

High Hazard Potential Dams (HHPD) Grant Program - Lessons Learned

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Image courtesy State of Maryland



Maryland
Department of
the Environment

Background of HHPD Grant

President Obama's Initiative

Signed the “*Water Infrastructure Improvements for the Nation Act*” (“**WIIN Act**”) on December 16, 2016.

Goals: Rehabilitation of High Hazard Dams, provides technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams.

Under Auspices of

U.S. Dept. of Homeland Security (*DHS*)

Federal Emergency Management Agency (*FEMA*, Policy 104-008-7)

Federal Insurance and Mitigation Administration (*FIMA*)

National Dam Safety Program Office (*NDSP*)

Authorizing Authority for Program

National Dam Safety Program Act (Pub. L. 92–367), as amended, 33 U.S.C. 467f-2.

Section 5006 of the Act: *Rehabilitation of High Hazard Potential Dams, provides technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams.*

HHPD Grant Amount (for the entire country)

2019 - \$10 Million; 2020 - \$10 Million; and in 2021 - \$12 Million (suggested).



Objectives of HHPD Grant

- Provide financial assistance for repair, removal, or rehabilitation of eligible high hazard potential dams (HHPD);
- Protect the federal investment by requiring operation and maintenance of the project for the 50-year period following completion of rehabilitation;
- Encourage state and local governments to consider all dam risk in state and local mitigation planning;
- Reduce the potential consequences to life and property of HHPD incidents;
- Incentivize states to incorporate risk-informed analysis and decision making into their dam safety practice;
- Reduce the overall number of HHPD that pose an unacceptable risk to public;
- Promote a program of ‘Emergency Action Plan’ (EAP) implementation, compliance, and exercise for HHPD; and
- Reduce costs associated with dam rehabilitation through the deployment of innovative solutions and technologies.



Eligibility for HHPD Grant

(A) Ineligible Dams, Projects, and Activities:

Note: This is not an exhaustive list

- Rehabilitation of a federal dam;
- Dams built by the U.S. Dept. of Agriculture;
- Projects that increase water supply storage capacity;
- Performance of routine operation or maintenance of a dam;
- Any modification to a dam that does not also improve the safety of the dam; and
- Licensed hydroelectric dams. Modification of a dam to produce hydroelectric power.

(B) Eligible Dams, Projects, and Activities:

- Eligible dams are in a state or territory with a state dam safety program;
- Classified as “high hazard potential” by Maryland Dam Safety Program;
- Has an “Emergency Action Plan” (EAP), approved by Maryland Dam Safety Program;
- Maryland Dam Safety Program has determined either of the two criteria:
 - Dam fails to meet minimum dam safety standards of the state; OR
 - Dam poses an unacceptable risk to the public.
- Structural/nonstructural rehabilitation of eligible high hazard potential dams.
- Provide O&M of the project for the 50-year period following completion of rehabilitation.
- Participate in, and comply with, the National Flood Insurance Program (NFIP).



FEMA's Responsibilities

- Administer grants. An annual “*Notice of Funding Opportunity*” (NOFO, ~ May/June);
- Provide technical support for development/implementation of floodplain mgmt. plans;
- Review and approve hazard mitigation plans for the inclusion of dam risks;
- Consult with the National Dam Safety Review Board to develop a risk-based system to prioritize and identify eligible high hazard potential dams within a state where grant funding is possible;
- Coordinate with State Dam Safety Program (MDE) & State Hazard Mitigation Office (MEMA), to facilitate the grant. MDE is the ‘Technical Coordinator’, and MEMA is the ‘Administrator’ of the HHPD Grant in Maryland.



MDE & MEMA's Responsibilities

MDE's Role (Technical Coordinator):

- Develop & prioritize the list of “*unsafe*” high hazard dams in Maryland;
- Prioritize the list of unsafe dams based on PAR (“People at Risk”), agreement/partake by dam owner; and other factors determined important by the Dam Safety Program;
- Coordinate & communicate with select owners of “*unsafe*” dams regarding:
 - a) cost-share (65% FEMA - 35% dam owner) in the Grant;
 - b) need for updated “Emergency Action Plan” (EAP);
 - c) availability/development of a county-wide hazard mitigation plan; and
 - d) flood management plan, needed prior to applying for the Grant.
- Issue ‘*Notice of Interest*’ (NOI) to eligible owners of “*unsafe*” dams.
- Assist eligible dam owners in preparing their HHPD Grant application, providing updates on the grant approval process received from FEMA/MEMA, etc.
- Coordinating with MEMA (“Administrator” of Grant) on applications submitted; and
- Providing technical reports to MEMA on work done on qualified dam projects.



