Rehabilitation of High Hazard Potential Dams Grant Program Fiscal Year 2022

Executive Summary and Grant Guidelines

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This document is available on the Department of Ecology's website at: https://apps.ecology.wa.gov/publications/summarypages/2311001.html.

This document contains federal and state guidelines for administration of the 2022 U.S. Federal Emergency Management Agency (FEMA), High Hazard Potential Dams (HHPD) Grant Program. (Notice of Funding Opportunity Number DHS-21-MT-041-00-01.) These guidelines apply to Ecology as the primary applicant for the grant and any subapplicants requesting pass-through funding via an Ecology subgrant.

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[1] www.ecology.wa.gov/contact

Contents

I. Overview

The Federal Emergency Management Agency (FEMA) introduced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program in 2019. It is authorized by Congress under the National Dam Safety Program Act (33 U.S. Code § 467f). The authorizing authority for the program is Public Law 92-367, Section 8A of the National Dam Safety Program Act, as amended (Pub. L. No.114-322).

The main objective of the HHPD Rehabilitation Grant Program is to support the rehabilitation of eligible high hazard potential dams through grants for technical, planning, design, and construction projects, using non-federal sponsors to administer the program. The program defines "rehabilitation" as the repair, replacement, reconstruction, or removal of a dam that is carried out to meet applicable state dam safety and security standards.

The Washington State Department of Ecology's Dam Safety Office (DSO) successfully applied for funds for fiscal years (FY) 2019, 2020, and 2021. Ecology received the following awards for each fiscal year.

Fiscal Year	Award Amount
2019	$153,007
2020	$260,322
2021	$507,208

Ecology passed through the full award amount in the form of subawards to local jurisdictions based on eligibility, screening criteria, and risk assessment score. See Appendix D for information on previous years' awards and projects.

For the FY2022 grant cycle there were two funding sources: the annual appropriation for planning and design projects and the Infrastructure Investment and Jobs Act Funding (IIJA) for construction-ready projects. FEMA awarded Ecology $588,257 from the annual appropriation source and $1,068,330 from the IIJA source.

Ecology did not receive any subapplications for construction-ready projects so will only be passing-through the funding from the annual appropriation source. See Appendix E for the project proposals Ecology submitted for FEMA approval.

II. FEMA Notice of Funding Opportunity

FEMA's Notice of Funding Opportunity (NOFO) for FY 2022 Rehabilitation of High Hazard Potential Dams (HHPD)[2] was published on May 26, 2022. The NOFO provides prospective applicants and subapplicants FEMA's requirements for eligibility and instructions for applying for the HHPD Rehabilitation Grant Program funds.

Only one application can be submitted for each state. Most states use either the State Dam Safety Office or the State Emergency Management Office. In Washington State, the State Dam Safety Office (DSO) agreed to be the applicant after consultation with the Washington Military Department's Emergency Management Division (EMD).

FEMA awards funds to states based on their meeting the NOFO prerequisites and a formula primarily based on the number of high hazard dams in each state. Although not required, the DSO has passed through all funds to dam owners. Only dams designated by DSO as "poor" or "unsatisfactory" are eligible for pass-through grant funds.

The full NOFO can be found in Appendix A.

[2] https://www.grants.gov/web/grants/search-grants.html

III. Screening Criteria

In order for a dam to be eligible for the HHPD Rehabilitation Grant Program, the organization must first meet all of FEMA's Eligibility Criteria listed below under III.A. Then Washington State Department of Ecology's Dam Safety Office (DSO) applies additional Washington State Eligibility Criteria listed below in III.B to determine which dams were invited to submit an application for the grant.

A. FEMA's Eligibility Criteria

Must be a non-federal dam that:

- Is located in a state with a state dam safety program and regulated under that state dam safety program;
- Is classified as "high hazard potential" by the state dam safety agency;
- Has an emergency action plan that:
    - Is approved by the relevant state dam safety agency; or
    - Is in conformance with state law and pending approval by the relevant state dam safety agency.
- Fails to meet minimum dam safety standards of the state in which the dam is located, as determined by the state dam safety agency.
- Has a condition assessment rating of *poor* or *unsatisfactory* as identified in the National Inventory of Dams (NID) no later than 05/15/2022.

Eligible subrecipients under FY2022 HHPD are non-federal governmental organizations and nonprofit organizations. Subrecipients must also meet the following criteria to be eligible:

- Acts in accordance with the state dam safety program and the project dam must be regulated by the state dam safety program. All activities must be approved by the state dam safety agency. Any engineering studies, plans, or design drawings and specifications must be approved, signed, and stamped by a qualified design professional registered in the state in which the project is located.
- The community in which the dam is located takes part in, and complies with, all applicable regulations of the National Flood insurance Program, and is in good standing, not on probation, suspended, or withdrawn from such Program.
- The Tribal or local government with jurisdiction over the area in which the dam is located has in place a FEMA-approved hazard mitigation plan that includes all dam risks, and complies with the Disaster Mitigation Act of 2000 (Pub. L. 106–390; 114 Stat. 1552). If the Tribal or local mitigation plan does not include all dam risks, the Subrecipient may request an extension to meet this requirement.
- Commit to provide operation and maintenance of the project for the expected life of the dam following completion of rehabilitation.

- Carries out activities relating to the public in the area around the dam in accordance with the hazard mitigation plan.
- Complies with section 5196(j)(9) of title 42 of the U.S. Code (as in effect on December 16, 2016) with respect to projects receiving assistance under this section in the same manner as recipients are required to comply in order to receive financial contributions from the Administrator for emergency preparedness purposes.
- Complies with chapter 11 of title 40; Selection of Architects and Engineers.
- Have in place (or will be developed not later than 2 years after the date of execution of a dam rehabilitation or removal project agreement and implemented not later than 2 years after the date of completion of a project) a floodplain management plan to reduce the impacts of future flood events in the area impacted by the project.

B. Washington State Eligibility Criteria

Dam criteria:

- Has a high relative risk compared to other poor condition dams as determined by DSO. This is primarily done through the application and ranking of dam risk using DSO's Risk-Based Methodology for Dam safety in Washington State (Appendix B).
- Has a high relative possibility of failure (urgency) compared to other poor condition dams.
- Has issues that can be addressed by grant-funded work to reduce risk.

Subapplicant criteria

- Must be a local or state government entity or a nonprofit with a local government sponsor.
- Has staff and resources available to perform grant management activities.
- Is in good standing with DSO. (Current on annual dam fees and responsive to DSO compliance direction.)
- Demonstrates they can meet cost sharing of 35%.

Project proposal factors

- Complexity of work considered (uses proven technologies and methodologies).
- Is cost effective (reasonable estimates, funds needed vs funds available, cost-benefit comparison).
- Builds on previous, successful grant(s) (need for additional funds, demonstrated grant experience).

IV. Risk Methodology

Each dam regulated by Ecology's Dam Safety Office (DSO) found to be in poor or unsatisfactory condition after a periodic inspection is given a risk assessment score with the use of risk-based methodology for dams (Appendix B).

DSO compiles information from dam periodic inspections in the Dam Safety System (DSS) Database for all regulated dams. Some of this information is then used for the risk-based prioritization.

All of the criteria below provide points that when added together make up the total priority points or risk assessment score.

- **Deficiency Seriousness** – Each deficiency found during a periodic inspection performed by the DSO is given a seriousness level of either, emergency, major, minor, moderate, or uncertain. Each seriousness level has corresponding points.
- **Hazard class** – Low, Significant, or High hazard depending on the number of People at Risk (PAR) below the dam within the flow path if the dam should fail. Each hazard class has corresponding points.
- **Warning Potential** – The amount of warning time before the breach water would reach the residents. Different points are given based on if the warning potential rating is adequate (> 30 min.), marginal (between 10 & 30 min.), inadequate (< 10 min.), or unknown.
- **Year Built** – DSO assigns points based on the age of the dam, because older dams typically have more deterioration and were not constructed to modern (higher) standards.

The risk assessment score is the primary criteria for selecting and prioritizing dams for the HHPD Rehabilitation Grant Program.

V. Sub-Grant Process

FEMA awards the HHPD grant funds to Washington State Department of Ecology's Dam Safety Office (DSO). FEMA's allocation of funds is based on the number of qualifying states that request funds in any given annual grant cycle, as well as the number of qualifying dams in each of those states. For the FY2022 grant cycle, DSO elects to pass through all the grant funds to dam owners (subrecipients). Although DSO is the pass-through entity and invites dam owners to express interest in a pass-through grant, FEMA makes the final determination as to which subrecipients receive funds. FEMA also approves subrecipients' project scope, schedule, and budget. See Appendix E for a list of the proposed subrecipients and projects Ecology submitted to FEMA for the FY2022 grant cycle.

Sub-grant process and timeline

- May 26, 2022 – FEMA released the Notice of Funding (NOFO) for the FY2022 HHPD Grant.
- June 1, 2022 – DSO determined which dams met grant edibility as outlined in the NOFO and sent emails of interest to 17 qualifying dams.
- July 15, 2022 – DSO submitted the application to FEMA for FY2022 HHPD funds.
- September 29, 2022 – FEMA awarded Washington State:
    - Annual Appropriation (project scoping only): $588,257.00
    - IIJA (construction only): $1,068,330.00
- October 12, 2022 – DSO sent email to 17 qualifying dams inviting them to complete an official grant application for pass-through funds.
- October 13, 2022 to November 22, 2022 – DSO worked with subapplicants to ensure eligibility and completeness of their subapplication.
- November 23, 2022 – Completed subapplications due to DSO with Project Description, Scope of Work, Budget, and Timelines. DSO received subapplications from four dams.
- November 28, 2022 to December 2, 2022 – DSO evaluated subapplications.
- December 6, 2022 – DSO contacted those awarded pass-through grants. All four subapplicants received grants.
- December 7, 2022 to December 22, 2022 – DSO worked with subapplicants to finalize the scope of work (SOW) and budgets for their subapplication to be submitted for FEMA approval.
- December 30, 2022 – Phase 2 of application in the form of an Amendment due to FEMA with updated subapplications for Analysis/Planning/Design projects.

- January 20, 2022 – Amendment due to FEMA with updated subapplications for Construction projects. (DSO did not have any subapplications for construction-ready projects.)
- Unknown – FEMA intends to make final eligibility decision for subapplicants. (In the past FEMA approval has taken a year from Ecology's amendment submittal.)
- Within 10 days from FEMA approval of projects or amendments – FEMAs approved projects will be entered into Ecology's Administration of Grants & Loans (EAGL) database.
- Within 10 days upon receipt of agreement – Pass through HHPD Grant agreements signed by subrecipients and returned to DSO.

Recipient Risk Assessment and Grant Monitoring

DSO conducts a risk assessment of all HHPD pass-through grant recipients. Ecology does this in two phases. Some risk assessment is done during initial screening and some is done with only the final subrecipients.

For the initial risk screening, DSO considers the following:

- Dam ownership. DSO currently only qualifies dams owned by a government entity or by a non-profit with a government sponsor. At this time private dam owners (even with a government sponsor) are not eligible for grant funds. This reduces risk to FEMA and Ecology and lowers the complexity of fund management, as DSO does not have staff to provide the needed high-level support required for private dam owners.
- History of good communication and responsiveness with the DSO.
- History of timely paying dam owner annual fees.
- Project complexity. Innovative or unusual pilot project or a complex project, including projects with multiple or tentative funding sources.

After FEMA has approved the subapplicants to receive a grant, DSO assesses risk to determine whether to apply any additional conditions or monitoring through the EAGL grant process. The primary tool is through a review of past audits using the Washington State Auditor's Office Report Tool[3].

Other risk factors include:

- First-time recipient.
- Change in key recipient staff.

[3] https://sao.wa.gov/reports-data/audit-reports/

- Recipient whose last loan or grant ended more than three (3) years prior to the current loan or grant offer.
- Inadequate performance on existing or past projects.
- Poor results on the financial capability assessment, or a negative change in the recipient's financial condition.

The level of risk determines the level of oversight required by Ecology throughout the term of the grant. If the subrecipient's performance or project circumstances change, DSO may reassess risk and notify the Subrecipient of any changes to administrative requirements.

Management of Grant in Ecology Grants and Loan (EAGL)

All pass-through grants are managed through EAGL for the life of the grant. Subrecipients must follow the requirements in the "Yellow Book"[4]. Added guidance can be found in the EAGL External User's Manual[5].

Reporting timeline

Ecology requires all grant and loan recipients to submit a quarterly progress report/payment request (PRPR). Progress Reports are linked with the Payment Request in EAGL. You are required to submit a progress report even if you do not have a payment request to submit for the quarter.

In order for Ecology to complete quarterly reporting to FEMA, grant subrecipients must complete the progress report in EAGL no later than the 20th of the reporting period.

Reporting Period	Report Due Date
October 1 – December 31	January 20
January 1 – March 31	April 20
April 1 – June 30	July 20
July 1 – September 30	October 20

Information in your progress report is used for Ecology's quarterly reporting to FEMA, so please be thorough when filling out the progress report task progress section, including:

- The "Summary of Accomplishments" should be written in complete sentences with a description of work that was completed on a task during that quarter.

[4] https://apps.ecology.wa.gov/publications/documents/1701004.pdf
[5] https://apps.ecology.wa.gov/publications/documents/1701015.pdf

- The “Percent Complete” is cumulative throughout the agreement period. The number should stay the same or increase with each Progress Report, and it may or may not align with the percentage of funds spent overall.
- The “Description and reason for delay” box should be filled in if there are delays. Refer to the Milestones Workplan Table you filled out at the beginning of the grant agreement process.
- The “Description and reasons for cost overruns” box should be filled in if there are cost overruns. This will prompt a conversation with the Ecology Project Manager.
- The “Upload Supporting Documents” is where you will upload any deliverables that were completed during that quarter. Do not upload financial supporting documents here.
- Use the EAGL External User’s Manual[6] for guidance needed in completing the payment request/progress report.

[6] https://apps.ecology.wa.gov/publications/documents/1701015.pdf

Appendix A
FEMA NOFO

The Department of Homeland Security (DHS) Notice of Funding Opportunity (NOFO) Fiscal Year 2022

Rehabilitation of High Hazard Potential Dams (HHPD)

Unique Entity Identifier registration information is available on GSA.gov at: Unique Entity Identifier Update | GSA.

Grants.gov registration information can be found at: https://www.grants.gov/web/grants/register.html. Detailed information regarding UEI and SAM is also provided in **Section D.6., Application and Submission Information** of this NOFO.

A. Program Description

1. Issued By

U.S. Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA)/ Federal Insurance and Mitigation Administration (FIMA), Risk Management Directorate/Planning, Safety and Building Science Division / Planning and Safety Branch, National Dam Safety Program Office (NDSP)

2. Assistance Listings Number

97.041

3. Assistance Listings Title

National Dam Safety Program

4. Funding Opportunity Title

Fiscal Year 2022 Rehabilitation of High Hazard Potential Dams (HHPD)

5. Funding Opportunity Number

DHS-22-MT-041-00-01

6. Authorizing Authority for Program

National Dam Safety Program Act (Pub. L. No. 92-367, as amended, 33 U.S.C. § 467f-2)

7. Appropriation Authority for Program

Department of Homeland Security Appropriations Act, 2022 (Pub. L. No. 117-103) Infrastructure Investment and Jobs Act (Pub. L. No. 117-58)

8. Announcement Type

Initial

9. Program Category

Mitigation

Program Overview, Objectives, and Priorities

a. Overview

FEMA's National Dam Safety Program (NDSP) is committed to protecting lives and property from the risks associated with dams. The Rehabilitation of High Hazard Potential Dams (HHPD) Grant Program makes available federal funds to eligible states for pass through to non-Federal governmental organizations or nonprofit organizations for the rehabilitation of eligible high hazard potential dams that fail to meet minimum state dam safety standards and pose unacceptable risk to life and property.

For the purposes of the HHPD Grant Program, rehabilitation means the repair, replacement, reconstruction, or removal of a dam that is carried out to meet applicable state dam safety and security standards.

The Fiscal Year 2022 HHPD grant is available to support two categories of funding: (1) Project Scoping, Engineering and Design and (2) Construction-ready Projects

The HHPD Program incentivizes eligible states to:

- Provide financial assistance for repair, removal, or rehabilitation of eligible high hazard potential dams.
- Incorporate risk-informed analysis and decision making into their dam safety practice and HHPD rehabilitation investments.
- Incorporate risk-analysis results and information and consider all dam risk in state, local, tribal, and territorial mitigation planning.
- Promote community preparedness by requiring recipients to develop and implement floodplain management plans that address potential measures, practices, and policies to reduce loss of life, injuries, damage to property and facilities, public expenditures, and other adverse effects of flooding.
- Reduce costs associated with dam rehabilitation through the deployment of innovative solutions and technologies.

Given the requirements of this grant (e.g. National Flood Insurance Program participation, state and local hazard mitigation plans (HMP), floodplain management plan, risk prioritization, state dam safety agency approval of the award), applicants must pursue this grant in coordination with the State Dam Safety Officer and the State Hazard Mitigation Officer, regardless of which entity will implement the grant. Contact information for the State Hazard Mitigation Officers (SHMOs) is provided on the FEMA website at http://www.fema.gov/state-hazard-mitigation-officers.

The HHPD supports DHS Strategic Goal 5: Strengthen Preparedness and Resilience, Objective 5.1: Build a National Culture of Preparedness and Presidential Policy Directive 8: Build and Sustain National Preparedness. Specifically, the HHPD supports Sub-Objective 5.1.1 of Strategic Goal 5 to incentivize investments that reduce risk and increase pre-disaster mitigation, including expanding

the use of insurance to manage risk. DHS Strategic Plan, Fiscal years 2020-2024 has identified strengthening national preparedness and resilience as one of the basic Homeland Security missions. This initiative supports this mission by providing grant assistance for eligible high hazard potential dams that pose an unacceptable risk to the public. This program also supports Goal 2: Lead Whole of Community in Climate Resilience, Objective 2.3, Empower Risk-Informed Decision Making, of the 2022-2026 FEMA Strategic Plan.

b. Objectives

The objective of the program is to:

1. Reduce or eliminate risk of eligible high hazard potential dams.

c. Priorities

For FY2022, the HHPD priorities are: planning, design, and construction activities related to the repair, removal, or rehabilitation of eligible high hazard dams.

Performance Measures

The following list provides Performance Measures aligned with Program Objectives and associated eligible activities. Applicants may choose one or more activities from the list below. Applicants may propose additional activities to support the program objectives; however, applicants must discuss additional activities with the FEMA Program Officer for approval and inclusion into the workplan.

Program Objective: Reduce or eliminate risk of eligible high hazard potential dam (HHPD)

Performance Measures

1.1 Planning tasks and activities, studies and analysis for pre-construction phases, scoping activities, and permit applications.

Performance Measure 1.1: Number of eligible HHPD dams that have resulted in the completion of studies and analysis for pre-construction phases, scoping activities, and permit applications.

1.2 Preliminary and final design package and required permit approvals.

Performance Measure 1.2: Number of eligible HHPD dams that have resulted in the completion of preliminary and final engineering design package and permits.

1.3 Construction activities that support dam rehabilitation or removal projects. Performance Measure 1.3: Number of eligible HHPD dams that result in construction projects for dam rehabilitation or removal.

Applicants are to establish Performance Measurement targets for activities submitted for funding under this award. *See* Appendix A: FY2022 Performance Measure Targets.

B. Federal Award Information

1. Available Funding for the NOFO: $22,000,000.00

Annual Appropriation: $11,640,000.00
Infrastructure Investment and Jobs Act Funding: $10,360,000.00

Applicants should apply for planning and design projects under the Annual Appropriated funds. Applicants with construction-ready projects should apply for the Infrastructure Investment and Jobs Act funding.

The allocation of available HHPD grant funds is determined by 33 U.S.C § 467f- 2(g)(2) Allocation of Funds. The allocation of the HHPD funds is calculated as follows:

(i) Equal distribution

One-third of the available funding will be distributed equally among states in which the projects for which eligible applications are submitted are located.

(ii) Need-based

Two-thirds of the available funding will be distributed among states in which the projects for which eligible applications are submitted are located based on the proportion that:

a. the number of eligible high hazard potential dams in the state; bears to

b. the number of eligible high hazard potential dams in all such states.

2. Projected Number of Awards: **50**

3. Period of Performance: **36 Months**

Extensions to the period of performance are allowed. For additional information on period of performance extensions, please refer to Section H.3, Period of Performance Extensions.

FEMA awards under most programs, including this program, only include one budget period, so it will be same as the period of performance. See 2 C.F.R. § 200.1 for definitions of "budget period" and "period of performance."

4. Projected Period of Performance Start Date(s): **09/15/2022**

5. Projected Period of Performance End Date(s): **09/14/2025**

6. Funding Instrument Type: **Grant**

C. Eligibility Information

1. Eligible Applicants

A state with a state dam safety program authorized by state legislation is the only entity eligible to submit HHPD applications to DHS/FEMA.

For the purposes of the HHPD, the term "state" means each of the several states of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any other territory or possession of the United States.

2. Applicant Eligibility Criteria

Each eligible state must designate one State Administrative Agency (SAA) to serve as the applicant for HHPD funding. Each SAA may submit only one (1) HHPD grant application to FEMA and be able to comply with regulations associated with receipt of federal financial contributions from FEMA.

Each Recipient must have a FEMA-approved state mitigation plan that includes all dam risks; and complies with the Disaster Mitigation Act of 2000 (Pub. L. 106–390; 114 Stat. 1552) that amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-707. For more information on the Mitigation Plan Requirements, *see* Section E.1.a, Programmatic Criteria for Mitigation Plan Requirement. For links to mitigation plan guidance documents and for questions, *see* Section H.12., Mitigation Plan Requirement Resources.

3. Subrecipient Eligibility Criteria

Eligible subrecipients under FY2022 HHPD are non-federal governmental organizations (other than the designated applicant) and nonprofit organizations. Under FY 2022 HHPD, eligible subrecipients apply for and receive subawards directly from the SAA. Subrecipients must meet the following criteria to be eligible:

(A) Acts in accordance with the state dam safety program. Additionally, the project dam must be regulated by the state dam safety program. All activities must be approved by the state dam safety agency. Any engineering studies, plans, or design drawings and specifications must be approved, signed, and stamped by a qualified design professional registered in the state in which the project is located.

(B) The community in which the dam is located participates in, and complies with, all applicable regulations of the National Flood insurance Program, and is in good standing, not on probation, suspended, or withdrawn from such Program;

(C) The Tribal or local government with jurisdiction over the area in which the dam is located has in place an approved hazard mitigation plan that includes all dam risks, and complies with the Disaster Mitigation Act of 2000 (Pub. L. 106–390; 114 Stat. 1552). For more information on the Mitigation Plan Requirements, *see* Section E.1.a., Programmatic Criteria for Mitigation Plan Requirement. If the Tribal or local mitigation plan does not include all dam risks, the subrecipient may request an extension to meet this requirement. For more information on the

Mitigation Plan Requirements, *see* Section H.13, Mitigation Plan Requirement Extension Requests. For links to mitigation plan guidance documents and for questions, *see* Section H.12., Mitigation Plan Requirement Resources.

(D) Commit to provide operation and maintenance of the project for the expected life of the dam following completion of rehabilitation;

(E) Carries out activities relating to the public in the area around the dam in accordance with the hazard mitigation plan.

(F) Complies with section 5196(j)(9) of title 42 of the U.S. Code (as in effect on December 16, 2016) with respect to projects receiving assistance under this section in the same manner as recipients are required to comply in order to receive financial contributions from the Administrator for emergency preparedness purposes. *See* Section D.13.a., Requirements Related to Contractor and Subcontractor Wages, for additional information.

(G) Complies with chapter 11 of the title 40; Selection of Architects and Engineers. (*See* Section D.13.b., Requirements Related to Contract and Subcontract Services.)

(H) Have in place (or will be developed not later than 2 years after the date of execution of a dam rehabilitation or removal project agreement and implemented not later than 2 years after the date of completion of a project) a floodplain management plan to reduce the impacts of future flood events in the area impacted by the project. The floodplain management plan shall address:

a. potential measures, practices, and policies to reduce loss of life, injuries, damage to property and facilities, public expenditures, and other adverse impacts of flooding in the area protected by the project;

b. plans for flood fighting and evacuation; and

c. public education and awareness of flood risks.

For additional information, please *see* Section H.18., Floodplain Management Plan.

4. Other Program-Specific Eligibility Criteria

a. Approved Hazard Mitigation Plan

The state must have in place (by the application deadline and at the time of obligation of grant funds) an approved state hazard mitigation plan that includes all dam risks (*See* Section H.19., Definitions, for the definition of All Dam Risk) and complies with the Disaster Mitigation Act of 2000 (Public Law 106–390; 114 Stat. 1552). If an HHPD applicant does not have a state mitigation plan that includes all dam risks, the applicant may request an extension to meet this requirement. (*See* Section H.13., Mitigation Plan Requirement Extension Requests).

b. Allowable Activities

See Section H.17., Eligible Activities, for more information on allowable activities. *See* Section D.13.b., Requirements Related to Contract and Subcontract Services, for information about funding restrictions.

c. List of Eligible High Hazard Dams

The SAA must submit a list of all eligible high hazard potential dams in their state with the application. The SAA must submit an official assurance statement (signed by the State Dam Safety Officer or Governor's Authorized Representative [GAR]) that all dams included on the list of eligible high hazard potential dams are regulated by the state dam safety program and meet the following HHPD criteria for eligible high hazard potential dams.

A dam considered as eligible under grant must meet the following criteria:

"(A) In general, the term "eligible high hazard potential dam" means a non-Federal dam that—

(i) is located within a state with a state dam safety program and regulated under that state dam safety program;
(ii) is classified as high hazard potential by the relevant state dam safety agency;
(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 dam safety agency;
(v) and has a condition assessment rating of POOR or UNSATISFACTORY as identified in the National Inventory of Dams (NID) no later than 05/15/2022.

(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." 33 U.S.C. § 467(4)(A)

Note: Dams with FAIR, SATISFACTORY or NOT RATED condition assessments are not eligible for the HHPD program.

