10911, 10912, 10913, 10914, 10915, 10916, 10917, 10918, 10919, 10920, 10921, 10922, 10923, 10924, 10925, 10926, 10927, 10928, 10929, 10930, 10931, 10932, 10933, 10934, 10935, 10936, 10937, 10938, 10939, 10940, 10941, 10942, 10943, 10944, 10945, 10946, 10947, 10948, 10949, 10950, 10951, 10952, 10953, 10954, 10955, 10956, 10957, 10958, 10959, 10960, 10961, 10962, 10963, 10964, 10965, 10966, 10967, 10968, 10969, 10970, 10971, 10972, 10973, 10974, 10975, 10976, 10977, 10978, 10979, 10980, 10981, 10982, 10983, 10984, 10985, 10986, 10987, 10988, 10989, 10990, 10991, 10992, 10993, 10994, 10995, 10996, 10997, 10998, 10999, 11000, 11001, 11002, 11003, 11004, 11005, 11006, 11007, 11008, 11009, 11010, 11011, 11012, 11013, 11014, 11015, 11016, 11017, 11018, 11019, 11020, 11021, 11022, 11023, 11024, 11025, 11026, 11027, 11028, 11029, 11030, 11031, 11032, 11033, 11034, 11035, 11036, 11037, 11038, 11039, 11040, 11041, 11042, 11043, 11044, 11045, 11046, 11047, 11048, 11049, 11050, 11051, 11052, 11053, 11054, 11055, 11056, 11057, 11058, 11059, 11060, 11061, 11062, 11063, 11064, 11065, 11066, 11067, 11068, 11069, 11070, 11071, 11072, 11073, 11074, 11075, 11076, 11077, 11078, 11079, 11080, 11081, 11082, 11083, 11084, 11085, 11086, 11087, 11088, 11089, 11090, 11091, 11092, 11093, 11094, 11095, 11096, 11097, 11098, 11099, 11100, 11101, 11102, 11103, 11104, 11105, 11106, 11107, 11108.

- Section 3 of the draft EIS adequately described a reasonable range of alternatives as required by NEPA (40 CFR § 1502.14; 43 CFR § 46.420(b); Pub. Resources Code, § 21002). Alternatives are limited to ones that avoid or substantially lessen the proposed action's significant environmental effects. A lead agency is not required to consider all conceivable

alternatives to the proposed action (Pub. Resources Code, § 21091(d)(2)(B)) nor is a lead agency required to analyze an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

- Section 3.4.2.1 of the EIS was added to describe the unified methodology that was developed to better address fire risk reduction in several project areas and to respond to concerns raised by the public on the draft EIS.
- Section 3 of the draft EIS adequately addressed the five preliminary alternatives FEMA developed in consideration of the public comments received during the public scoping period. All five preliminary alternatives were assessed against the criteria for meeting the identified purpose and need and against the comments received during scoping. This set of preliminary alternatives was ultimately screened down to two, the no action alternative and the proposed and connected actions, for further analysis in the EIS.

Issue 43: Project Rationale

The following commenters (identified by PK) raised Issue 43: 3, 10, 13, 19, 30, 31, 33, 42, 45, 53, 55, 74, 76, 79, 86, 99, 121, 135, 143, 156, 160, 162, 163, 164, 166, 167, 174, 175, 184, 186, 200, 201, 214, 216, 217, 218, 227, 228, 231, 234, 239, 249, 254, 268, 269, 273, 275, 276, 280, 284, 288, 290, 291, 296, 304, 309, 351, 544, 590, 690, 712, 727, 729, 751, 753, 755, 758, 759, 760, 761, 765, 774, 776, 782, 793, 794, 836, 855, 876, 881, 904, 1004, 1017, 1093, 1096, 1117, 1142, 1194, 1196, 1200, 1204, 1214, 1216, 1220, 1223, 1231, 1401, 1403, 1405, 1409, 1411, 1417, 1444, 1448, 1452, 1465, 1473, 1479, 1483, 1484, 1486, 1487, 1490, 1494, 1522, 1529, 1538, 1550, 1598, 1612, 1649, 1656, 1663, 1667, 1669, 1671, 1675, 1682, 1688, 1690, 1695, 1705, 1707, 1709, 1711, 1712, 1713, 1719, 1723, 1726, 1730, 1736, 1739, 1745, 1750, 1753, 1755, 1759, 1766, 1768, 1781, 1782, 1783, 1784, 1788, 1789, 1790, 1791, 1792, 1796, 1799, 1807, 1818, 1819, 1821, 1828, 1829, 1830, 1832, 1833, 1839, 1848, 1856, 1858, 1861, 1868, 1869, 1871, 1879, 1883, 1884, 1888, 1900, 1901, 1903, 1905, 1909, 1913, 1915, 1921, 1928, 1937, 1946, 1965, 1968, 1981, 1987, 2003, 2005, 2009, 2013, 2017, 2021, 2024, 2025, 2028, 2038, 2043, 2050, 2057, 2061, 2067, 2072, 2075, 2088, 2095, 2099, 2112, 2116, 2123, 2130, 2131, 2132, 2134, 2137, 2141, 2143, 2144, 2146, 2153, 2156, 2167, 2176, 2178, 2183, 2185, 2186, 2191, 2201, 2210, 2212, 2215, 2238, 2244, 2253, 2259, 2263, 2277, 2279, 2283, 2287, 2291, 2299, 2306, 2313, 2321, 2330, 2332, 2341, 2344, 2347, 2349, 2350, 2355, 2358, 2362, 2364, 2372, 2376, 2378, 2380, 2382, 2384, 2386, 2388, 2390, 2394, 2406, 2417, 2421, 2423, 2426, 2427, 2428, 2431, 2435, 2437, 2438, 2444, 2448, 2449, 2452, 2468, 2469, 2470, 2478, 2486, 2490, 2491, 2493, 2494, 2501, 2515, 2518, 2529, 2530, 2536, 2537, 2539, 2546, 2549, 2555, 2559, 2567, 2570, 2693, 2706, 2711, 2733, 2736, 2739, 2751, 2753, 2756, 2770, 2774, 2777, 2787, 2858, 2911, 2922, 2933, 2947, 2954, 3067, 3068, 3081, 3087, 3090, 3096, 3104, 3108, 3119, 3125, 3142, 3176, 3184, 3185, 3192, 3505, 3508, 3521, 3522, 3525, 3526, 3528, 3531, 3536, 3543, 3546, 3555, 3559, 3568.

- Section 2 of the EIS was clarified to add detail on the relationship between fire risk and vegetation types as they occur in the East Bay Hills.
- The fuels reduction methodology presented in the draft EIS was revised to more closely align implementation of the project with the purpose and need and in response to a number of public comments received on the draft EIS. This unified methodology (described in detail in

Section 3.4.2.1 of the final EIS) was developed in coordination with the subapplicants to more closely align the methods and approaches with those described for EBRPD in the draft EIS. The application of the unified methodology addresses a wide variety of public comments received on the draft EIS.

Issue 44: Implementation of Alternatives

The following commenters (identified by PK) raised Issue 44: 1, 5, 7, 13, 14, 15, 19, 25, 27, 30, 31, 33, 34, 40, 41, 42, 45, 53, 55, 56, 58, 59, 62, 64, 74, 76, 79, 80, 86, 88, 93, 99, 103, 105, 111, 112, 116, 119, 121, 123, 126, 128, 133, 135, 142, 143, 146, 149, 150, 151, 155, 156, 158, 159, 160, 162, 163, 166, 167, 170, 172, 174, 175, 176, 177, 178, 180, 182, 183, 184, 185, 186, 187, 190, 191, 192, 196, 200, 201, 203, 207, 208, 209, 210, 214, 216, 217, 222, 227, 228, 231, 239, 243, 249, 254, 268, 269, 273, 275, 276, 277, 278, 280, 284, 285, 287, 288, 290, 291, 296, 304, 306, 308, 311, 319, 320, 322, 323, 324, 326, 328, 333, 334, 335, 337, 339, 344, 346, 348, 351, 352, 421, 465, 486, 506, 507, 508, 509, 510, 516, 520, 544, 635, 636, 649, 679, 696, 697, 702, 727, 729, 730, 742, 744, 751, 753, 758, 759, 761, 765, 773, 774, 776, 778, 782, 784, 793, 795, 796, 799, 804, 807, 815, 817, 826, 836, 841, 855, 864, 870, 871, 872, 876, 877, 879, 881, 885, 893, 897, 919, 928, 941, 952, 961, 966, 973, 974, 1004, 1017, 1031, 1045, 1060, 1062, 1068, 1078, 1081, 1086, 1093, 1106, 1117, 1130, 1131, 1132, 1136, 1142, 1143, 1156, 1194, 1196, 1200, 1204, 1214, 1216, 1220, 1223, 1231, 1292, 1300, 1304, 1307, 1309, 1311, 1323, 1348, 1372, 1386, 1401, 1405, 1409, 1411, 1417, 1444, 1448, 1452, 1465, 1473, 1479, 1483, 1486, 1487, 1490, 1494, 1505, 1522, 1529, 1538, 1550, 1574, 1587, 1596, 1598, 1612, 1621, 1638, 1649, 1656, 1667, 1669, 1671, 1675, 1686, 1690, 1695, 1705, 1707, 1709, 1711, 1712, 1719, 1723, 1730, 1732, 1736, 1739, 1741, 1745, 1750, 1753, 1755, 1759, 1766, 1768, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1788, 1789, 1790, 1791, 1796, 1821, 1828, 1829, 1830, 1858, 1861, 1869, 1879, 1888, 1909, 1913, 1915, 1921, 1937, 1959, 1962, 1968, 1987, 1995, 2005, 2009, 2013, 2025, 2057, 2072, 2088, 2095, 2122, 2131, 2133, 2137, 2141, 2144, 2146, 2153, 2167, 2176, 2191, 2199, 2201, 2206, 2209, 2210, 2212, 2215, 2225, 2238, 2244, 2253, 2259, 2263, 2279, 2283, 2287, 2291, 2299, 2313, 2321, 2332, 2344, 2347, 2349, 2350, 2355, 2358, 2364, 2372, 2380, 2382, 2384, 2386, 2388, 2390, 2394, 2406, 2414, 2417, 2421, 2426, 2427, 2428, 2432, 2434, 2435, 2437, 2438, 2449, 2458, 2459, 2482, 2483, 2490, 2491, 2496, 2501, 2517, 2520, 2525, 2530, 2537, 2541, 2545, 2555, 2559, 2563, 2572, 2606, 2664, 2736, 2751, 2756, 2770, 2777, 2866, 2901, 2911, 2933, 2954, 2979, 3053, 3061, 3067, 3068, 3081, 3096, 3099, 3101, 3104, 3108, 3119, 3125, 3135, 3142, 3175, 3176, 3177, 3184, 3185, 3193, 3198, 3516, 3517, 3522, 3531, 3538, 3542, 3553, 3554, 3556, 3557, 3558, 3563, 3570.

- Section 3.4.2.1 of the EIS was added to describe the unified methodology that was developed to more closely align implementation of the project with the purpose and need and in response to a number of public comments received on the draft EIS. This unified methodology was developed in coordination with the subapplicants to apply the methods and approaches described for EBRPD on the UCB and Oakland project areas.
- Section 3.4.2 of the EIS was amended to add clarifying information on the required MMPs to better outline the maintenance and monitoring activities proposed for the 10-year duration of the project.

Public Involvement Issues

The sections below (Issue 45 through Issue 47) include responses to all comments received on the draft EIS addressing concerns about public involvement issues. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Issue 45: Comment Period

The following commenters (identified by PK) raised Issue 45: 58, 164, 186, 226, 228, 286, 771, 776, 802, 806, 817, 823, 1024, 1283, 1641, 1663, 1675, 2941, 3081, 3084, 3099, 3104, 3142, 3154, 3176, 6184, 6294, 7377, 7434.

- Sections 1.6 and 7.1 of the EIS were amended to include a detailed description of the draft EIS public involvement process and a summary of the level of public response received. FEMA has provided many opportunities for public involvement throughout the environmental review process and has met the public involvement requirements of NEPA.
- Section 7.7 of the EIS was revised to provide information regarding public notification of the availability of the final EIS. Following the completion of the final EIS, FEMA will file a notice of availability with EPA. In accordance with NEPA requirements, FEMA will not take any action on the project for a period of 30 days.
- Following the release of the final EIS, FEMA will prepare a ROD that will state what the decision is, identify alternatives considered, and specify those that are environmentally preferable, state whether all practicable mitigation measures were adopted, and if not, explain why, and commit to a monitoring and enforcement program to insure implementation of mitigation measures.

