

FEMA Review of the Warren County, NJ Multi-Jurisdictional Hazard Mitigation Plan

[This is a FEMA Review. State may comment separately.]

This *Local Mitigation Plan Review Tool* documents where the Mitigation Plan met or did not meet federal planning requirements and it offers additional feedback.

- Section 1: The Regulation Checklist provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements. It may also note where modifications are required to comply with federal regulations.
- Section 2: The Plan Assessment identified the plan's strengths and recommends areas for future improvement.
- Section 3: The Multi-Jurisdictional Summary Sheet denotes those jurisdictions that are APA and if some jurisdictions required revisions, it notes which elements require revision.

Jurisdiction: Warren County, New Jersey and ## of its local jurisdictions	Title of Plan: Warren County Multi-Jurisdictional All-Hazards Hazard Mitigation Plan	Date of Plan:
Local Point of Contact: William Hunt	Address: Warren County OEM 1024 Route 57	
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State Reviewer: Howard Wolf Chris Teasta	Title: Mitigation Manager Planner	Date: 9/26/21
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FEMA Reviewer: Paul Hoole	Title: Mitigation Planner	Date: 11/05/21
Date Received in FEMA Region <i>(insert #)</i>	10/13/21	
Plan Not Approved		
Plan Approvable Pending Adoption	11/05/21	
Plan Approved		

Summary:

Standard Review

The plan is Approvable Pending Adoption (APA). Please have each jurisdiction adopt the plan as soon as practical. Upon receipt of a certified adoption resolution FEMA will approve the plan for adopting jurisdiction at which point these jurisdictions become eligible for three FEMA hazard mitigation grant programs (BRIC, FMA, and HMGP).

Eligibility for a fourth grant program, FEMA's high hazard potential dam (HHPD) rehabilitation grant program, requires mitigation plans that exceed planning requirements set forth in 44 CFR 201.6 and demonstrate the plan has addressed all dam risks. Addressing all dam risks is optional. At this point **none of the jurisdictions with a high hazard dam have a plan that meets the HHPD criteria.** Attached to this Review Tool are those criteria. If a municipality will be applying for a HHPD grant, they should first amend their portion of this multi-jurisdictional plan and submit the amended plan through the State to FEMA. FEMA will then review the amendment to confirm their section of the plan has addressed all dam risks.

**SECTION 1:
REGULATION CHECKLIST**

1. REGULATION CHECKLIST Regulation (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not Met
ELEMENT A. PLANNING PROCESS			
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	Sec 3.2	X	
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	Sec 3.2.4, Sec 3.3.4	X	
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	Sec 3.2.5 Sec 3.4	X	
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	Sec 5.6	X	
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	Sec 7.3	X	
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i))	Sec 7.1	X	
ELEMENT A: REQUIRED REVISIONS No revisions required. See Opportunity for Improvement – inviting public input before the plan is drafted			

1. REGULATION CHECKLIST Regulation (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not Met
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT			
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	Sec 4.6.1-3 Sec 4.24.1-3	X	
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	Sec 4.6.4-5 Sec 4.24.4-5	X	
B3. Is there a description of each identified hazard’s impact on the community as well as an overall summary of the community’s vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	Sec 4.6.6-7 Sec 6.24.6-7	X	
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))	Sec 4.9 Annexes	X	
ELEMENT B: REQUIRED REVISIONS No revisions required			

1. REGULATION CHECKLIST		Location in Plan	Met	Not Met
Regulation (44 CFR 201.6 Local Mitigation Plans)		(section and/or page number)		
ELEMENT C. MITIGATION STRATEGY				
C1. Does the plan document each jurisdiction's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))	Sec 5.6.4 Annexes	X		
C2. Does the Plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	Sec 4.9 Annexes	X		
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	Sec 6.4	X		
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))	Sec 6.5.4	X		
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))	Sec 6.5.5 Annexes	X		
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))	Sec 5.6.4 Annexes	X		
<u>ELEMENT C: REQUIRED REVISIONS</u>				
No revisions required				

1. REGULATION CHECKLIST		Location in Plan	Met	Not Met
Regulation (44 CFR 201.6 Local Mitigation Plans)		(section and/or page number)		
ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION (applicable to plan updates only)				
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))	Sec 2.5	X		
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	Sec 6.4 Appendix 1	X		
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	Sec 6.4 Appendix 1	X		
<u>ELEMENT D: REQUIRED REVISIONS</u>				
No revisions required				

1. REGULATION CHECKLIST

Regulation (44 CFR 201.6 Local Mitigation Plans)

Location in Plan

(section and/or
page number)

Met

Not
Met**ELEMENT E. PLAN ADOPTION**

E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))		NA	NA
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))			X

ELEMENT E: REQUIRED REVISIONS

Element E2 will be met as each participating jurisdiction formally adopts the plan and submits a certified resolution through the State to FEMA. These resolutions should be forwards to FEMA as soon a practical.

SECTION 2: PLAN ASSESSMENT

Element A: Planning Process

Strengths

- The participants and their consultant are to be congratulated for efficiently and effectively completing the update of this plan when a pandemic prevented in-person meetings. The process to just 12 months from its start with a Steering Committee meeting to the submission of the plan to the State/FEMA.
- The planning process was well documented and clearly presented. The narrative was supplemented by tables 3.3-1 and 3.3-2 listing the meetings, their purpose and who attended. There was also individual coordination, and it was excellent that each participant POC was encouraged to include other from their municipality to contribute to the update. Table 3.3-3 documents that this was successful. It listed each of the individuals who were involved from each municipality.