If the SAA chooses to be a pass-through entity, the SAA must contact potential subrecipients to identify potential eligible subrecipients with an eligible dam who express interest in obtaining a grant *for a specific planning or design project* and are capable of meeting the requirements of the HHPD grant. *See* Section H.17., Eligible Activities, for information on Eligible Activities.

The list or prospective eligible dams will be used to allocate grant funds to the state. *See* Section H.15., Example Using the Funding Formula, for a sample calculation on how eligible dams is used for state grant allocations.

Upon request, the SAA must provide to FEMA substantiating documentation that documents dams submitted are eligible under the HHPD grant. The requested documentation may include, but is not limited to, copies of the regulatory notices, risk assessments, engineering analyses, etc.

d. List of Eligible High Hazard Dams Template

The list of dams must be submitted in table format with NID Data and must include the below column row headers and must be signed by the State Dam Safety Agency or GAR:

- Does the state have a state dam safety program?
- Dam Name
- NID ID
- Longitude
- Latitude
- Hazard Potential
- State Approved EAP? (Y/N)
- EAP Date
- Owner Type
- Built by USDA/NRCS? (Y/N)
- Licensed by FERC? (Y/N)
- NID Condition Assessment*
- Fails to Meet Minimum State Dam Safety Standards
- Dam has a documented Dam Safety Deficiency?**
- Was Dam Safety Deficiency caused by lack of Routine Operation and Maintenance?
- Was Dam Safety Deficiency caused by Deferred Maintenance?
- Brief Description of Deficiency
- Name of potential Subrecipient that has indicated interest in HHPD and is capable of meeting HHPD requirements***

* FEMA will review the Condition Assessment data reported in the NID to validate a dam's eligibility on 5/15/2022. Dams that meet the NID criteria for POOR or UNSATISFACTORY condition assessments may be eligible to include on the list of eligible high hazard potential dams. Upon request, the SAA must provide to FEMA substantiating documentation that verify dams submitted are eligible under the HHPD grant. The requested documentation may include, but is not limited to, copies of the regulatory notices, risk assessments, engineering analyses, etc.

**Dam Safety Deficiency (Source NID): A load capacity limit or other issue that can result in a failure of the dam or appurtenant structure. It is a characteristic or condition that does not meet the applicable minimum regulatory criteria.

*** the SAA must contact potential subrecipients to identify potential eligible subrecipients with an eligible dam who express interest in obtaining a grant *for a specific planning or* design *project* and are capable of meeting the requirements of the HHPD grant. (Only fill out this field if the potential subrecipient has been contacted or is the SAA.)

5. Cost Share or Match

Assistance provided under the HHPD grant is subject to a non-Federal cost-sharing requirement of not less than 35 percent. Federal funding is available for up to 65 percent of the eligible activity costs. The remaining 35 percent of eligible activity costs must be derived from non-federal sources, which may be in-kind. Requirements for cash and third-party in- kind contributions can be found in 2 C.F.R. § 200.306. The non-Federal cost share contribution is not limited to 65 percent.

The non-federal cost share contribution is calculated based on the total cost of the proposed activity. The calculation to determine the non-Federal Cost share is:

Non-Federal Share = [0.35*(Federal Share)]/(0.65).

For example, if the total cost is $400,000 and the non-Federal cost share is 35 percent, then the non-federal contribution is $140,000: 35 percent of $400,000 is $140,000. The federal share cannot exceed $260,000 ($400,000 x 65%).

D. Application and Submission Information

1. Key Dates and Times

a. Application Start Date: **05/16/2022**

b. Application Submission Deadline: **07/15/2022 at 5:00 PM ET**

All applications **must** be received by the established deadline.

The Non-Disaster (ND) Grants System has a date stamp that indicates when an application is submitted. Applicants will receive an electronic message confirming receipt of their submission. For additional information on how an applicant will be notified of application receipt, *see* Section D.9., Timely Receipt Requirements and Proof of Timely Submission.

FEMA will not review applications that are received after the deadline or consider these late applications for funding. FEMA may, however, extend the application deadline on request for any applicant who can demonstrate that good cause exists to justify extending the deadline. Good cause for an extension may include technical problems outside of the applicant's control that prevent submission of the application by the deadline, other exigent or emergency circumstances, or statutory requirements for FEMA to make an award.

Applicants experiencing technical problems outside of their control must notify FEMA as soon as possible and before the application deadline. Failure to timely notify FEMA of the issue that prevented the timely filing of the application may preclude consideration of the award. "Timely notification" of FEMA means: prior to the application deadline and within 48 hours after the applicant became aware of the issue.

A list of FEMA contacts can be found in Section G.1.a, Program Office Contact. For additional assistance using the ND Grants System, please contact the ND Grants Service Desk at (800) 865-4076 or NDGrants@fema.dhs.gov. The ND Grants Service Desk is

available Monday through Friday, 9:00 AM – 6:00 PM Eastern Time (ET). For programmatic or grants management questions, please contact your Program Analyst or Grants Specialist. If applicants do not know who to contact or if there are programmatic questions or concerns, please contact the Centralized Scheduling and Information Desk (CSID) by phone at (800) 368-6498 or by e-mail at askcsid@fema.dhs.gov, Monday through Friday, 9:00 AM – 5:00 PM ET.

FEMA will not review applications that are received after the deadline or consider these late applications for funding. FEMA may, however, extend the application deadline on request for any applicant who can demonstrate that good cause exists to justify extending the deadline. Good cause for an extension may include technical problems outside of the applicant's control that prevent submission of the application by the deadline, other exigent or emergency circumstances, or statutory requirements for FEMA to make an award.

Applicants experiencing technical problems outside of their control must notify FEMA as soon as possible and before the application deadline. Failure to timely notify FEMA of the issue that prevented the timely filing of the application may preclude consideration of the award. "Timely notification" of FEMA means the following: prior to the application deadline and within 48 hours after the applicant became aware of the issue.

c. Anticipated Funding Selection Date: **No later than 09/15/2022**

d. Anticipated Award Date: **No later than 09/30/2022**

e. Other Key Dates

Event	Suggested Deadline for Completion
Obtaining Unique Entity Identifier (UEI) number	Four weeks before actual submission deadline
Obtaining a valid Employer Identification Number (EIN)	Four weeks before actual submission deadline
Creating an account with login.gov	Four weeks before actual submission deadline
Registering in SAM or Updating SAM registration	Four weeks before actual submission deadline
Registering in Grants.gov	Four weeks before actual submission deadline
Registering in ND Grants	Four weeks before actual submission deadline
Starting application in Grants.gov	One week before actual submission deadline
Submitting the final application in ND Grants	By the submission deadline

2. Agreeing to Terms and Conditions of the Award

By submitting an application, applicants agree to comply with the requirements of this NOFO and the terms and conditions of the award, should they receive an award.

3. Address to Request Application Package

Initial applications are processed through the Grants.gov portal. Final applications are completed and submitted through FEMA's Non-Disaster Grants (ND Grants) System. Application forms and instructions are available at Grants.gov. To access these materials, go to http://www.grants.gov.

4. Steps Required to Obtain a Unique Entity Identifier, Register in the System for Award Management (SAM), and Submit an Application

Applying for an award under this program is a multi-step process and requires time to complete. Applicants are encouraged to register early as the registration process can take four weeks or more to complete. Therefore, registration should be done in sufficient time to ensure it does not impact your ability to meet required submission deadlines.

Please review the table above for estimated deadlines to complete each of the steps listed. Failure of an applicant to comply with any of the required steps before the deadline for submitting an application may disqualify that application from funding.

To apply for an award under this program, all applicants must:

a. Apply for, update, or verify their Unique Entity Identifier (UEI) number from SAM.gov and Employer Identification Number (EIN) from the Internal Revenue Service;
b. In the application, provide an UEI number;
c. Have an account with login.gov;
d. Register for, update, or verify their SAM account and ensure the account is active before submitting the application;
e. Create a Grants.gov account;
f. Add a profile to a Grants.gov account;
g. Establish an Authorized Organizational Representative (AOR) in Grants.gov;
h. Register in ND Grants
i. Submit an initial application in Grants.gov;
j. Submit the final application in ND Grants, including electronically signing applicable forms; and
k. Continue to maintain an active SAM registration with current information at all times during which it has an active federal award or an application or plan under consideration by a federal awarding agency. As part of this, applicants must also provide information on an applicant's immediate and highest-level owner and subsidiaries, as well as on all predecessors that have been awarded federal contracts or federal financial assistance within the last three years, if applicable.

Specific instructions on how to apply for, update, or verify an UEI number or SAM registration or establish an AOR are included below in the steps for applying through Grants.gov.

Applicants are advised that FEMA may not make a federal award until the applicant has complied with all applicable SAM requirements. Therefore, an applicant's SAM registration must be active not only at the time of application, but also during the application review period and when FEMA is ready to make a federal award. Further, as noted above, an applicant's or recipient's SAM registration must remain active for the duration of an active federal award. If an applicant's SAM

registration is expired at the time of application, expires during application review, or expires any other time before award, FEMA may determine that the applicant is not qualified to receive a federal award and use that determination as a basis for making a federal award to another applicant.

Per 2 C.F.R. § 25.110(c)(2)(iii), if an applicant is experiencing exigent circumstances that prevents it from obtaining an UEI number and completing SAM registration prior to receiving a federal award, the applicant must notify FEMA as soon as possible by contacting askcsid@fema.dhs.gov and providing the details of the circumstances that prevent completion of these requirements. If FEMA determines that there are exigent circumstances and FEMA has decided to make an award, the applicant will be required to obtain an UEI number, if applicable, and complete SAM registration within 30 days of the federal award date.

5. Electronic Delivery

DHS is participating in the Grants.gov initiative to provide the grant community with a single site to find and apply for grant funding opportunities. DHS encourages or requires applicants to submit their applications online through Grants.gov, depending on the funding opportunity.

For this funding opportunity, FEMA requires applicants to submit initial applications through Grants.gov and a final application through ND Grants.

6. How to Register to Apply through Grants.gov

a. General Instructions:

The registration process can take up to four weeks to complete. To ensure an application meets the deadline, applicants are advised to start the required steps well in advance of their submission.

Organizations must have an UEI number, an EIN, an active System for Award Management (SAM) registration and Grants.gov account to apply for grants.

Organizations must also have a Grants.gov account to apply for an award under this program. Creating a Grants.gov account can be completed online in minutes, but UEI and SAM registrations may take several weeks. Therefore, an organization's registration should be done in sufficient time to ensure it does not impact the entity's ability to meet required application submission deadlines. Complete organization instructions can be found on Grants.gov here: https://www.grants.gov/web/grants/applicants/organization-registration.html.

If individual applicants are eligible to apply for this grant funding opportunity, refer to: https://www.grants.gov/web/grants/applicants/registration.html.

b. Obtain an UEI Number:

All entities applying for funding, including renewal funding, prior to April 4, 2022, must have a UEI number. Applicants must enter the UEI number in the applicable data entry field on the SF-424 form.

For more detailed instructions for obtaining a UEI number, refer to: Sam.gov.

c. Obtain Employer Identification Number

All entities applying for funding must provide an Employer Identification Number (EIN). The EIN can be obtained from the IRS by visiting: https://www.irs.gov/businesses/small- businesses-self-employed/apply-for-an-employer-identification-number-ein-online.

d. Create a login.gov account:

Applicants must have a login.gov account in order to register with SAM or update their SAM registration. Applicants can create a login.gov account here: https://secure.login.gov/sign_up/enter_email?request_id=34f19fa8-14a2-438c-8323-a62b99571fd3.

Applicants only have to create a login.gov account once. For applicants that are existing SAM users, use the same email address for the login.gov account as with SAM.gov so that the two accounts can be linked.

For more information on the login.gov requirements for SAM registration, refer to: https://www.sam.gov/SAM/pages/public/loginFAQ.jsf.

e. Register with SAM:

All organizations applying online through Grants.gov must register with SAM. Failure to register with SAM will prevent your organization from applying through Grants.gov. SAM registration must be renewed annually.

For more detailed instructions for registering with SAM, refer to: https://www.grants.gov/web/grants/applicants/organization-registration/step-2-register-with-sam.html.

Note: As a new requirement per 2 C.F.R. § 25.200, applicants must also provide the applicant's immediate and highest-level owner, subsidiaries, and predecessors that have been awarded federal contracts or federal financial assistance within the last three years, if applicable.

i. ADDITIONAL SAM REMINDERS

Existing SAM.gov account holders should check their account to make sure it is "ACTIVE." SAM registration should be completed at the very beginning of the application period and should be renewed annually to avoid being "INACTIVE." Please allow plenty of time before the grant application submission deadline to obtain an UEI number and then to register in SAM. It may be four weeks or more after an applicant submits the SAM registration before the registration is active in SAM, and then it may be an additional 24 hours before FEMA's system recognizes the information.

It is imperative that the information applicants provide is correct and current. Please ensure that your organization's name, address, and EIN are up to date in SAM and that the UEI number

used in SAM is the same one used to apply for all other FEMA awards. Payment under any FEMA award is contingent on the recipient's having a current SAM registration.

ii. HELP WITH SAM

The SAM quick start guide for new recipient registration and SAM video tutorial for new applicants are tools created by the General Services Administration (GSA) to assist those registering with SAM. If applicants have questions or concerns about a SAM registration, please contact the Federal Support Desk at https://www.fsd.gov/fsd-gov/home.do or call toll free (866) 606-8220.

f. Create a Grants.gov Account:

The next step in the registration process is to create an account with Grants.gov. If applicable, applicants must know their organization's UEI number to complete this process.

For more information, follow the on-screen instructions or refer to: https://www.grants.gov/web/grants/applicants/registration.html.

See Section D.8., Submitting the Final Application in ND Grants, for instructions on how to register early in ND Grants.

g. Add a Profile to a Grants.gov Account:

A profile in Grants.gov corresponds to a single applicant organization the user represents (i.e., an applicant) or an individual applicant. If you work for or consult with multiple organizations and have a profile for each, you may log in to one Grants.gov account to access all of your grant applications. To add an organizational profile to your Grants.gov account, if applicable, enter the UEI number for the organization in the UEI field while adding a profile.

For more detailed instructions about creating a profile on Grants.gov, refer to: https://www.grants.gov/web/grants/applicants/registration/add-profile.html.

h. EBiz POC Authorized Profile Roles:

After you register with Grants.gov and create an Organization Applicant Profile, the organization applicant's request for Grants.gov roles and access is sent to the EBiz POC. The EBiz POC will then log in to Grants.gov and authorize the appropriate roles, which may include the Authorized Organization Representative (AOR) role, thereby giving you permission to complete and submit applications on behalf of the organization. You will be able to submit your application online any time after you have been assigned the AOR role.

For more detailed instructions about creating a profile on Grants.gov, refer to: https://www.grants.gov/web/grants/applicants/registration/authorize-roles.html.

i. Track Role Status:

To track your role request, refer to:
https://www.grants.gov/web/grants/applicants/registration/track-role-status.html.

j. Electronic Signature:

When applications are submitted through Grants.gov, the name of the organization applicant with the AOR role that submitted the application is inserted into the signature line of the application, serving as the electronic signature. The EBiz POC must authorize individuals who are able to make legally binding commitments on behalf of the organization as an AOR; this step is often missed, and it is crucial for valid and timely submissions.

7. How to Submit an Initial Application to FEMA via Grants.gov

Standard Form 424 (SF-424) is the initial application for this NOFO.

Grants.gov applicants can apply online using a workspace. A workspace is a shared, online environment where members of a grant team may simultaneously access and edit different web forms within an application. For each Notice of Funding Opportunity, you can create individual instances of a workspace. Applicants are encouraged to submit their initial applications in Grants.gov at least seven days before the application deadline.

In Grants.gov, applicants need to submit the following forms:

- SF-424, Application for Federal Assistance
- Grants.gov Lobbying Form, Certification Regarding Lobbying

Below is an overview of applying on Grants.gov. For access to complete instructions on how to apply for opportunities using Workspace, refer to:
https://www.grants.gov/web/grants/applicants/workspace-overview.html.

a. Create a Workspace:

Creating a workspace allows you to complete it online and route it through your organization for review before submitting.

b. Complete a Workspace:

Add participants to the workspace to work on the application together, complete all the required forms online or by downloading PDF versions, and check for errors before submission.

c. Adobe Reader:

If you decide not to apply by filling out webforms you can download individual PDF forms in Workspace so that they will appear similar to other Standard or DHS forms. The individual PDF forms can be downloaded and saved to your local device storage, network drive(s), or external drives, then accessed through Adobe Reader.

NOTE: Visit the Adobe Software Compatibility page on Grants.gov to download the appropriate version of the software at: https://www.grants.gov/web/grants/applicants/adobe- software-compatibility.html.

d. Mandatory Fields in Forms:

In the forms, you will note fields marked with an asterisk and a different background color. These fields are mandatory fields that must be completed to successfully submit your application.

e. Complete SF-424 Fields First:

The forms are designed to fill in common required fields across other forms, such as the applicant name, address, and UEI number. To trigger this feature, an applicant must complete the SF-424 information first. Once it is completed, the information will transfer to the other forms.

f. Submit a Workspace:

An application may be submitted through workspace by clicking the "Sign and Submit" button on the Manage Workspace page, under the Forms tab. Grants.gov recommends submitting your application package at least 24-48 hours prior to the close date to provide you with time to correct any potential technical issues that may disrupt the application submission.

g. Track a Workspace:

After successfully submitting a workspace package, a Grants.gov Tracking Number (GRANTXXXXXXXX) is automatically assigned to the application. The number will be listed on the confirmation page that is generated after submission. Using the tracking number, access the Track My Application page under the Applicants tab or the Details tab in the submitted workspace.

h. Additional Training and Applicant Support:

For additional training resources, including video tutorials, refer to: https://www.grants.gov/web/grants/applicants/applicant-training.html.

Grants.gov provides applicants 24/7 (except federal holidays) support via the toll-free number (800) 518-4726, email at support@grants.gov and the website at https://www.grants.gov/support.html. For questions related to the specific grant opportunity, contact the number listed in the application package of the grant you are applying for.

If you are experiencing difficulties with your submission, it is best to call the Grants.gov Support Center and get a ticket number. The Support Center ticket number will assist FEMA with tracking your issue and understanding background information on the issue.

8. Submitting the Final Application in ND Grants

After submitting the initial application in Grants.gov, eligible applicants will be notified by FEMA and asked to proceed with submitting their complete application package in ND Grants. Applicants can register early with ND Grants and are encouraged to begin their ND Grants registration at the

time of this announcement or, at the latest, seven days before the application deadline. Early registration will allow applicants to have adequate time to start and complete their applications.

Applicants needing assistance registering for the ND Grants system should contact ndgrants@fema.dhs.gov or (800) 865-4076. For step-by-step directions on using the ND Grants system and other guides, please see https://www.fema.gov/grants/guidance-tools/non- disaster-grants-management-system.

In ND Grants, applicants will be prompted to submit the standard application information and any program-specific information required as described in Section D.10., Content and Form of Application Submission. The Standard Forms (SF) are auto generated in ND Grants, but applicants may access these forms in advance through the Forms tab under the SF-424 family on Grants.gov. Applicants should review these forms before applying to ensure they have all the information required.

For additional application submission requirements, including program-specific requirements, please refer to Section D.10., Content and Form of Application Submission, or the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020).

9. Timely Receipt Requirements and Proof of Timely Submission

As application submission is a two-step process, the applicant with the AOR role who submitted the application in Grants.gov will receive an acknowledgement of receipt and a tracking number (GRANTXXXXXXXX) from Grants.gov with the successful transmission of its initial application. This notification does not serve as proof of timely submission, as the application is not complete until it is submitted in ND Grants. Applicants can also view the ND Grants Agency Tracking Number by accessing the Details tab in the submitted workspace section in Grants.gov, under the Agency Tracking Number column. Should the Agency Tracking Number not appear, the application has not yet migrated from Grants.gov into the ND Grants System. Please allow 24 hours for your ND Grants application tracking number to migrate.

All applications must be received in ND Grants by **5:00 PM ET** on the application deadline. Proof of timely submission is automatically recorded by ND Grants. An electronic date/time stamp is generated within the system when the application is successfully received by ND Grants. Additionally, the applicant(s) listed as contacts on the application will receive a system-generated email to confirm receipt.

Applicants who experience system-related issues will be addressed until 3:00 PM ET on the date applications are due. No new system-related issues will be addressed after this deadline. Applications not received by the application submission deadline will not be accepted.

10. Content and Form of Application Submission

a. Standard Required Application Forms and Information

The following forms or information are required to be submitted in either Grants.gov or ND Grants. The Standard Forms (SF) are submitted either through Grants.gov, through forms generated in ND Grants, or as an attachment in ND Grants. Applicants may also access the SFs at https://www.grants.gov/web/grants/forms/sf-424-family.html.

iii. GRANTS.GOV

- SF-424, Application for Federal Assistance, initial application submitted through Grants.gov
- Grants.gov Lobbying Form, Certification Regarding Lobbying, submitted through Grants.gov

iv. ND GRANTS

- SF-424A, Budget Information (Non-Construction), submitted via the forms generated by ND Grants
    - For construction under an award, submit SF-424C, Budget Information (Construction), submitted via the forms generated by ND Grants, in addition to or instead of SF-424A
- SF-424B, Standard Assurances (Non-Construction), submitted via the forms generated by ND Grants
    - For construction under an award, submit SF-424D, Standard Assurances (Construction), submitted via the forms generated by ND Grants, in addition to or instead of SF-424B
- SF-LLL, Disclosure of Lobbying Activities, submitted via the forms generated by ND Grants
- Indirect Cost Agreement or Proposal, submitted as an attachment in ND Grants if the budget includes indirect costs and the applicant is required to have an indirect cost rate agreement or proposal. If the applicant does not have or is not required to have an indirect cost rate agreement or proposal, please see Section D.13., Funding Restrictions and Allowable Costs, for further information regarding allowability of indirect costs and whether alternatives to an indirect cost rate agreement or proposal might be available, or contact the relevant FEMA staff identified in Section G.1.a., Program Office Contact for further instructions.

Generally, applicants have to submit either the non-construction forms (i.e., SF-424A and SF-424B) or construction forms (i.e., SF-424C and SF-424D), meaning that applicants that only have construction work and do not have any non-construction work need only submit the construction forms (i.e., SF-424C and SF-424D) and not the non-construction forms (i.e., SF-424A and SF-424B), and vice versa. However, applicants who have both construction and non-construction work under this program need to submit both the construction and non- construction forms.

b. Program-Specific Required Forms and Information

Contact your NDSP Program Officer for templates to submit Program-Specific Information.

The SAA must include the following five documents in the initial application package—each document must be labeled and numbered. At the top of each document provide the following:

- State/Agency Name
- FY2022 HHPD
- Name and contact information (completing documents)
- Date

The following program-specific forms or information are required to be submitted in ND Grants:

1. List of eligible high hazard potential dams, including National Inventory of Dams (NID) ID Identifiers, in their state with the application. The SAA or GAR should sign a statement that the list of eligible high hazard potential dams has been reviewed and approved. *See* Section C.4.c., List of Eligible High Hazard Potential Dams, for eligibility requirements and Section C.4.d., List of Eligible High Hazard Potential Dams Template, for an example table template for submittal.
2. Proposed Budget and HHPD proposed projects/activities: Indicate and describe proposed activities: (1) project scoping and engineering design, and or (2) construction. Include a brief project narrative on how the funds will advance HHPD priorities and meet performance goals and include:
    a. Proposed Budget
    b. Percent of cost share: Submit the cost share and a summary of in-kind activities. *See* **Section C.5., Cost Share or Match**, for requirements.
3. Statement of assurances signed by authorized state official.
    a. Statement and date of FEMA approval of state HMP which includes all-dam risk (insert ref/policy)
    b. Statement the applicant is able to comply with regulations associated with receipt of federal financial contributions from FEMA.
    c. If Pass-through Entity: Assurance statement that subrecipients will meet all criteria listed in Section C.3., Subrecipient Eligibility Criteria.
    d. Assurance statement that the 35 percent cost share requirement can be met. See Section C.5., Cost Share or Match, for requirements.
4. State Administrative Plan.

    At a minimum, the State Administrative Plan must include the items listed below:

    a. Designation of the SAA responsible for program administration.
    b. Identification of the State Official responsible for financial and program matters related to the High Hazard Potential Dam Rehabilitation Grant Program.
    c. Timely submission of HHPD quarterly performance progress reports on approved projects.
    d. Determination of staffing requirements and sources of staff necessary for administration of the program.
    e. If applicable, the establishment of procedures as a Pass-through Entity:
        1. Identify, select, and notify potential subrecipients of the availability of the program.

2. Ensure that potential subrecipients are provided information on the application process, program eligibility, including the requirement for an approved mitigation plan that includes all dam risks for the jurisdiction where the dam is located, and key deadlines.
3. Determine subrecipient eligibility, including the requirement for an approved mitigation plan for the jurisdiction where the dam is located.
4. Submit revisions or amendments for FEMA review and approval. *See* Section F.2, Pass-Through Requirements.
5. Conduct environmental and floodplain management reviews.
6. Establish priorities for selection of projects.
7. Process requests for advances of funds and reimbursement.
8. Monitor and evaluate the progress and completion of the selected projects.
9. Review and approve cost overruns.
10. Process appeals.
11. Provide technical assistance as required to subrecipient(s) and/or jurisdiction where the dam is located including coordination with State Hazard Mitigation Officer regarding the eligibility requirement to have an approved mitigation plan that includes all dam risks and complies with the Disaster Mitigation Act of 2000 (Public Law 106–390; 114 Stat. 1552). For more information on the Mitigation Plan Requirements, *see* Section E.1., Application Evaluation Criteria.
12. Comply with the administrative and audit requirements of 2 C.F.R. Part 200.

11. Other Submission Requirements

Fair Wages and Labor Standards: Regarding payment of laborers and mechanics employed by contractors or subcontractors in the performance of construction work financed with the assistance of any contribution of Federal funds. Section 5196(j)(9) of the US Code of Laws Title 42.

For a grant of an amount greater than $1,000,000, an eligible subrecipient that receives the grant shall require that each contract and subcontract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping, and related services entered into using funds from the grant be awarded in the same manner as a contract for architectural and engineering services is awarded under—

(A) chapter 11 of title 40; or
(B) an equivalent qualifications-based requirement prescribed by the relevant State.