Issue 46: Inadequate Outreach

The following commenters (identified by PK) raised Issue 46: 27, 45, 58, 106, 135, 149, 164, 169, 175, 180, 186, 228, 266, 268, 411, 415, 420, 428, 473, 476, 488, 543, 708, 730, 735, 769, 771, 776, 782, 802, 806, 830, 836, 857, 891, 900, 931, 949, 1051, 1068, 1081, 1093, 1137, 1171, 1207, 1231, 1344, 1381, 1524, 1713, 1770, 1831, 1843, 1863, 1951, 1984, 2028, 2127, 2451, 2501, 2514, 2520, 2526, 2535, 2545, 2547, 2549, 2551, 2555, 2559, 2563, 2570, 2572, 2609, 2639, 2682, 2807, 2862, 2868, 2869, 2878, 2911, 3073, 3081, 3095, 3096, 3104, 3142, 3146, 3154, 3176, 3191, 3504, 3511, 3516, 3518, 3527, 3542, 3544, 3547, 3548, 3552, 3553, 3555, 3556, 3559, 3560, 3561, 3562, 3563, 3567, 3572, 5521, 6184, 7201, 7377, 7434, 7503, 8698, 9110, 9354, 9699, 9790, 12987.

- Sections 1.6 and 7.1 of the EIS were amended to include a detailed description of the draft EIS public involvement process and a summary of the level of public response received. FEMA has provided many opportunities for public involvement throughout the environmental review process and has met the public involvement requirements of NEPA.

Issue 47: Public Meeting and Document Accessibility

The following commenters (identified by PK) raised Issue 47: 45, 135, 164, 169, 186, 268, 476, 1344, 1663, 1701, 1843, 2017, 2767, 2911, 9110, 9699, 10302.

- Section 7.1 of the EIS was amended to include a detailed description of the draft EIS public involvement process, including the accessibility of the public hearing meetings and the draft EIS document for review. FEMA has provided many opportunities for public involvement throughout the environmental review process and has met the public involvement requirements of NEPA.
- Section 7.7.1 of the draft EIS described the contact locations where hard and electronic copies of the document were accessible to the public for review, including government agency offices, local libraries, and the project website. This information was also posted on the project website and provided in outreach notifications to agencies, stakeholders, and the public. In the final EIS, Section 7.7.1 was revised to move the description of outreach efforts related to the public review of the draft EIS to Section 7.1.2. Section 7.7 of the final EIS describes the availability of the final EIS.
- Section 1.4.2 of the EIS was amended to include additional information on the environmental review requirements FEMA must adhere to when developing an EIS and implementing the proposed project. This new language includes a description of FEMA's use of the best available science in its analysis of environmental effects and addresses scientific uncertainty.
- Section 9 of the EIS adequately provided the public with a comprehensive list of references that were used to develop the draft and final EIS. This section has been updated with new references added in through revisions in the final EIS.

Federal Funding Issues

The sections below (Issue 48 through Issue 50) include responses to all comments received on the draft EIS addressing concerns about federal funding. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Comments regarding project funding do not raise significant environmental issues; therefore, no response is required. However, in an effort to provide additional clarification the following information is provided. The primary purpose of an EIS is to serve as disclosure document to inform the decision making process and to ensure that the policies and goals defined in NEPA are infused in ongoing programs and actions of the federal government. An EIS should provide full and fair discussion of significant environmental impacts and inform decision makers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment (40 CFR 1502.1).

Issue 48: Misuse of Federal Funds

The following commenters (identified by PK) raised Issue 48: 1, 12, 16, 26, 92, 99, 135, 137, 139, 164, 169, 186, 201, 213, 234, 300, 304, 325, 334, 503, 606, 613, 654, 727, 729, 758, 782,

792, 825, 840, 842, 862, 870, 876, 883, 888, 891, 917, 935, 937, 954, 970, 976, 1032, 1038, 1041, 1113, 1145, 1182, 1199, 1214, 1220, 1247, 1255, 1267, 1276, 1306, 1353, 1358, 1369, 1396, 1401, 1411, 1413, 1417, 1425, 1542, 1546, 1554, 1560, 1573, 1578, 1596, 1641, 1646, 1684, 1695, 1719, 1730, 1739, 1745, 1750, 1771, 1796, 1818, 1819, 1843, 1931, 1973, 1985, 2019, 2033, 2067, 2088, 2131, 2141, 2153, 2156, 2183, 2191, 2194, 2206, 2210, 2215, 2221, 2244, 2253, 2291, 2303, 2310, 2329, 2347, 2349, 2364, 2378, 2386, 2388, 2443, 2444, 2468, 2475, 2477, 2493, 2501, 2503, 2518, 2535, 2537, 2541, 2542, 2552, 2583, 2649, 2659, 2672, 2678, 2692, 2702, 2719, 2730, 2743, 2756, 2770, 2801, 2808, 2812, 2822, 2833, 2837, 2841, 2843, 2846, 2849, 2857, 2860, 2861, 2868, 2869, 2871, 2872, 2873, 2880, 2881, 2904, 2916, 2931, 2937, 2941, 2954, 2968, 2989, 3002, 3007, 3012, 3014, 3024, 3037, 3043, 3049, 3056, 3091, 3096, 3128, 3151, 3154, 3158, 3176, 3184, 3186, 3188, 3189, 3200, 3509, 3527, 3531, 3536, 3538, 3539, 3540, 3551, 5515, 5531, 5649, 5815, 5885, 5887, 5898, 5970, 6016, 6689, 6876, 6904, 7293, 7342, 7748, 7847, 7956, 8287, 9351, 9560, 9621, 9644, 9738, 9743, 9808, 9863, 9998, 10020, 10022, 10131, 10136, 10214, 10215, 10261, 10302, 10428, 10593, 10753, 10761, 10800, 11053, 11070, 11074, 12416, 12890, 13136.

- Section 1 of the draft EIS adequately describes the four grant applications, which are the subject of this EIS analysis. However, additional text was added to the EIS to clarify the purpose of the PDM program and the HMGP.
- The grant applications were submitted to the California Office of Emergency Services (Cal OES) under FEMA's Pre-Disaster Mitigation (PDM) program and FEMA's Hazard Mitigation Grant Program (HMGP). The PDM program provides funds to states, territories, Indian tribal governments, communities, and universities for hazard mitigation planning and implementation of mitigation projects to prepare for a disaster. The HMGP provides grants to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce loss of life and property due to natural disasters and to enable implementation of mitigation measures during recovery from a disaster. The proposed and connected actions represent an appropriate use of these funds as these plans and projects strive to reduce overall risks to people and structures while also reducing future reliance on funding connected with disaster relief.

Issue 49: Misuse of Authority

The following commenters (identified by PK) raised Issue 49: 26, 135, 186, 771, 1068, 1271, 1560, 1649, 1796, 2144, 2215, 2463, 2501, 2664, 2699, 2706, 2880, 2904, 3032, 3037, 3096, 3142, 3176, 3184, 9238, 9427, 9430, 9978, 10058, 10164, 10304, 10306, 10826, 12665, 12683, 12838, 13096.

- Section 1 of the draft EIS adequately describes the four grant applications, which are the subject of this EIS analysis. However, additional text was added to the EIS to clarify the purpose of the PDM program and the HMGP.
- The grant applications were submitted to the California Office of Emergency Services (Cal OES) under FEMA's Pre-Disaster Mitigation (PDM) program and FEMA's Hazard Mitigation Grant Program (HMGP). The PDM program provides funds to states, territories, Indian tribal governments, communities, and universities for hazard mitigation planning and implementation of mitigation projects to prepare for a disaster. The HMGP provides grants to

states and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce loss of life and property due to natural disasters and to enable implementation of mitigation measures during recovery from a disaster. The proposed and connected actions represent an appropriate use of these funds as these plans and projects strive to reduce overall risks to people and structures while also reducing future reliance on funding connected with disaster relief.

Issue 50: Alternative Use of Funds

The following commenters (identified by PK) raised Issue 50: 1, 35, 45, 99, 160, 164, 169, 174, 186, 325, 460, 646, 730, 742, 744, 753, 777, 789, 836, 838, 892, 898, 908, 912, 1004, 1009, 1045, 1060, 1096, 1542, 1818, 1931, 1962, 2019, 2033, 2080, 2156, 2167, 2171, 2206, 2215, 2221, 2386, 2463, 2501, 2525, 2526, 2538, 2549, 2559, 2570, 2572, 2664, 2699, 2706, 2858, 2860, 3067, 3176, 3235, 3517, 3518, 3532, 3546, 3558, 3567, 3571, 5521, 5528, 5633, 5983, 6657, 6678, 6896, 7070, 7397, 9644, 12769.

- Section 3 of the draft EIS adequately describes other alternatives considered for funding, but which were not carried forward for further study in the EIS, including, but not limited to, defensible space, additional fire services, and roof replacement. Members of the public provided input on the development of these project alternatives and helped in the development of the proposed project during the public scoping process.

Grants Management Issues

The sections below (Issue 51 through Issue 53) include responses to all comments received on the draft EIS addressing concerns about grants management. Each issue discussion includes a list of the PKs for comment submittals that raised the issue followed by a list of where that concern is addressed in the final EIS and where there were any changes, clarifications, or amendments made to the EIS in response to the comments.

Comments regarding the process in which FEMA is authorized to distribute grant funds and its management of these funds do not raise significant environmental issues; therefore, no response is required. However, in an effort to provide additional clarification the following information is provided. The primary purpose of an EIS is to serve as disclosure document to inform the decision making process and to ensure that the policies and goals defined in NEPA are infused in ongoing programs and actions of the federal government. An EIS should provide full and fair discussion of significant environmental impacts and inform decision makers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment (40 CFR 1502.1).

Issue 51: Financial Oversight

The following commenters (identified by PK) raised Issue 51: 26, 45, 99, 112, 135, 164, 186, 231, 1292, 2215, 2503, 2664, 2858, 2904, 3061, 3084, 3176, 3184, 3235, 5502, 5503, 5504, 5505, 5506, 5507, 5508, 5509, 5510, 5511, 5512, 5513, 5514, 5515, 5516, 5517, 5518, 5519, 5520, 5521, 5522, 5523, 5524, 5525, 5526, 5527, 5528, 5529, 5530, 5531, 5532, 5533, 5534, 5535, 5536, 5537, 5538, 5539, 5540, 5541, 5542, 5543, 5544, 5545, 5546, 5547, 5548, 5549,

