

Priority System Process for the Rehabilitation of High Hazard Potential Dams (HHPD) Grants

The National Dam Safety Review Board recommended a Project Prioritization Method for applicants to use to meet the priority system process required by the Water Infrastructure Improvements for the Nation Act, as amended by 33 USC 467f-2. The Project Prioritization Method described in this fact sheet will launch with the upcoming HHPD Notice of Funding Opportunity.

Background

The Rehabilitation of High Hazard Potential Dams (HHPD) program was authorized by Congress in the Water Infrastructure Improvements for the Nation Act” or the “WIIN Act” and signed into law by the President on Dec. 16, 2016. The law added a new grant program under FEMA’s National Dam Safety Program (33USC 467f-2). Section 5006 of the Act, Rehabilitation of High Hazard Potential Dams, provides technical, planning, design, and construction assistance in the form of grants to eligible subrecipients for the rehabilitation or removal of eligible high hazard potential dams.

The legislation requires that FEMA develop a priority system in consultation with the National Dam Safety Review Board (NDSRB) for use by applicants in identifying eligible high hazard potential dams that “fail to meet minimum dam safety standards of the state in which the dam is located and poses an unacceptable risk to the public, as determined by the state” (33USC 467(4)(iv)).¹

In 2021, the NDSRB assigned a team that included five state voting members of the Board and federal partners to recommend the project priority system for the HHPD grant program. The NDSRB team met over 30 times to discuss the priority system and considered input collected from several “listening sessions” FEMA coordinated with stakeholders and the public. On April 26, 2023, the NDSRB confirmed the recommendation.

¹ State refers to “each of the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any other territory or possession of the United States.” (33USC 467f-2 definitions)



33 USC § 467f–2 (f) Priority System

The Administrator, in consultation with the Board, shall develop a risk-based priority system for use in identifying eligible high hazard potential dams for which grants may be made under this section.

Prioritization and the HHPD NOFO Process

Once the Notice of Funding Opportunity (NOFO) is announced, the HHPD application process consists of two parts:

- Part 1 of the application process establishes the funding states will receive by successfully making application for that grant period.
- Part 2 is to be performed by the states after they receive notification of successful application. During Part 2 of the process, grant recipients prioritize and document how the funds will be allocated to eligible subrecipients.

Eligible High Hazard Potential Dam (Source: 33 USC § 467(4)(A))

(A) In general The term “eligible high hazard potential dam” means a non-Federal dam that—

- (i) is located in a State with a State dam safety program;
- (ii) is classified as “high hazard potential” by the State dam safety agency in the State in which the dam is located;
- (iii) has an emergency action plan that—
 - (I) is approved by the relevant State dam safety agency; or
 - (II) is in conformance with State law and pending approval by the relevant State dam safety agency;
- (iv) fails to meet minimum dam safety standards of the State in which the dam is located, as determined by the State; and
- (v) poses an unacceptable risk to the public, as determined by the Administrator, in consultation with the Board.

(B) Exclusion The term “eligible high hazard potential dam” does not include—

- (i) a licensed hydroelectric dam under a hydropower project with an authorized installed capacity of greater than 1.5 megawatts; or
- (ii) a dam built under the authority of the Secretary of Agriculture.

For Part 1 of the application process, applicants for HHPD grants will be required to identify eligible high hazard potential dams in their state that meet the Act definition of Eligible High Hazard Potential Dam and are listed in the National Inventory of Dams (NID) with a condition assessment of POOR or UNSATISFACTORY without regard to population at risk (PAR). Applicants will also be asked to identify Act eligible dams with a FAIR condition assessment with a PAR greater than 1000. The list of dams must only include dams with a documented dam safety deficiency that results in the dam not complying with state standards. Deficiencies that result from deferred maintenance are not eligible for consideration.

The state funding for the HHPD grant is determined using the number of eligible dams based on the funding formula specified in the Act.

33 U.S.C § 467f-2 (g)(2) Allocation of Funds

The total amount of funds made available to carry out this section for each fiscal year shall be distributed as follows:

- (A) Equal distribution: $\frac{1}{3}$ shall be distributed equally among the states in which the projects for which applications are submitted under subsection (c)(1) are located.
- (B) Need-based: $\frac{2}{3}$ shall be distributed among the States in which the projects for which applications are submitted under subsection (c)(1) are located based on the proportion that—
 - (i) the number of eligible high hazard potential dams in the State; bears to
 - (ii) the number of eligible high hazard potential dams in all such States.

After FEMA notifies applicants of their successful application and their funding allocation, grant recipients are required to use the HHPD priority system process to prioritize dams that will receive HHPD funding. Part 2 of the application process involves application of two tools to estimate risk and risk reduction. The prioritization process includes an initial determination of dam risk and proposed risk reduction for a subset of Part 1 eligible dams for which eligible subrecipients request HHPD funding. For this initial determination, the FEMA Project Prioritization Tool must be used to estimate the likelihood of failure and the U.S. Army Corps of Engineers Dam Screening Tool (DST) must be used to estimate PAR consequences.

The HHPD Priority System Process requires that dams under consideration for HHPD funding be plotted on a HHPD risk matrix (see Figure 1) with the likelihood of failure from the FEMA Project Prioritization Tool on the vertical axis and the DST calculated consequences of the horizontal axis. Comparing the dams based on likelihood of failure and PAR consequences provides a ranking of dams consistent with the intent of the Act.