12. Intergovernmental Review

An intergovernmental review may be required. Applicants must contact their state's Single Point of Contact (SPOC) to comply with the state's process under Executive Order 12372 (See https://www.archives.gov/federal-register/codification/executive-order/12372.html; https://www.whitehouse.gov/wp-content/uploads/2020/01/spoc_1_16_2020.pdf).

13. Funding Restrictions and Allowable Costs

All costs charged to awards covered by this NOFO must comply with the Uniform Administrative Requirements, Cost Principles, and Audit Requirements at 2 C.F.R. Part 200, unless otherwise indicated in the NOFO, or the terms and conditions of the award. This includes, among other requirements, that costs must be incurred, and products and services must be delivered, within the period of performance of the award. *See* 2 C.F.R. § 200.403(h) (referring to budget periods, which for FEMA awards under this program is the same as the period of performance).

In general, the Cost Principles establish standards for the allowability of costs, provide detailed guidance on the cost accounting treatment of costs as direct or administrative costs, and set forth allowability principles for selected items of cost. More specifically, except as otherwise stated in this NOFO, the terms and condition of an award, or other program materials, costs charged to awards covered by this NOFO must be consistent with the Cost Principles for Federal Awards located at 2 C.F.R. Part 200, Subpart E. In order to be allowable, all costs charged to a FEMA award or applied to the cost share must be reasonable in nature and amount and allocable to the particular FEMA award.

Additionally, all costs charged to awards must comply with the grant program's applicable statutes, policies, requirements in this NOFO as well as with the terms and conditions of the award. If FEMA staff identify costs that are inconsistent with any of these requirements, these costs may be disallowed, and FEMA may recover funds as appropriate, consistent with applicable laws, regulations, and policies.

As part of those requirements, grant recipients and subrecipients may only use federal funds or funds applied to a cost share for the purposes set forth in this NOFO and the terms and conditions of the award, and those costs must be consistent with the statutory authority for the award.

Grant funds may not be used for matching funds for other federal grants/cooperative agreements, lobbying, or intervention in federal regulatory or adjudicatory proceedings. In addition, federal funds may not be used to sue the federal government or any other government entity.

HHPD recipients may only fund activities and projects that are included and approved in the FY 2022 HHPD Work Plan and Budget. *See* Section H.17., Eligible Activities, for a description of eligible activities. *See* Section D.10., Content and Form of Application Submission, for Work Plan requirements.

The maximum amount of funding any Subrecipient can receive under HHPD is statutorily limited. The maximum subrecipient funding cannot exceed the lesser of 12.5 percent of the total amount of funds made available, or $7,500,000. For the FY 2022 program, $22,000,000 is allocated to the HHPD program; therefore, no subrecipient may receive an award for more than $2,750,000. *See* Section H.15., Examples Using Funding Formula.

a. Requirements Related to Contractor and Subcontractor Wages

Per 33 U.S.C. § 467f-2(d)(2)(E), recipients and subrecipients are required to comply with the requirements of 42 U.S.C. § 5196(j)(9). All laborers and mechanics employed by contractors or subcontractors in the performance of construction work financed with the assistance of any contribution of Federal funds made by the Administrator under this subsection shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with sections 3141–3144, 3146, and 3147 of title 40, and every such employee shall receive compensation at a rate not less than one and ½ times the basic rate of pay of the employee for all hours worked in any workweek in excess of eight hours in any workday or 40 hours in the workweek, as the case may be.

The Administrator shall make no contribution of Federal funds without first obtaining adequate assurance that these labor standards will be maintained upon the construction work. The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40.

b. Requirements Related to Contract and Subcontract Services

Per 33 U.S.C. § 467f-2(i), a contract awarded shall not be considered to confer a proprietary interest upon the United States. As a condition on the receipt of a grant under this section of an amount greater than $1,000,000, recipients and subrecipients shall require that each contract and subcontract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping, and related services entered into using funds from the grant be awarded in the same manner as a contract for architectural and engineering services is awarded under 40 U.S. Code Chapter 11 or an equivalent qualifications-based requirement prescribed by the recipient state.

c. Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services

Recipients and subrecipients of FEMA federal financial assistance are subject to the prohibitions described in section 889 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (FY 2019 NDAA), Pub. L. No. 115-232 (2018) and 2 C.F.R. §§ 200.216, 200.327, 200.471, and Appendix II to 2 C.F.R. Part 200. Beginning August 13, 2020, the statute – as it applies to FEMA recipients, subrecipients, and their contractors and subcontractors – prohibits obligating or expending federal award funds on certain telecommunications and video surveillance products and contracting with certain entities for national security reasons.

Guidance is available at Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services (Interim) FEMA Policy #405-143-1, or superseding document.

Additional guidance is available Contract Provisions Guide: Navigating Appendix II to Part 200 - Contract Provisions for Non-Federal Entity Contracts Under Federal Awards (fema.gov).

Effective August 13, 2020, FEMA recipients and subrecipients may not use any FEMA funds under open or new awards to:

(1) Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;

(2) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system; or

(3) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

d. Pre-Award Costs

Pre-award costs are not allowed.

e. Management and Administration (M&A) Costs

Management and administration (M&A) activities are those directly relating to the management and administration of HHPD funds, such as financial management and monitoring. M&A costs are not operational costs. They are the necessary costs incurred in direct support of the grant or as a consequence of the grant and should be allocated across the entire lifecycle of the grant. A maximum of up to 10 percent of HHPD funds awarded may be retained by the state, and any funds retained are to be used solely for M&A purposes associated with the HHPD award. Subrecipients may also retain a maximum of up to 5 percent of the funding passed through by the state solely for M&A purposes associated with the HHPD award. Applicant requests for management costs must be included in the State Administrative Plan. Subrecipient management cost activities must be added to the scope of work section and reflected in the cost estimate section of subgrant applications.

Applicants and subrecipients who do not receive awards/subawards will not receive reimbursement for management costs.

f. Indirect Facilities & Administrative (F&A) Costs

Indirect costs are allowable under this program as described in 2 C.F.R. Part 200, including 2 C.F.R. § 200.414. Applicants with a current negotiated indirect cost rate agreement that desire to charge indirect costs to an award must provide a copy of their negotiated indirect cost rate agreement at the time of application. Not all applicants are required to have a current negotiated indirect cost rate agreement. Applicants that are not required by 2 C.F.R. Part 200 to have a negotiated indirect cost rate agreement but are required by 2 C.F.R. Part 200 to develop an indirect cost rate proposal must provide a copy of their proposal at the time of application.

Applicants who do not have a current negotiated indirect cost rate agreement (including a provisional rate) and wish to charge the de minimis rate must reach out to the FEMA NDSP Program Officer or Grants Management Specialist for further instructions.

Applicants who wish to use a cost allocation plan in lieu of an indirect cost rate must also reach out to the FEMA NDSP Program Officer or Grants Management Specialist for further instructions. Post-award requests to charge indirect costs will be considered on a case-by- case basis and based upon the submission of an agreement or proposal as discussed above or based upon on the de minimis rate or cost allocation plan, as applicable.

E. Application Review Information

1. Application Evaluation Criteria

In addition to the eligibility requirements stated in Section C., Eligibility Information, the following programmatic criteria must be met and will be evaluated during the application review.

a. Programmatic Criteria for Mitigation Plan Requirement

Applicant

During the application review period for completeness and eligibility, FEMA will validate if the Applicant has an approved state mitigation plan that includes all dam risks. *See* Section H.19., Definitions, for the definition of All Dam Risk. If the Applicant has an approved state mitigation plan that does not include all dam risks, FEMA will inform the Applicant of the determination and the Applicant may submit a request for an extension to the mitigation plan requirement. Applicants may coordinate with FEMA for a review of the approved state mitigation plan to assess for all dam risks in advance of the application deadline. All supplemental attachments must be submitted via ND Grants. *See* Section H.13., Mitigation Plan Requirement Extension Requests.

Applicant's state hazard mitigation plan will be assessed against 44 C.F.R. Part 201, Mitigation Planning and the requirements specific to assessing all dam risks set forth in the State Mitigation Planning Policy Guide (FEMA, April 2022). For all other mitigation planning requirements, the State Mitigation Plan Review Guide (FEMA, March 2015) policy remains in effect until it is sunset in April 2023. The requirements in this NOFO supersede requirements in the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020) and FEMA Policy 104- 008-7, to determine if the plan complies with the requirement to address all dam risks. Specifically, FEMA will validate whether each of the following elements are included in the state hazard mitigation plan:

a. Does the plan describe how the state dam safety agency, other agencies, and stakeholders participated in the planning process and contributed expertise, data, studies, information, etc. relative to high hazard potential dams?
b. Does the plan address all dam risk for high hazard potential dams in the risk assessment?
c. Does the plan include mitigation goals to reduce long-term vulnerabilities from high hazard potential dams?

d. Does the plan prioritize mitigation actions and activities to reduce vulnerabilities from high hazard potential dams?
e. Does the plan identify current and potential sources of funding to implement mitigation actions and activities for high hazard potential dams?
f. Does the plan generally describe and analyze the effectiveness of local mitigation policies, programs, and capabilities that address high hazard potential dams?
g. Does the plan describe the criteria for prioritizing funding for high hazard potential dams?

For additional information on all other state mitigation plan requirements and FEMA procedures for review and approval of state mitigation plans, see FEMA's *State Mitigation Plan Review Guide* (FP 302-094-2, March 2015) or subsequent update.

Subrecipients

Subrecipients must demonstrate that the tribal or local government with jurisdiction over the area in which the dam is located has in place at the time the SAA submits the SOW package to FEMA, as well as the time FEMA approves the SOW package, an approved hazard mitigation plan that includes all dam risks. *See* **Section H.19., Definitions,** for the definition of All Dam Risk. The hazard mitigation plan must comply with the Disaster Mitigation Act of 2000 (Pub. L. 106–390; 114 Stat. 1552). Dams owned by nonprofit organizations that are subrecipients must be located in a local jurisdiction with an approved hazard mitigation plan that includes all dam risks and complies with the Disaster Mitigation Act of 2000 (Pub. L. 106–390; 114 Stat. 1552).

FEMA will determine if the mitigation plan addresses all dam risks in accordance with the requirements specific to assessing all dam risks set forth in the Local Mitigation Planning Policy Guide (FEMA, April 2022). These requirements supersede the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020) and the FEMA Policy 104- 008-7, to determine if the plan complies with the requirement to address all dam risks. Specifically, FEMA will validate whether each of the following elements are included in the local plan:

a. Does the plan describe the incorporation of existing plans, studies, reports, and technical information for high hazard potential dams?
b. Does the plan address high hazard potential dams in the risk assessment?
c. Does the plan include mitigation goals to reduce long-term vulnerabilities from high hazard potential dams?
d. Does the plan include actions that address high hazard potential dams, and prioritize mitigation actions to reduce vulnerabilities from high hazard potential dams?

For additional information on all other local mitigation plan requirements and FEMA procedures for review and approval of local mitigation plans, *see* FEMA's Local Mitigation Plan Review Guide (Local Guide) (October 2011) / Guía de Revisión del Plan Local de Mitigación (Octubre 2011) or subsequent update.

If the dam is located on land under jurisdiction of a Federally recognized tribal government, the tribal mitigation plan must address all dam risks. FEMA will validate whether each of the following elements are included in the tribal plan:

a. Does the plan describe the incorporation of existing plans, studies, reports, and technical information for high hazard potential dams?
b. Does the plan address high hazard potential dams in the risk assessment?
c. Does the plan include mitigation goals to reduce long-term vulnerabilities from high hazard potential dams?
d. Does the plan include actions that address high hazard potential dams, and prioritize mitigation actions to reduce vulnerabilities from high hazard potential dams?

For additional information on tribal mitigation plan requirements, reference the Tribal Mitigation Plan Review Guide (December 2017).

If an HHPD subrecipient cannot demonstrate that the local or tribal government with jurisdiction over the area in which the dam is located has in place a hazard mitigation plan that includes all dam risks; and complies with the Disaster Mitigation Act of 2000 (Pub. L. 106–390; 114 Stat. 1552); then the subrecipient may request an extension to meet this requirement, and may need to coordinate with the jurisdiction where the dam is located to update the mitigation plan to include all dam risks within twelve (12) months. For more information *see* Section H.13., Mitigation Plan Requirement Extension Requests.

b. Financial Integrity Criteria

Prior to making a federal award, FEMA is required by 31 U.S.C. § 3354, as amended by the Payment Integrity Information Act of 2019, Pub. L. No. 116-117 (2020); 41 U.S.C. § 2313; and 2 C.F.R. § 200.206 to review information available through any Office of Management and Budget (OMB)-designated repositories of government wide eligibility qualification or financial integrity information, including whether the applicant is suspended or debarred.

FEMA may also pose additional questions to the applicant to aid in conducting the pre-award risk review. Therefore, application evaluation criteria may include the following risk-based considerations of the applicant:

i. Financial stability.
ii. Quality of management systems and ability to meet management standards.
iii. History of performance in managing federal award.
iv. Reports and findings from audits.
v. Ability to effectively implement statutory, regulatory, or other requirements.

c. Supplemental Financial Integrity Criteria and Review

Prior to making a federal award where the anticipated total federal share will be greater than the simplified acquisition threshold, currently $250,000:

i. FEMA is required to review and consider any information about the applicant, including information on the applicant's immediate and highest-level owner, subsidiaries, and

predecessors, if applicable, that is in the designated integrity and performance system accessible through the System for Award Management (SAM), which is currently the Federal Awardee Performance and Integrity Information System (FAPIIS).

ii. An applicant, at its option, may review information in FAPIIS and comment on any information about itself that a federal awarding agency previously entered.

iii. FEMA will consider any comments by the applicant, in addition to the other information in FAPIIS, in making a judgment about the applicant's integrity, business ethics, and record of performance under federal awards when completing the review of risk posed by applicants as described in 2 C.F.R. § 200.206.

2. Review and Selection Process

The review and selection process will be completed in two parts:

Part 1

FEMA reviews applications for completeness and eligibility as well as the brief scoping narratives for potential FY2022 projects. After the Part 1 review is complete, FEMA will notify states of funding amounts via the ND Grants system.

During Part 1, SAAs will submit applications into Grants.gov and ND Grants, and FEMA Headquarters will review the applications for completeness and eligibility. SAAs are to include clearly defined State objectives, a proposal narrative, and the required critical data to support proposal. Applicants will be evaluated and selected for funding based on the following:

1. The Applicant has the authority and demonstrates the capability necessary to successfully fulfill the requirements of the HHPD.
2. The dams included on the Applicant's list of eligible high hazard potential dams meet eligibility criteria.
3. The Applicant demonstrates how HHPD funds will advance the HHPD priorities and performance goals and provides brief scoping narratives for potential FY2022 projects.
4. The State Administrative Plan must clearly describe the SAA's timelines and milestones for implementing the HHPD grant. The State Administrative Plan must describe the process for selecting subrecipients. The State Administrative Plan must also describe methodology and data used to measure progress toward achieving the performance outcomes of the HHPD grant.
5. FEMA will validate if the Applicant has an approved state mitigation plan that includes all dam risks.

FEMA may request additional information from the Applicant for clarification and better understanding of the proposed grant activities during this review period.

Part 2

SAA accepts the funding award and develops and submits a Scope of Work (SOW) package to include a narrative of how and why the projects were selected for funding, detailed quarterly milestone workplan, EHP checklist, and budget narrative (Refer to FEMA Program Officer for checklist for SOW package). The SOW package must be submitted to FEMA for review during

the Part 2 submission period. FEMA will review the subrecipient's local hazard mitigation plan for eligibility. *See* Section D.10.b, Program-Specific Required Forms and Information and Section F.2., Pass-Through Requirements, for requirements. *See* Section E.1.a, Programmatic Criteria for Mitigation Plan Requirement, for more details on specific application evaluation criteria.

F. Federal Award Administration Information

1. Notice of Award

Before accepting the award, the AOR and recipient should carefully read the award package. The award package includes instructions on administering the grant award and the terms and conditions associated with responsibilities under federal awards. Recipients must accept all conditions in this NOFO as well as any specific terms and conditions in the Notice of Award to receive an award under this program.

Notification of award approval is made through the ND Grants system through an automatic electronic mail to the recipient's authorized official listed in the initial application. The recipient should follow the directions in the notification to confirm acceptance of the award.

Recipients must accept their awards no later than 60 days from the award date. The recipient shall notify FEMA of its intent to accept and proceed with work under the award or provide a notice of intent to decline through the ND Grants system. For instructions on how to accept or decline an award in the ND Grants system, please see the ND Grants Grant Recipient User Guide, which is available at https://www.fema.gov/grants/guidance-tools/non-disaster-grants- management-system along with other ND Grants materials.

Funds will remain on hold until the recipient accepts the award through the ND Grants system and all other conditions of the award have been satisfied or until the award is otherwise rescinded. Failure to accept a grant award within the 60-day timeframe may result in a loss of funds.

2. Pass-Through Requirements

All pass-through entities must comply with 2 C.F.R. 200.332 Requirements for pass-through entities.

Awards made to the SAA for HHPD carry additional pass-through requirements. Pass- through is defined as an obligation on the part of the SAA to make funds available to eligible subrecipients. Four requirements must be met to pass-through grant funds:

- The SAA must submit a SOW package to FEMA for approval that describes the budget and project scope for each subrecipient in accordance with 2 C.F.R. § 200.308.
- The SAA must make a firm written commitment to passing through grant funds to subrecipients;
- The SAA's commitment must be unconditional (i.e., no contingencies for the availability of SAA funds);

- There must be documentary evidence (i.e., award document, terms, and conditions) of the commitment; and
- The award terms must be communicated to the subrecipient, including the requirement for an approved local or tribal mitigation plan (that meet the requirements set forth at 44 C.F.R. Part 201 Mitigation Planning) that addresses all dam risks for the jurisdiction where the dam is located.

Timing and Amount

The SAA must pass-through the HHPD subaward to eligible subrecipients within 90 calendar days of receipt of the funds. "Receipt of the funds" occurs when the ND Grants system releases the financial hold of the award, following FEMA approval of the SOW package. SAAs are sent notification of the release of financial hold of the HHPD award funds via the ND Grants system.

3. Administrative and National Policy Requirements

In addition to the requirements of in this section and in this NOFO, FEMA may place specific terms and conditions on individual awards in accordance with 2 C.F.R. Part 200.

a. DHS Standard Terms and Conditions

All successful applicants for DHS grant and cooperative agreements are required to comply with DHS Standard Terms and Conditions, which are available online at: DHS Standard Terms and Conditions.

The applicable DHS Standard Terms and Conditions will be those in effect at the time the award was made unless the application is for a continuation award. In that event, the terms and conditions in effect at the time the original award was made will generally apply. What terms and conditions will apply for the award will be clearly stated in the award package at the time of award.

b. Ensuring the Protection of Civil Rights

As the Nation works towards achieving the National Preparedness Goal, it is important to continue to protect the civil rights of individuals. Recipients and subrecipients must carry out their programs and activities, including those related to the building, sustainment, and delivery of core capabilities, in a manner that respects and ensures the protection of civil rights for protected populations.

Federal civil rights statutes, such as Section 504 of the Rehabilitation Act of 1973 and Title VI of the Civil Rights Act of 1964, along with DHS and FEMA regulations, prohibit discrimination on the basis of race, color, national origin, sex, religion, age, disability, limited English proficiency, or economic status in connection with programs and activities receiving federal financial assistance from FEMA.

The DHS Standard Terms and Conditions include a fuller list of the civil rights provisions that apply to recipients. These terms and conditions can be found in the DHS Standard Terms and Conditions. Additional information on civil rights provisions is available at https://www.fema.gov/about/offices/equal-rights/civil-rights.

Monitoring and oversight requirements in connection with recipient compliance with federal civil rights laws are also authorized pursuant to 44 C.F.R. Part 7.

In accordance with civil rights laws and regulations, recipients and subrecipients must ensure the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment.

c. Environmental Planning and Historic Preservation (EHP) Compliance

As a federal agency, FEMA is required to consider the effects of its actions on the environment and historic properties to ensure that all activities and programs funded by FEMA, including grant-funded projects, comply with federal EHP laws, Executive Orders, regulations, and policies, as applicable.

All non-critical new construction or substantial improvement of structures in a Special Flood Hazard Area must, at a minimum, apply the flood elevations of the Federal Flood Risk Management Standard's Freeboard Value Approach unless doing so would cause the project to be unable to meet applicable program cost-effectiveness requirements. All other types of projects may choose to apply the flood elevations of the Federal Flood Risk Management Standard's Freeboard Value Approach. See Executive Order (EO) 14030, Climate-Related Financial Risk and FEMA Policy #-206-21-0003, Partial Implementation of the Federal Flood Risk Management Standard for Hazard Mitigation Assistance Programs (Interim) (fema.gov).

Recipients and subrecipients proposing projects that have the potential to impact the environment, including, but not limited to, the construction of communication towers, modification or renovation of existing buildings, structures, and facilities, or new construction including replacement of facilities, must participate in the FEMA EHP review process. The EHP review process involves the submission of a detailed project description along with any supporting documentation requested by FEMA in order to determine whether the proposed project has the potential to impact environmental resources or historic properties.

In some cases, FEMA is also required to consult with other regulatory agencies and the public in order to complete the review process. Federal law requires EHP review to be completed before federal funds are released to carry out proposed projects. FEMA may not be able to fund projects that are not incompliance with applicable EHP laws, Executive Orders, regulations, and policies.

DHS and FEMA EHP policy is found in directives and instructions available on the FEMA.gov EHP page, the FEMA website page that includes documents regarding EHP responsibilities and program requirements, including implementation of the National Environmental Policy Act and

other EHP regulations and Executive Orders. Individual FEMA programs have separate procedures to conduct and document EHP review. Guidance for individual grant programs is available from applicable program offices.

Recipients and subrecipients applying for HHPD projects that have the potential for physical impacts to the environment or cultural resources are encouraged determine the information needed to comply with the National Environmental Policy Act (NEPA) (42 U.S.C. §§ 4321-4370h) as part of their initial and ongoing planning in order to lessen potential impacts to the environment or cultural resources and to identify the best possible solution for their dam safety initiative. Recipients and subrecipients should be aware that an Environmental Assessment pursuant the requirements of NEPA may be necessary for dam rehabilitation or construction projects funded by FEMA and should therefore be accounted for as initial and ongoing project planning takes place. Recipients and subrecipients should also be aware that approval or funding of a dam rehabilitation plan or study under HHPD does not guarantee that additional EHP review will not be required if FEMA or another federal agency was to fund construction or rehabilitation activities that result from these grant activities.

4. Reporting

Recipients are required to submit various financial and programmatic reports as a condition of award acceptance. Future awards and funds drawdown may be withheld if these reports are delinquent.

a. Financial Reporting Requirements

I. FEDERAL FINANCIAL REPORT (FFR)

Recipients must report obligations and expenditures through the FFR form (SF-425) to FEMA.

Recipients may review the Federal Financial Reporting Form (FFR) (SF-425) at https://www.grants.gov/web/grants/forms/post-award-reporting-forms.html#sortby=1

Recipients must file the FFR electronically using the Payment and Reporting Systems (PARS).

II. FFR REPORTING PERIODS AND DUE DATES

An FFR must be submitted quarterly throughout the POP, including partial calendar quarters, as well as in periods where no grant award activity occurs. The final FFR is due within 120 calendar days after the end of the POP. Future awards and fund drawdowns may be withheld if these reports are delinquent, demonstrate lack of progress, or are insufficient in detail.

Except for the final FFR due at 120 days after the end of the POP for purposes of closeout, the following reporting periods and due dates apply for the FFR:

Reporting Period	Report Due Date
October 1 – December 31	January 30
January 1 – March 31	April 30
April 1 – June 30	July 30
July 1 – September 30	October 30

b. Programmatic Performance Reporting Requirements

I. PERFORMANCE PROGRESS REPORT (PPR)

Grant recipients are responsible for providing performance reports on a quarterly basis. Performance progress reports should be submitted as either a word document or a pdf file. Performance progress reports are due within 30 days after the end of each reporting period, must be submitted via ND Grants, and must include at a minimum the following:

The recipient must use FEMA's template to submit a quarterly performance progress report (PPR) for each award. *See* Appendix B, Performance Progress Report (PRR).

Performance reports include:

1. Reporting period, date of report, and recipient point of contact (POC) name and contact information.
2. SF-PPR must be used and submitted via ND Grants
3. Project identification information, including FEMA project number, subrecipient, and project type using standard ND Grants.
4. Significant activities and developments that have occurred or have shown progress during the quarter, including a comparison of actual accomplishments to the work schedule objectives established in the subaward.
5. Percent completion and whether completion of work is on schedule; a discussion of any problems, delays, or adverse conditions that will impair the ability to meet the timelines stated in the subaward; and anticipated completion date.
6. Status of costs, including whether the costs are (1) unchanged, (2) overrun, or (3) underrun. If there is a change in cost status, the report should include a narrative describing the change. Also, include amount dispersed to subrecipient by activity.
7. A statement of whether a request to extend the award POP is anticipated.
8. Incremental funding amounts (SFM) and progress completed.
9. Additional information as required by FEMA to assess the progress of an award.

FEMA may suspend drawdowns from PARS if quarterly performance progress reports are not submitted on time.

The following reporting periods and due dates apply:

Reporting Period	Report Due Date
August 1 – September 30	October 30 (First Report)
October 1 – December 31	January 30
January 1 – March 31	April 30
April 1 – June 30	July 30
July 1 – September 30	October 30

c. Closeout Reporting Requirements

I. CLOSEOUT REPORTING

Within 120 calendar days after the end of the period of performance for the prime award or after an amendment has been issued to close out an award before the original POP ends, recipients must liquidate all financial obligations and must submit the following:

i. The final request for payment, if applicable.
ii. The final FFR (SF-425).
iii. The final report details all accomplishments throughout the period of performance, including a narrative of measurement of risk reduction on populations/people, property, and critical infrastructure and describes the methodology used;
iv. v. A qualitative summary of the impact of accomplishments throughout the period of performance; and
v. vii. Other documents required by this NOFO, terms and conditions of the award, or other FEMA guidance.