5550, 5551, 5552, 5553, 5554, 5555, 5556, 5557, 5558, 5559, 5560, 5561, 5562, 5563, 5564, 5565, 5566, 5567, 5568, 5569, 5570, 5571, 5572, 5573, 5574, 5575, 5576, 5577, 5578, 5579, 5580, 5581, 5582, 5583, 5584, 5585, 5586, 5587, 5588, 5589, 5590, 5591, 5592, 5593, 5594, 5595, 5596, 5597, 5598, 5599, 5600, 5601, 5602, 5603, 5604, 5605, 5606, 5607, 5608, 5609, 5610, 5611, 5612, 5613, 5614, 5615, 5616, 5617, 5618, 5619, 5620, 5621, 5622, 5623, 5624, 5625, 5626, 5627, 5628, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5636, 5637, 5638, 5639, 5640, 5641, 5642, 5643, 5644, 5645, 5646, 5647, 5648, 5649, 5650, 5651, 5652, 5653, 5654, 5655, 5656, 5657, 5658, 5659, 5660, 5661, 5662, 5663, 5664, 5665, 5666, 5667, 5668, 5669, 5670, 5671, 5672, 5673, 5674, 5675, 5676, 5677, 5678, 5679, 5680, 5681, 5682, 5683, 5684, 5685, 5686, 5687, 5688, 5689, 5690, 5691, 5692, 5693, 5694, 5695, 5696, 5697, 5698, 5699, 5700, 5701, 5702, 5703, 5704, 5705, 5706, 5707, 5708, 5709, 5710, 5711, 5712, 5713, 5714, 5715, 5716, 5717, 5718, 5719, 5720, 5721, 5722, 5723, 5724, 5725, 5726, 5727, 5728, 5729, 5730, 5731, 5732, 5733, 5734, 5735, 5736, 5737, 5738, 5739, 5740, 5741, 5742, 5743, 5744, 5745, 5746, 5747, 5748, 5749, 5750, 5751, 5752, 5753, 5754, 5755, 5756, 5757, 5758, 5759, 5760, 5761, 5762, 5763, 5764, 5765, 5766, 5767, 5768, 5769, 5770, 5771, 5772, 5773, 5774, 5775, 5776, 5777, 5778, 5779, 5780, 5781, 5782, 5783, 5784, 5785, 5786, 5787, 5788, 5789, 5790, 5791, 5792, 5793, 5794, 5795, 5796, 5797, 5798, 5799, 5800, 5801, 5802, 5803, 5804, 5805, 5806, 5807, 5808, 5809, 5810, 5811, 5812, 5813, 5814, 5815, 5816, 5817, 5818, 5819, 5820, 5821, 5822, 5823, 5824, 5825, 5826, 5827, 5828, 5829, 5830, 5831, 5832, 5833, 5834, 5835, 5836, 5837, 5838, 5839, 5840, 5841, 5842, 5843, 5844, 5845, 5846, 5847, 5848, 5849, 5850, 5851, 5852, 5853, 5854, 5855, 5856, 5857, 5858, 5859, 5860, 5861, 5862, 5863, 5864, 5865, 5866, 5867, 5868, 5869, 5870, 5871, 5872, 5873, 5874, 5875, 5876, 5877, 5878, 5879, 5880, 5881, 5882, 5883, 5884, 5885, 5886, 5887, 5888, 5889, 5890, 5891, 5892, 5893, 5894, 5895, 5896, 5897, 5898, 5899, 5900, 5901, 5902, 5903, 5904, 5905, 5906, 5907, 5908, 5909, 5910, 5911, 5912, 5913, 5914, 5915, 5916, 5917, 5918, 5919, 5920, 5921, 5922, 5923, 5924, 5925, 5926, 5927, 5928, 5929, 5930, 5931, 5932, 5933, 5934, 5935, 5936, 5937, 5938, 5939, 5940, 5941, 5942, 5943, 5944, 5945, 5946, 5947, 5948, 5949, 5950, 5951, 5952, 5953, 5954, 5955, 5956, 5957, 5958, 5959, 5960, 5961, 5962, 5963, 5964, 5965, 5966, 5967, 5968, 5969, 5970, 5971, 5972, 5973, 5974, 5975, 5976, 5977, 5978, 5979, 5980, 5981, 5982, 5983, 5984, 5985, 5986, 5987, 5988, 5989, 5990, 5991, 5992, 5993, 5994, 5995, 5996, 5997, 5998, 5999, 6000, 6001, 6002, 6003, 6004, 6005, 6006, 6007, 6008, 6009, 6010, 6011, 6012, 6013, 6014, 6015, 6016, 6017, 6018, 6019, 6020, 6021, 6022, 6023, 6024, 6025, 6026, 6027, 6028, 6029, 6030, 6031, 6032, 6033, 6034, 6035, 6036, 6037, 6038, 6039, 6040, 6041, 6042, 6043, 6044, 6045, 6046, 6047, 6048, 6049, 6050, 6051, 6052, 6053, 6054, 6055, 6056, 6057, 6058, 6059, 6060, 6061, 6062, 6063, 6064, 6065, 6066, 6067, 6068, 6069, 6070, 6071, 6072, 6073, 6074, 6075, 6076, 6077, 6078, 6079, 6080, 6081, 6082, 6083, 6084, 6085, 6086, 6087, 6088, 6089, 6090, 6091, 6092, 6093, 6094, 6095, 6096, 6097, 6098, 6099, 6100, 6101, 6102, 6103, 6104, 6105, 6106, 6107, 6108, 6109, 6110, 6111, 6112, 6113, 6114, 6115, 6116, 6117, 6118, 6119, 6120, 6121, 6122, 6123, 6124, 6125, 6126, 6127, 6128, 6129, 6130, 6131, 6132, 6133, 6134, 6135, 6136, 6137, 6138, 6139, 6140, 6141, 6142, 6143, 6144, 6145, 6146, 6147, 6148, 6149, 6150, 6151, 6152, 6153, 6154, 6155, 6156, 6157, 6158, 6159, 6160, 6161, 6162, 6163, 6164, 6165, 6166, 6167, 6168, 6169, 6170, 6171, 6172, 6173, 6174, 6175, 6176, 6177, 6178, 6179, 6180, 6181, 6182, 6183, 6184, 6185, 6186, 6187, 6188, 6189, 6190, 6191, 6192, 6193, 6194, 6195, 6196, 6197, 6198, 6199, 6200, 6201, 6202, 6203, 6204, 6205, 6206, 6207, 6208, 6209, 6210, 6211, 6212, 6213, 6214, 6215, 6216, 6217, 6218, 6219, 6220, 6221, 6222, 6223, 6224, 6225, 6226, 6227, 6228, 6229, 6230, 6231, 6232, 6233, 6234, 6235, 6236, 6237, 6238, 6239,

6240, 6241, 6242, 6243, 6244, 6245, 6246, 6247, 6248, 6249, 6250, 6251, 6252, 6253, 6254, 6255, 6256, 6257, 6258, 6259, 6260, 6261, 6262, 6263, 6264, 6265, 6266, 6267, 6268, 6269, 6270, 6271, 6272, 6273, 6274, 6275, 6276, 6277, 6278, 6279, 6280, 6281, 6282, 6283, 6284, 6285, 6286, 6287, 6288, 6289, 6290, 6291, 6292, 6293, 6294, 6295, 6296, 6297, 6298, 6299, 6300, 6301, 6302, 6303, 6304, 6305, 6306, 6307, 6308, 6309, 6310, 6311, 6312, 6313, 6314, 6315, 6316, 6317, 6318, 6319, 6320, 6321, 6322, 6323, 6324, 6325, 6326, 6327, 6328, 6329, 6330, 6331, 6332, 6333, 6334, 6335, 6336, 6337, 6338, 6339, 6340, 6341, 6342, 6343, 6344, 6345, 6346, 6347, 6348, 6349, 6350, 6351, 6352, 6353, 6354, 6355, 6356, 6357, 6358, 6359, 6360, 6361, 6362, 6363, 6364, 6365, 6366, 6367, 6368, 6369, 6370, 6371, 6372, 6373, 6374, 6375, 6376, 6377, 6378, 6379, 6380, 6381, 6382, 6383, 6384, 6385, 6386, 6387, 6388, 6389, 6390, 6391, 6392, 6393, 6394, 6395, 6396, 6397, 6398, 6399, 6400, 6401, 6402, 6403, 6404, 6405, 6406, 6407, 6408, 6409, 6410, 6411, 6412, 6413, 6414, 6415, 6416, 6417, 6418, 6419, 6420, 6421, 6422, 6423, 6424, 6425, 6426, 6427, 6428, 6429, 6430, 6431, 6432, 6433, 6434, 6435, 6436, 6437, 6438, 6439, 6440, 6441, 6442, 6443, 6444, 6445, 6446, 6447, 6448, 6449, 6450, 6451, 6452, 6453, 6454, 6455, 6456, 6457, 6458, 6459, 6460, 6461, 6462, 6463, 6464, 6465, 6466, 6467, 6468, 6469, 6470, 6471, 6472, 6473, 6474, 6475, 6476, 6477, 6478, 6479, 6480, 6481, 6482, 6483, 6484, 6485, 6486, 6487, 6488, 6489, 6490, 6491, 6492, 6493, 6494, 6495, 6496, 6497, 6498, 6499, 6500, 6501, 6502, 6503, 6504, 6505, 6506, 6507, 6508, 6509, 6510, 6511, 6512, 6513, 6514, 6515, 6516, 6517, 6518, 6519, 6520, 6521, 6522, 6523, 6524, 6525, 6526, 6527, 6528, 6529, 6530, 6531, 6532, 6533, 6534, 6535, 6536, 6537, 6538, 6539, 6540, 6541, 6542, 6543, 6544, 6545, 6546, 6547, 6548, 6549, 6550, 6551, 6552, 6553, 6554, 6555, 6556, 6557, 6558, 6559, 6560, 6561, 6562, 6563, 6564, 6565, 6566, 6567, 6568, 6569, 6570, 6571, 6572, 6573, 6574, 6575, 6576, 6577, 6578, 6579, 6580, 6581, 6582, 6583, 6584, 6585, 6586, 6587, 6588, 6589, 6590, 6591, 6592, 6593, 6594, 6595, 6596, 6597, 6598, 6599, 6600, 6601, 6602, 6603, 6604, 6605, 6606, 6607, 6608, 6609, 6610, 6611, 6612, 6613, 6614, 6615, 6616, 6617, 6618, 6619, 6620, 6621, 6622, 6623, 6624, 6625, 6626, 6627, 6628, 6629, 6630, 6631, 6632, 6633, 6634, 6635, 6636, 6637, 6638, 6639, 6640, 6641, 6642, 6643, 6644, 6645, 6646, 6647, 6648, 6649, 6650, 6651, 6652, 6653, 6654, 6655, 6656, 6657, 6658, 6659, 6660, 6661, 6662, 6663, 6664, 6665, 6666, 6667, 6668, 6669, 6670, 6671, 6672, 6673, 6674, 6675, 6676, 6677, 6678, 6679, 6680, 6681, 6682, 6683, 6684, 6685, 6686, 6687, 6688, 6689, 6690, 6691, 6692, 6693, 6694, 6695, 6696, 6697, 6698, 6699, 6700, 6701, 6702, 6703, 6704, 6705, 6706, 6707, 6708, 6709, 6710, 6711, 6712, 6713, 6714, 6715, 6716, 6717, 6718, 6719, 6720, 6721, 6722, 6723, 6724, 6725, 6726, 6727, 6728, 6729, 6730, 6731, 6732, 6733, 6734, 6735, 6736, 6737, 6738, 6739, 6740, 6741, 6742, 6743, 6744, 6745, 6746, 6747, 6748, 6749, 6750, 6751, 6752, 6753, 6754, 6755, 6756, 6757, 6758, 6759, 6760, 6761, 6762, 6763, 6764, 6765, 6766, 6767, 6768, 6769, 6770, 6771, 6772, 6773, 6774, 6775, 6776, 6777, 6778, 6779, 6780, 6781, 6782, 6783, 6784, 6785, 6786, 6787, 6788, 6789, 6790, 6791, 6792, 6793, 6794, 6795, 6796, 6797, 6798, 6799, 6800, 6801, 6802, 6803, 6804, 6805, 6806, 6807, 6808, 6809, 6810, 6811, 6812, 6813, 6814, 6815, 6816, 6817, 6818, 6819, 6820, 6821, 6822, 6823, 6824, 6825, 6826, 6827, 6828, 6829, 6830, 6831, 6832, 6833, 6834, 6835, 6836, 6837, 6838, 6839, 6840, 6841, 6842, 6843, 6844, 6845, 6846, 6847, 6848, 6849, 6850, 6851, 6852, 6853, 6854, 6855, 6856, 6857, 6858, 6859, 6860, 6861, 6862, 6863, 6864, 6865, 6866, 6867, 6868, 6869, 6870, 6871, 6872, 6873, 6874, 6875, 6876, 6877, 6878, 6879, 6880, 6881, 6882, 6883, 6884, 6885, 6886, 6887, 6888, 6889, 6890, 6891, 6892, 6893, 6894, 6895, 6896, 6897, 6898, 6899, 6900, 6901, 6902, 6903, 6904, 6905, 6906, 6907, 6908, 6909, 6910, 6911, 6912, 6913, 6914, 6915, 6916, 6917, 6918, 6919, 6920, 6921, 6922, 6923, 6924, 6925, 6926, 6927, 6928, 6929,