MDE's Notice of Interest (NOI)



MDE-MEMA NOTICE OF INTEREST (NOI)

FEMA High Hazard Potential Dams (HHPD) Grant Programs

Submit to: MDE (vistv.dalal@maryland.gov), and MEMA (Jalessa.tate@maryland.gov)

1.0 PROGRAM PREFERENCE	
Please check your interest:	
<input type="checkbox"/> Interested in 2020 FEMA-MDE HHPD Grant	
<input type="checkbox"/> Not this year, maybe in future	
2.0 SUBAPPLICANT IDENTIFICATION	
Name of Dam Project	
Subapplicant/Owner of Dam	
Point of Contact (Phone & Email)	
3.0 PROJECT DETAILS	
Description:	
Location of Project	
Project benefits to community	
Risk Assessment Completed	
Status of Design of repair/construction	
Emergency Action Plan (EAP) available.	
Other stakeholders Involved	
4.0 ACTIVITY	
Description of Project or Plan	
Estimated Project Schedule	
Engineer/contractors	
5.0 COST ESTIMATE	
Total Project Cost	
35% Non-federal Cost Share and Source Identified	

MDE & MEMA's Responsibilities

MEMA's Role (Administrator):

- Coordinate and communicate with FEMA regarding:
 - “*Notice of Funding Opportunity*” (NOFO) requirements - timeline, award, etc.;
 - Grant application process and submittal of applications from MDE;
 - Meeting of all grant application requirements – EAP, FMP, HMP, etc.,
 - Submission of applications to FEMA by due date via appropriate federal websites;
- Coordinate and communicate with MDE regarding:
 - Provide expertise on ‘Hazard Mitigation & Flood Management Plans’ required with grant applications before submission to FEMA;
 - Coordinate on incorporating the technical reports received from dam projects in the overall FEMA reports on a quarterly basis;
- Coordinate & communicate with grant awardees regarding:
 - Grant awarded to their dam projects with official letters from FEMA;
 - Receipt of invoices for dam project work and payment of reimbursable expenses.



Applicant Requirements

- The state where the dam is located must participate in and comply with all applicable federal flood insurance programs;
- Have in place a hazard mitigation plan that includes all the dam risks;
- Commit to provide O&M of the project for the 50-year period following completion of rehabilitation (or the expected life of the dam);
- Ensure that each dam owner/operator of a dam is under a participating state dam safety program. The owner/operator will act in accordance with the state dam safety program;
- Comply with CFR 42 section 5196(j)(9) – all laborers/mechanics employed by contractors will be paid wages not less than those determined by U.S. Sec. of Labor;
- Have a floodplain management plan in place to reduce the impacts of future flood events in the area projected by the project -or-demonstrate that it will be in place no later than one year after the date of completion of construction of the project.



Grant Funds Allocation

- In 2020, \$10,000,000 million were allocated for HHPD Grant (for the entire country!!);
- In 2021, it is slated to be around \$12,000,000 million. Confirmed after 2021 NOFO is published by FEMA;

Fund Allocation Formula

- 1/3 equal distribution among states that apply for grant;
- 2/3 among states based on the proportion of eligible high hazard potential dams in the state relative to the national total;

Limits on Grant Amounts

- Grant under this program should not exceed the lesser of (1) 12.5% of the total amount of funds made available; or (2) \$7.5 million.
- Non-federal cost share requirement of not less than 35%, which may partially or fully be in-kind.

Period of Performance

- The period of Performance is 36-months and begins on the date of award.



2020 HHPD Funding to Maryland

- In 2020, MDE with MEMA's assistance applied for the HHPD Grant for the first time;
- MDE prioritized six (6) “*unsafe*” high hazard dams that qualified based on several factors:
 - Dam Safety Division's review of the engineering reports on various deficiencies at the dam;
 - “*People at Risk*” (PAR) scores that were generated;
 - Communication with “*unsafe*” dam owners;
 - Written commitment by dam owners of “*unsafe*” dams vying for the HHPD Grant; and
 - Availability or guaranteed development of hazard mitigation/flood management plans by applicants.
- After several iterations, FEMA approved \$274,167.00 as Maryland's share of the HHPD Grant, with a cost-share match in the amount of \$147,629.00 (35% match) provided by the dam owners.
- With the small amount approved by FEMA, three out of six dam owners opted to not pursue the grant.
- Finally, two (2) dam owners decided to pursue the HHPD Grant for their dam repairs.
- However, the two projects have still not received their ‘Award Letter’ from FEMA.



Lessons Learned - 2020 HHPD Grant

- *“All that glitters is not gold”!*
- The FEMA’s HHPD Grant comes with a lot of strings attached:
 - Development of ‘Hazard Mitigation Plan’ (HMP);
 - Development of ‘Flood Management Plan’ (FMP);
 - Development of ‘Emergency Action Plan’ (EAP);
 - Should be listed as *“Unsafe High Hazard Dam”* by State’s Dam Safety Program;
 - Repairs should IMPROVE the overall condition of the dam to mitigate hazards to public;
 - Grant can’t be used for general maintenance or repairs to the structure.
- The abovementioned plans require forethought and planning, not to mention funds to carry out the studies, before the Grant is awarded.
- Check the economic feasibility for individual projects before applying for the Grant.
- **MDE-Dam Safety Program will always be there to assist you!**



References

- Search for HHPD Grant - <https://www.grants.gov/web/grants/search-grants.html>
(Basic search criteria, keyword – 2021 HHPD Grant)
- <https://www.fema.gov/emergency-managers/risk-management/dam-safety/grants>
(State Assistance Grants -NDSP, and High Hazard Potential Dam Grants-HHPD)
- <https://www.grants.gov/web/grants/view-opportunity.html?oppId=326939>
(High Hazard Potential Dams – HHPD Rehabilitation Grant)
Grantor Contact Information: Mr. James E. Demby, Jr. PE, james.demby@fema.dhs.gov





Questions ???

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