In addition, pass-through entities are responsible for closing out their subawards as described in 2 C.F.R. § 200.344; subrecipients are still required to submit closeout materials within 90 calendar days of the period of performance end date. When a subrecipient completes all closeout requirements, pass-through entities must promptly complete all closeout actions for subawards in time for the recipient to submit all necessary documentation and information to FEMA during the closeout of the prime award.

After the prime award closeout reports have been reviewed and approved by FEMA, a closeout notice will be completed to close out the grant. The notice will indicate the period of performance as closed, list any remaining funds that will be deobligated, and address the requirement of maintaining the grant records for at least three years from the date of the final FFR. The record retention period may be longer, such as due to an audit or litigation, for equipment or real property used beyond the period of performance, or due to other circumstances outlined in 2 C.F.R. § 200.334.

The recipient is responsible for refunding to FEMA any balances of unobligated cash that FEMA paid that are not authorized to be retained per 2 C.F.R. § 200.344(d).

II. ADMINISTRATIVE CLOSEOUT

Administrative closeout is a mechanism for FEMA to unilaterally move forward with closeout of an award using available award information in lieu of final reports from the recipient per 2 C.F.R. § 200.344(h)-(i). It is a last resort available to FEMA, and if FEMA needs to administratively close an award, this may negatively impact a recipient's ability to obtain future funding. This mechanism can also require FEMA to make cash or cost adjustments and ineligible cost determinations based on the information it has, which may result in identifying a debt owed to FEMA by the recipient.

When a recipient is not responsive to FEMA's reasonable efforts to collect required reports needed to complete the standard closeout process, FEMA is required under 2 C.F.R. § 200.344(h) to start the administrative closeout process within the regulatory timeframe.

FEMA will make at least three written attempts to collect required reports before initiating administrative closeout. If the recipient does not submit all required reports in accordance with 2 C.F.R. § 200.344, this NOFO, and the terms and conditions of the award, FEMA must proceed to administratively close the award with the information available within one year of the period of performance end date. Additionally, if the recipient does not submit all required reports within one year of the period of performance end date, per 2 C.F.R. § 200.344(i), FEMA must report in FAPIIS the recipient's material failure to comply with the terms and conditions of the award.

If FEMA administratively closes an award where no final FFR has been submitted, FEMA uses that administrative closeout date in lieu of the final FFR submission date as the start of the record retention period under 2 C.F.R. § 200.334.

In addition, if an award is administratively closed, FEMA may decide to impose remedies for noncompliance per 2 C.F.R. § 200.339, consider this information in reviewing future award applications, or apply special conditions to existing or future awards.

d. Additional Reporting Requirements

I. DISCLOSING INFORMATION PER 2 C.F.R. § 180.335

This reporting requirement pertains to disclosing information related to government-wide suspension and debarment requirements. Before a recipient enters into a grant award with FEMA, the recipient must notify FEMA if it knows if it or any of the recipient's principals under the award fall under one or more of the four criteria listed at 2 C.F.R. § 180.335:

i. Are presently excluded or disqualified;
ii. Have been convicted within the preceding three years of any of the offenses listed in 2 C.F.R. § 180.800(a) or had a civil judgment rendered against it or any of the recipient's principals for one of those offenses within that time period;
iii. Are presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses listed in 2 C.F.R. § 180.800(a); or

iv. Have had one or more public transactions (federal, state, or local) terminated within the preceding three years for cause or default.

At any time after accepting the award, if the recipient learns that it or any of its principals falls under one or more of the criteria listed at 2 C.F.R. § 180.335, the recipient must provide immediate written notice to FEMA in accordance with 2 C.F.R. § 180.350.

II. REPORTING OF MATTERS RELATED TO RECIPIENT INTEGRITY AND PERFORMANCE

Per 2 C.F.R. Part 200, Appendix I § F.3, the additional post-award reporting requirements in 2 C.F.R. Part 200, Appendix XII may apply to applicants who, if upon becoming recipients, have a total value of currently active grants, cooperative agreements, and procurement contracts from all federal awarding agencies that exceeds $10,000,000 for any period of time during the period of performance of an award under this funding opportunity.

Recipients that meet these criteria must maintain current information reported in FAPIIS about civil, criminal, or administrative proceedings described in paragraph 2 of Appendix XII at the reporting frequency described in paragraph 4 of Appendix XII.

III. SINGLE AUDIT REPORT

For audits of fiscal years beginning on or after December 26, 2014, recipients that expend $750,000 or more from all federal funding sources during their fiscal year are required to submit an organization-wide financial and compliance audit report, also known as the single audit report.

The audit must be performed in accordance with the requirements of U.S. Government Accountability Office's (GAO) Government Auditing Standards, located at https://www.gao.gov/yellowbook/overview, and the requirements of Subpart F of 2 C.F.R. Part 200, located at http://www.ecfr.gov/cgi-bin/text-idx?node=sp2.1.200.f.

5. Monitoring and Oversight

Per 2 C.F.R. § 200.337, FEMA, through its authorized representatives, has the right, at all reasonable times, to make site visits or conduct desk reviews to review project accomplishments and management control systems to review award progress and to provide any required technical assistance. During site visits or desk reviews, FEMA will review recipients' files related to the award. As part of any monitoring and program evaluation activities, recipients must permit FEMA, upon reasonable notice, to review grant-related records and to interview the organization's staff and contractors regarding the program. Recipients must respond in a timely and accurate manner to FEMA requests for information relating to the award.

Effective monitoring and oversight help FEMA ensure that recipients use grant funds for their intended purpose(s); verify that projects undertaken are consistent with approved plans; and ensure that recipients make adequate progress toward stated goals and objectives. Additionally, monitoring serves as the primary mechanism to ensure that recipients comply with applicable laws, rules, regulations, program guidance, and requirements. FEMA regularly monitors all grant programs both financially and programmatically in accordance with federal laws, regulations

(including 2 C.F.R. Part 200), program guidance, and the terms and conditions of the award. All monitoring efforts ultimately serve to evaluate progress towards grant goals and proactively target and address issues that may threaten grant success during the period of performance.

FEMA staff will periodically monitor recipients to ensure that administrative processes, policies and procedures, budgets, and other related award criteria are meeting Federal Government-wide and FEMA regulations. Aside from reviewing quarterly financial and programmatic reports, FEMA may also conduct enhanced monitoring through either desk- based reviews, onsite monitoring visits, or both. Enhanced monitoring will involve the review and analysis of the financial compliance and administrative processes, policies, activities, and other attributes of each federal assistance award, and it will identify areas where the recipient may need technical assistance, corrective actions, or other support.

Financial and programmatic monitoring are complementary processes within FEMA's overarching monitoring strategy that function together to ensure effective grants management, accountability, and transparency; validate progress against grant and program goals; and safeguard federal funds against fraud, waste, and abuse. Financial monitoring primarily focuses on statutory and regulatory compliance with administrative grant requirements, while programmatic monitoring seeks to validate and assist in grant progress, targeting issues that may be hindering achievement of project goals and ensuring compliance with the purpose of the grant and grant program. Both monitoring processes are similar in that they feature initial reviews of all open awards, and additional, in-depth monitoring of grants requiring additional attention.

Recipients and subrecipients who are pass-through entities are responsible for monitoring their subrecipients in a manner consistent with the terms of the federal award at 2 C.F.R. Part 200, including 2 C.F.R. § 200.332. This includes the pass-through entity's responsibility to monitor the activities of the subrecipient as necessary to ensure that the subaward is used for authorized purposes, in compliance with federal statutes, regulations, and the terms and conditions of the subaward; and that subaward performance goals are achieved.

In terms of overall award management, recipient and subrecipient responsibilities include, but are not limited to: accounting of receipts and expenditures, cash management, maintaining adequate financial records, reporting and refunding expenditures disallowed by audits, monitoring if acting as a pass-through entity, or other assessments and reviews, and ensuring overall compliance with the terms and conditions of the award or subaward, as applicable, including the terms of 2 C.F.R. Part 200.

H. DHS Awarding Agency Contact Information

1. Contact and Resource Information

a. Program Office Contact

Kayed Lakhia
National Dam Safety Program
Federal Emergency Management Agency
Phone: (202) 304-7209
Kayed.Lakhia@fema.dhs.gov

b. Centralized Scheduling and Information Desk (CSID)

CSID is a non-emergency comprehensive management and information resource developed by FEMA for grants stakeholders. CSID provides general information on all FEMA grant programs and maintains a comprehensive database containing key personnel contact information at the federal, state, and local levels. When necessary, recipients will be directed to a federal point of contact who can answer specific programmatic questions or concerns.

CSID can be reached by phone at (800) 368-6498 or by e-mail at askcsid@fema.dhs.gov, Monday through Friday, 9:00 AM – 5:00 PM ET.

c. Grant Programs Directorate (GPD) Award Administration Division

GPD's Award Administration Division (AAD) provides support regarding financial matters and budgetary technical assistance. Additional guidance and information can be obtained by contacting the AAD's Help Desk via e-mail at ASK-GMD@fema.dhs.gov.

d. FEMA Regional Offices

FEMA Regional Offices also may provide fiscal support, including pre- and post-award administration and technical assistance such as conducting cash analysis, financial monitoring, and audit resolution to the grant program under this NOFO. FEMA National Dam Safety Program may provide programmatic support and technical assistance.

FEMA Regional Offices manage, administer, and conduct the application budget review, create the award package, approve, amend, and close out awards, as well as conduct cash analysis, financial and programmatic monitoring, and audit resolution for HHPD. The Regions also provide technical assistance to HHPD recipients.

FEMA Regional Office contact information is available at https://www.fema.gov/fema- regional-contacts.

e. Equal Rights

The FEMA Office of Equal Rights (OER) is responsible for compliance with and enforcement of federal civil rights obligations in connection with programs and services conducted by FEMA and recipients of FEMA financial assistance. All inquiries and communications about federal civil

rights compliance for FEMA grants under this NOFO should be sent to FEMA-CivilRightsOffice@fema.dhs.gov.

f. Environmental Planning and Historic Preservation

The FEMA Office of Environmental Planning and Historic Preservation (OEHP) provides guidance and information about the EHP review process to FEMA programs and FEMA's recipients and subrecipients. All inquiries and communications about EHP compliance for FEMA grant projects under this NOFO or the EHP review process should be sent to FEMA- OEHP-NOFOQuestions@fema.dhs.gov.

2. Systems Information

a. Grants.gov

For technical assistance with Grants.gov, call the customer support hotline 24 hours per day, 7 days per week (except federal holidays) at (800) 518-4726 or e-mail at support@grants.gov.

b. Non-Disaster (ND) Grants

For technical assistance with the ND Grants system, please contact the ND Grants Helpdesk at ndgrants@fema.dhsgov or (800) 865-4076, Monday through Friday, 9:00 AM – 6:00 PM ET. User resources are available at https://www.fema.gov/grants/guidance-tools/non- disaster-grants-management-system

c. Payment and Reporting System (PARS)

FEMA uses the Payment and Reporting System (PARS) for financial reporting, invoicing, and tracking payments. FEMA uses the Direct Deposit/Electronic Funds Transfer (DD/EFT) method of payment to recipients. To enroll in the DD/EFT, recipients must complete a Standard Form 1199A, Direct Deposit Form. If you have questions about the online system, please call the Customer Service Center at (866) 927-5646 or email ask- GMD@fema.dhs.gov.

I. Additional Information

1. Termination Provisions

FEMA may terminate a federal award in whole or in part for one of the following reasons. FEMA and the recipient must still comply with closeout requirements at 2 C.F.R. §§ 200.344-200.345 even if an award is terminated in whole or in part. To the extent that subawards are permitted under this NOFO, pass-through entities should refer to 2 C.F.R. § 200.340 for additional information on termination regarding subawards.

a. Noncompliance

If a recipient fails to comply with the terms and conditions of a federal award, FEMA may terminate the award in whole or in part. If the noncompliance can be corrected, FEMA may first attempt to direct the recipient to correct the noncompliance. This may take the form of a Compliance Notification. If the noncompliance cannot be corrected or the recipient is non-

responsive, FEMA may proceed with a Remedy Notification, which could impose a remedy for noncompliance per 2 C.F.R. § 200.339, including termination. Any action to terminate based on noncompliance will follow the requirements of 2 C.F.R. §§ 200.341-200.342 as well as the requirement of 2 C.F.R. § 200.340(c) to report in FAPIIS the recipient's material failure to comply with the award terms and conditions. See also the section on Actions to Address Noncompliance.

b. With the Consent of the Recipient

FEMA may also terminate an award in whole or in part with the consent of the recipient, in which case the parties must agree upon the termination conditions, including the effective date, and in the case of partial termination, the portion to be terminated.

c. Notification by the Recipient

The recipient may terminate the award, in whole or in part, by sending written notification to FEMA setting forth the reasons for such termination, the effective date, and in the case of partial termination, the portion to be terminated. In the case of partial termination, FEMA may determine that a partially terminated award will not accomplish the purpose of the federal award, so FEMA may terminate the award in its entirety. If that occurs, FEMA will follow the requirements of 2 C.F.R. §§ 200.341-200.342 in deciding to fully terminate the award.

2. Program Evaluation

Recipients and subrecipients are encouraged to incorporate program evaluation activities from the outset of their program design and implementation to meaningfully document and measure their progress towards meeting an agency priority goal(s). Title I of the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act), Pub. L. No. 115-435 (2019) urges federal awarding agencies and federal assistance recipients and subrecipients to use program evaluation as a critical tool to learn, to improve equitable delivery, and to elevate program service and delivery across the program lifecycle. Evaluation means "an assessment using systematic data collection and analysis of one or more programs, policies, and organizations intended to assess their effectiveness and efficiency." Evidence Act § 101 (codified at 5 U.S.C. § 311). Evaluation costs are allowable costs (either as direct or indirect), unless prohibited by statute or regulation.

3. Period of Performance Extensions

Extensions to the period of performance (POP) for this program are allowed. Extensions to the POP identified in the award will only be considered through formal, written requests to the recipient's FEMA NDSP Program Officer and must contain specific and compelling justifications as to why an extension is required. Recipients are advised to coordinate with the FEMA NDSP Program Officer as needed when preparing an extension request.

All extension requests must address the following:

a. The grant program, fiscal year, and award number;
b. Reason for the delay –including details of the legal, policy, or operational challenges that prevent the final outlay of awarded funds by the deadline;

c. Current status of the activity(ies);
d. Approved POP termination date and new project completion date;
e. Amount of funds drawn down to date;
f. Remaining available funds, both federal and, if applicable, non-federal;
g. Budget outlining how remaining federal and, if applicable, non-federal funds will be expended;
h. Plan for completion, including milestones and timeframes for achieving each milestone and the position or person responsible for implementing the plan for completion; and
i. Certification that the activity(ies) will be completed within the extended POP without any modification to the original statement of work, as described in the application and as approved by FEMA.

Extension requests will be granted only due to compelling legal, policy, or operational challenges. Extension requests will only be considered for the following reasons:

- Contractual commitments by the recipient or subrecipient with vendors prevent completion of the project, including delivery of equipment or services, within the existing POP;
- The project must undergo a complex environmental review that cannot be completed within the existing POP;
- Projects are long-term by design, and therefore acceleration would compromise core programmatic goals; or
- Where other special or extenuating circumstances exist.

Recipients should submit all proposed extension requests to FEMA for review and approval at least 90 days prior to the end of the POP to allow sufficient processing time.

4. Disability Integration

Pursuant to Section 504 of the Rehabilitation Act of 1973, recipients of FEMA financial assistance must ensure that their programs and activities do not discriminate against other qualified individuals with disabilities.

Grant recipients should engage with the whole community to advance individual and community preparedness and to work as a nation to build and sustain resilience. In doing so, recipients are encouraged to consider the needs of individuals with disabilities into the activities and projects funded by the grant.

FEMA expects that the integration of the needs of people with disabilities will occur at all levels, including planning; alerting, notification, and public outreach; training; purchasing of equipment and supplies; protective action implementation; and exercises/drills.

The following are examples that demonstrate the integration of the needs of people with disabilities in carrying out FEMA awards:

- Include representatives of organizations that work with/for people with disabilities on planning committees, work groups and other bodies engaged in development and implementation of the grant programs and activities.

- Hold all activities related to the grant in locations that are accessible to persons with physical disabilities to the extent practicable.
- Acquire language translation services, including American Sign Language, that provide public information across the community and in shelters.
- Ensure shelter-specific grant funds are in alignment with FEMA's Guidance on Planning for Integration of Functional Needs Support Services in General Population Shelters.
- If making alterations to an existing building to a primary function area utilizing federal funds, complying with the most recent codes and standards and making path of travel to the primary function area accessible to the greatest extent possible.
- Implement specific procedures used by public transportation agencies that include evacuation and passenger communication plans and measures for individuals with disabilities.
- Identify, create, and deliver training to address any training gaps specifically aimed toward whole-community preparedness. Include and interact with individuals with disabilities, aligning with the designated program capability.
- Establish best practices in inclusive planning and preparedness that consider physical access, language access, and information access. Examples of effective communication access include providing auxiliary aids and services such as sign language interpreters, Computer Aided Real-time Translation (CART), and materials in Braille or alternate formats.

FEMA grant recipients can fund projects towards the resiliency of the whole community, including people with disabilities, such as training, outreach and safety campaigns, provided that the project aligns with this NOFO and the terms and conditions of the award.

5. Conflicts of Interest in the Administration of Federal Awards or Subawards

For conflicts of interest under grant-funded procurements and contracts, refer to the section on Procurement Integrity in this NOFO and 2 C.F.R. §§ 200.317 – 200.327.

To eliminate and reduce the impact of conflicts of interest in the subaward process, recipients and pass-through entities must follow their own policies and procedures regarding the elimination or reduction of conflicts of interest when making subawards. Recipients and pass-through entities are also required to follow any applicable federal and state, local, tribal, or territorial (SLTT) statutes or regulations governing conflicts of interest in the making of subawards.

The recipient or pass-through entity must disclose to the respective Program Analyst or Program Manager, in writing, any real or potential conflict of interest that may arise during the administration of the federal award, as defined by the federal or SLTT statutes or regulations or their own existing policies, within five days of learning of the conflict of interest. Similarly, subrecipients, whether acting as subrecipients or as pass-through entities, must disclose any real or potential conflict of interest to the recipient or next-level pass- through entity as required by the recipient or pass-through entity's conflict of interest policies, or any applicable federal or SLTT statutes or regulations.

Conflicts of interest may arise during the process of FEMA making a federal award in situations where an employee, officer, or agent, any members of his or her immediate family, his or her

partner has a close personal relationship, a business relationship, or a professional relationship, with an applicant, subapplicant, recipient, subrecipient, or FEMA employees.

6. Procurement Integrity

Through audits conducted by the DHS Office of Inspector General (OIG) and FEMA grant monitoring, findings have shown that some FEMA recipients have not fully adhered to the proper procurement requirements at 2 C.F.R. §§ 200.317 – 200.327 when spending grant funds. Anything less than full compliance with federal procurement requirements jeopardizes the integrity of the grant as well as the grant program. To assist with determining whether an action is a procurement or instead a subaward, please consult 2 C.F.R. § 200.331. For detailed guidance on the federal procurement standards, recipients and subrecipients should refer to various materials issued by FEMA's Procurement Disaster Assistance Team (PDAT), such as the PDAT Field Manual and Contract Provisions Guide. Additional resources, including an upcoming trainings schedule can be found on the PDAT Website: https://www.fema.gov/grants/procurement.

The below highlights the federal procurement requirements for FEMA recipients when procuring goods and services with federal grant funds. FEMA will include a review of recipients' procurement practices as part of the normal monitoring activities. All procurement activity must be conducted in accordance with federal procurement standards at 2 C.F.R. §§ 200.317 – 200.327. Select requirements under these standards are listed below. The recipient and any of its subrecipients must comply with all requirements, even if they are not listed below.

Under 2 C.F.R. § 200.317, when procuring property and services under a federal award, states (including territories) must follow the same policies and procedures they use for procurements from their non-federal funds; additionally, states must now follow 2 C.F.R. § 200.321 regarding socioeconomic steps, 200.322 regarding domestic preferences for procurements, 200.323 regarding procurement of recovered materials, and 2 C.F.R. § 200.327 regarding required contract provisions.

All other non-federal entities, such as tribes (collectively, non-state entities), must have and use their own documented procurement procedures that reflect applicable SLTT laws and regulations, provided that the procurements conform to applicable federal law and the standards identified in 2 C.F.R. Part 200. These standards include, but are not limited to, providing for full and open competition consistent with the standards of 2 C.F.R. § 200.319 and the required procurement methods at § 200.320.

a. Important Changes to Procurement Standards in 2 C.F.R. Part 200

OMB recently updated various parts of Title 2 of the Code of Federal Regulations, among them, the procurement standards. States are now required to follow the socioeconomic steps in soliciting small and minority businesses, women's business enterprises, and labor surplus area firms per 2 C.F.R. § 200.321. All non-federal entities should also, to the greatest extent practicable under a federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States per 2 C.F.R. § 200.322. More

information on OMB's revisions to the federal procurement standards can be found in Purchasing Under a FEMA Award: OMB Revisions Fact Sheet.

The recognized procurement methods in 2 C.F.R. § 200.320 have been reorganized into informal procurement methods, which include micro-purchases and small purchases; formal procurement methods, which include sealed bidding and competitive proposals; and noncompetitive procurements. The federal micro-purchase threshold is currently $10,000, and non-state entities may use a lower threshold when using micro-purchase procedures under a FEMA award. If a non-state entity wants to use a micro-purchase threshold higher than the federal threshold, it must follow the requirements of 2 C.F.R. § 200.320(a)(1)(iii)- (v). The federal simplified acquisition threshold is currently $250,000, and a non-state entity may use a lower threshold but may not exceed the federal threshold when using small purchase procedures under a FEMA award. *See* 2 C.F.R. § 200.1 (citing the definition of simplified acquisition threshold from 48 C.F.R. Part 2, Subpart 2.1).

See 2 C.F.R. §§ 200.216, 200.471, and Appendix II as well as Section D.13.c, Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services.

b. Competition and Conflicts of Interest

Among the requirements of 2 C.F.R. § 200.319(b) applicable to all non-federal entities other than states, in order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals must be excluded from competing for such procurements. FEMA considers these actions to be an organizational conflict of interest and interprets this restriction as applying to contractors that help a non-federal entity develop its grant application, project plans, or project budget. This prohibition also applies to the use of former employees to manage the grant or carry out a contract when those former employees worked on such activities while they were employees of the non-federal entity.

Under this prohibition, unless the non-federal entity solicits for and awards a contract covering both development and execution of specifications (or similar elements as described above), and this contract was procured in compliance with 2 C.F.R. §§ 200.317 – 200.327, federal funds cannot be used to pay a contractor to carry out the work if that contractor also worked on the development of those specifications. This rule applies to all contracts funded with federal grant funds, including pre-award costs, such as grant writer fees, as well as post- award costs, such as grant management fees.

Additionally, some of the situations considered to be restrictive of competition include, but are not limited to:

- Placing unreasonable requirements on firms for them to qualify to do business;
- Requiring unnecessary experience and excessive bonding;
- Noncompetitive pricing practices between firms or between affiliated companies;
- Noncompetitive contracts to consultants that are on retainer contracts;

- Organizational conflicts of interest;
- Specifying only a "brand name" product instead of allowing "an equal" product to be offered and describing the performance or other relevant requirements of the procurement; and
- Any arbitrary action in the procurement process.

Per 2 C.F.R. § 200.319(c), non-federal entities other than states must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed SLTT geographical preferences in the evaluation of bids or proposals, except in those cases where applicable federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

Under 2 C.F.R. § 200.318(c)(1), non-federal entities other than states are required to maintain written standards of conduct covering conflicts of interest and governing the actions of their employees engaged in the selection, award, and administration of contracts. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a federal award if he or she has a real or apparent conflict of interest. Such conflicts of interest would arise when the employee, officer or agent, any member of his or her immediate family, his or her partner, or an organization that employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, non-federal entities may set standards for situations in which the financial interest is not substantial, or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-federal entity.

Under 2 C.F.R. 200.318(c)(2), if the recipient or subrecipient (other than states) has a parent, affiliate, or subsidiary organization that is not a state, local, tribal, or territorial government, the non-federal entity must also maintain written standards of conduct covering organizational conflicts of interest. In this context, organizational conflict of interest means that because of a relationship with a parent company, affiliate, or subsidiary organization, the non-federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization. The non-federal entity must disclose in writing any potential conflicts of interest to FEMA or the pass-through entity in accordance with applicable FEMA policy.

c. Supply Schedules and Purchasing Programs

Generally, a non-federal entity may seek to procure goods or services from a federal supply schedule, state supply schedule, or group purchasing agreement.

i. GENERAL SERVICES ADMINISTRATION SCHEDULES

States, tribes, and local governments, and any instrumentality thereof (such as local education agencies or institutions of higher education) may procure goods and services from a General Services Administration (GSA) schedule. GSA offers multiple efficient and effective procurement programs for state, tribal, and local governments, and instrumentalities thereof, to purchase products and services directly from pre-vetted contractors. The GSA Schedules (also referred to as the Multiple Award Schedules and the Federal Supply Schedules) are long-term government-wide contracts with commercial firms that provide access to millions of commercial products and services at volume discount pricing.

Information about GSA programs for states, tribes, and local governments, and instrumentalities thereof, can be found at https://www.gsa.gov/resources-for/programs-for- State-and-local-governments and https://www.gsa.gov/buying-selling/purchasing-programs/gsa-schedules/schedule-buyers/state-and-local-governments.