6930, 6931, 6932, 6933, 6934, 6935, 6936, 6937, 6938, 6939, 6940, 6941, 6942, 6943, 6944, 6945, 6946, 6947, 6948, 6949, 6950, 6951, 6952, 6953, 6954, 6955, 6956, 6957, 6958, 6959, 6960, 6961, 6962, 6963, 6964, 6965, 6966, 6967, 6968, 6969, 6970, 6971, 6972, 6973, 6974, 6975, 6976, 6977, 6978, 6979, 6980, 6981, 6982, 6983, 6984, 6985, 6986, 6987, 6988, 6989, 6990, 6991, 6992, 6993, 6994, 6995, 6996, 6997, 6998, 6999, 7000, 7001, 7002, 7003, 7004, 7005, 7006, 7007, 7008, 7009, 7010, 7011, 7012, 7013, 7014, 7015, 7016, 7017, 7018, 7019, 7020, 7021, 7022, 7023, 7024, 7025, 7026, 7027, 7028, 7029, 7030, 7031, 7032, 7033, 7034, 7035, 7036, 7037, 7038, 7039, 7040, 7041, 7042, 7043, 7044, 7045, 7046, 7047, 7048, 7049, 7050, 7051, 7052, 7053, 7054, 7055, 7056, 7057, 7058, 7059, 7060, 7061, 7062, 7063, 7064, 7065, 7066, 7067, 7068, 7069, 7070, 7071, 7072, 7073, 7074, 7075, 7076, 7077, 7078, 7079, 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089, 7090, 7091, 7092, 7093, 7094, 7095, 7096, 7097, 7098, 7099, 7100, 7101, 7102, 7103, 7104, 7105, 7106, 7107, 7108, 7109, 7110, 7111, 7112, 7113, 7114, 7115, 7116, 7117, 7118, 7119, 7120, 7121, 7122, 7123, 7124, 7125, 7126, 7127, 7128, 7129, 7130, 7131, 7132, 7133, 7134, 7135, 7136, 7137, 7138, 7139, 7140, 7141, 7142, 7143, 7144, 7145, 7146, 7147, 7148, 7149, 7150, 7151, 7152, 7153, 7154, 7155, 7156, 7157, 7158, 7159, 7160, 7161, 7162, 7163, 7164, 7165, 7166, 7167, 7168, 7169, 7170, 7171, 7172, 7173, 7174, 7175, 7176, 7177, 7178, 7179, 7180, 7181, 7182, 7183, 7184, 7185, 7186, 7187, 7188, 7189, 7190, 7191, 7192, 7193, 7194, 7195, 7196, 7197, 7198, 7199, 7200, 7201, 7202, 7203, 7204, 7205, 7206, 7207, 7208, 7209, 7210, 7211, 7212, 7213, 7214, 7215, 7216, 7217, 7218, 7219, 7220, 7221, 7222, 7223, 7224, 7225, 7226, 7227, 7228, 7229, 7230, 7231, 7232, 7233, 7234, 7235, 7236, 7237, 7238, 7239, 7240, 7241, 7242, 7243, 7244, 7245, 7246, 7247, 7248, 7249, 7250, 7251, 7252, 7253, 7254, 7255, 7256, 7257, 7258, 7259, 7260, 7261, 7262, 7263, 7264, 7265, 7266, 7267, 7268, 7269, 7270, 7271, 7272, 7273, 7274, 7275, 7276, 7277, 7278, 7279, 7280, 7281, 7282, 7283, 7284, 7285, 7286, 7287, 7288, 7289, 7290, 7291, 7292, 7293, 7294, 7295, 7296, 7297, 7298, 7299, 7300, 7301, 7302, 7303, 7304, 7305, 7306, 7307, 7308, 7309, 7310, 7311, 7312, 7313, 7314, 7315, 7316, 7317, 7318, 7319, 7320, 7321, 7322, 7323, 7324, 7325, 7326, 7327, 7328, 7329, 7330, 7331, 7332, 7333, 7334, 7335, 7336, 7337, 7338, 7339, 7340, 7341, 7342, 7343, 7344, 7345, 7346, 7347, 7348, 7349, 7350, 7351, 7352, 7353, 7354, 7355, 7356, 7357, 7358, 7359, 7360, 7361, 7362, 7363, 7364, 7365, 7366, 7367, 7368, 7369, 7370, 7371, 7372, 7373, 7374, 7375, 7376, 7377, 7378, 7379, 7380, 7381, 7382, 7383, 7384, 7385, 7386, 7387, 7388, 7389, 7390, 7391, 7392, 7393, 7394, 7395, 7396, 7397, 7398, 7399, 7400, 7401, 7402, 7403, 7404, 7405, 7406, 7407, 7408, 7409, 7410, 7411, 7412, 7413, 7414, 7415, 7416, 7417, 7418, 7419, 7420, 7421, 7422, 7423, 7424, 7425, 7426, 7427, 7428, 7429, 7430, 7431, 7432, 7433, 7434, 7435, 7436, 7437, 7438, 7439, 7440, 7441, 7442, 7443, 7444, 7445, 7446, 7447, 7448, 7449, 7450, 7451, 7452, 7453, 7454, 7455, 7456, 7457, 7458, 7459, 7460, 7461, 7462, 7463, 7464, 7465, 7466, 7467, 7468, 7469, 7470, 7471, 7472, 7473, 7474, 7475, 7476, 7477, 7478, 7479, 7480, 7481, 7482, 7483, 7484, 7485, 7486, 7487, 7488, 7489, 7490, 7491, 7492, 7493, 7494, 7495, 7496, 7497, 7498, 7499, 7500, 7501, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7509, 7510, 7511, 7512, 7513, 7514, 7515, 7516, 7517, 7518, 7519, 7520, 7521, 7522, 7523, 7524, 7525, 7526, 7527, 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7544, 7545, 7546, 7547, 7548, 7549, 7550, 7551, 7552, 7553, 7554, 7555, 7556, 7557, 7558, 7559, 7560, 7561, 7562, 7563, 7564, 7565, 7566, 7567, 7568, 7569, 7570, 7571, 7572, 7573, 7574, 7575, 7576, 7577, 7578, 7579, 7580, 7581, 7582, 7583, 7584, 7585, 7586, 7587, 7588, 7589, 7590, 7591, 7592, 7593, 7594, 7595, 7596, 7597, 7598, 7599, 7600, 7601, 7602, 7603, 7604, 7605, 7606, 7607, 7608, 7609, 7610, 7611, 7612, 7613, 7614, 7615, 7616, 7617, 7618, 7619,

7620, 7621, 7622, 7623, 7624, 7625, 7626, 7627, 7628, 7629, 7630, 7631, 7632, 7633, 7634, 7635, 7636, 7637, 7638, 7639, 7640, 7641, 7642, 7643, 7644, 7645, 7646, 7647, 7648, 7649, 7650, 7651, 7652, 7653, 7654, 7655, 7656, 7657, 7658, 7659, 7660, 7661, 7662, 7663, 7664, 7665, 7666, 7667, 7668, 7669, 7670, 7671, 7672, 7673, 7674, 7675, 7676, 7677, 7678, 7679, 7680, 7681, 7682, 7683, 7684, 7685, 7686, 7687, 7688, 7689, 7690, 7691, 7692, 7693, 7694, 7695, 7696, 7697, 7698, 7699, 7700, 7701, 7702, 7703, 7704, 7705, 7706, 7707, 7708, 7709, 7710, 7711, 7712, 7713, 7714, 7715, 7716, 7717, 7718, 7719, 7720, 7721, 7722, 7723, 7724, 7725, 7726, 7727, 7728, 7729, 7730, 7731, 7732, 7733, 7734, 7735, 7736, 7737, 7738, 7739, 7740, 7741, 7742, 7743, 7744, 7745, 7746, 7747, 7748, 7749, 7750, 7751, 7752, 7753, 7754, 7755, 7756, 7757, 7758, 7759, 7760, 7761, 7762, 7763, 7764, 7765, 7766, 7767, 7768, 7769, 7770, 7771, 7772, 7773, 7774, 7775, 7776, 7777, 7778, 7779, 7780, 7781, 7782, 7783, 7784, 7785, 7786, 7787, 7788, 7789, 7790, 7791, 7792, 7793, 7794, 7795, 7796, 7797, 7798, 7799, 7800, 7801, 7802, 7803, 7804, 7805, 7806, 7807, 7808, 7809, 7810, 7811, 7812, 7813, 7814, 7815, 7816, 7817, 7818, 7819, 7820, 7821, 7822, 7823, 7824, 7825, 7826, 7827, 7828, 7829, 7830, 7831, 7832, 7833, 7834, 7835, 7836, 7837, 7838, 7839, 7840, 7841, 7842, 7843, 7844, 7845, 7846, 7847, 7848, 7849, 7850, 7851, 7852, 7853, 7854, 7855, 7856, 7857, 7858, 7859, 7860, 7861, 7862, 7863, 7864, 7865, 7866, 7867, 7868, 7869, 7870, 7871, 7872, 7873, 7874, 7875, 7876, 7877, 7878, 7879, 7880, 7881, 7882, 7883, 7884, 7885, 7886, 7887, 7888, 7889, 7890, 7891, 7892, 7893, 7894, 7895, 7896, 7897, 7898, 7899, 7900, 7901, 7902, 7903, 7904, 7905, 7906, 7907, 7908, 7909, 7910, 7911, 7912, 7913, 7914, 7915, 7916, 7917, 7918, 7919, 7920, 7921, 7922, 7923, 7924, 7925, 7926, 7927, 7928, 7929, 7930, 7931, 7932, 7933, 7934, 7935, 7936, 7937, 7938, 7939, 7940, 7941, 7942, 7943, 7944, 7945, 7946, 7947, 7948, 7949, 7950, 7951, 7952, 7953, 7954, 7955, 7956, 7957, 7958, 7959, 7960, 7961, 7962, 7963, 7964, 7965, 7966, 7967, 7968, 7969, 7970, 7971, 7972, 7973, 7974, 7975, 7976, 7977, 7978, 7979, 7980, 7981, 7982, 7983, 7984, 7985, 7986, 7987, 7988, 7989, 7990, 7991, 7992, 7993, 7994, 7995, 7996, 7997, 7998, 7999, 8000, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8009, 8010, 8011, 8012, 8013, 8014, 8015, 8016, 8017, 8018, 8019, 8020, 8021, 8022, 8023, 8024, 8025, 8026, 8027, 8028, 8029, 8030, 8031, 8032, 8033, 8034, 8035, 8036, 8037, 8038, 8039, 8040, 8041, 8042, 8043, 8044, 8045, 8046, 8047, 8048, 8049, 8050, 8051, 8052, 8053, 8054, 8055, 8056, 8057, 8058, 8059, 8060, 8061, 8062, 8063, 8064, 8065, 8066, 8067, 8068, 8069, 8070, 8071, 8072, 8073, 8074, 8075, 8076, 8077, 8078, 8079, 8080, 8081, 8082, 8083, 8084, 8085, 8086, 8087, 8088, 8089, 8090, 8091, 8092, 8093, 8094, 8095, 8096, 8097, 8098, 8099, 8100, 8101, 8102, 8103, 8104, 8105, 8106, 8107, 8108, 8109, 8110, 8111, 8112, 8113, 8114, 8115, 8116, 8117, 8118, 8119, 8120, 8121, 8122, 8123, 8124, 8125, 8126, 8127, 8128, 8129, 8130, 8131, 8132, 8133, 8134, 8135, 8136, 8137, 8138, 8139, 8140, 8141, 8142, 8143, 8144, 8145, 8146, 8147, 8148, 8149, 8150, 8151, 8152, 8153, 8154, 8155, 8156, 8157, 8158, 8159, 8160, 8161, 8162, 8163, 8164, 8165, 8166, 8167, 8168, 8169, 8170, 8171, 8172, 8173, 8174, 8175, 8176, 8177, 8178, 8179, 8180, 8181, 8182, 8183, 8184, 8185, 8186, 8187, 8188, 8189, 8190, 8191, 8192, 8193, 8194, 8195, 8196, 8197, 8198, 8199, 8200, 8201, 8202, 8203, 8204, 8205, 8206, 8207, 8208, 8209, 8210, 8211, 8212, 8213, 8214, 8215, 8216, 8217, 8218, 8219, 8220, 8221, 8222, 8223, 8224, 8225, 8226, 8227, 8228, 8229, 8230, 8231, 8232, 8233, 8234, 8235, 8236, 8237, 8238, 8239, 8240, 8241, 8242, 8243, 8244, 8245, 8246, 8247, 8248, 8249, 8250, 8251, 8252, 8253, 8254, 8255, 8256, 8257, 8258, 8259, 8260, 8261, 8262, 8263, 8264, 8265, 8266, 8267, 8268, 8269, 8270, 8271, 8272, 8273, 8274, 8275, 8276, 8277, 8278, 8279, 8280, 8281, 8282, 8283, 8284, 8285, 8286, 8287, 8288, 8289, 8290, 8291, 8292, 8293, 8294, 8295, 8296, 8297, 8298, 8299, 8300, 8301, 8302, 8303, 8304, 8305, 8306, 8307, 8308, 8309,