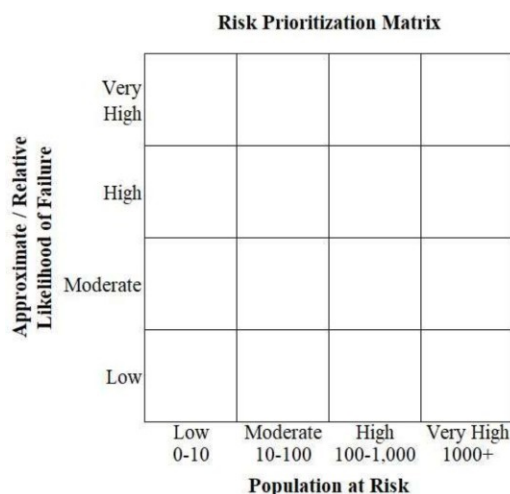
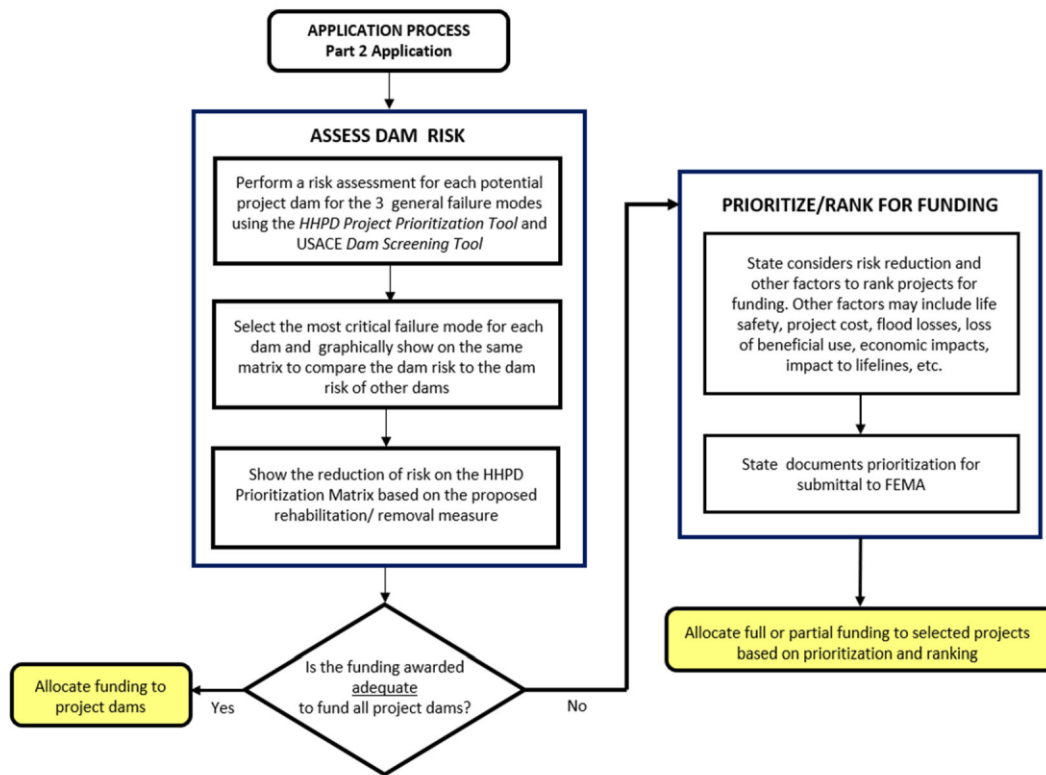


Figure 1. HHPD Priority System Process Matrix

If the HHPD funding received by the state is adequate to fund the eligible requests for HHPD funding, no additional prioritization is required, and the state can fully fund all projects. However, if the funding received by the state is inadequate to fund the eligible requests for HHPD funding, project prioritization is required. The following flowchart outlines the requirement for project prioritization.



Final Prioritization

If project prioritization is required, projects should be compared for total dam risk and dam risk reduction. Dams with the most dam risk reduction should be prioritized for funding. Grant recipients may also voluntarily choose to conduct a secondary prioritization based on other risk-based factors for situations such as results showing dams of equal risk and dam risk reduction clustered on the risk matrix or if the state already uses a more detailed dam risk methodology. FEMA encourages states to develop more detailed dam risk assessment methodologies consistent with FEMA P-1025 guidance [Dam Safety Federal Guidelines | FEMA.gov](https://www.fema.gov/dam-safety-federal-guidelines).

The need for secondary screening was requested by the states during the pilot testing of the tools in Vermont, Virginia, South Carolina, Mississippi, Oklahoma, Ohio, South Dakota, and California VT, VA, SC, MS, OK, OH, SD, and CA where over 200 dams were evaluated. This same request came from input received during the FEMA listening sessions and at presentations to states. The need for a secondary project prioritization allows the states to consider other factors when prioritizing dams of similar risk and risk reduction on the matrix including:

- State risk assessment methods that are more detailed than the FEMA screening level methodology
- More detailed estimation for PAR including transient PAR
- Evaluation of consequences other than PAR
- Preference for shovel-ready construction projects over design or planning studies
- Preference for dam removals to reduce dam risk

The secondary project prioritization methodology is specific to that state and would be determined and applied by the state. FEMA requires the primary prioritization to be conducted first using the tools provided and after dams are prioritized using PAR, the secondary prioritization can be applied to document the final state prioritization for HHPD funding.

It should be noted that after the DST is used to estimate PAR as part of the initial project prioritization, other tools such as DSS-WISE Lite can be used for secondary screening if it is deemed by the state to be more representative of PAR and then used as an input to the Project Prioritization Tool.

Optional Enhance Project Prioritization Ranking for Dams