For tribes, local governments, and their instrumentalities that purchase off of a GSA schedule, this will satisfy the federal requirements for full and open competition provided that the recipient follows the GSA ordering procedures; however, tribes, local governments, and their instrumentalities will still need to follow the other rules under 2 C.F.R. §§ 200.317 – 200.327, such as solicitation of minority businesses, women's business enterprises, small businesses, or labor surplus area firms (§ 200.321), domestic preferences (§ 200.322), contract cost and price (§ 200.324), and required contract provisions (§ 200.327 and Appendix II).

ii. OTHER SUPPLY SCHEDULES AND PROGRAMS

For non-federal entities other than states, such as tribes, local governments, and nonprofits, that want to procure goods or services from a state supply schedule, cooperative purchasing program, or other similar program, in order for such procurements to be permissible under federal requirements, the following must be true:

- The procurement of the original contract or purchasing schedule and its use by the non-federal entity complies with state and local law, regulations, and written procurement procedures;
- The state or other entity that originally procured the original contract or purchasing schedule entered into the contract or schedule with the express purpose of making it available to the non-federal entity and other similar types of entities;
- The contract or purchasing schedule specifically allows for such use, and the work to be performed for the non-federal entity falls within the scope of work under the contract as to type, amount, and geography;
- The procurement of the original contract or purchasing schedule complied with all the procurement standards applicable to a non-federal entity other than states under at 2 C.F.R. §§ 200.317 – 200.327; and
- With respect to the use of a purchasing schedule, the non-federal entity must follow ordering procedures that adhere to applicable state, tribal, and local laws and

regulations and the minimum requirements of full and open competition under 2 C.F.R. Part 200.

If a non-federal entity other than a state seeks to use a state supply schedule, cooperative purchasing program, or other similar type of arrangement, FEMA recommends the recipient discuss the procurement plans with its FEMA NDSP Program Officer.

d. Procurement Documentation

Per 2 C.F.R. § 200.318(i), non-federal entities other than states and territories are required to maintain and retain records sufficient to detail the history of procurement covering at least the rationale for the procurement method, selection of contract type, contractor selection or rejection, and the basis for the contract price. States and territories are encouraged to maintain and retain this information as well and are reminded that in order for any cost to be allowable, it must be adequately documented per 2 C.F.R. § 200.403(g).

Examples of the types of documents that would cover this information include but are not limited to:

- Solicitation documentation, such as requests for quotes, invitations for bids, or requests for proposals;
- Responses to solicitations, such as quotes, bids, or proposals;
- Pre-solicitation independent cost estimates and post-solicitation cost/price analyses on file for review by federal personnel, if applicable;
- Contract documents and amendments, including required contract provisions; and
- Other documents required by federal regulations applicable at the time a grant is awarded to a recipient.
- Additional information on required procurement records can be found on pages 24-26 of the PDAT Field Manual.

7. Record Retention

a. Record Retention Period

Financial records, supporting documents, statistical records, and all other non-Federal entity records pertinent to a Federal award generally must be maintained for at least three years from the date the final FFR is submitted. *See* 2 C.F.R. § 200.334. Further, if the recipient does not submit a final FFR and the award is administratively closed, FEMA uses the date of administrative closeout as the start of the general record retention period.

The record retention period may be longer than three years or have a different start date in certain cases. These include:

- Records for real property and equipment acquired with Federal funds must be retained for three years after final disposition of the property. *See* 2 C.F.R. § 200.334(c).
- If any litigation, claim, or audit is started before the expiration of the three-year period, the records must be retained until all litigation, claims, or audit findings involving the records have been resolved and final action taken. *See* 2 C.F.R. § 200.334(a).

- The record retention period will be extended if the non-federal entity is notified in writing of the extension by FEMA, the cognizant or oversight agency for audit, or the cognizant agency for indirect costs, or pass-through entity. *See* 2 C.F.R. § 200.334(b).
- Where FEMA requires recipients to report program income after the period of performance ends, the program income record retention period begins at the end of the recipient's fiscal year in which program income is earned. *See* 2 C.F.R. § 200.334(e).
- For indirect cost rate computations and proposals, cost allocation plans, or any similar accounting computations of the rate at which a particular group of costs is chargeable (such as computer usage chargeback rates or composite fringe benefit rates), the start of the record retention period depends on whether the indirect cost rate documents were submitted for negotiation. If the indirect cost rate documents were submitted for negotiation, the record retention period begins from the date those documents were submitted for negotiation. If indirect cost rate documents were not submitted for negotiation, the record retention period begins at the end of the recipient's fiscal year or other accounting period covered by that indirect cost rate. *See* 2 C.F.R. § 200.334(f).

b. Types of Records to Retain

FEMA requires that non-federal entities maintain the following documentation for federally funded purchases:

- Specifications
- Solicitations
- Competitive quotes or proposals
- Basis for selection decisions
- Purchase orders
- Contracts
- Invoices
- Cancelled checks

Non-federal entities should keep detailed records of all transactions involving the grant. FEMA may at any time request copies of any relevant documentation and records, including purchasing documentation along with copies of cancelled checks for verification. *See, e.g.*, 2 C.F.R. §§ 200.318(i), 200.334, 200.337.

In order for any cost to be allowable, it must be adequately documented per 2 C.F.R. § 200.403(g). Non-federal entities who fail to fully document all purchases may find their expenditures questioned and subsequently disallowed.

8. Actions to Address Noncompliance

Non-federal entities receiving financial assistance funding from FEMA are required to comply with requirements in the terms and conditions of their awards or subawards, including the terms set forth in applicable federal statutes, regulations, NOFOs, and policies. Throughout the award lifecycle or even after an award has been closed, FEMA or the pass- through entity may discover potential or actual noncompliance on the part of a recipient or subrecipient. This potential or

actual noncompliance may be discovered through routine monitoring, audits, closeout, or reporting from various sources.

In the case of any potential or actual noncompliance, FEMA may place special conditions on an award per 2 C.F.R. §§ 200.208 and 200.339, FEMA may place a hold on funds until the matter is corrected, or additional information is provided per 2 C.F.R. § 200.339, or it may do both. Similar remedies for noncompliance with certain federal civil rights laws are authorized pursuant to 44 C.F.R. Parts 7 and 19.

In the event the noncompliance is not able to be corrected by imposing additional conditions or the recipient or subrecipient refuses to correct the matter, FEMA might take other remedies allowed under 2 C.F.R. § 200.339. These remedies include actions to disallow costs, recover funds, wholly or partly suspend or terminate the award, initiate suspension and debarment proceedings, withhold further federal awards, or take other remedies that may be legally available. For further information on termination due to noncompliance, see the section on Termination Provisions in the NOFO.

FEMA may discover and take action on noncompliance even after an award has been closed. The closeout of an award does not affect FEMA's right to disallow costs and recover funds as long the action to disallow costs takes place during the record retention period. *See* 2 C.F.R. §§ 200.334, 200.345(a). Closeout also does not affect the obligation of the non-federal entity to return any funds due as a result of later refunds, corrections, or other transactions. 2 C.F.R. § 200.345(a)(2).

The types of funds FEMA might attempt to recover include, but are not limited to, improper payments, cost share reimbursements, program income, interest earned on advance payments, or equipment disposition amounts.

FEMA may seek to recover disallowed costs through a Notice of Potential Debt Letter, a Remedy Notification, or other letter. The document will describe the potential amount owed, the reason why FEMA is recovering the funds, the recipient's appeal rights, how the amount can be paid, and the consequences for not appealing or paying the amount by the deadline.

If the recipient neither appeals nor pays the amount by the deadline, the amount owed will become final. Potential consequences if the debt is not paid in full or otherwise resolved by the deadline include the assessment of interest, administrative fees, and penalty charges; administratively offsetting the debt against other payable federal funds; and transferring the debt to the U.S. Department of the Treasury for collection.

FEMA notes the following common areas of noncompliance for FEMA's grant programs:

- Insufficient documentation and lack of record retention.
- Failure to follow the procurement under grants requirements.
- Failure to submit closeout documents in a timely manner.
- Failure to follow EHP requirements.
- Failure to comply with the POP deadline.

9. Audits

FEMA grant recipients are subject to audit oversight from multiple entities including the DHS OIG, the GAO, the pass-through entity, or independent auditing firms for single audits, and may cover activities and costs incurred under the award. Auditing agencies such as the DHS OIG, the GAO, and the pass-through entity (if applicable), and FEMA in its oversight capacity, must have access to records pertaining to the FEMA award. Recipients and subrecipients must retain award documents for at least three years from the date the final FFR is submitted, and even longer in many cases subject to the requirements of 2 C.F.R. § 200.334. In the case of administrative closeout, documents must be retained for at least three years from the date of closeout, or longer subject to the requirements of 2 C.F.R. § 200.334. If documents are retained longer than the required retention period, the DHS OIG, the GAO, and the pass-through entity, as well as FEMA in its oversight capacity, have the right to access these records as well. *See* 2 C.F.R. §§ 200.334, 200.337.

Additionally, non-federal entities must comply with the single audit requirements at 2 C.F.R. Part 200, Subpart F. Specifically, non-federal entities, other than for-profit subrecipients, that expend $750,000 or more in federal awards during their fiscal year must have a single or program-specific audit conducted for that year in accordance with Subpart F. 2 C.F.R. § 200.501. A single audit covers all federal funds expended during a fiscal year, not just FEMA funds. The cost of audit services may be allowable per 2 C.F.R. § 200.425, but non-federal entities must select auditors in accordance with 2 C.F.R. § 200.509, including following the proper procurement procedures. For additional information on single audit reporting requirements, *see* [Section F.4.d.iii., Single Audit Report].

The objectives of single audits are to:

- Determine if financial statements conform to generally accepted accounting principles (GAAP);
- Determine whether the schedule of expenditures of federal awards is presented fairly;
- Understand, assess, and test the adequacy of internal controls for compliance with major programs; and
- Determine if the entity complied with applicable laws, regulations, and contracts or grants.

For single audits, the auditee is required to prepare financial statements reflecting its financial position, a schedule of federal award expenditures, and a summary of the status of prior audit findings and questioned costs. The auditee also is required to follow up and take appropriate corrective actions on new and previously issued but not yet addressed audit findings. The auditee must prepare a corrective action plan to address the new audit findings. 2 C.F.R. §§ 200.508, 200.510, 200.511.

Non-federal entities must have an audit conducted, either single or program-specific, of their financial statements and federal expenditures annually or biennially pursuant to 2 C.F.R. § 200.504. Non-federal entities must also follow the information submission requirements of 2 C.F.R. § 200.512, including submitting the audit information to the Federal Audit Clearinghouse within the earlier of 30 calendar days after receipt of the auditor's report(s) or nine months after the end of the audit period. The audit information to be submitted include the data collection form described

at 2 C.F.R. § 200.512(c) and Appendix X to 2 C.F.R. Part 200 as well as the reporting package described at 2 C.F.R. § 200.512(b).

The non-federal entity must retain one copy of the data collection form and one copy of the reporting package for three years from the date of submission to the Federal Audit Clearinghouse. 2 C.F.R. § 200.512; *see also* 2 C.F.R. § 200.517 (setting requirements for retention of documents by the auditor and access to audit records in the auditor's possession).

FEMA, the DHS OIG, the GAO, and the pass-through entity (if applicable), as part of monitoring or as part of an audit, may review a non-federal entity's compliance with the single audit requirements. In cases of continued inability or unwillingness to have an audit conducted in compliance with 2 C.F.R. Part 200, Subpart F, FEMA and the pass-through entity, if applicable, are required to take appropriate remedial action under 2 C.F.R. § 200.339 for noncompliance, pursuant to 2 C.F.R. § 200.505.

10. Payment Information

FEMA uses the Direct Deposit/Electronic Funds Transfer (DD/EFT) method of payment to recipients. To enroll in the DD/EFT, the recipient must complete SF-1199A, Direct Deposit Form.

FEMA utilizes the Payment and Reporting System (PARS) for financial reporting, invoicing and tracking payments. For additional information, refer to https://isource.fema.gov/sf269/execute/LogIn?sawContentMessage=true.

11. Whole Community Preparedness

Preparedness is a shared responsibility that calls for the involvement of everyone—not just the government—in preparedness efforts. By working together, everyone can help keep the nation safe from harm and help keep it resilient when struck by hazards, such as natural disasters, acts of terrorism, and pandemics.

Whole Community includes:

- Individuals and families, including those with access and functional needs
- Businesses
- Faith-based and community organizations
- Nonprofit groups
- Schools and academia
- Media outlets
- All levels of government, including state, local, tribal, territorial, and federal partners

The phrase "Whole Community" often appears in preparedness materials, as it is one of the guiding principles. It means two things:

1. Involving people in the development of national preparedness documents.
2. Ensuring their roles and responsibilities are reflected in the content of the materials.

13. Mitigation Plan Requirement Resources

FEMA's Mitigation Planning program provides policies ((State Mitigation Plan Review Guide (March 2015), Local Mitigation Plan Review Guide (October 2011) or Tribal Mitigation Plan Review Guide (December 2017)), training, and technical assistance regarding the mitigation plan requirement for state, local, tribal and territorial governments, including meeting the requirements to include all dam risks in order to receive HHPD funding found in the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020) or subsequent updates and the FEMA Policy 104- 008-7. Additional information on mitigation planning is available from Hazard Mitigation Planning | FEMA.gov, in particular:

- Regulations and Guidance | FEMA.gov
- Create a Hazard Mitigation Plan | FEMA.gov

Information on the HHPD mitigation plan requirements can be found here: Dam Safety Grants | FEMA.gov

Questions should be sent to the Senior Mitigation Planner in the Mitigation Division of the appropriate FEMA Regional Office. Contact information is available at https://www.fema.gov/fema-regional-contacts.

14. Mitigation Plan Requirement Extension Request

FEMA may grant an extension to the approved local mitigation plan requirement in extraordinary circumstances when justification is provided by the Recipient and subrecipient or jurisdiction where the dam is located if differs from subrecipient. If this extension is granted by FEMA, then a local or tribal mitigation plan that includes all dam risks must be approved within twelve (12) months of the date FEMA approves the Recipient grant SOW package. *See* Section H.14., Example Mitigation Plan Extension Request Template.

Extraordinary circumstances exist when a determination is made by FEMA, with concurrence from FEMA Headquarters National Mitigation Planning Program, that the local or tribal government has a current approved mitigation plan that does not address all dam risks and also meets at least one (1) of the criteria below:

- The jurisdiction meets the definition of small impoverished community. See Section H.19., Definitions. Applicants must certify and provide documentation of the community or jurisdictional status to FEMA with the Mitigation Plan Extraordinary Circumstances Request through ND Grants. See Section H.14., Example Mitigation Plan Extension Request Template.
- The jurisdiction has been determined to have had insufficient capacity due to a lack of available funding, staffing, or other necessary expertise to satisfy the mitigation planning requirement prior to the application deadline.
- The jurisdiction where the dam is located has an approved mitigation plan, but it does not include all dam risk, for reasons beyond the control of the jurisdiction.

The Recipient will request in writing via ND Grants on behalf of the subrecipient that an extension is needed to meet the local or tribal mitigation plan requirement for the jurisdiction where the dam

is located. *See* Section H.14., Example Mitigation Plan Extension Request Template. The request must affirm that the jurisdiction where the dam is located will have an approved local or tribal mitigation plan within twelve (12) months of the date FEMA approves the Recipient grant SOW package, and a written justification that identifies 1) the circumstance for not meeting the mitigation plan requirement, and 2) explains what resources the recipient and/or subrecipient or jurisdiction where the dam is located will use to update the approved mitigation plan to include all dam risks to meet the specific HHPD requirements set forth in the above referenced guidance and policy, and 3) includes the schedule and milestones for the plan to be approved by FEMA within twelve (12) months of the date FEMA approves the recipient grant SOW package. The updated local or tribal mitigation plan must be submitted to FEMA a minimum of 45 days prior to twelve (12) month deadline from the date FEMA approved the SOW package to allow sufficient time for review, revisions, if needed, and approval.

The Recipient should coordinate with the Regional Mitigation Planner for the determination of whether the jurisdiction where the dam is located has an approved mitigation plan (compliant with 44 C.F.R. Part 201 and Local Mitigation Plan Review Guide (October 2011) or Tribal Mitigation Plan Review Guide (December 2017))) and includes all dam risks in accordance with the requirements set forth in the Local Mitigation Planning Policy Guide (FEMA, April 2022), which supersede the requirements set forth in the Rehabilitation of High Hazard Potential Dams Grant Program Guidance, (FEMA, June 2020) and the FEMA Policy 104- 008-7, prior to submitting the SOW package to FEMA HHPD staff for review and approval. FEMA will not approve the SOW package for subrecipients without an approved mitigation plan for the jurisdiction where the dam is located (compliant with 44 C.F.R Part 201 and Local Mitigation Plan Review Guide (October 2011) or Tribal Mitigation Plan Review Guide (December 2017))) that includes all dam risks in accordance requirements set forth in the Local Mitigation Planning Policy Guide (FEMA, April 2022), which supersede the requirements set forth in the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020) and the FEMA Policy 104- 008-7 or has requested a twelve (12) month extension to the requirement. *See* Section H.14., Example Mitigation Plan Extension Request Template.

FEMA Headquarters GPD shall explicitly incorporate the requirement to have an approved local or tribal mitigation plan for the jurisdiction where the dam is located (compliant with 44 C.F.R Part 201 and Local Mitigation Plan Review Guide (October 2011) or Tribal Mitigation Plan Review Guide (December 2017)) that includes all dam risks in accordance requirements set forth in the Local Mitigation Planning Policy Guide (FEMA, April 2022), which supersede the requirements set forth in the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020) and the FEMA Policy 104- 008-7 within twelve (12) months of the date FEMA approves the SOW package.

Remedies for non-compliance with Federal awards are set forth in 2 C.F.R. Section 200.339. If the recipient, subrecipient and/or jurisdiction where the dam is located receive a twelve (12) month extension to the mitigation plan requirement and do not meet the terms and conditions of the SOW package for the subrecipient to have an approved local or tribal mitigation plan that includes all dam risks within twelve (12) months of the date FEMA approved the SOW package, FEMA may

seek remedies that are legally available, such as temporarily withholding cash payments pending correction of the deficiency, terminate in whole or in part the grant award, withholding further FEMA / HHPD awards to the Recipient, initiating suspension or debarment proceedings, etc. *See* Section H.1., Termination Provisions and Section H.1.a., Noncompliance for more information on noncompliance remedies.

FEMA will provide the SAA with notification in ND Grants 30 days prior to the twelve (12) month deadline from the date of the applicable grant SOW package approval. The SAA must provide a written explanation in ND Grants prior to the deadline as to why the subrecipient or jurisdiction where the dam is located will fail to meet the deadline to have an approved mitigation plan that includes all dam risks and include any aggravating and/or mitigation circumstances as well as a proposed corrective action plan to remedy the non- compliance. FEMA (GPD, OCC, NDSP, and HQ and Regional Mitigation Planning) will determine if the proposed remedy is satisfactory, apply legal remedies, as applicable, and notify the Recipient via ND Grants.

15. Example Mitigation Plan Extension Request Template

Mitigation Plan Extraordinary Circumstances Request - Applicant Template (States)

[Appropriate Branch Chief or FEMA Program Officer]
National Dam Safety Program
Federal Emergency Management Agency [*Office Address Street*]
[*Office City, State Zip*]

Submitted via ND Grants

Reference: Request approval of 12-month extension to update mitigation plan under "Mitigation Plan Extraordinary Circumstances" in order to receive funding under the *Rehabilitation of High Hazard Potential Dams Grant Program*

Dear (*Insert Name*):

The [*insert Applicant name]* in consultation and coordination with *[insert name of agency/ies responsible for updating the approved local or tribal mitigation plan* (*compliant with 44 C.F.R. Part 201 and Local Mitigation Plan Review Guide (October 2011) or subsequent update or Tribal Mitigation Plan Review Guide (December 2017)) either for the subrecipient or for the jurisdiction where the dam is located*] requests approval for the Mitigation Plan Extraordinary Circumstances extension as stated on page [*Insert page number*] of the Rehabilitation of High Hazard Potential Dams (HHPD) Grant Program Notice of Funding Opportunity (NOFO).

[For local or tribal mitigation plan(s) where the dam is located that require updates, insert the following text]

With respect to the following local and/or tribal government and/or nonprofit organization subrecipients, I/we have included the documentation requested on page [*Insert page number*] of the NOFO (6.c.) to request an extension to the approved local or tribal mitigation plan

requirements (compliant with 44 C.F.R. Part 201 and Local Mitigation Plan Review Guide October 2011) or subsequent update or Tribal Mitigation Plan Review Guide (December 2017)) for the jurisdiction where the dam is located in order to receive HHPD funding. We understand, if our request is approved, that the following currently approved local and/or tribal mitigation plans for the jurisdiction where the dam is located will need to be updated to address all dam risks in accordance with requirements set forth in the Local Mitigation Planning Policy Guide (FEMA, April 2022), which supersede the requirements set forth in the Rehabilitation of High Hazard Potential Dams Grant Program Guidance and the FEMA Policy 104- 008-7 within twelve (12) months from the date FEMA Grants Program Directorate approves the SOW package in ND Grants or FEMA may terminate the award or explore other remedies as appropriate as described on page x of the NOFO:

- [Insert list]

If you have any questions, please contact me at [*insert phone # and email address*].

Sincerely,
[Recipient name, title]; and
[State Hazard Mitigation Officer or state mitigation planner name, title]; and
[Agency Responsible for Updating subrecipient HM Plan where the dam is located name, title]

cc: FEMA Regional National Dam Safety Program Point of Contact

Attachments:

- Approach, schedule, and milestones (workplan) for updating approved local or tribal mitigation plan(s) to include all dam risks to include the requirements set forth in the Local Mitigation Planning Policy Guide (FEMA, April 2022), which supersede the requirements set forth in the Rehabilitation of High Hazard Potential Dams Grant Program Guidance and the FEMA Policy 104- 008-7, including allowing time for FEMA review and approval
- Documentation supporting the determination of Extraordinary Circumstances for each subrecipient

17. Examples Using Funding Formula

The following example demonstrates the funding formula. Assume eleven states apply for funding in a given year, with the number of eligible dams as shown in Table 1.

Table 1: Example – Number of States and Eligible Dams

State	Number Eligible Dams
State 1	3
State 2	10
State 3	2
State 4	5
State 5	8
State 6	7
State 7	14
State 8	6
State 9	4
State 10	9
State 11	5
Total Eligible Dams	**73**

Step [i]. Using the funding formula, 1/3 of the $11,640,000.00 in available funding ($3,880,000.00) would be divided evenly between the eleven states, totaling $352,727.27 to each of the eleven states.

Step [ii]. There are a total of 73 eligible dams in the eleven states that submitted applications. The remaining 2/3 of the available funding ($7,760,000.00) would be distributed as shown:

Table 2: Example – Resulting Funding Using Formula

State	Ratio of State's Eligible Dams to All Eligible Dams	Resulting Funding
State 1	3/73	$352,727.27 + $7,760,000.00 x (3/73) = $671,631.39
State 2	10/73	$352,727.27 + $7,760,000.00 x (10/73) = $1,415,740.98
State 3	2/73	$352,727.27 + $7,760,000.00 x (2/73) = $565,330.01
State 4	5/73	$352,727.27 + $7,760,000.00 x (5/73) = $884,234.12
State 5	8/73	$352,727.27 + $7,760,000.00 x (8/73) = $1,203,138.23
State 6	7/73	$352,727.27 + $7,760,000.00 x (7/73) = $1,096,836.86
State 7	14/73	$352,727.27 + $7,760,000.00 x (14/73) = $1,840,946.45
State 8	6/73	$352,727.27 + $7,760,000.00 x (6/73) = $990,535.49
State 9	4/73	$352,727.27 + $7,760,000.00 x (4/73) = $777,932.75
State 10	9/73	$352,727.27 + $7,760,000.00 x (9/73) = $1,309,439.6
State 11	5/73	$352,727.27 + $7,760,000.00 x (5/73) = $884,234.12

Maximum Funding Amounts. Using the example provided, the maximum amount that could be awarded to any subrecipient in FY2020 is $1,250,000. Using the funding formula, the resulting

funding for State 7 exceeded the maximum amount, so State 7 would still receive $1,840,946.45. However, no subrecipient would be awarded more than $1,250,000.

A state may have multiple subrecipients; if the amount of funding is not sufficient for all eligible subrecipients, the state will have to prioritize dams using their discretion, and other eligibility factors such as the subrecipient's ability to meet the non-Federal cost share, to choose which subrecipients to fund.

Example (use Table 2 above): Assume State 2 submitted five (5) activities with their application. Assume the cost estimates for each activity are as follows: $200,000 for Activity 1, $500,000 for Activity 2, $600,000 for Activity 3, $400,000 for Activity 4, and $1,000,000 for Activity 5. FEMA reviewed the five activities and determined that Activity 1 is not eligible for funding. State 2 must use the risk-based prioritization method to determine which of the remaining four eligible activities (Activities 2-5) to fund. Note that some of the activities may not be fully funded.

18. Determination of Unacceptable Risk to the Public

For purposes of the HHPD, the determination of unacceptable risk to the public is to be made by the state dam safety program, the agency of the state that is authorized by state statute to manage the state participation in the NDSP. *See* **Section H.19., Definitions**, for the definitions of unacceptable risk to the public and official regulatory notice.

19. Eligible Activities

FEMA will evaluate proposed activities for eligibility. Eligible activities include repair, removal, or any other structural or nonstructural measures to rehabilitate an eligible high hazard potential dam. Note that all eligible activities included in the list must also have eligible subrecipients that can meet the cost-share requirements and have taxing ability.

For the purposes of this grant program, the activities shown in Table 3 could qualify for funding. The activities are categorized into three types of activities: planning, design, and construction. This list is not exhaustive; other activities may also be eligible.

- **Planning Activities** - Planning activities include investigations and risk assessments that further define the dam risk. Planning activities should include alternatives analysis to identify a preferred plan for dam rehabilitation and the estimated cost for design and construction. For project planning, the alternatives should involve the preparation of preliminary hydrologic and hydraulic modeling to address the regulations of the state and local governments for alterations in floodplain areas as well as the minimum requirements of the NFIP. The local community should be consulted during the alternative identification and selection process to address local planning, zoning, and floodplain management regulations. Potential environmental impacts should also be considered in the selection of the preferred plan. Early coordination with EHP should be conducted to address applicable environmental requirements.
- **Design Activities** – Design activities include work to develop conceptual, preliminary, or final design plans and specifications for dam rehabilitation projects that have been

planned using an alternative evaluation process that complies with NEPA requirements. Coordination with EHP during the design should be conducted to confirm that the design complies with NEPA requirements. Detailed hydrologic and hydraulic modeling should be performed for use in designing the dam rehabilitation and to address the permit requirements of the state and local government as well as the minimum requirements of the NFIP. For all projects located in Special Flood Hazard Areas on FEMA Flood Insurance Rate Maps, a FEMA conditional review of the project design for compliance with NFIP requirements should be conducted through the process outlined in 44 C.F.R. § 65.8. The design effort should include obtaining all state, local, and federal permits for approval to construct the project in the floodplain and to meet all environmental requirements.