8310, 8311, 8312, 8313, 8314, 8315, 8316, 8317, 8318, 8319, 8320, 8321, 8322, 8323, 8324, 8325, 8326, 8327, 8328, 8329, 8330, 8331, 8332, 8333, 8334, 8335, 8336, 8337, 8338, 8339, 8340, 8341, 8342, 8343, 8344, 8345, 8346, 8347, 8348, 8349, 8350, 8351, 8352, 8353, 8354, 8355, 8356, 8357, 8358, 8359, 8360, 8361, 8362, 8363, 8364, 8365, 8366, 8367, 8368, 8369, 8370, 8371, 8372, 8373, 8374, 8375, 8376, 8377, 8378, 8379, 8380, 8381, 8382, 8383, 8384, 8385, 8386, 8387, 8388, 8389, 8390, 8391, 8392, 8393, 8394, 8395, 8396, 8397, 8398, 8399, 8400, 8401, 8402, 8403, 8404, 8405, 8406, 8407, 8408, 8409, 8410, 8411, 8412, 8413, 8414, 8415, 8416, 8417, 8418, 8419, 8420, 8421, 8422, 8423, 8424, 8425, 8426, 8427, 8428, 8429, 8430, 8431, 8432, 8433, 8434, 8435, 8436, 8437, 8438, 8439, 8440, 8441, 8442, 8443, 8444, 8445, 8446, 8447, 8448, 8449, 8450, 8451, 8452, 8453, 8454, 8455, 8456, 8457, 8458, 8459, 8460, 8461, 8462, 8463, 8464, 8465, 8466, 8467, 8468, 8469, 8470, 8471, 8472, 8473, 8474, 8475, 8476, 8477, 8478, 8479, 8480, 8481, 8482, 8483, 8484, 8485, 8486, 8487, 8488, 8489, 8490, 8491, 8492, 8493, 8494, 8495, 8496, 8497, 8498, 8499, 8500, 8501, 8502, 8503, 8504, 8505, 8506, 8507, 8508, 8509, 8510, 8511, 8512, 8513, 8514, 8515, 8516, 8517, 8518, 8519, 8520, 8521, 8522, 8523, 8524, 8525, 8526, 8527, 8528, 8529, 8530, 8531, 8532, 8533, 8534, 8535, 8536, 8537, 8538, 8539, 8540, 8541, 8542, 8543, 8544, 8545, 8546, 8547, 8548, 8549, 8550, 8551, 8552, 8553, 8554, 8555, 8556, 8557, 8558, 8559, 8560, 8561, 8562, 8563, 8564, 8565, 8566, 8567, 8568, 8569, 8570, 8571, 8572, 8573, 8574, 8575, 8576, 8577, 8578, 8579, 8580, 8581, 8582, 8583, 8584, 8585, 8586, 8587, 8588, 8589, 8590, 8591, 8592, 8593, 8594, 8595, 8596, 8597, 8598, 8599, 8600, 8601, 8602, 8603, 8604, 8605, 8606, 8607, 8608, 8609, 8610, 8611, 8612, 8613, 8614, 8615, 8616, 8617, 8618, 8619, 8620, 8621, 8622, 8623, 8624, 8625, 8626, 8627, 8628, 8629, 8630, 8631, 8632, 8633, 8634, 8635, 8636, 8637, 8638, 8639, 8640, 8641, 8642, 8643, 8644, 8645, 8646, 8647, 8648, 8649, 8650, 8651, 8652, 8653, 8654, 8655, 8656, 8657, 8658, 8659, 8660, 8661, 8662, 8663, 8664, 8665, 8666, 8667, 8668, 8669, 8670, 8671, 8672, 8673, 8674, 8675, 8676, 8677, 8678, 8679, 8680, 8681, 8682, 8683, 8684, 8685, 8686, 8687, 8688, 8689, 8690, 8691, 8692, 8693, 8694, 8695, 8696, 8697, 8698, 8699, 8700, 8701, 8702, 8703, 8704, 8705, 8706, 8707, 8708, 8709, 8710, 8711, 8712, 8713, 8714, 8715, 8716, 8717, 8718, 8719, 8720, 8721, 8722, 8723, 8724, 8725, 8726, 8727, 8728, 8729, 8730, 8731, 8732, 8733, 8734, 8735, 8736, 8737, 8738, 8739, 8740, 8741, 8742, 8743, 8744, 8745, 8746, 8747, 8748, 8749, 8750, 8751, 8752, 8753, 8754, 8755, 8756, 8757, 8758, 8759, 8760, 8761, 8762, 8763, 8764, 8765, 8766, 8767, 8768, 8769, 8770, 8771, 8772, 8773, 8774, 8775, 8776, 8777, 8778, 8779, 8780, 8781, 8782, 8783, 8784, 8785, 8786, 8787, 8788, 8789, 8790, 8791, 8792, 8793, 8794, 8795, 8796, 8797, 8798, 8799, 8800, 8801, 8802, 8803, 8804, 8805, 8806, 8807, 8808, 8809, 8810, 8811, 8812, 8813, 8814, 8815, 8816, 8817, 8818, 8819, 8820, 8821, 8822, 8823, 8824, 8825, 8826, 8827, 8828, 8829, 8830, 8831, 8832, 8833, 8834, 8835, 8836, 8837, 8838, 8839, 8840, 8841, 8842, 8843, 8844, 8845, 8846, 8847, 8848, 8849, 8850, 8851, 8852, 8853, 8854, 8855, 8856, 8857, 8858, 8859, 8860, 8861, 8862, 8863, 8864, 8865, 8866, 8867, 8868, 8869, 8870, 8871, 8872, 8873, 8874, 8875, 8876, 8877, 8878, 8879, 8880, 8881, 8882, 8883, 8884, 8885, 8886, 8887, 8888, 8889, 8890, 8891, 8892, 8893, 8894, 8895, 8896, 8897, 8898, 8899, 8900, 8901, 8902, 8903, 8904, 8905, 8906, 8907, 8908, 8909, 8910, 8911, 8912, 8913, 8914, 8915, 8916, 8917, 8918, 8919, 8920, 8921, 8922, 8923, 8924, 8925, 8926, 8927, 8928, 8929, 8930, 8931, 8932, 8933, 8934, 8935, 8936, 8937, 8938, 8939, 8940, 8941, 8942, 8943, 8944, 8945, 8946, 8947, 8948, 8949, 8950, 8951, 8952, 8953, 8954, 8955, 8956, 8957, 8958, 8959, 8960, 8961, 8962, 8963, 8964, 8965, 8966, 8967, 8968, 8969, 8970, 8971, 8972, 8973, 8974, 8975, 8976, 8977, 8978, 8979, 8980, 8981, 8982, 8983, 8984, 8985, 8986, 8987, 8988, 8989, 8990, 8991, 8992, 8993, 8994, 8995, 8996, 8997, 8998, 8999,

9000, 9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9011, 9012, 9013, 9014, 9015, 9016, 9017, 9018, 9019, 9020, 9021, 9022, 9023, 9024, 9025, 9026, 9027, 9028, 9029, 9030, 9031, 9032, 9033, 9034, 9035, 9036, 9037, 9038, 9039, 9040, 9041, 9042, 9043, 9044, 9045, 9046, 9047, 9048, 9049, 9050, 9051, 9052, 9053, 9054, 9055, 9056, 9057, 9058, 9059, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 9067, 9068, 9069, 9070, 9071, 9072, 9073, 9074, 9075, 9076, 9077, 9078, 9079, 9080, 9081, 9082, 9083, 9084, 9085, 9086, 9087, 9088, 9089, 9090, 9091, 9092, 9093, 9094, 9095, 9096, 9097, 9098, 9099, 9100, 9101, 9102, 9103, 9104, 9105, 9106, 9107, 9108, 9109, 9110, 9111, 9112, 9113, 9114, 9115, 9116, 9117, 9118, 9119, 9120, 9121, 9122, 9123, 9124, 9125, 9126, 9127, 9128, 9129, 9130, 9131, 9132, 9133, 9134, 9135, 9136, 9137, 9138, 9139, 9140, 9141, 9142, 9143, 9144, 9145, 9146, 9147, 9148, 9149, 9150, 9151, 9152, 9153, 9154, 9155, 9156, 9157, 9158, 9159, 9160, 9161, 9162, 9163, 9164, 9165, 9166, 9167, 9168, 9169, 9170, 9171, 9172, 9173, 9174, 9175, 9176, 9177, 9178, 9179, 9180, 9181, 9182, 9183, 9184, 9185, 9186, 9187, 9188, 9189, 9190, 9191, 9192, 9193, 9194, 9195, 9196, 9197, 9198, 9199, 9200, 9201, 9202, 9203, 9204, 9205, 9206, 9207, 9208, 9209, 9210, 9211, 9212, 9213, 9214, 9215, 9216, 9217, 9218, 9219, 9220, 9221, 9222, 9223, 9224, 9225, 9226, 9227, 9228, 9229, 9230, 9231, 9232, 9233, 9234, 9235, 9236, 9237, 9238, 9239, 9240, 9241, 9242, 9243, 9244, 9245, 9246, 9247, 9248, 9249, 9250, 9251, 9252, 9253, 9254, 9255, 9256, 9257, 9258, 9259, 9260, 9261, 9262, 9263, 9264, 9265, 9266, 9267, 9268, 9269, 9270, 9271, 9272, 9273, 9274, 9275, 9276, 9277, 9278, 9279, 9280, 9281, 9282, 9283, 9284, 9285, 9286, 9287, 9288, 9289, 9290, 9291, 9292, 9293, 9294, 9295, 9296, 9297, 9298, 9299, 9300, 9301, 9302, 9303, 9304, 9305, 9306, 9307, 9308, 9309, 9310, 9311, 9312, 9313, 9314, 9315, 9316, 9317, 9318, 9319, 9320, 9321, 9322, 9323, 9324, 9325, 9326, 9327, 9328, 9329, 9330, 9331, 9332, 9333, 9334, 9335, 9336, 9337, 9338, 9339, 9340, 9341, 9342, 9343, 9344, 9345, 9346, 9347, 9348, 9349, 9350, 9351, 9352, 9353, 9354, 9355, 9356, 9357, 9358, 9359, 9360, 9361, 9362, 9363, 9364, 9365, 9366, 9367, 9368, 9369, 9370, 9371, 9372, 9373, 9374, 9375, 9376, 9377, 9378, 9379, 9380, 9381, 9382, 9383, 9384, 9385, 9386, 9387, 9388, 9389, 9390, 9391, 9392, 9393, 9394, 9395, 9396, 9397, 9398, 9399, 9400, 9401, 9402, 9403, 9404, 9405, 9406, 9407, 9408, 9409, 9410, 9411, 9412, 9413, 9414, 9415, 9416, 9417, 9418, 9419, 9420, 9421, 9422, 9423, 9424, 9425, 9426, 9427, 9428, 9429, 9430, 9431, 9432, 9433, 9434, 9435, 9436, 9437, 9438, 9439, 9440, 9441, 9442, 9443, 9444, 9445, 9446, 9447, 9448, 9449, 9450, 9451, 9452, 9453, 9454, 9455, 9456, 9457, 9458, 9459, 9460, 9461, 9462, 9463, 9464, 9465, 9466, 9467, 9468, 9469, 9470, 9471, 9472, 9473, 9474, 9475, 9476, 9477, 9478, 9479, 9480, 9481, 9482, 9483, 9484, 9485, 9486, 9487, 9488, 9489, 9490, 9491, 9492, 9493, 9494, 9495, 9496, 9497, 9498, 9499, 9500, 9501, 9502, 9503, 9504, 9505, 9506, 9507, 9508, 9509, 9510, 9511, 9512, 9513, 9514, 9515, 9516, 9517, 9518, 9519, 9520, 9521, 9522, 9523, 9524, 9525, 9526, 9527, 9528, 9529, 9530, 9531, 9532, 9533, 9534, 9535, 9536, 9537, 9538, 9539, 9540, 9541, 9542, 9543, 9544, 9545, 9546, 9547, 9548, 9549, 9550, 9551, 9552, 9553, 9554, 9555, 9556, 9557, 9558, 9559, 9560, 9561, 9562, 9563, 9564, 9565, 9566, 9567, 9568, 9569, 9570, 9571, 9572, 9573, 9574, 9575, 9576, 9577, 9578, 9579, 9580, 9581, 9582, 9583, 9584, 9585, 9586, 9587, 9588, 9589, 9590, 9591, 9592, 9593, 9594, 9595, 9596, 9597, 9598, 9599, 9600, 9601, 9602, 9603, 9604, 9605, 9606, 9607, 9608, 9609, 9610, 9611, 9612, 9613, 9614, 9615, 9616, 9617, 9618, 9619, 9620, 9621, 9622, 9623, 9624, 9625, 9626, 9627, 9628, 9629, 9630, 9631, 9632, 9633, 9634, 9635, 9636, 9637, 9638, 9639, 9640, 9641, 9642, 9643, 9644, 9645, 9646, 9647, 9648, 9649, 9650, 9651, 9652, 9653, 9654, 9655, 9656, 9657, 9658, 9659, 9660, 9661, 9662, 9663, 9664, 9665, 9666, 9667, 9668, 9669, 9670, 9671, 9672, 9673, 9674, 9675, 9676, 9677, 9678, 9679, 9680, 9681, 9682, 9683, 9684, 9685, 9686, 9687, 9688, 9689,