Note that all grant-funded activities must comply with Federal Environmental Planning and Historic Preservation (EHP) regulations. *See* Section F.3.c., Environmental Planning and Historic Preservation (EHP) Compliance, for more information about EHP Compliance.

Table 3: Examples of Eligible Scope of Work Activities

Category	Eligible Scope of Work Activities	FPMP Requirement Y/N	Staff Notes/ Comments
Planning	• Development of evacuation plans, plans for flood fighting, or community response plans to include in the floodplain management plan • Coordination of EAP and EOPs for different release conditions	N	
Planning	• Activities and studies that determine risks associated with eligible dams • Environmental studies for NEPA compliance • Development of operation and maintenance plans	N	
Planning	• Public education and awareness of flood risks associated with the eligible dam project	N	
Planning	• Dam risk and consequence assessments Feasibility studies • Preliminary engineering studies Alternatives analysis • Mapping, engineering survey, and inundation modeling	Y	
Design	• Engineering design • Development of specifications	Y	
Construction	• Repair or rehabilitation of the dam • Dam removal • Construction monitoring • Installation of early warning systems associated with the eligible dam project	Y	

20. Floodplain Management Plan

To be eligible for HHPD, subrecipients must have in place (or will be developed not later than 2 years after the date of execution of a dam rehabilitation or removal project agreement and implemented not later than 2 years after the date of completion of a project) a floodplain management plan to reduce the impacts of future flood events in the area impacted by the project. The floodplain management plan (FPMP) shall address:

a. potential measures, practices, and policies to reduce loss of life, injuries, damage to property and facilities, public expenditures, and other adverse impacts of flooding in the area protected by the project;
b. plans for flood fighting and evacuation; and
c. public education risk communication targeting communities in the inundation area.

The purpose of the FPMP is to specifically address the impacts of the dam or dams for which an HHPD grant has been awarded. It is intended to function as a stand-alone plan that does not modify the floodplain ordinance in effect to comply with the NFIP. The following information must be addressed in the FPMP.

The development of the FPMP should be a shared responsibility of the subrecipient and local government with authority to implement policies that protect the public and regulate development. The FPMP development should include the involvement of key partners and stakeholders including representatives of the local government emergency managers, first responders and planners, state agencies including dam safety and state hazard mitigation office, as well as technical resources afforded by federal agencies such as the USACE and the NRCS. Therefore, the FPMP should include a formalized stakeholder involvement process to obtain input from key partners and stakeholders leading to adoption of the FPMP by the governing body impacted by the dam rehabilitation. The FPMP must address the following:

A. <u>Potential measures to reduce the adverse impacts of flooding</u>

1. Evaluation of the flood hazards with and without the dam rehabilitation measures
    a. Identification of the reach of stream downstream and upstream of the dam for which flooding is impacted by the rehabilitation. This defines the study area as well as the local governments that should be consulted
    b. Identification of the impacts of the dam rehabilitation on the flood elevations for a range of frequent and infrequent flood events.
        i. Does the dam rehabilitation maintain or decrease the level of flood protection for the 1% flood (designed flood prevention or non-designed incidental)?
        ii. Does the dam rehabilitation increase the flood flows to downstream areas for a range of recurrence interval events including the 2-, 10-, 25-, 50-, 100-, and 500- year events?
        iii. Does the dam rehabilitation impact the operational releases form the dam during rain events?
        iv. For dam removal projects, the removal of the dam may increase the magnitude and timing of flood flows to downstream areas. Any adverse impacts on a range of frequent and infrequent recurrence interval events should be documented and mitigated

2. What are the consequences related to the adverse impacts identified in 1 above?
    a. Number of residential and commercial insurable structures
    b. Estimated economic losses due to the flooding event
    c. Critical utilities
    d. Transportation network
    e. Critical facilities
    f. Local governmental public expenditures for operations to prepare for and recover in the event of flooding
3. What mitigation actions will be implemented by the local governments to address both the adverse impacts resulting from the dam rehabilitation (if any) such as:
    a. Structural modification to the stream conveyance system
    b. Nonstructural measures including:
        i. Floodproofing of structures
        ii. Building standards to account for increased depth or velocity
4. What mitigation actions will be implemented by the local governments to address residual risk not resolved by item 3 above:
    a. What actions and policies will be implemented address flood risk attributable to the adverse impacts of dam rehabilitation that could not be mitigated?
    b. What actions and policies that will be implemented to address residual flood risk not associated with the adverse impacts of the dam rehabilitation.
    c. The mitigation actions should address the planned schedule for study or implementation.

B. Plan for flood fighting and evacuation

A plan developed by the dam owner in cooperation with the governing local government, local government emergency managers and first responders should be prepared for flood fighting activities and evacuation for both operational releases during frequent and infrequent recurrence interval events as well as potential dam failure scenarios.

1. The plan should be consistent with the Emergency Action Plan for the dam.
2. Using the depth, velocity, and timing information of the modeling of the hydrologic and hydraulic modeling of the effects of the dam rehabilitation on downstream and upstream areas, the plan should address the locations of critical facilities, venerable population, and the transportation network. The locations of flood fighting should be identified as well as an implementation plan including responsible parties and resources (stockpile of materials or on-call contractors).
3. The plan should address the value of an early warning system.
4. The evacuation plan should address both shelter in place and horizonal evacuation.
5. The plan should address the frequency for drills and exercises of the flood fighting and evacuation plan.

C. Public Education and awareness of Flood Risk

A public education and outreach program should provide information to impacted property owners and residents in and near the floodplain upstream and downstream of the dam as well as use the recreational facilities or transportation network susceptible to flooding.

The plan should consider multimedia and social media measures to reach the intended audience and provide information to determine where to get information for flood hazards, flood warning, flood evacuation and how to develop their personal flood avoidance plan.

The governing local government should consider evaluation of the extent of floodplains upstream and downstream of dams in the planning and zoning process for new development that may be adversely impacted by the dam. Local governments should consider including dam breach inundation mapping to subdivision plats to provide educate potential buyers of the potential flood hazard and to encourage location of building lots outside the inundation area.

Compliance with Executive Order 11988

Executive Order 11988 (source- Glossary Section National Flood Insurance Program

Issued in May 1977, this Executive Order directs Federal Agencies to:

1. assert leadership in reducing flood losses and losses to environmental values served by floodplains;
2. avoid actions located in or adversely affecting floodplains unless there is no practicable alternative;
3. take action to mitigate losses if avoidance is not practicable; and
4. establishes a process for flood hazard evaluation based upon the 100- year base flood standard of the National Flood Insurance Program (NFIP). It also directed Federal agencies to issue implementing procedures; provided a consultation mechanism for developing the implementing procedures; and provided oversight mechanisms.

Under the Constitution, a Federal agency does not have to obtain local community permits to develop property within the community. However, all Federal agencies are responsible for implementing Executive Order 11988 through their own regulations. The Order states that, at a minimum, Federal agencies must comply with National Flood Insurance Program (NFIP)

For HHPD projects located in a FEMA identified regulatory floodplain, the projects must comply with Executive Order 11988.

All dam rehabilitation projects should meet state and local regulations for encroachment in or alterations of regulatory floodplains in compliance with state laws and local floodplain management, zoning, and site design regulations.

Projects funded by the HHPD must also address compliance with this executive order by meeting the requirements identified in 44 C.F.R. Part 65.

For all HHPD grants, Executive Order 11988 must be considered through all stages of grant funding including planning and design.

Dam rehabilitation projects may impact the regulatory flood elevations through a structural modification to the dam or outlet works that may increase the regulatory flood elevations upstream and downstream of the dam. Such modification may result in an increase of the regulatory flood elevations upstream of the dam or may result in the loss of incidental or designed flood storage in the reservoir resulting in an increase in the regulatory flood elevations downstream of the dam.

A dam removal may result in a decrease in the regulatory flood elevations upstream of the dam and an increase in the regulatory flood elevations downstream of the dam due to loss of flood storage.

For a grant that funds *planning* activities**,** alternatives should be considered for the dam rehabilitation or dam removal including performing hydrologic and hydraulic studies to determine the impact of the project on the regulatory flood elevations upstream and downstream of the dam. The local community for which the dam is located should be consulted to confirm compliance with the local floodplain management regulations and NFIP regulations.

For a grant that funds *design* the hydrologic and hydraulic modeling should be updated to reflect the design and a review of the proposed project should be submitted to FEMA for review and issuance of a conditional letter of map revision in accordance with 44 C.F.R. §65.8 and potentially § 65.12 of the NFIP regulations.

21. Definitions Administrator

The term "Administrator" means the Administrator of the Federal Emergency Management Agency.

All Dam Risk

For the purposes of the HHPD program, all dam risk includes the incremental risk, non-breach risk, and residual risk associated with each eligible high hazard potential dam, as well as the reason(s) the state has determined the dam is an eligible high hazard potential dam.

Applicant

The entity (i.e., the state under this grant program) applying to the Federal Emergency Management Agency (FEMA) for a Federal award that will be accountable for the use of the funds. Once funds are awarded, the applicant becomes the recipient or pass-through entity or both.

Board

The term "Board" means a National Dam Safety Review Board established under section 467f(f) of this title.

Budget Period (Source 2 C.F.R. 200.1)

Budget Period means the time interval from the start date of a funded portion of an award to the end date of that funded portion during which recipients are authorized to expend the funds awarded, including any funds carried forward or other revisions pursuant to § 200.308.

Construction-Ready Projects

Construction-ready projects are projects that have completed the planning and engineering phases and are ready, with adequate funding, to being the construction phase.

Dam (Source: 33 USC § 467(3))

The term "dam"—

(A) means any artificial barrier that has the ability to impound water, wastewater, or any liquid-borne material, for the purpose of storage or control of water, that—
  (i) is 25 feet or more in height from—
    (I) the natural bed of the stream channel or watercourse measured at the downstream toe of the barrier; or
    (II) if the barrier is not across a stream channel or watercourse, from the lowest elevation of the outside limit of the barrier; to the maximum water storage elevation; or
  (ii) has an impounding capacity for maximum storage elevation of 50 acre-feet or more; but

(B) does not include—
  (i) a levee; or
  (ii) a barrier described in subparagraph (A) that—
    (I) is 6 feet or less in height regardless of storage capacity; or
    (II) has a storage capacity at the maximum water storage elevation that is 15 acre-feet or less regardless of height; unless the barrier, because of the location of the barrier or another physical characteristic of the barrier, is likely to pose a significant threat to human life or property if the barrier fails (as determined by the Administrator).

Dam Safety Deficiency (Source NID)

A load capacity limit or other issue that can result in a failure of the dam or appurtenant structure. It is a characteristic or condition that does not meet the applicable minimum regulatory criteria.

Deferred Maintenance *(Source: Adapted from FASAB Statement of Federal Financial Accounting Standards 42, Apr. 25, 2012)*

Routine activities performed to prevent deterioration of structures and equipment to keep a dam in a safe and functioning condition were not performed when they should have been or were scheduled to be and which are put off or delayed for a future period. Routine activities include preventive maintenance; replacement of parts, systems, or components; and other activities needed to preserve or maintain the dam. Maintenance and repairs, as distinguished from capital improvements, exclude activities directed towards expanding the capacity of a dam or otherwise upgrading it to serve needs different from, or significantly greater than, its current use.

Fair (Source: NID Condition Assessment definition)

No existing dam safety deficiencies are recognized for normal operating conditions. Rare or extreme hydrologic and/or seismic events may result in a dam safety deficiency. Risk may be in the range to take further action. Note: Rare or extreme event is defined by the regulatory agency based on their minimum applicable state or federal criteria.

Other Circumstances:

- Lack of maintenance requires attention to prevent developing safety concerns.
- Maintenance conditions may exist that require remedial action greater than routine work and/or secondary studies or investigations.
- Interim or permanent risk reduction measures may be under consideration.

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.

Expected life of the dam

Estimated number of years the rehabilitation will be effective. The expected life for a dam rehabilitated under the HHPD program is 50 years.

Federal Agency

The term "Federal agency" means a Federal agency that designs, finances, constructs, owns, operates, maintains, or regulates the construction, operation, or maintenance of a dam.

Federal Guidelines for Dam Safety

The term "Federal Guidelines for Dam Safety" means the FEMA publication, numbered 93 and dated June 1979, that defines management practices for dam safety at all Federal agencies.

FEMA

The term "FEMA" means the Federal Emergency Management Agency.

Hazard Reduction

The term "hazard reduction" means the reduction in the potential consequences to life and property of dam failure.

Incremental Risk

The risk (likelihood and consequences) to the pool area and downstream floodplain occupants that can be attributed to the presence of the dam should the dam breach prior or subsequent to overtopping, or undergo component malfunction or misoperation, where the consequences considered are over and above those that would occur without dam breach. The consequences typically are due to downstream inundation, but loss of the pool can result in significant consequences in the pool area upstream of the dam.

Interim Risk Reduction Measures (Source: https://www.usace.army.mil/Missions/Civil-Works/Levee-Safety-Program/Risk-Reduction/)

Effective, interim actions taken to reduce flood risk while longer term solutions are planned and implemented. Interim risk reduction measures are a critical part of responsible, adaptive flood risk management.

Non-Breach Risk

The risk in the reservoir pool area and affected downstream floodplain due to 'normal' dam operation of the dam (e.g. large spillway flows within the design capacity that exceed channel capacity) or 'overtopping of the dam without breaching' scenarios.

Non-Federal Entity

A state, local, or tribal government, or nonprofit organization that carries out a federal award as a recipient or subrecipient.

Nonprofit

Eligible nonprofit organizations are those organizations that are described under section 501(c)(3) of the Internal Revenue Code of 1986 (IRC) and exempt from tax under section 501(a) of such code. Refer to links below for additional information:

- https://www.irs.gov/charities-non-profits/charitable-organizations/exemption-requirements-section-501-c-3-organizations
- https://www.irs.gov/publications/p557/ch03.html
- https://www.irs.gov/charities-non-profits

Not Rated *(Source: NID Condition Assessment definition)*

The dam has not been inspected, is not under state or federal jurisdiction, or has been inspected but, for whatever reason, has not been rated.

Official Regulatory Notice

A specific Dam Safety Deficiency (meeting the NID definition) is recognized and cannot be resolved with routine maintenance. The state dam safety agency has issued an official regulatory notice to the dam owner that includes all of the following elements:

1. The dam owner is notified of the specific deficiency and a regulatory requirement to immediately implement risk-reduction measures. (Required risk-reduction measures may include activities such as hiring an engineer to conduct risk-based failure mode studies, design of risk-reduction measures, construction of risk-reduction measures, or other actions.)
2. The regulatory notice indicates whether temporary risk-reduction measures (such as reservoir restrictions) are required.
3. The regulatory notice indicates a specific time allowance for the completion of the risk-reduction measures.4. The regulatory notice includes a statement of the state dam safety's authority to issue regulatory actions and/or specific regulatory enforcement actions for failure to comply.

Pass-through Entity

A non-federal entity that provides a subaward to a subrecipient to carry out part of a Federal program.

Period of Performance (POP) *(Source 2 C.F.R. 200.1)*

Period of performance means the total estimated time interval between the start of an initial Federal award and the planned end date, which may include one or more funded portions, or budget periods. Identification of the period of performance in the Federal award per § 200.211(b)(5) does not commit the awarding agency to fund the award beyond the currently approved budget period.

Poor *(Source: NID Condition Assessment definition)*

A dam safety deficiency is recognized for normal operating conditions which may realistically occur. Remedial action is necessary. POOR may also be used when uncertainties exist as to critical analysis parameters which identify a potential dam safety deficiency. Investigations and studies are necessary.

Other Circumstances:

- Dam has multiple deficiencies or a significant deficiency that requires remedial work.
- Lack of maintenance (erosion, sinkholes, settlement, cracking, unwanted vegetation, animal burrows, inoperable outlet gates) has affected the integrity or the operation of the dam under normal operational conditions and requires remedial action to resolve.
- Critical design information is needed to evaluate the potential performance of the dam. For example, a field observation or a review of the dam's performance history has identified a question that can only be answered by review of the design and construction history for the dam. Uncertainty arises when there is no design and/or construction documentation available for review and additional analysis is needed to better understand the risk associated with operation under normal operational conditions.
- Interim or permanent risk reduction measures may be under consideration.

Population at Risk (PAR) *(Source: USACE ER 1110-2-1156)*

The population downstream of a dam that would be subject to risk from flooding in the instance of a potential dam failure; usually documented in numbers of persons at risk.

Pre-award Costs *(Source: 2 C.F.R. § 200.458)*

Pre-award costs are those incurred prior to the effective date of the federal award directly pursuant to the negotiation and in anticipation of the federal award where such costs are necessary for efficient and timely performance of the scope of work. Such costs are allowable only to the extent that they would have been allowable if incurred after the date of the federal award and only with the written approval of the federal awarding agency.

Program

The term "Program" means the national dam safety program established under section 467f of this title.

Recipient

A non-federal entity that receives a federal award directly from a federal awarding agency to carry out an activity under a federal program. The term recipient does not include subrecipients.

Rehabilitation *(Source: 33 U.S.C. § 467(12))*

The term "rehabilitation" means the repair, replacement, reconstruction, or removal of a dam that is carried out to meet applicable State dam safety and security standards.

Routine Operation and Maintenance

Activities performed to prevent deterioration of structures and equipment to keep a dam in a safe and functioning condition throughout the expected life of the dam. These activities can be a scheduled or recurring action outlined in the operation and maintenance plan or performed after an inspection reveals an unusual observation that requires corrective restoration. Identifying and correcting problems before they become serious is an important part of routine operation and maintenance. Typical routine operation and maintenance activities can include (but are not limited to) mowing, removal of woody vegetation, addressing erosion, repairing concrete structures, replacement of equipment and gates, and servicing gates.

Residual Risk *(Source: ER 1110-2-1156)*

The risk that remains after all mitigation actions and risk reduction actions have been completed. With respect to dams, FEMA defines residual risk as "risk remaining at any time" (FEMA, 2015, p A-2). It is the risk that remains after decisions related to a specific dam safety issue are made and prudent actions have been taken to address the risk. It is the remote risk associated with a condition that was judged to not be a credible dam safety issue.

Risk

The product of the likelihood of a structure being loaded, adverse structural performance, (e.g., dam failure), and the magnitude of the resulting consequences

Satisfactory *(Source: NID Condition Assessment definition)*

No existing or potential dam safety deficiencies are recognized. Acceptable performance is expected under all loading conditions (static, hydrologic, seismic) in accordance with the minimum applicable state or federal regulatory criteria or tolerable risk guidelines.

Typical Circumstances:

- No existing deficiencies or potentially unsafe conditions are recognized, with the exception of minor operational and maintenance items that require attention.
- Safe performance is expected under all loading conditions including the design earthquake and design flood.
- Permanent risk reduction measures (reservoir restrictions, spillway modifications, operating procedures, etc.) have been implemented to eliminate identified deficiencies.

Small Impoverished Community

A small impoverished community must:

a. Be a community of 3,000 or fewer individuals identified by the applicant as a rural community that is not a remote area within the corporate boundaries of a larger city or jurisdictional area or boundary
b. Be economically disadvantaged, with residents having an average per capita annual income not exceeding 80 percent of the national per capita income, based on best available data. For the most current information on the national income, see http://www.bea.gov
c. Have a local unemployment rate that exceeds by 1 percentage point or more the most recently reported, average yearly national unemployment rate. For the most current unemployment information, *see* http://www.bls.gov/eag/eag.us.htm
d. Meet other criteria required by the applicant in which the community is located

State *(Source 33 U.S.C.§ 467(13))*

The term "State" means each of the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any other territory or possession of the United States.

State Dam Safety Agency *(Source 33 U.S.C.§ 467(14))*

The term "State dam safety agency" means a State agency that has regulatory authority over the safety of non-Federal dams.

State Dam Safety Program *(Source 33 U.S.C.§ 467(15))*

The term "State dam safety program" means a State dam safety program approved and assisted under section 467f(e) of this title.

Subaward

An award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract.

Subrecipient

A non-federal entity that receives a subaward from a pass-through entity to carry out part of a federal program; but does not include an individual that is a beneficiary of such program. A subrecipient may also be a recipient of other federal awards directly from a federal awarding agency.

The term “eligible subrecipient”, in the case of a project receiving assistance through the HHPD program, includes—

(A) a governmental organization; and
(B) a nonprofit organization

Unacceptable Risk to the Public

For purposes of the HHPD, the determination of *unacceptable risk to the public* is to be made by the state dam safety program, the agency of the state that is authorized by state statute to manage the state participation in the National Dam Safety Program.

A dam poses *unacceptable risk to the public* when the dam requires remediation or risk reduction measures due to deficiencies caused by inadequate dam design, construction methods, or the results of inadequate operation and maintenance.

For a dam to be considered an *unacceptable risk to the public* for funding under the HHPD, it must meet all the following conditions:

1. Does not meet the minimum dam safety standards of the state (not including routine operations and maintenance actions)
2. State dam safety program has documented the deficiencies at the dam that must be reduced, eliminated or mitigated
3. Official Regulatory Notice (see definition) of the determination of the documented deficiency(s) has been communicated to the dam owner to address the *unacceptable risk to the public* to implement interim risk reduction measures until permanent risk reduction measures are implemented in a manner that is acceptable to the state. Official Regulatory Notice must be on official state or state dam safety program letterhead and may include official citations issued from the state dam safety program to the dam owner.

Unsatisfactory *(Source: NID Condition Assessment definition)*

A dam safety deficiency is recognized that requires immediate or emergency remedial action for problem resolution.

Typical Circumstances:

- A critical component of the dam has deteriorated to unacceptable condition or failed.
- A safety inspection indicates major structural distress (excessive uncontrolled seepage, cracks, slides, sinkholes, severe deterioration, etc.), advanced deterioration, or operational deficiencies which could lead to failure of the dam or its appurtenant structures under normal operating conditions.
- Reservoir restrictions or other interim risk reduction measures are required.
- A partial or complete reservoir drawdown may be mandated by the state or federal regulatory agency.

22. Appendices

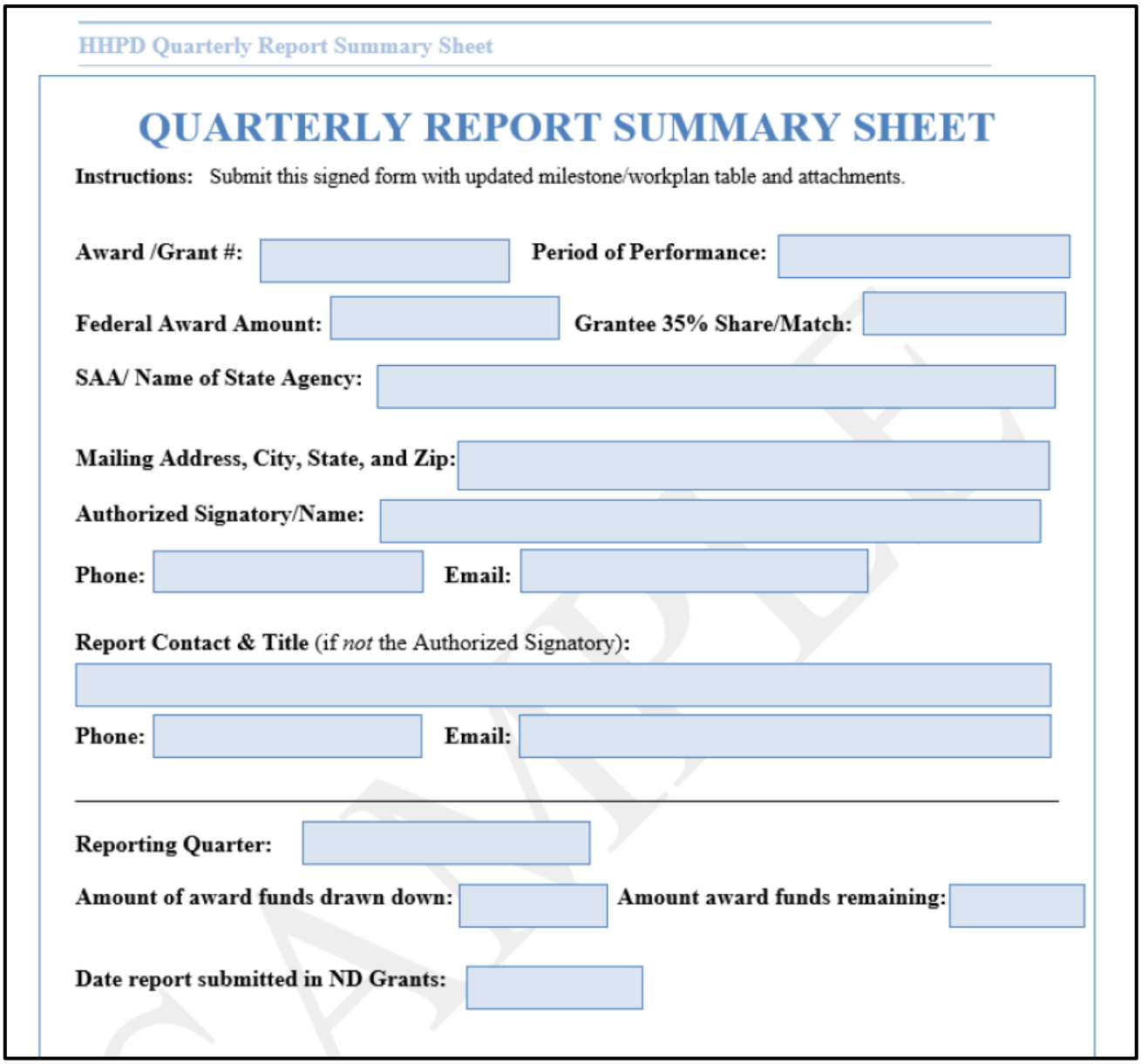
Appendix A: FY2022 Performance Measure Targets

Program Objective	Eligible Activities - Examples	Performance Measures	FY2022 Target Unit
Reduce or eliminate risk of eligible high hazard potential dam (HHPD)	1.1 Planning tasks and activities, studies and analysis for pre-construction phases, scoping activities, and permit applications.	1.1 Number of eligible HHPD dams that have resulted in the completion of studies and analysis for pre-construction phases, scoping activities, and permit applications.	**Total number**
	1.2 Preliminary and final design package and required permit approvals.	1.2 Number of eligible HHPD dams that have resulted in the completion of preliminary and final engineering design package and permits	**Total number**
	1.3 Construction activities that support dam rehabilitation or removal projects.	1.3 Number of eligible HHPD dams that result in construction projects for dam rehabilitation or removal.	**Total number**

Appendix B: Performance Progress Report (PPR)

Appendix B1: Performance Progress Report (PPR) Template: Part 1 Summary Sheet

PPR Templates are available through your Regional Program Officer



HHPD Quarterly Report Summary Sheet

QUARTERLY REPORT SUMMARY SHEET

Instructions: Submit this signed form with updated milestone/workplan table and attachments.

Award /Grant #: **Period of Performance:**

Federal Award Amount: **Grantee 35% Share/Match:**

SAA/ Name of State Agency:

Mailing Address, City, State, and Zip:

Authorized Signatory/Name:

Phone: **Email:**

Report Contact & Title (if *not* the Authorized Signatory):

Phone: **Email:**

Reporting Quarter:

Amount of award funds drawn down: **Amount award funds remaining:**

Date report submitted in ND Grants:

APPENDIX B2: PERFORMANCE PROGRESS REPORT (PPR) TEMPLATE: PART 2 PERFORMANCE METRICS TARGETS

PPR Templates are available through your Regional Program Officer

FY22 HHPD Workplan and Quarterly Reporting			State Agency:								
Person completing this worksheet:			HHPD Project POC:								
Date completed:			Award#:								
			Period of Performance								
			Period of Performan								
			Oct-Dec 22		Jan-March 23		Apr-June 23		July-Sept 23		
Instructions: Column C is the list of FEMA approved activities and deliverables in your workplan. Report and validate actual % completed in ACTUALS column.			Q1		Q2		Q3		Q4		
			Target	Actual	Target	Actual	Target	Actual	Target	Actual	
Quarterly Progress Reports due				1/30/2023		4/30/2023		7/30/2023		10/30/2023	
Enter ALL Deliverables and Milestones per FEMA approved Scope											
Subapplicant / Project #####		**Performance Metric (Drop down)**									
1	Ex: Alternatives Analysis	1.1 Planning and Analysis	0%		0%		10%		40%		
2	Ex: Rehabilitation Design	1.2 Preliminary or Final Design									
3	Ex. Dam Removal	1.3 Construction Activities									
4											
5											
Activity #####											
1											
2											
3											
4											

Appendix B
Risk-based Methodology for Dams

RISK-BASED METHODOLOGY FOR DAM SAFETY IN WASHINGTON STATE
TWENTY YEARS OF SUCCESS

Doug Johnson
Washington State Dam Safety Supervisor
September 2000
Last Updated: May 2019

Introduction

This paper discusses the application of probability and risk concepts in the state of Washington's dam safety program. Our approach can be characterized as employing risk concepts in a standards-based framework, and using a risk-based prioritization scheme to correct dam safety deficiencies. Under this approach, probability methods, risk concepts and elements of risk assessment are combined with decision making in setting performance standards that provide acceptable minimum levels of protection.

This approach has been quite successful since its implementation in 1990. For similar downstream hazard settings, it has provided consistent levels of protection against flood induced overtopping failures across diverse climatic regions. It has been less successful in addressing the difficult, rapidly evolving seismic concerns confronting the Pacific Northwest. Furthermore, this approach has allowed us to make great progress in repairing the backlog of dams with identified safety deficiencies, as well as design new dams to more consistent standards across the State of Washington.

Why Choose Probabilistic Over Deterministic Approach?

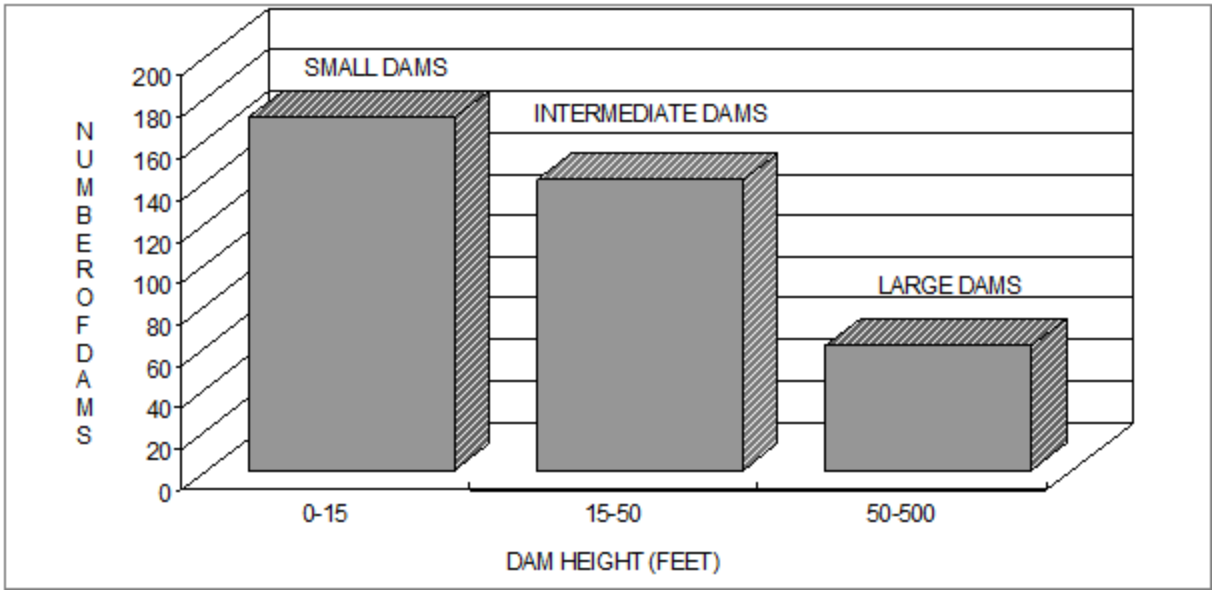
The use of risk-based approaches in the dam safety community is still highly controversial. There is much fear and trepidation among dam safety engineers when "risk" is mentioned in conjunction with dam safety. To many, the word risk implies that we would be designing to accept failure and loss of life, or more insidiously, that risk assessment is a way of avoiding making expensive structural repairs to a dam. In addition, many think that using risk entails quantitative risk assessment, a highly complex and time-consuming analysis.

Conversely, many dam safety professionals believe that using deterministic standards imply that a dam can pose zero risk to the public (as well as no liability risk to the engineer). Unfortunately, this viewpoint is based on misconceptions in the engineering community about the Probable Maximum Precipitation (PMP) and the Maximum Credible Earthquake (MCE). In reality, these values are estimates of the theoretical maxima that commonly approach, rather than meet, the theoretical upper limits. For example, studies have shown[1] that the annual exceedance probabilities (AEPs) of PMP events vary widely across the nation, from about 10^{-5} to perhaps 10^{-9}. In the Pacific Northwest, PMP events have AEPs that vary from about 10^{-5} on the coast, to 10^{-6} in the Puget Sound region to 10^{-9} in some areas of Eastern Washington[1]. Thus, the use of these values may not only not provide zero risk; they likely do not provide consistent levels of protection across broad geographic areas.

The situation is further complicated when we look at smaller dams where only a few lives would be at risk. This situation represents the majority of dams regulated by Washington and, we believe, most other states (Figure 1). Regulatory organizations have long recognized that PMP and MCE loadings are too stringent for the design/analysis of these smaller projects. Consequently, some percentage of the theoretical maximum PMP is used for hydrologic assessment. An earthquake with a larger probability of exceedance is utilized in the seismic stability assessment. For example, 50% of the PMP is frequently used by many regulatory agencies as the lower bound for smaller dams where only a few lives are at risk.

However, when ratios of the PMP are taken, wildly differing levels of protection may result. For example, based on a regional analysis of some 10,000 station-years of precipitation data covering the Pacific Northwest, 50% of the PMP is only about a 100-year event in the marine climate on the Pacific Coast, while being closer to a 10,000-year event in parts of the arid eastern half of the state. Thus, by using ratios of PMP for design or repair of smaller, lower hazard dams, not only are we accepting that the dam is not zero risk, we often have no idea what the level of risk is!

Figure 1– Dams Sited Above Populated Areas in Washington State



Selection of Risk Based Approach

Recognizing that the PMP/MCE (much less %PMP) approach is not zero risk and provides unbalanced protection across the state, the Dam Safety Office elected to employ a risk-based design approach. This approach was selected based on a number of considerations. The first consideration was the need to provide consistent minimum levels of protection across the state for similar downstream hazard settings.

There was also a need to provide methods of analysis that were manageable with limited resources. The state is responsible for over 800 dams, and has limited staffing and resources to

apply toward detailed risk assessment. Likewise, most of the regulated community has smaller dams with limited project budgets.

Finally, we needed an approach that could be used for the design of new projects as well as for analysis of existing dams. Performing quantitative risk assessments for every project would not be feasible given these considerations. However, employing risk concepts and procedures in a standards-based framework allowed us to address these issues, while realizing the benefits of using a risk-based approach in a relatively simple and inexpensive manner.

We decided to utilize probability and risk concepts in two main areas. The first was to develop risk-based standards for dam design and evaluation of existing dams. These standards were applied through the design step format, which is detailed later in this paper. The second area where these concepts were applied was in the development of a risk-based ranking scheme to prioritize compliance and enforcement efforts on existing dams with identified safety deficiencies. The combination of both areas was integral to the success of Washington's dam safety program and is detailed in the following sections.

Design Philosophy

The philosophy of the Washington dam safety program utilizes several design principles that provide a framework for evaluating and establishing what design/performance levels are appropriate for the various elements of a dam project. The primary principles related to risk are *Balance Protection* and *Consequence Dependent Design Levels*.

Balanced Protection – A dam is comprised of numerous critical elements, and like the old chain adage, "is only as strong as the weakest link". The goal of the *Balanced Protection* concept is to establish an appropriate common Annual Exceedance Probability (AEP) as the minimum design level for the evaluation of each critical project element. The term critical project element refers to an aspect of the structure, whose failure could precipitate an uncontrolled release of the reservoir. This office has only achieved partial success in this endeavor. As is noted below, the seismic design aspects lag behind the progress made in the hydrology arena.

Consequence Dependent Design Levels – Standard practice in the civil engineering community is that the degree of conservatism in design should correspond with the consequences of failure of a given element. If failure of a given element could pose a threat of loss of life, design levels are typically much more conservative. That conservatism increases with an increase in the potential magnitude of loss of life and property at risk. This concept is called *Consequence Dependent Design Levels*.

Design Step Format

The philosophies of Balanced Protection and Consequence Dependent Design are implemented through the Design Step Format. This format utilizes eight steps, where the design events become increasingly more stringent as the consequences of failure become more severe. Design Step 1 has an annual exceedance probability of 1 in 500, and would apply where the consequences of dam failure are minimal and there would be no chance for loss of life. Design

Step 8 applies to large dams where a dam failure would be catastrophic, with hundreds of lives at risk. In this situation, extreme design loads are used to provide the extremely high levels of reliability needed to properly protect the public. Thus, the AEP of Step 8 is set at 1 in 1,000,000, or the theoretical maximum events (PMP, MCE), whichever is smaller. The design Step 8 AEP of 10^{-6} is based on existing design standards (EPRI[2]) and a review of recommendations for engineered structures with extreme consequences of failure, such a nuclear powerplants.

The design step format was completed by providing uniform performance increments between the design steps such that the AEP's decrease tenfold for every two design steps. Figure 2 shows the 8-step format employed by the Washington dam safety program.

Figure 2. Design Step Format

Design Step	Exceedance Probability	Consequence Rating Points
1	1 in 500	< 275
2	1 in 1000	275 – 325
3	1 in 3000 (actually 3160)	326 – 375
4	1 in 10,000	376 – 425
5	1 in 30,000	426 – 475
6	1 in 100,000	476 – 525
7	1 in 300,000	526 – 575
8	1 in 1,000,000 (or theoretical maximum)	> 575

Benchmarks for Selecting Design Steps

A critical question when using risk-based design is "what is 'acceptable' (or tolerable) risk?" This is probably the most controversial aspect of using risk assessment in dam safety. This implies that above some threshold design event/performance level, loss of life would be tolerated. This is actually a common engineering precept used in bridge design, the UBC, and other engineering codes and standards.

At the time we were developing our standards, there was very little guidance on tolerable risk criteria in the dam safety field. Thus, rather than try to come up with a definition of tolerable risk on our own, we decided to utilize design levels that would be consistent with the levels of safety provided by other engineering disciplines and governmental regulation.

Because the actual levels of protection in many engineering applications are obscured by standards and codes (sometimes intentionally), the actual design levels and probabilities of failure had to be back calculated. This back calculation had been done for the establishment of performance goals in the design and evaluation of Department of Energy facilities[10]. That information, as well as other sources provided background information for setting the benchmarks shown in Figure 3.

Figure 3 – Benchmarks for Calibrating Point Rating Algorithm For Use in Decision Framework

Benchmark	Characteristics of Idealized Projects	Minimum Design Step	Design/Performance Goal AEP
1	1 or More Lives at Risk	3	3×10^{-4}
2	Large Dam, over 50 feet High No Downstream Hazard	3	3×10^{-4}
3	Intermediate Dam No Commercial Development 10 Residences at Risk	4	10^{-4}
4	Large Dam Limited Commercial Development 34 Residences at Risk	6	10^{-5}
5	Large Dam Significant Commercial Development 100 Residences at Risk	8	10^{-6}

Note: AEP – Annual Exceedance Probability

Additional guidance in setting design levels was obtained by examining the levels of risk to which the public is exposed to in ordinary life. Several of those risks are shown in Figure 4.

Figure 4 – Listing of Risks and Performance Levels

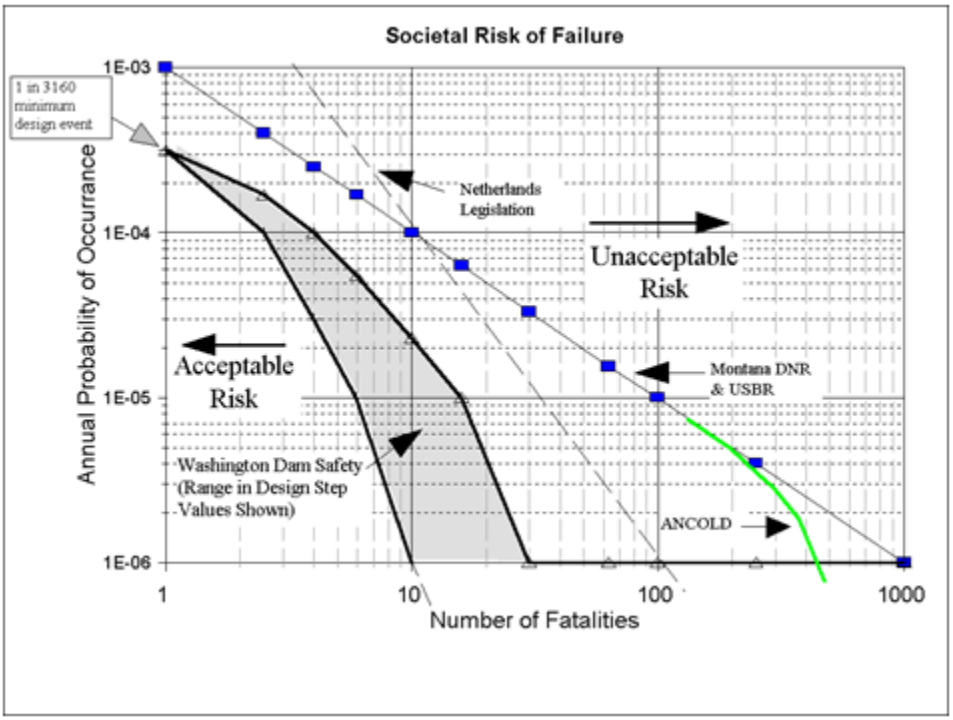
ACTIVITY/ITEM	TYPICAL NUMBER OF PERSONS AT RISK	RISK LEVEL	PERFORMANCE LEVEL
NATIONAL FLOOD INSURANCE PROGRAM ·Risk from Natural Flooding	Varies Widely		1/100 AEP 100 Year Flood
FATAL DISEASE[3] · All Causes	1	1/120 AC	
ASCE STRUCTURAL CODE[4] · Performance of Individual Structural Members for Ordinary Buildings Subject to Natural Hazards due to Wind and Earthquake Loads	Typically 1-20		1/1000 AEP
EXISTING OFFSHORE DRILLING PLATFORMS[5] · Performance Subject to Wind, Wave and Earthquake Loads	Varies 0-25		1/1000 AEP
ACCIDENTAL DEATH[6] · All Causes	Few 1-3	1/2000 AC	
ACCIDENTAL DEATH[4] · Motor Vehicles	Few 1-6	1/3000 AC	
ACCIDENTAL DEATH[4] · Non-Motor Vehicles	Few 1-3	1/6000 AC	
UNIFORM BUIILDING CODE[7] · Performance Of Essential Buildings such as Hospitals and Emergency Response Facilities to Maintain Building Functionality and Protect Occupants for Buildings Subjected to Wind and Earthquake Loads.	Typically 50-200		1/5,000 AEP
BRITISH SPILLWAY DESIGN[8]	Small Community More than 30		1/10,000 AEP 10,000 Year Flood
DEPT. OF ENERGY BUILDINGS[9] · Performance of Building to Contain Radioactive or Toxic Materials and Protect Occupants for Buildings Subjected to Wind, Flood or Earthquake Loads	Varies Often Large Numbers of People at Risk		1/10,000 AEP

ACTIVITY/ITEM	TYPICAL NUMBER OF PERSONS AT RISK	RISK LEVEL	PERFORMANCE LEVEL
DEPT. OF ENERGY BUILDINGS[7] · Very High Confidence of Containment of Radioactive or Toxic Materials and Protection to Occupants for Buildings subjected to Wind, Flood or Earthquake Loads	Varies Often Large Numbers of People at Risk Both Onsite and Offsite		1/100,000 AEP
NUCLEAR POWERPLANTS[10] · Damage to Core of Nuclear Power plant from Earthquakes	Varies Potentially Very Large Number of People		1/100,000 AEP
AIR TRANSPORTATION[4] · Fatalities – All Aircraft	Varies 1-300	1/150,000 AC**	
AIR TRANSPORTATION[4] · Fatalities – Commercial Airlines	Varies 50-350	1/700,000 AC**	
NUCLEAR POWERPLANTS[8] · Performance Goal for Radioactive Releases Greater than 25 REM	Varies Potentially Very Large Numbers Of People at Risk		1/1,000,000 AEP

Note: AC - Annual Chance of Occurrence AEP - Annual Exceedance Probability ** - Based on an "Average Traveler"

A review of both these tables shows a basic trend. In those activities where few lives are at risk, the public accepts the nominal values of protection. Conversely, as the number or persons at risk and the consequences of a failure increase, the level of protection expected by society and the engineering profession increases significantly. This viewpoint is termed "risk-averse" with regard to loss of life. This is illustrated in Figure 5, which shows DSO criteria compared to other risk criteria such as Montana and the USBR[11], which are risk neutral (i.e., a constant value of risk of 1 in 1000 loss of life/year).

Figure 5 – Comparison of Societal Risk Criteria



Additive Point Rating Scheme

The next step in developing the risk–based standards was the development of an additive weighting scheme to determine numerical ratings of the consequences of dam failure. This scheme reflects the relative importance and range of severity of the impacts posed by each consequence. Cumulative rating points with values between 200 and 800 points were used to define the working range for the eight-step format. Factors were selected within the three general categories shown in Figure 6, which described the nature of the consequences of dam failure.

Utility curves or consequence rating tables were developed for each of the indicator parameters in Figure 6 to implement the additive weighting scheme. A worksheet (Appendix B, Ref 14) was then developed for compiling the rating points and selecting an appropriate design step. The point rating scheme was calibrated using a wide cross-section of project types and downstream settings to yield results (design steps) consistent with the five benchmarks shown in figure 3.

Figure 6 – Numerical Rating Format for Assessing Consequences of Dam Failure

CONSEQUENCE CATEGORIES	CONSEQUENCE RATING POINTS	INDICATOR OPARAMETER	CONSIDERATIONS
CAPITAL VALUE OF PROJECT	0 – 150 0 – 75	DAM HEIGHT PROJECT BENEFITS	Capital Value of Dam Revenue Generation or Value of Reservoir Contents
POTENTIAL FOR LOSS OF LIFE	0 – 75 0 - 300 0 - 100	CATASTROPHIC INDEX POPULATION AT RISK ADEQUACY OF WARNING	Ratio of Dam Breach Peak Discharge to100 Year Period Population at Risk Potential for Future Development Likely Adequacy of Warning in Event of Dam Failure
POTENTIAL FOR PROPERTY DAMAGE	0 – 250	ITEMS DAMAGED OR SERVICES DISRUPTED	Residential and Commercial Property Roads, Bridges, Transportation Facilities Lifeline Facilities Community Services Environmental Degradation from Reservoir Contents (Tailings, Wastes.)

Probabilistic Design Data

Before we could implement the risk-based standards described above, magnitude-frequency relationships were needed for extreme events such as floods and earthquakes. Unfortunately, this type of information is not readily available to most states, and much work is still needed around the United States to develop probabilistic precipitation and seismic data for extreme events. In Washington State, we benefited from Dr. Mel Schaefer's detailed studies of extreme storms in the Northwest[12, 13], and his development of probabilistic based procedures[14] for generating precipitation magnitude-frequency relationships for any location in the state. Thus,

Washington State has the necessary hydrologic data to employ them in a logical and consistent manner in our risk based design/performance practice. This data is used in determining a design storm event with an appropriate AEP to match the design/performance step for the dam in question. This storm is then used to compute the inflow design flood to size the spillway(s) for a new project, or to determine the adequacy of the spillway for an existing dam.

In the seismic arena, we are encountering difficulties on design Set 1 and above in Western Washington and Step 3 and above in Eastern Washington in dealing with the population of existing dams. Our difficulties stem from the severity of the earthquake loadings projected for the Pacific Northwest. Seven interface earthquakes of Moment Magnitude (M_w) 8 or larger are believed to have struck the coast in the last 3500 years[15]. The last event in 1700 was estimated from Japanese tidal records to have been an M_w 9. Thus, all projects in the western half of the state must consider a seismogenic source capable of generating minutes of strong ground motion at a mean recurrence interval of 500 years. With the exception of California, Oregon and Alaska, few other states have to deal with such intense ground motion on so short a mean recurrence interval. In addition, the intensity and duration of shaking yields a high probability of liquefaction. Thus, a significant fraction of the analyses must predict the post-liquefied, deformation response of soils.

This is an area of active research in the geotechnical profession. While data is being generated at considerable expense on high profile projects, little guidance is available for extrapolating to the small dams that comprise the majority of the projects under our purview. Here, any rigorous assessment scheme would face the same difficulties confronting us. In much of the rest of the country, the appreciably less intense seismic setting would minimize the difficulties of implementing our design step scheme.

Design Standards for Other Critical Elements

For critical elements at new dam projects where a design loading is not readily applicable (e.g. conduit, seepage), a qualitative approach is used, where redundancy and survivability concepts are employed to achieve adequate reliability against failure. For these critical elements on existing dams, a qualitative approach is used, rather than a quantitative assessment. This is achieved through review of the design and identification of deficiencies for the critical element, coupled with a qualitative assessment of the likelihood of failure based on past experience and engineering judgement. However, we are considering the utilization of some of the more formal risk assessment procedures for these elements currently employed by the Bureau of Reclamation.

Risk Prioritization Scheme

At the close of the 1980's, the Dam safety Office had over 60 dams listed as having safety deficiencies. Many of these dams were projects inspected under the National Dam Safety Program from 1977 to 1981, and had no action toward making repairs in 10 years. With such a large number of unsafe dams, and limited staffing, it became clear to the DSO that some way of prioritizing these projects was in order. Thus, in conjunction with the development of the risk-

based standards described previously, in 1990 the DSO developed a prioritization-ranking scheme for dams with safety deficiencies.

The scoring and ranking algorithm developed by the DSO is simple in concept and application, but was found to be more than adequate for producing an initial ranking of projects. The algorithm is contained within our Microsoft Access database, and a report showing the ranking of projects can be generated by the touch of a key. This ranking is then used as a starting point where other project specific intangibles can be considered by management. The number of projects targeted for enforcement action at any time are chosen to maximize compliance, while not jeopardizing other critical functions of the dam safety program. Typically, this represents an active enforcement workload of about 10 projects.

The underlying logic in the development of this algorithm is fairly simple, and includes the following key ideas:

- For dams with similar deficiencies, those dams with the greatest consequences should be given higher priority.
- For dams with similar consequences, those dams with the more serious deficiencies should be given higher priority.
- For dams with similar deficiencies and similar consequences, those dams with a poorer change for warning to the public should be given higher priority.
- Dams with only minor deficiencies should be ranked lower than dams with significant deficiencies, regardless of the consequences.
- The risk associated with three minor deficiencies is ranked just below that of one moderate deficiency.
- The Risk associated with two moderate deficiencies is ranked just below that of one major deficiency.
- All things being equal, older dams should be given a higher priority.

These concepts were then incorporated into developing the equations for computing the number of priority points. Two different equations were developed for computing the priority points. The first equation is for dams where one or more of the safety deficiencies are rated moderate, major or emergency. The second equation is for a project where all deficiencies are rated minor. These equations are shown in Figure 7. Rating points were then developed for the consequences, adequacy of warning, and seriousness of deficiencies, as shown in Figure 8. The points were selected and calibrated to meet the underlying logic goals discussed previously.