9690, 9691, 9692, 9693, 9694, 9695, 9696, 9697, 9698, 9699, 9700, 9701, 9702, 9703, 9704, 9705, 9706, 9707, 9708, 9709, 9710, 9711, 9712, 9713, 9714, 9715, 9716, 9717, 9718, 9719, 9720, 9721, 9722, 9723, 9724, 9725, 9726, 9727, 9728, 9729, 9730, 9731, 9732, 9733, 9734, 9735, 9736, 9737, 9738, 9739, 9740, 9741, 9742, 9743, 9744, 9745, 9746, 9747, 9748, 9749, 9750, 9751, 9752, 9753, 9754, 9755, 9756, 9757, 9758, 9759, 9760, 9761, 9762, 9763, 9764, 9765, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9780, 9781, 9782, 9783, 9784, 9785, 9786, 9787, 9788, 9789, 9790, 9791, 9792, 9793, 9794, 9795, 9796, 9797, 9798, 9799, 9800, 9801, 9802, 9803, 9804, 9805, 9806, 9807, 9808, 9809, 9810, 9811, 9812, 9813, 9814, 9815, 9816, 9817, 9818, 9819, 9820, 9821, 9822, 9823, 9824, 9825, 9826, 9827, 9828, 9829, 9830, 9831, 9832, 9833, 9834, 9835, 9836, 9837, 9838, 9839, 9840, 9841, 9842, 9843, 9844, 9845, 9846, 9847, 9848, 9849, 9850, 9851, 9852, 9853, 9854, 9855, 9856, 9857, 9858, 9859, 9860, 9861, 9862, 9863, 9864, 9865, 9866, 9867, 9868, 9869, 9870, 9871, 9872, 9873, 9874, 9875, 9876, 9877, 9878, 9879, 9880, 9881, 9882, 9883, 9884, 9885, 9886, 9887, 9888, 9889, 9890, 9891, 9892, 9893, 9894, 9895, 9896, 9897, 9898, 9899, 9900, 9901, 9902, 9903, 9904, 9905, 9906, 9907, 9908, 9909, 9910, 9911, 9912, 9913, 9914, 9915, 9916, 9917, 9918, 9919, 9920, 9921, 9922, 9923, 9924, 9925, 9926, 9927, 9928, 9929, 9930, 9931, 9932, 9933, 9934, 9935, 9936, 9937, 9938, 9939, 9940, 9941, 9942, 9943, 9944, 9945, 9946, 9947, 9948, 9949, 9950, 9951, 9952, 9953, 9954, 9955, 9956, 9957, 9958, 9959, 9960, 9961, 9962, 9963, 9964, 9965, 9966, 9967, 9968, 9969, 9970, 9971, 9972, 9973, 9974, 9975, 9976, 9977, 9978, 9979, 9980, 9981, 9982, 9983, 9984, 9985, 9986, 9987, 9988, 9989, 9990, 9991, 9992, 9993, 9994, 9995, 9996, 9997, 9998, 9999, 10000, 10001, 10002, 10003, 10004, 10005, 10006, 10007, 10008, 10009, 10010, 10011, 10012, 10013, 10014, 10015, 10016, 10017, 10018, 10019, 10020, 10021, 10022, 10023, 10024, 10025, 10026, 10027, 10028, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10036, 10037, 10038, 10039, 10040, 10041, 10042, 10043, 10044, 10045, 10046, 10047, 10048, 10049, 10050, 10051, 10052, 10053, 10054, 10055, 10056, 10057, 10058, 10059, 10060, 10061, 10062, 10063, 10064, 10065, 10066, 10067, 10068, 10069, 10070, 10071, 10072, 10073, 10074, 10075, 10076, 10077, 10078, 10079, 10080, 10081, 10082, 10083, 10084, 10085, 10086, 10087, 10088, 10089, 10090, 10091, 10092, 10093, 10094, 10095, 10096, 10097, 10098, 10099, 10100, 10101, 10102, 10103, 10104, 10105, 10106, 10107, 10108, 10109, 10110, 10111, 10112, 10113, 10114, 10115, 10116, 10117, 10118, 10119, 10120, 10121, 10122, 10123, 10124, 10125, 10126, 10127, 10128, 10129, 10130, 10131, 10132, 10133, 10134, 10135, 10136, 10137, 10138, 10139, 10140, 10141, 10142, 10143, 10144, 10145, 10146, 10147, 10148, 10149, 10150, 10151, 10152, 10153, 10154, 10155, 10156, 10157, 10158, 10159, 10160, 10161, 10162, 10163, 10164, 10165, 10166, 10167, 10168, 10169, 10170, 10171, 10172, 10173, 10174, 10175, 10176, 10177, 10178, 10179, 10180, 10181, 10182, 10183, 10184, 10185, 10186, 10187, 10188, 10189, 10190, 10191, 10192, 10193, 10194, 10195, 10196, 10197, 10198, 10199, 10200, 10201, 10202, 10203, 10204, 10205, 10206, 10207, 10208, 10209, 10210, 10211, 10212, 10213, 10214, 10215, 10216, 10217, 10218, 10219, 10220, 10221, 10222, 10223, 10224, 10225, 10226, 10227, 10228, 10229, 10230, 10231, 10232, 10233, 10234, 10235, 10236, 10237, 10238, 10239, 10240, 10241, 10242, 10243, 10244, 10245, 10246, 10247, 10248, 10249, 10250, 10251, 10252, 10253, 10254, 10255, 10256, 10257, 10258, 10259, 10260, 10261, 10262, 10263, 10264, 10265, 10266, 10267, 10268, 10269, 10270, 10271, 10272, 10273, 10274, 10275, 10276, 10277, 10278, 10279, 10280, 10281, 10282, 10283, 10284, 10285, 10286, 10287, 10288, 10289, 10290, 10291, 10292, 10293, 10294, 10295, 10296, 10297, 10298, 10299, 10300, 10301, 10302, 10303, 10304, 10305, 10306, 10307, 10308, 10309, 10310, 10311, 10312, 10313, 10314, 10315, 10316, 10317, 10318, 10319, 10320, 10321, 10322, 10323, 10324, 10325, 10326, 10327, 10328,

10329, 10330, 10331, 10332, 10333, 10334, 10335, 10336, 10337, 10338, 10339, 10340, 10341, 10342, 10343, 10344, 10345, 10346, 10347, 10348, 10349, 10350, 10351, 10352, 10353, 10354, 10355, 10356, 10357, 10358, 10359, 10360, 10361, 10362, 10363, 10364, 10365, 10366, 10367, 10368, 10369, 10370, 10371, 10372, 10373, 10374, 10375, 10376, 10377, 10378, 10379, 10380, 10381, 10382, 10383, 10384, 10385, 10386, 10387, 10388, 10389, 10390, 10391, 10392, 10393, 10394, 10395, 10396, 10397, 10398, 10399, 10400, 10401, 10402, 10403, 10404, 10405, 10406, 10407, 10408, 10409, 10410, 10411, 10412, 10413, 10414, 10415, 10416, 10417, 10418, 10419, 10420, 10421, 10422, 10423, 10424, 10425, 10426, 10427, 10428, 10429, 10430, 10431, 10432, 10433, 10434, 10435, 10436, 10437, 10438, 10439, 10440, 10441, 10442, 10443, 10444, 10445, 10446, 10447, 10448, 10449, 10450, 10451, 10452, 10453, 10454, 10455, 10456, 10457, 10458, 10459, 10460, 10461, 10462, 10463, 10464, 10465, 10466, 10467, 10468, 10469, 10470, 10471, 10472, 10473, 10474, 10475, 10476, 10477, 10478, 10479, 10480, 10481, 10482, 10483, 10484, 10485, 10486, 10487, 10488, 10489, 10490, 10491, 10492, 10493, 10494, 10495, 10496, 10497, 10498, 10499, 10500, 10501, 10502, 10503, 10504, 10505, 10506, 10507, 10508, 10509, 10510, 10511, 10512, 10513, 10514, 10515, 10516, 10517, 10518, 10519, 10520, 10521, 10522, 10523, 10524, 10525, 10526, 10527, 10528, 10529, 10530, 10531, 10532, 10533, 10534, 10535, 10536, 10537, 10538, 10539, 10540, 10541, 10542, 10543, 10544, 10545, 10546, 10547, 10548, 10549, 10550, 10551, 10552, 10553, 10554, 10555, 10556, 10557, 10558, 10559, 10560, 10561, 10562, 10563, 10564, 10565, 10566, 10567, 10568, 10569, 10570, 10571, 10572, 10573, 10574, 10575, 10576, 10577, 10578, 10579, 10580, 10581, 10582, 10583, 10584, 10585, 10586, 10587, 10588, 10589, 10590, 10591, 10592, 10593, 10594, 10595, 10596, 10597, 10598, 10599, 10600, 10601, 10602, 10603, 10604, 10605, 10606, 10607, 10608, 10609, 10610, 10611, 10612, 10613, 10614, 10615, 10616, 10617, 10618, 10619, 10620, 10621, 10622, 10623, 10624, 10625, 10626, 10627, 10628, 10629, 10630, 10631, 10632, 10633, 10634, 10635, 10636, 10637, 10638, 10639, 10640, 10641, 10642, 10643, 10644, 10645, 10646, 10647, 10648, 10649, 10650, 10651, 10652, 10653, 10654, 10655, 10656, 10657, 10658, 10659, 10660, 10661, 10662, 10663, 10664, 10665, 10666, 10667, 10668, 10669, 10670, 10671, 10672, 10673, 10674, 10675, 10676, 10677, 10678, 10679, 10680, 10681, 10682, 10683, 10684, 10685, 10686, 10687, 10688, 10689, 10690, 10691, 10692, 10693, 10694, 10695, 10696, 10697, 10698, 10699, 10700, 10701, 10702, 10703, 10704, 10705, 10706, 10707, 10708, 10709, 10710, 10711, 10712, 10713, 10714, 10715, 10716, 10717, 10718, 10719, 10720, 10721, 10722, 10723, 10724, 10725, 10726, 10727, 10728, 10729, 10730, 10731, 10732, 10733, 10734, 10735, 10736, 10737, 10738, 10739, 10740, 10741, 10742, 10743, 10744, 10745, 10746, 10747, 10748, 10749, 10750, 10751, 10752, 10753, 10754, 10755, 10756, 10757, 10758, 10759, 10760, 10761, 10762, 10763, 10764, 10765, 10766, 10767, 10768, 10769, 10770, 10771, 10772, 10773, 10774, 10775, 10776, 10777, 10778, 10779, 10780, 10781, 10782, 10783, 10784, 10785, 10786, 10787, 10788, 10789, 10790, 10791, 10792, 10793, 10794, 10795, 10796, 10797, 10798, 10799, 10800, 10801, 10802, 10803, 10804, 10805, 10806, 10807, 10808, 10809, 10810, 10811, 10812, 10813, 10814, 10815, 10816, 10817, 10818, 10819, 10820, 10821, 10822, 10823, 10824, 10825, 10826, 10827, 10828, 10829, 10830, 10831, 10832, 10833, 10834, 10835, 10836, 10837, 10838, 10839, 10840, 10841, 10842, 10843, 10844, 10845, 10846, 10847, 10848, 10849, 10850, 10851, 10852, 10853, 10854, 10855, 10856, 10857, 10858, 10859, 10860, 10861, 10862, 10863, 10864, 10865, 10866, 10867, 10868, 10869, 10870, 10871, 10872, 10873, 10874, 10875, 10876, 10877, 10878, 10879, 10880, 10881, 10882, 10883, 10884, 10885, 10886, 10887, 10888, 10889, 10890, 10891, 10892, 10893, 10894, 10895, 10896, 10897, 10898, 10899, 10900, 10901, 10902, 10903, 10904, 10905, 10906, 10907, 10908, 10909, 10910, 10911, 10912, 10913, 10914, 10915, 10916, 10917, 10918, 10919, 10920, 10921, 10922, 10923, 10924, 10925, 10926,

10927, 10928, 10929, 10930, 10931, 10932, 10933, 10934, 10935, 10936, 10937, 10938, 10939, 10940, 10941, 10942, 10943, 10944, 10945, 10946, 10947, 10948, 10949, 10950, 10951, 10952, 10953, 10954, 10955, 10956, 10957, 10958, 10959, 10960, 10961, 10962, 10963, 10964, 10965, 10966, 10967, 10968, 10969, 10970, 10971, 10972, 10973, 10974, 10975, 10976, 10977, 10978, 10979, 10980, 10981, 10982, 10983, 10984, 10985, 10986, 10987, 10988, 10989, 10990, 10991, 10992, 10993, 10994, 10995, 10996, 10997, 10998, 10999, 11000, 11001, 11002, 11003, 11004, 11005, 11006, 11007, 11008, 11009, 11010, 11011, 11012, 11013, 11014, 11015, 11016, 11017, 11018, 11019, 11020, 11021, 11022, 11023, 11024, 11025, 11026, 11027, 11028, 11029, 11030, 11031, 11032, 11033, 11034, 11035, 11036, 11037, 11038, 11039, 11040, 11041, 11042, 11043, 11044, 11045, 11046, 11047, 11048, 11049, 11050, 11051, 11052, 11053, 11054, 11055, 11056, 11057, 11058, 11059, 11060, 11061, 11062, 11063, 11064, 11065, 11066, 11067, 11068, 11069, 11070, 11071, 11072, 11073, 11074, 11075, 11076, 11077, 11078, 11079, 11080, 11081, 11082, 11083, 11084, 11085, 11086, 11087, 11088, 11089, 11090, 11091, 11092, 11093, 11094, 11095, 11096, 11097, 11098, 11099, 11100, 11101, 11102, 11103, 11104, 11105, 11106, 11107, 11108.