Figure 7: Equations for Prioritization Ranking

One or More Safety Deficiencies Rated Moderate, Major or Emergency	Priority = [*Hazard Class*] + [*Warning*] + [Σ(*Seriousness of Deficiencies*)] + [*Agel*2]
All Safety Deficiencies Rated Minor	Priority = 0.5 *[*Hazard Class*] + [*Warning*] + [Σ(*Seriousness of Deficiencies*)] + [*Agel*2]

Figure 8: Rating Points for Prioritization

Rating Points for Consequences – By Hazard Class

Hazard Class	Rating Points
High Hazard Hazard Classification 1A – (100+ homes at risk)	500 Points
High Hazard Hazard Classification 1B – (11-99 homes at risk)	400 Points
High Hazard Hazard Classification 1C – (3-10 homes at risk)	300 Points
Significant Hazard Hazard Classification 2 – (1 or 2 homes at risk)	100 Points
Low Hazard Hazard Classification 3 – (0 homes at risk)	0 Points

Rating Points for Adequacy of Warning

Adequacy of Warning	Rating Points
Inadequate Warning – (< 10 minutes advanced warning)	*100 Points*
Marginal Warning – (between 10-30 minutes)	*50 Points*
Adequate Warning – (greater than 30 minutes)	*0 Points*

Rating Points for Seriousness of Each Deficiency
(Primary focus on deficiencies that could lead to a dam failure of uncontrolled release of reservoir)

Deficiency Seriousness	Rating Points
Emergency Condition	250 Points
Major Deficiency	145 Points
Moderate Deficiency	65 Points
Uncertain Seriousness	65 Points
Minor Deficiency	20 Points

The seriousness of safety deficiencies is evaluated based on the matrix in Figure 9. This matrix is intended for guidance only, and ultimately, the final rating of seriousness of deficiencies is based on knowledge of the project and on engineering judgement.

Figure 9 – Matrix for Evaluating Seriousness of Deficiencies

CONDITION	HYDRAULIC ADEQUACY	EMBANKMENT STABILITY	SEEPAGE ON EMBANKMENTS, FOUNDATION, ABUTMENTS	OUTLET CONDUIT(S)
SATISFACTORY	Can accommodate IDF	Meets criteria for static and seismic stability	Minimal seepage consistent with past behavior	KSU Conduit Rating > 8
MINOR DEFICIENCIES	Can only accommodate flood 1 step below Design Step	Meets criteria for static stability, marginal seismic stability under design earthquake	Minor seepage quantity, inconsistent with past behavior. No evidence of internal erosion	KSU Conduit Rating 6-8
MODERATE DEFICIENCIES	Can only accommodate flood 2 steps below Design Step	Marginal static stability 1.3 < FS < 1.5 Inadequate seismic stability or liquefaction under design earthquake	Moderate seepage quantity Or Anomalous increase in quantity. Minor concerns of piping	KSU Conduit Rating 4-6
MAJOR DEFICIENCIES	Can only accommodate flood 3 steps below Design Step	Inadequate static stability < FS < 1.3 Inadequate seismic stability or liquefaction under design earthquake	Relative Large Seepage Quantity Multiple Points of Seepage And/or Significant concern of piping	KSU Conduit Rating 2-4
EMERGENCY	Cannot Accommodate 25-year Flood	Significant slope failures that intercept dam crest or involve major portion of the embankment	Large or rapidly changing seepage quantity Multiple points of seepage and ongoing piping	KSU Conduit Rating 0-2

Conclusions

Since its implementation in 1990, the use of the risk-based standards approach has been quite successful in Washington State. It has provided a consistent level of protection against failure between projects located across the state, despite significant differences in seismicity and rainfall. For new dams, we have been able to apply risk concepts in a standards-based approach that is fairly straightforward and easy to use.

For the evaluation of existing dams, we have been able to utilize a combination of probabilistic methods, risk concepts and risk-based standards to determine if the dam has an adequate level of protection against failure. If dams do not meet state standards, we are able to estimate the relative level of risk they currently pose, and prioritize our compliance efforts on those projects with the greatest risk. It has also allowed us to inform dam owners not only that their dams are “unsafe”, but also educate them as to what level of risk their unsafe project poses to the downstream public. In addition, we have utilized a prioritization scheme for compliance efforts on unsafe dams, based on the relative risk of each project. These combined approaches have resulted in great progress in repairing the backlog of dams with identified safety deficiencies in the State of Washington.

Aspects of risk assessment that may be valuable to state programs

Based on our experience, we feel that several aspects of risk assessment and risk management can be of benefit to other dam safety organizations. No matter what standards are used, all dam safety professionals are in the business of managing risk, and the more knowledgeable we are about risk, the better we can make decisions that protect public safety. Using probability and risk concepts allows a dam safety professional to understand the risks and manage them better.

At the 1999 ASDSO/FEMA Specialty Workshop on Risk Assessment for Dams in Logan, Utah, several areas were identified as being potentially of use to state dam safety programs. The areas showing the most promise for the states included qualitative risk assessments such as Failure Mode Evaluation and Analysis (FMEA), prioritization and portfolio approaches, and developing risk-based standards for spillway and/or seismic design, as in Washington and Montana. These areas are highlighted as follows:

- FMEA can be a useful tool, even for those regulators that exclusively use deterministic standards. FMEA allows the regulator a better understanding of the potential site-specific failure modes, the possible failure scenarios and potential consequences, and effective risk reduction measures and dam safety related actions.

- Risk prioritization and portfolio approaches, such as Washington's, can be valuable tools for states to manage their limited resources toward fixing unsafe dams. Using a prioritization scheme, unsafe projects can be ranked for compliance and enforcement activity, based on the risk that they pose to downstream population. The most critical projects can then be targeted for enforcement action.

- Washington's risk-based standards approach may be of interest to some states, especially in spillway design. In fact, Montana's dam safety program has used our example to develop risk based spillway standards of their own. The drawback to implementing these standards on a broader scale is the current lack of probabilistic precipitation data in the U.S. beyond the 500-year event. It can be quite expensive for states to undertake this effort on their own. The Logan workshop identified the need for large-scale regional studies to be performed for probabilities of extreme rainfall events across the U.S. If these studies are completed, then it may be more attractive for some states to implement risk-based spillway standards.

- States using %PMP as a design level for analysis of spillways are already using a non-deterministic standard and by default are accepting risk, but the probability of the %PMP event, and corresponding risk to public safety is unknown. These states may benefit from the aforementioned regional precipitation studies, which would allow them to learn the probability of their %PMP standards. Depending on the results, the states may elect to go to risk-based standards, or may decide to adjust the percentage of PMP to increase or decrease the risk level.

- Quantitative risk assessment is not likely to be a useful tool for most state dam safety programs, due to the lack of probabilistic data, inadequate staffing levels, and amount of effort required to perform an assessment for each dam. Most states regulated a large number of small to medium sized dams, and would not have adequate staffing or resources to complete comprehensive studies on each dam.

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Appendix C – Required Subapplicant Information

Washington Department of Ecology
High Hazard Potential Dams (HHPD) Grant Program - FY 2022
Required Project Information for Scope of Work Package

1. Subapplicant Organization:
2. Project Type(s) (select one or more: (1) planning, (2) preliminary design, (3) final design
3. Project Name:
4. Dam Name:
5. Dam NID #:
6. Location of Dam:
7. Is this dam located in a FEMA Special Flood Hazard Area (SFHA)? Yes/No
   If yes, name zone:
8. FEMA Funds Requested: (65% of FEMA Subgrant total)
9. Matching funds: (35% of FEMA subgrant total)
10. FEMA Subgrant Total:
11. Total Project Costs: (if different than subgrant total because FEMA grant is part of larger project)
12. Source and type of matching funds:
13. Has the Subapplicant received previous HHPD funding in support of this dam project or received any other FEMA funding in support of this dam project? Yes/No
    If yes please indicate award name/date of award, award #, and project description:
14. Is this a dam project simultaneously submitted under a different FEMA FY2021 funding instrument? Yes/No
    If yes, please indicate which program and date submitted.
15. Name of tribe or local government with jurisdiction over the area in which the dam is located (such as township, county, city, special district):
    - The Tribal or local government with jurisdiction over the area in which the dam is located has in place a FEMA-approved hazard mitigation plan. Yes/No
    - If yes, does the FEMA-approved mitigation plan include all dam risk? Yes/No
      (Link to or copy of FEMA-approved hazard mitigation plan, specifically referencing section(s) that includes all dam risk.)
    - If no, has the Subrecipient (and the local government with jurisdiction over the area in which the dam is located, if different than the Subrecipient) submitted a

joint request to FEMA to extend the mitigation plan requirement by 12 months using Extraordinary Circumstances to update HMP? Yes/No

- Section 5.9, Mitigation Plan Extraordinary Circumstances in Rehabilitation of High Hazard Potential Dams Grant Program Guidance[7] (FEMA, June 2020).
- See Appendix C: Mitigation plan extraordinary circumstance request templates and plan review tools in Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020).

16. EHP checklist for this project completed and attached with subapplication? Yes/No (See appendix C.1)
17. Will this project complete a final design package during this PoP? Yes/No

- If yes, The FEMA EHP approval will trigger the Floodplain Management Plan (FPMP) requirement. The FPMP shall be in place (or will be developed not later than 2 years after final design and FEMA EHP approval (aka: the date of execution of a dam rehabilitation or removal project agreement) and implemented not later than 2 years after the date of completion of a project).

18. Include Scoping Narrative:
    The scoping narrative briefly and succinctly describes:

- description of project and all elements,
- how project reduces unacceptable risk to life and property,
- project management for monitoring tasks and timelines, coordinating across departments, managing budgets, and ensuring timely delivery (limit to 1-2 pages).

19. Include Project Workplan Table (See appendix C.2)

- The Project Workplan table illustrates the major activities and tasks, entity/person responsible, alignment with HHPD objectives and start and finish dates for completion.
- If Management and Administrative (M&A) costs are requested, include the M&A costs in Workplan and align with budget detail. (M&A costs are not operational costs, they are the necessary costs incurred indirect support of the grant or as a consequence of the grant and should be allocated across the entire lifecycle of the grant. Cannot exceed 5% of funded total.)

20. Include required assurance statements:
    Statements can be written using this format and making statement directly under lettered item. Be sure to include backup documentation if required.

[7] https://www.fema.gov/sites/default/files/2020-08/fema_hhpd_grant-guidance.pdf

a. Statement and demonstration that the Subrecipient organization can meet the cost share requirements.

b. Statement that Subrecipient will follow competitive bidding process.

c. Statement that the Subapplicant is doing work and has project approval from Washington Department of Ecology Dam Safety Office (refer to deficiencies found in the last periodic inspection).

d. Statement that the Subapplicant follows, operates, and maintains dam in accordance with the Washington Department of Ecology Dam Safety Office laws and regulations.

e. Statement that the Subapplicant participates in, and complies with, all applicable federal flood insurance programs.

f. Statement that the dam has an Emergency Action Plan (EAP) approved by the Dam Safety Office, and that the dam is classified as "high hazard potential" by the Washington State Department of Ecology (Use EAP submitted to DSO.)

g. Statement that dam owners will provide operation and maintenance of the project for the 50-year period following completion of rehabilitation. Including, assurance that the Subapplicant will have adequate funding resources for operation and Maintenance activities to be carried out over 50-year period following completion of rehabilitation project.

   Provide:

   - Estimated annual O&M costs and sources of funding.
   - Statement that Subapplicant will complete all maintenance, repair, or replacement activities within a reasonable time after the identification of such need.
   - Statement that Subapplicant will be responsible for the replacement of structure components that have a design life of less duration than the expected life of the dam as specified in the O&M Plan.
   - Statement that Subapplicant will obtain prior approval from DSO and FEMA for any planned alteration to the dam or its appurtenant structures.
   - Statement that Subapplicant will prohibit the installation of any structure or facility that negatively impacts the safety of the dam or interferes with the operation or maintenance of the dam and its structures.
   - Statement that Subapplicant will notify DSO and FEMA of any proposed agreement with other parties for the operation or maintenance of all or any part of the structures and provide DSO and FEMA with a copy of the executed agreement. Such agreements will not negate the Subapplicants' responsibilities as stated in this agreement.

- Statement that Subapplicant will provide DSO and FEMA personnel or its agents the right of free access to the structure sites at any reasonable time for the purpose of carrying out the terms of the agreement.
- Statement that Subapplicant will consider air and water quality, sediment control, and other environmental concerns in the operation and maintenance of the structures.
  - See section 5.5.2 O&M Agreement of the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020).
  - See section 5.5.3 O&M Financial Plan of the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020).

h. A statement that activities relating to the public in the area around the dam are performed in accordance with the hazard mitigation plan.
   - See section and all subsections of 5.6 HHPD Floodplain Management Plan Requirements in the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020).

i. If this project is to complete a final design package during this PoP and if the Floodplain Management Plan is not in place, a statement that the plan will be developed not later than one (1) year after the date of execution of a project agreement and implemented not later than one (1) year after the date of completion of construction of the project must be included.
   - See Appendix H: Sample HHPD Floodplain Management Plan Outline in the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020).

j. A statement that the Subapplicant will comply with section 5196(j)(9) of title 42 (as in effect on December 16, 2016).
   - See Section 2.1.2 Compliance with Section 5196(j)(9) of Title 42.in the Rehabilitation of High Hazard Potential Dams Grant Program Guidance (FEMA, June 2020).

k. A statement that the Subapplicant will comply with chapter 11 of title 40; Selection of Architects and Engineers. The language can be viewed at: https://www.law.cornell.edu/uscode/text/40/subtitle-I/chapter-11.

Appendix C.1
EHP Checklist

EHP Checklist

Subrecipient must complete the EHP Checklist and provide information and documentation. Any relevant information or studies related to EHP considerations identified and addressed in previous project planning activities by FEMA, another federal agency, or an agency with designated federal authority should also be provided and may be used to satisfy the EHP compliance requirements at FEMA's discretion.

"Yes" indicates that the environmental regulation or statute may apply to your project. Please provide relevant information and/or documentation to support your answers. This list is not all-inclusive.

Environmental Regulation or Statute		Yes	No
National Historic Preservation Act (NHPA)			
1.A	Would the proposed activity affect, or is the proposed activity in close proximity to, any buildings or structures 50 years or more in age? What is the construction date of the dam?		
1.B	Will the proposed activity involve disturbance of ground? If yes, provide a description and dimensions of the anticipated ground disturbance.		
Endangered Species Act (ESA)			
2.A	Are federally listed or endangered species, or their critical habitat, present in or near the project area and, if so, which species are present?		
2.B	Will the proposed activity remove or affect vegetation?		
2.C	Is the proposed activity in or near (within 200 feet), or likely to affect, any type of water body or body of water?		
Clean Water Act (CWA) and Rivers and Harbors Act			
3.A	Will the proposed activity involve dredging or disposal of dredged material, excavation, the addition of fill material, or result in any modification to water bodies or wetlands designated as "waters of the United States" as identified by the U.S. Army Corps of Engineers or the National Wetland Inventory?		
Executive Order 11988 (Protection of Floodplains) and Executive Order 11990 (Protection of Wetlands)			
4.A	Does a Flood Insurance Rate Map, Flood Hazard Boundary Map, hydrology study, or some other source indicate the activity is located in, or will affect, a 100-year floodplain, a 500-year floodplain (if a critical action), an identified regulatory floodway, or an area prone to flooding?		
4.B	Is the proposed activity located in, or will it affect, a wetland as listed in the National Wetland Inventory?		
4.C	Will the proposed activity alter a watercourse, water flow patterns, or a drainage way, regardless of floodplain designation?		
4.D	Is the proposed activity located in, or will it affect, a floodplain or wetland?		
Coastal Zone Management Act (CZMA) and Coastal Barrier Resources Act (CBRA)			
5.A	Is the proposed activity located in the state's designated coastal zone?		
5.B	Is the proposed activity located in a Coastal Barrier Resources System Unit or Otherwise Protected Area?		
Farmland Protection Policy Act (FPPA)			
6.A	Will the proposed activity convert more than 5 acres of "prime or unique" farmland outside city limits to a non-agricultural use?		

Environmental Regulation or Statute		Yes	No
Resource Conservation Recovery Act RC A) and Comprehensive Environmental Response, Compensation			
7.A	Are there any studies, investigations, or enforcement actions related to the property associated with the proposed activity?		
7.B	Are there any studies, investigations, or enforcement actions related to the property associated with the proposed activity?		
7.C	Will any project construction or operation activities involve the use of hazardous or toxic materials?		
7.D	Are any of the current or past land uses of the property associated with the proposed activity, or are any of the adjacent properties associated with toxic materials?		
Executive Order 12898 (Federal Actions to Address Environmental Justice for Low-Income and Minority Populations)			
8.A	Are there any low-income and/or minority populations in the project's area of effect or adjacent to the property? If yes, provide a plan to provide these populations access to public information on, and an opportunity for public participation in, matters relating to the environment.		
Other Environmental/Historic Preservation Laws (including applicable state laws) or Issues			
9.A	Are other environmental/historic preservation requirements associated with this project?		
9.B	Are any controversial issues associated with this project?		
9.C	Have any public meetings been conducted, public notices been circulated, or public comments been solicited on the proposed project?		

Appendix C.2
Project Workplan Table Example

Project Workplan Table Example

Subrecipient name: Name of Project: Name of Dam: NID ID #:								
List HHPD Priority	Eligible Project Type (Planning/preliminary design/final design)	Activity/ deliverables/ Sub-Tasks	Description of Expected Outcomes (Risk reduction)	Performance metric	Estimated Management and Admin costs (no more than 5%)	Person Responsible /Subrecipient	Estimated Start Date Month/Year within PoP	Estimated Completion Date Month/Year within Pop
1.		1.						
		1.1						
		1.2						
		1.3						
2.		2						
		2.1						
		2.2						

Appendix D
Previous Years' Subrecipients and Projects

FY2019 HHPD Grant Subrecipients and Projects

Award No.: EMW-2019-GR-00008
Period of Performance: 9/15/2019 – 9/14/2022
FY2019 HHPD Federal Award to Ecology: $153,007
35% Cost Share Contribution: $82,388.38
Total Project: $235,395.39

Aberdeen - Fairview Reservoir No 1

The Fairview Reservoir provides drinking water for the City of Aberdeen's water supply system. The dam has slope stability issues. The Northeast and Southeast slopes of the dam are in need of a seismic assessment and retrofit. Ecology passed through funds for an alternatives analysis to identify the preferred solution to address the slope stabilization issues in the northeast corner of the embankment of Reservoir No. 1.

Subrecipient Award: $76,503
35% Cost Share Contribution: $41,193.93
Total Project: $117,696.93

Newcastle - Railroad Embankment

The Newcastle Railroad Embankment Dam was in need of a new spillway and slope repair. They found that the embankment cannot be rehabilitated without damaging the surrounding park, and so the City plans to eventually remove the dam altogether. In the meantime the intake structure needed to be replaced to implement a reservoir restriction to reliably keep the water level down. Ecology passed through funds for design for replacing the intake structure and 30% geotechnical and alternatives analysis for removing the dam.

Subrecipient Award: $76,504
35% Cost share contribution: $41,194.46
Total Project: $117,698.46

FY2020 HHPD Grant Subrecipients and Projects

Award No.: EMW-2020-GR-00198
Period of Performance: 9/1/2020 – 8/31/2023
FY2019 HHPD Federal Award to Ecology: $260,322
35% Cost Share Contribution: $140,174
Total Project: $400,496

City of Aberdeen – Fairview Reservoir No 1

Fairview Reservoir No. 1 project is an extension of the project started under the 2019 HHPD Grant. Ecology passed through funds for the City of Aberdeen to finish the analysis on the southeast slope of Fairview Reservoir No. 1.

Subrecipient Award: $39,000
35% Cost share contribution: $21,000
Total Project: $60,000

City of Newcastle – Railroad Embankment

Newcastle Railroad Embankment project is an extension of the project started under the 2019 HHPD Grant. Ecology passed through funds for the City of Newcastle to complete the final analysis for removing the dam.

Subrecipient Award: $56,322
35% Cost share contribution: $20,327.23
Total Project: $86,649.23

Icicle & Peshastin Irrigation Districts and Chelan County – Eightmile Lake Dam

Eightmile Lake is located within Chelan County and is one of four lakes in the Alpine Lakes Wilderness Area managed by Icicle and Peshastin Irrigation Districts to provide water storage for irrigation. Built in 1933, the infrastructure at the dam is aging and in need of rehabilitation. Ecology passed through funds for alternatives analysis, final design, and permitting assistance to rehabilitate the slope and replace the low-level outlet. The grant is sponsored by Chelan County.

Subrecipient Award: $100,000
35% Cost share contribution: $53,846.16
Total Project: $153,846.16

Grays Harbor College – Swano Lake Dam

Swano Lake is located at Grays Harbor College in Aberdeen. The earthen dam also serves as a road embankment. The dam does not have adequate spillway capacity and is in need of overtopping protection. Ecology passed through funds for alternatives analysis, final construction documents, and permitting assistance to replace the spillway and armor the slope.

Subrecipient Award: $65,000
35% Cost share contribution: $35,000
Total Project: $100,000

FY2021 HHPD Grant Subrecipients and Projects

Award No.: EMW-2021-GR-00163
Period of Performance: 9/15/2021 to 9/14/2024
FY2019 HHPD Federal Award to Ecology: $507,208
35% Cost Share Contribution: $273,112
Total Project: $780,320

Icicle & Peshastin Irrigation Districts and Chelan County – Eightmile Lake Dam

The Eightmile Lake Dam project is an extension of the project started under the 2020 HHPD Grant. Ecology passed through funds to complete the final drawings, specifications, and opinions of probable costs.

Icicle & Peshastin Irrigation Districts and Chelan County – Colchuck Lake Dam, Klonaqua Lake Dam, and Square Lake Dam

Colchuck, Klonaqua, and Square Lake Dams are located within Chelan County and are three of four lakes in the Alpine Lakes Wilderness Area managed by Icicle and Peshastin Irrigation Districts to provide water storage for irrigation. Ecology passed through funds to complete a stability assessment in normal and seismic conditions, preliminary design drawings, a preliminary design report, and environmental permit scoping for all three dams.

Subrecipient Award: $ 316,308.00
35% Cost share contribution: $ 170,319.69
Total Project: $ 486,627.69

City of Hoquiam – Beacon Hill Dam and College Hill Dam

Owned by the City of Hoquiam, both reservoirs are located on hilltops surrounded by residential areas. Their primary purposes are to provide storage for the city's water supply system. Ecology passed through funds to complete a stability assessment in normal and seismic conditions.

Subrecipient Award: $104,000
35% Cost share contribution: $56,000
Total Project: $160,000

City of Port Townsend – Lords Lake Dam

Owned by the City of Port Townsend. The reservoir is an enlargement of a natural lake created by two earthfill dams. Lords Lake is used as a secondary source of water supply for the Port Townsend Paper Mill and the City of Port Townsend during low flow periods on the Big Quilcene River. Additionally, Lords Lake acts as backup water supply when the primary source is turbid. Ecology passed through funds to complete a stability assessment under seismic conditions. If the analysis finds it is required – the city will move forward with a slope stabilization alternative analysis, a preliminary design analysis report, and environmental permit scoping.

Subrecipient Award: $86,900
35% Cost share contribution: $46,792.31
Total Project: $133,692.31

Appendix E
FY2022 Proposed Subrecipients and Projects

FY2022 HHPD Grant Proposed Subrecipients and Projects

Award No.: EMW-2022-GR-00125
Period of Performance: 9/15/2022 to 9/14/2025
FY2022 HHPD Federal Award to Ecology (annual appropriation): $588,257
35% Cost Share Contribution: $316,754
Total Project: $905,022

Note: During FY2022 Ecology was awarded $1,068,330 from the IIJA funding source but there were no construction-ready projects. Ecology will not utilize or pass-through the IIJA funding.

The following projects were submitted for FEMA approval on December 30, 2022. Based on other FEMA timelines, it is anticipated that FEMA will provide their final approval for the projects before December 30, 2023.

City of Ilwaco – Indian Creek Dam

Indian Creek Dam is owned by the City of Ilwaco to provide a municipal water supply. The dam has had a history of seepage primarily from the left abutment area since it was constructed. The dam requires a drainage system in the left-groin outlet and plans on addressing the inoperable outlet structure. Ecology has proposed to pass-through funds to examine and evaluate the low-level intake structure, downstream bypass line, and outlet structure, complete 30% of a stability assessment under seismic conditions, and provide engineering design with cost estimates.

Subrecipient Award: $163,684
35% Cost share contribution: $88,138
Total Project: $251,822

Mountain View Park Community Club & King County – Kayak Lake Dam

Lake Kayak Dam is owned by the Mountain View Park Community Club. The lake is an impoundment of two unnamed tributaries of the North Fork Cherry Creek and primarily used for recreation by the citizens of the Community Club. Ecology has proposed to pass-through funds for a stability assessment under seismic conditions. King County is sponsoring the grant.

Subrecipient Award: $19,045
35% Cost share contribution: $10,255
Total Project: $29,300

WA State Parks and Recreation Commission – Sylvia Lake Dam

Lake Sylvia Dam is owned by the WA State Parks and Recreation Commission. Originally Lake Sylvia was the site of the first sawmill in Grays Harbor County. Around 1901 a timber crib dam was built at the site of the current structure to provide a log pond. Later the dam was refurbished in 188 and 1995 to the current concrete dam. Ecology has proposed to pass-through funds for structural and seismic analysis with recommendations for the repair and rehabilitation of the dam, and 60% preliminary drawings and specifications for repairs.

Subrecipient Award: $168,278
35% Cost share contribution: $90,611
Total Project: $258,889

City of Anacortes – Whistle Lake Dam

Whistle Lake Dam is owned by the City of Anacortes. Previously the lake served as a water supply for Anacortes residents. While the City no longer draws water from Whistle Lake, it remains an emergency backup water source. Currently, Whistle Lake is used for recreation. Ecology has proposed to pass-through funds to evaluate the stability of the dam under static and seismic loading conditions, conduct an hydrological analysis to evaluate the suitability of the current spillway configuration to determine if it is adequate to pass the IDF and still maintain the reservoir's water surface below the deign freeboard during the design flood event, environmental permitting and scoping, and an alternatives analysis to provide options available to bring the dam into compliance. Additionally, this project requires funding for permitting and widening the forest trail to provide access for the geotechnical investigation.

Subrecipient Award: $237,250
35% Cost share contribution: $127,750
Total Project: $365,000