- Comments received regarding project costs or funding do not raise significant environmental issues; therefore, no response is required. However, some additional clarification on the grant process was added to the EIS as described below.
- Section 1 of the draft EIS adequately describes the four grant applications, which are the subject of this EIS analysis. However, additional text was added to the EIS to clarify the purpose of the PDM program and the HMGP.
- Section 1.4 of the EIS was amended to clarify the grant programs and environmental review requirements.
- Section 1.4.1 of the EIS was amended to add additional information on FEMA' process for verifying the expenditure of grant funds by subapplicants as described in the project scope of work and the EIS.
- Comments received regarding project costs or funding do not raise significant environmental issues; therefore, no response is required.

Issue 52: Funding Induced Growth

The following commenters (identified by PK) raised Issue 52: 14, 15, 26, 35, 135, 164, 166, 186, 227, 231, 254, 268, 300, 323, 822, 954, 1106, 1578, 2501, 2633, 2695, 2902, 3096, 3097, 3142, 3176.

- Induced growth was not identified as a potential effect of the proposed and connected actions and Section 5 of the EIS adequately described this.

Issue 53: Compliance with the California Environmental Quality Act (CEQA)

The following commenters (identified by PK) raised Issue 53: 26, 45, 184, 186, 266, 561, 595, 1570, 1879, 2527, 2751, 2777, 2897, 2911, 2922, 3059, 3061, 3076, 3081, 3104, 3108, 3175, 3176, 3177, 3184, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3519, 12665.

- Several subsections in Section 5 of the draft EIS identified areas where the subapplicants might need to comply with CEQA before they may implement the proposed actions if they receive funding from FEMA. For example, there may be CEQA compliance requirements associated with air quality conformity as described in Section 5.5.

Public Opinion, Support, and Opposition

The section below includes all the PKs for which commenters made a general statement in favor or in opposition to the proposed project without reference to a specific issue or concern.

FEMA acknowledges that there are many people who support vegetation management to reduce hazardous fire risk in the East Bay Hills, and there are many who maintain that the existing vegetation should stay in place. The proposed project and alternatives are discussed in Chapters 1 through 3 in the EIS. There are positive and negative effects from both the no action alternative and proposed and connected actions. The potential effects of both alternatives are discussed in the EIS and will be fully considered by FEMA, along with public input and peer reviewed science, before making a final determination.

Issue 54: Public Opinion, Support and Opposition of the Proposed Project

The following commenters (identified by PK) raised Issue 54: 50, 109, 271, 293, 316, 341, 401, 402, 403, 404, 405, 408, 409, 410, 412, 413, 414, 416, 417, 418, 419, 422, 423, 425, 427, 429, 430, 431, 434, 436, 438, 440, 441, 442, 444, 445, 446, 447, 449, 450, 452, 453, 454, 456, 457, 458, 459, 461, 462, 463, 464, 466, 467, 468, 469, 470, 471, 477, 478, 479, 480, 483, 484, 485, 490, 492, 494, 496, 497, 498, 499, 500, 501, 511, 514, 515, 517, 519, 523, 524, 525, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 542, 545, 546, 547, 548, 549, 551, 552, 553, 554, 555, 560, 562, 563, 564, 565, 566, 568, 569, 570, 571, 574, 575, 576, 577, 578, 586, 587, 601, 602, 603, 604, 605, 607, 608, 609, 610, 612, 615, 617, 620, 621, 622, 624, 625, 626, 629, 631, 632, 634, 638, 639, 640, 648, 650, 651, 652, 653, 657, 663, 664, 668, 669, 670, 671, 674, 681, 683, 686, 691, 693, 694, 695, 699, 700, 701, 704, 705, 706, 707, 710, 720, 725, 728, 732, 733, 741, 747, 748, 749, 750, 752, 754, 756, 757, 763, 764, 766, 768, 770, 772, 779, 781, 783, 785, 786, 787, 788, 790, 791, 797, 798, 800, 808, 810, 813, 814, 816, 824, 834, 837, 839, 843, 845, 846, 848, 850, 851, 856, 858, 859, 860, 861, 863, 867, 868, 869, 874, 875, 878, 880, 882, 884, 886, 887, 894, 896, 902, 905, 907, 910, 911, 923, 925, 933, 943, 946, 947, 950, 955, 958, 963, 972, 983, 992, 999, 1006, 1007, 1008, 1011, 1012, 1026, 1030, 1037, 1042, 1043, 1048, 1049, 1054, 1055, 1058, 1059, 1061, 1071, 1074, 1075, 1085, 1089, 1095, 1107, 1111, 1115, 1120, 1125, 1129, 1134, 1139, 1141, 1149, 1150, 1152, 1154, 1165, 1167, 1168, 1175, 1180, 1181, 1187, 1193, 1195, 1197, 1201, 1213, 1215, 1219, 1232, 1233, 1240, 1241, 1244, 1248, 1256, 1258, 1259, 1260, 1261, 1268, 1269, 1270, 1272, 1273, 1274, 1275, 1277, 1278, 1280, 1282, 1286, 1287, 1290, 1291, 1298, 1299, 1301, 1305, 1308, 1310, 1313, 1314, 1315, 1341, 1343, 1346, 1347, 1349, 1350, 1357, 1359, 1360, 1363, 1364, 1365, 1366, 1368, 1371, 1374, 1377, 1382, 1390, 1393, 1398, 1402, 1404, 1421, 1461, 1485, 1498, 1499, 1500, 1501, 1502, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1527, 1528, 1541, 1561, 1581, 1593, 1608, 1609, 1610, 1637, 1662, 1666, 1699, 1717, 1725, 1731, 1749, 1752, 1757, 1758, 1761, 1763, 1786, 1811, 1812, 1827, 1835, 1837, 1838, 1845, 1846, 1850, 1859, 1878, 1891, 1892, 1895, 1896, 1897, 1924, 1927, 1930, 1932, 1933,

1940, 1943, 1944, 1949, 1952, 1953, 1954, 1956, 1967, 1972, 1993, 1994, 1998, 1999, 2000, 2002, 2023, 2032, 2042, 2047, 2049, 2055, 2059, 2060, 2077, 2078, 2081, 2082, 2092, 2094, 2101, 2105, 2106, 2107, 2114, 2118, 2119, 2125, 2126, 2129, 2138, 2140, 2148, 2151, 2155, 2157, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2169, 2172, 2175, 2179, 2180, 2181, 2182, 2184, 2187, 2188, 2189, 2190, 2192, 2195, 2197, 2198, 2202, 2203, 2205, 2207, 2208, 2211, 2213, 2214, 2216, 2217, 2218, 2219, 2220, 2228, 2229, 2241, 2242, 2243, 2249, 2256, 2327, 2336, 2337, 2343, 2348, 2353, 2354, 2441, 2446, 2460, 2464, 2472, 2479, 2481, 2484, 2485, 2487, 2489, 2492, 2582, 2597, 2598, 2600, 2601, 2605, 2621, 2622, 2623, 2625, 2630, 2638, 2641, 2648, 2671, 2675, 2676, 2681, 2686, 2715, 2729, 2732, 2735, 2742, 2754, 2761, 2762, 2768, 2773, 2785, 2786, 2791, 2806, 2815, 2818, 2821, 2836, 2852, 2853, 2855, 2856, 2859, 2863, 2864, 2874, 2877, 2882, 2883, 2885, 2887, 2890, 2896, 2903, 2927, 2930, 2945, 2946, 2959, 2960, 2961, 2963, 2984, 2995, 2998, 3001, 3036, 3042, 3048, 3054, 3055, 3060, 3062, 3063, 3066, 3069, 3070, 3072, 3074, 3077, 3078, 3079, 3080, 3082, 3083, 3086, 3088, 3089, 3092, 3093, 3102, 3103, 3105, 3106, 3107, 3113, 3114, 3116, 3117, 3118, 3123, 3124, 3132, 3138, 3149, 3164, 3166, 3167, 3168, 3170, 3173, 3178, 3182, 3183, 3190, 3195, 3197, 3199, 3203, 3204, 3208, 3209, 3210, 3211, 3212, 3213, 3215, 3216, 3218, 3219, 3220, 3221, 3222, 3223, 3224, 3225, 3226, 3227, 3228, 3229, 3230, 3231, 3232, 3233, 3234, 3512, 3514, 3520, 3529, 3530, 3533, 3534, 3535, 3569, 3573, 3574, 3575, 4002, 4004, 4008, 4009, 4010, 4011, 4012, 4013, 5001, 5002, 5003, 5004, 5005, 5006, 5007, 5008, 5009, 5010, 5011, 5012, 5013, 5014, 5015, 5016, 5017, 5018, 5019, 5020, 5021, 5022, 5023, 5024, 5025, 5026, 5027, 5028, 5029, 5030, 5031, 5032, 5033, 5034, 5035, 5036, 5037, 5038, 5039, 5040, 5041, 5042, 5043, 5044, 5045, 5046, 5047, 5048, 5049, 5050, 5051, 5052, 5053, 5054, 5055, 5056, 5057, 5058, 5059, 5060, 5061, 5062, 5063, 5064, 5065, 5066, 5067, 5068, 5069, 5070, 5071, 5072, 5073, 5074, 5075, 5076, 5077, 5078, 5079, 5080, 5081, 5082, 5083, 5084, 5085, 5086, 5087, 5088, 5089, 5090, 5091, 5092, 5093, 5094, 5095, 5096, 5097, 5098, 5099, 5100, 5101, 5102, 5103, 5104, 5105, 5106, 5107, 5108, 5109, 5110, 5111, 5112, 5113, 5114, 5115, 5116, 5117, 5118, 5119, 5120, 5121, 5122, 5123, 5124, 5125, 5126, 5127, 5128, 5129, 5130, 5131, 5132, 5133, 5134, 5135, 5136, 5137, 5138, 5139, 5140, 5141, 5142, 5143, 5144, 5145, 5146, 5147, 5148, 5149, 5150, 5151, 5152, 5153, 5154, 5155, 5156, 5157, 5158, 5159, 5160, 5161, 5162, 5163, 5164, 5165, 5166, 5167, 5168, 5169, 5170, 5171, 5172, 5173, 5174, 5175, 5176, 5177, 5178, 5179, 5180, 5181, 5182, 5183, 5184, 5185, 5186, 5187, 5188, 5189, 5190, 5191, 5192, 5193, 5194, 5195, 5196, 5197, 5198, 5199, 5200, 5201, 5202, 5203, 5204, 5205, 5206, 5207, 5208, 5209, 5210, 5211, 5212, 5213, 5214, 5215, 5216, 5217, 5218, 5219, 5220, 5221, 5222, 5223, 5224, 5225, 5226, 5227, 5228, 5229, 5230, 5231, 5232, 5233, 5234, 5235, 5236, 5237, 5238, 5239, 5240, 5241, 5242, 5243, 5244, 5245, 5246, 5247, 5248, 5249, 5250, 5251, 5252, 5253, 5254, 5255, 5256, 5257, 5258, 5259, 5260, 5261, 5262, 5263, 5264, 5265, 5266, 5267, 5268, 5269, 5270, 5271, 5272, 5273, 5274, 5275, 5276, 5277, 5278, 5279, 5280, 5281, 5282, 5283, 5284, 5285, 5286, 5287, 5288, 5289, 5290, 5291, 5292, 5293, 5294, 5295, 5296, 5297, 5298, 5299, 5300, 5301, 5302, 5303, 5304, 5305, 5306, 5307, 5308, 5309, 5310, 5311, 5312, 5313, 5314, 5315, 5316, 5317, 5318, 5319, 5320, 5321, 5322, 5323, 5324, 5325, 5326, 5327, 5328, 5329, 5330, 5331, 5332, 5333, 5334, 5335, 5336, 5337, 5338, 5339, 5340, 5341, 5342, 5343, 5344, 5345, 5346, 5347, 5348, 5349, 5350, 5351, 5352, 5353, 5354, 5355, 5356, 5357, 5358, 5359, 5360, 5361, 5362, 5363, 5364, 5365, 5366, 5367, 5368, 5369, 5370, 5371, 5372, 5373, 5374, 5375, 5376, 5377, 5378, 5379, 5380, 5381, 5382, 5383, 5384, 5385, 5386, 5387, 5388, 5389, 5390, 5391, 5392, 5393, 5394, 5395, 5396, 5397, 5398, 5399, 5400, 5401, 5402, 5403, 5404, 5405, 5406, 5407, 5408, 5409, 5410, 5411, 5412, 5413, 5414, 5415, 5416, 5417, 5418,

5419, 5420, 5421, 5422, 5423, 5424, 5425, 5426, 5427, 5428, 5429, 5430, 5431, 5432, 5433, 5434, 5435, 5436, 5437, 5438, 5439, 5440, 5441, 5442, 5443, 5444, 5445, 5446, 5447, 5448, 5449, 5450, 5451, 5452, 5453, 5454, 5455, 5456, 5457, 5458, 5459, 5460, 5461, 5462, 5463, 5464, 5465, 5466, 5467, 5468, 5469, 5470, 5471, 5472, 5473, 3061, 3167, 12001, 12002, 12003, 12004, 12005, 12007, 12008, 12009, 12010, 12011, 12012, 12013, 12014, 12015, 12016, 12017, 12018, 12019, 12020, 12021, 12022, 12023, 12024, 12025, 12026, 12027, 12028, 12029, 12030, 12031, 12032, 12033, 12034, 12035, 12036, 12037, 12038, 12039, 12040, 12041, 12042, 12043, 12044, 12045, 12046, 12047, 12048, 12049, 12050, 12051, 12052, 12054, 12055, 12056, 12057, 12058, 12059, 12060, 12061, 12062, 12063, 12064, 12065, 12066, 12067, 12068, 12069, 12070, 12071, 12072, 12073, 12074, 12075, 12076, 12077, 12078, 12079, 12080, 12081, 12082, 12083, 12084, 12085, 12086, 12087, 12088, 12089, 12090, 12091, 12092, 12093, 12094, 12096, 12097, 12098, 12099, 12100, 12101, 12102, 12103, 12104, 12105, 12106, 12107, 12108, 12109, 12110, 12111, 12112, 12113, 12115, 12116, 12117, 12118, 12119, 12120, 12121, 12122, 12123, 12124, 12125, 12126, 12127, 12128, 12129, 12130, 12131, 12132, 12133, 12134, 12135, 12136, 12137, 12138, 12139, 12140, 12141, 12142, 12143, 12144, 12145, 12146, 12147, 12148, 12149, 12150, 12151, 12152, 12154, 12155, 12156, 12157, 12158, 12159, 12160, 12161, 12162, 12163, 12164, 12165, 12166, 12167, 12168, 12169, 12170, 12171, 12172, 12173, 12174, 12175, 12176, 12177, 12178, 12179, 12180, 12181, 12182, 12183, 12184, 12185, 12186, 12187, 12188, 12189, 12190, 12191, 12192, 12194, 12195, 12196, 12197, 12198, 12199, 12200, 12201, 12202, 12203, 12204, 12205, 12206, 12207, 12208, 12209, 12211, 12213, 12214, 12215, 12216, 12217, 12218, 12219, 12220, 12221, 12222, 12223, 12224, 12225, 12226, 12227, 12228, 12229, 12230, 12231, 12232, 12233, 12234, 12235, 12236, 12237, 12238, 12239, 12240, 12241, 12242, 12243, 12244, 12245, 12246, 12247, 12248, 12249, 12250, 12251, 12252, 12253, 12254, 12255, 12256, 12257, 12258, 12259, 12260, 12261, 12262, 12263, 12264, 12265, 12266, 12267, 12268, 12269, 12270, 12271, 12272, 12274, 12275, 12276, 12277, 12278, 12279, 12280, 12281, 12282, 12283, 12284, 12285, 12286, 12287, 12288, 12289, 12290, 12291, 12292, 12293, 12294, 12295, 12296, 12297, 12298, 12299, 12300, 12301, 12302, 12303, 12304, 12305, 12306, 12307, 12308, 12309, 12310, 12311, 12312, 12313, 12314, 12315, 12316, 12317, 12318, 12319, 12320, 12321, 12322, 12323, 12324, 12325, 12326, 12327, 12328, 12329, 12330, 12331, 12333, 12334, 12335, 12336, 12337, 12338, 12339, 12340, 12341, 12342, 12343, 12344, 12345, 12346, 12347, 12348, 12349, 12350, 12351, 12352, 12353, 12354, 12355, 12356, 12357, 12358, 12359, 12361, 12362, 12363, 12365, 12366, 12367, 12368, 12369, 12370, 12371, 12372, 12373, 12374, 12375, 12377, 12378, 12379, 12380, 12381, 12382, 12383, 12384, 12385, 12386, 12387, 12388, 12389, 12390, 12391, 12392, 12393, 12394, 12396, 12397, 12398, 12399, 12400, 12401, 12403, 12404, 12405, 12406, 12407, 12408, 12409, 12410, 12411, 12412, 12413, 12414, 12415, 12417, 12418, 12419, 12420, 12421, 12422, 12423, 12424, 12426, 12427, 12428, 12429, 12430, 12431, 12432, 12433, 12434, 12435, 12436, 12437, 12438, 12439, 12440, 12441, 12442, 12443, 12444, 12445, 12446, 12447, 12448, 12449, 12451, 12452, 12453, 12454, 12455, 12456, 12457, 12458, 12459, 12460, 12461, 12462, 12464, 12465, 12466, 12467, 12468, 12469, 12470, 12471, 12472, 12473, 12474, 12476, 12477, 12478, 12479, 12480, 12481, 12482, 12483, 12484, 12486, 12487, 12489, 12490, 12491, 12492, 12493, 12494, 12495, 12496, 12497, 12498, 12499, 12500, 12501, 12502, 12503, 12504, 12505, 12506, 12507, 12508, 12509, 12510, 12511, 12512, 12514, 12515, 12516, 12517, 12518, 12520, 12521, 12522, 12523, 12524, 12525, 12526, 12527, 12529, 12530, 12531, 12532, 12533, 12534, 12535, 12536, 12537, 12538, 12539, 12540, 12541, 12542, 12543, 12544, 12545, 12546, 12547, 12548, 12549, 12550, 12551, 12552, 12553, 12554, 12555, 12556, 12557, 12558, 12559, 12560, 12561, 12563, 12564, 12565, 12566, 12567, 12568, 12570, 12571, 12572, 12573, 12574, 12575, 12576,

12577, 12578, 12579, 12580, 12581, 12582, 12583, 12584, 12585, 12586, 12587, 12588, 12590, 12591, 12592, 12593, 12594, 12595, 12596, 12597, 12598, 12599, 12600, 12601, 12602, 12603, 12604, 12605, 12606, 12607, 12608, 12609, 12610, 12611, 12612, 12613, 12614, 12615, 12616, 12617, 12618, 12619, 12620, 12621, 12622, 12623, 12624, 12625, 12626, 12627, 12628, 12629, 12630, 12631, 12632, 12633, 12634, 12635, 12636, 12637, 12638, 12639, 12640, 12641, 12642, 12643, 12644, 12645, 12646, 12647, 12648, 12650, 12651, 12652, 12653, 12654, 12656, 12657, 12658, 12659, 12660, 12661, 12662, 12663, 12664, 12666, 12667, 12669, 12670, 12671, 12672, 12673, 12674, 12675, 12676, 12677, 12679, 12680, 12681, 12682, 12684, 12685, 12686, 12687, 12688, 12689, 12690, 12691, 12692, 12693, 12694, 12695, 12696, 12697, 12698, 12699, 12700, 12701, 12702, 12703, 12704, 12705, 12706, 12707, 12708, 12710, 12711, 12712, 12713, 12714, 12715, 12716, 12717, 12718, 12719, 12720, 12721, 12722, 12723, 12724, 12725, 12726, 12727, 12728, 12729, 12730, 12731, 12732, 12733, 12734, 12735, 12736, 12737, 12738, 12740, 12741, 12742, 12743, 12744, 12745, 12746, 12748, 12749, 12750, 12751, 12752, 12753, 12754, 12755, 12756, 12757, 12758, 12759, 12760, 12761, 12762, 12763, 12764, 12765, 12766, 12767, 12768, 12770, 12771, 12772, 12773, 12774, 12775, 12776, 12777, 12778, 12779, 12780, 12781, 12782, 12783, 12784, 12786, 12787, 12789, 12790, 12791, 12792, 12793, 12794, 12795, 12797, 12798, 12799, 12800, 12801, 12802, 12803, 12804, 12805, 12806, 12807, 12808, 12809, 12810, 12811, 12812, 12813, 12814, 12815, 12816, 12817, 12818, 12819, 12820, 12821, 12822, 12823, 12824, 12825, 12826, 12827, 12828, 12829, 12830, 12831, 12832, 12833, 12834, 12835, 12836, 12837, 12839, 12840, 12841, 12842, 12843, 12844, 12846, 12847, 12848, 12849, 12850, 12851, 12852, 12853, 12854, 12855, 12856, 12857, 12858, 12859, 12860, 12861, 12862, 12863, 12864, 12865, 12866, 12867, 12868, 12869, 12871, 12872, 12873, 12875, 12876, 12877, 12878, 12879, 12880, 12881, 12882, 12883, 12884, 12885, 12886, 12887, 12888, 12889, 12891, 12892, 12893, 12894, 12895, 12896, 12897, 12898, 12899, 12900, 12901, 12902, 12903, 12904, 12905, 12906, 12907, 12908, 12909, 12910, 12911, 12912, 12913, 12914, 12915, 12916, 12917, 12919, 12920, 12921, 12922, 12924, 12925, 12926, 12927, 12928, 12929, 12930, 12931, 12932, 12933, 12935, 12936, 12937, 12938, 12939, 12940, 12941, 12942, 12943, 12944, 12945, 12946, 12947, 12948, 12949, 12950, 12951, 12952, 12953, 12954, 12955, 12956, 12957, 12958, 12959, 12960, 12961, 12962, 12963, 12964, 12965, 12967, 12968, 12969, 12970, 12971, 12972, 12973, 12974, 12975, 12976, 12977, 12978, 12979, 12980, 12981, 12982, 12983, 12984, 12985, 12986, 12988, 12989, 12990, 12991, 12992, 12993, 12994, 12995, 12996, 12997, 12998, 12999, 13000, 13003, 13004, 13005, 13006, 13007, 13008, 13009, 13010, 13011, 13012, 13013, 13014, 13015, 13016, 13017, 13018, 13019, 13020, 13021, 13022, 13023, 13024, 13025, 13026, 13027, 13028, 13029, 13030, 13031, 13032, 13033, 13034, 13035, 13036, 13037, 13038, 13039, 13040, 13041, 13042, 13043, 13045, 13046, 13047, 13048, 13049, 13050, 13051, 13052, 13053, 13054, 13055, 13056, 13057, 13058, 13059, 13060, 13061, 13062, 13063, 13064, 13065, 13066, 13067, 13068, 13069, 13070, 13071, 13072, 13073, 13074, 13075, 13076, 13077, 13078, 13079, 13080, 13081, 13082, 13083, 13084, 13085, 13086, 13087, 13088, 13089, 13090, 13091, 13092, 13093, 13094, 13095, 13097, 13098, 13099, 13100, 13101, 13102, 13103, 13104, 13105, 13106, 13107, 13108, 13109, 13110, 13111, 13112, 13113, 13114, 13115, 13116, 13117, 13118, 13119, 13120, 13121, 13122, 13123, 13124, 13125, 13126, 13127, 13128, 13129, 13130, 13131, 13132, 13133, 13135, 13137, 13138, 13139, 13140, 13141, 13142, 13143, 13144, 13145, 13146, 13147, 13148, 13149, 13150, 13151, 13153, 13154, 13155, 13157, 13158, 13159, 13160, 13161, 13162, 13163, 13164, 13165, 13166, 13167, 13168, 13169, 13170, 13171, 13172, 13173, 13174, 13175, 13176, 13177, 13178, 13179, 13180, 13181, 13182, 13183, 13184, 13185, 13186, 13187, 13188, 13189, 13190, 13191, 13192, 13193, 13194, 13195, 13196, 13198, 13199, 13200, 13201, 13202, 13203, 13204, 13205, 13206, 13207,

13208, 13209, 13210, 13211, 13212, 13213, 13214, 13215, 13218, 13219, 13220, 13221, 13222, 13223, 13224, 13225, 13226, 13227, 13228, 13229, 13230, 13231, 13232, 13233, 13234, 13235, 13236, 13237, 13239, 13240, 13241, 13242, 13243, 13244, 13245, 13246, 13247.