Opportunity for Improvement

- The planning process must 1) provide an opportunity for the public to be involved prior to the plan being drafted, and 2) the public must be given an opportunity to review and comment on the final draft of the plan before it is submitted for FEMA approval. A copy of the draft plan did occur, but there is no documentation that the public had an opportunity to contribute as the draft plan was being prepared. The plan is now an polished draft, making it unreasonable to disapprove the plan due to this failure. However, a plan is a living document, and **it is strongly recommended that a concerted effort be made at this time to obtain additional public input.** Post Tropical Storm Ida the public may have a lot to offer and if their comments merit amending the plan, the plan should be amended. [Note: An approved plan does not have to be resubmitted for FEMA review if it is amended. Likely amendments might be adding new mitigation actions or modifying some actions in the plan.
- The plan's list of participating jurisdictions (Table 3.1-1) only named the municipalizes in Warren County, and not the County itself. This was clearly an oversight and should be corrected.
- A project website was created and used almost exclusively to communicate with the public and stakeholders. This was necessary during a pandemic and websites can be very informative and a useful tool, but they communicate only with individuals with computer skills and access to a computer. It is also unclear how individuals were made aware of the website, other than to read it online. In recent years it has been recognized that more needs to be done to ensure all segments of the community are engaged in the planning process and no geographic area is underserved. Posting material on a website should be supplemented with other outreach efforts.
 - The plan states that a press release was posted on the website¹, which would not reach people who are not already on the website.

¹ This statement is on page 63. In the sentence a placeholder for the date was not replaced with the actual date. This is presumably an oversight which can be avoided if after completing a draft section the Find function of MSWord is used to search on the word "insert." This will identify locations where data was to be inserted, but at that point has not been inserted.

- The plan also states that on page 63, “All public comments are located in Appendix Volume II – F. Public Comments.” Volume II-F was included but blank. This is either in error or a sign that the public outreach effort was inadequate.
- HHPD Criterion 1 asks, “*Does the plan describe the incorporation of existing plans, studies, reports, and technical information for high hazard mitigation dams?*” In order to meet this criterion, the plan must identify the dam information reviewed by each applicable municipality with an eligible High Hazard Potential Dam (HHPD). These municipalities should review FEMA’s notice of funding opportunity for HHPD grants to determine which dams are eligible.

While HHPD grants are limited to just eligible high hazard potential dams, it is recommended that each municipality collect risk information on each the high hazard potential dams in their boundary. (A list of these dams is found in Table 4.6-3.) This might involve meeting with the dam owners, reviewing the Emergency Action Plan for the dam, and consulting adjacent municipalities when they might be affected by a dam failure.

Element B: Hazard Identification and Risk Assessment

Strengths

- The plan does a very nice job in listing and describing its critical facilities and assets. It is comprehensive, specific, and thorough.
- Section 4, Risk Assessment, is a large document (298 pages). The plan begins each section with a Table of Contents for each section and with a click on the subject, the view moves to that subsection. This is a nice feature for readers in search of information a one hazard.

Opportunity for Improvement

- The plan states it did not include a figure of repetitive loss areas from the public portion of the plan for confidentiality purposes. FEMA encourages the use of repetitive loss maps and will award points for these maps when a community participates in the Community Rating System (CRS) to obtain a discount on flood insurance premiums. Repetitive Loss Area maps do not violated the Privacy Act because they do not include name and addresses of those householder with flood insurance, nor information on those insurance policies. Repetitive Loss Area maps, like maps showing the Special Flood Hazard Areas (SFHA) only indicate the areas where there might be a future problem.
- HHPD Criterion 2 asks, “*Does the plan address high hazard potential dams in the risk assessment?*” The plan should consider each dam as critical infrastructure. The potential for failure of each is independent of the other dams. This is why citing the failure of other dams in the county is not as relevant as examining the data on each dam. Each high hazard dam’s Emergency Action Plan should be reviewed. Furthermore, a dam’s condition rating and the impact of natural hazards on the dam need to be part of the risk assessment for the plan to meet this HHPD criterion. There was no discussion of how earthquakes, landslides, flooding, or wildfires might impact individual dams. There was also no assessment, dam by dam, of how the downstream inundation areas might be impacts, or the consequences of losing the pooled reservoir created by the dam. The pooled reservoir, for example, could be a valuable water supply or recreation area. The potential impacts downstream and upstream could be mitigated using funds other than HHPD grants.

Element C: Mitigation Strategy

Strengths

- HHPD Criterion 3 asks, *“Does the plan include mitigation goals to reduce long-term vulnerabilities from high hazard potential dams that pose an unacceptable risk to the public?”* A plan’s goals and objectives must cover high hazard potential dams. They do not need to explicitly mention dams or use the words ‘high hazard potential dam’, so long as dams fall within an overarching goal.
 - The plan’s Goal 2 is to Protect Property and Objective 2.1 is to protect/harden/retrofit critical facilities and infrastructure. This alone is sufficient to meet HHPD Criterion 3.
 - Goal 7 is to Mitigate High Hazard Potential Dams, This goes beyond the minimum criteria for HHPD, which is always welcomed.

Opportunity for Improvement

- It appears the twenty-three participating jurisdictions are overly optimistic regarding the number of actions they will be able to accomplish. The plan proposes 112 actions [93 new; 19 actions carried forward], yet over the last five year only 13 actions were completed. The number of actions should be reconsidered and weighed against the capacity of each participant to complete the proposed work.
- HHPD Criterion 4 asks, *“Does the plan prioritized mitigation actions to reduce vulnerabilities from high hazard potential dams that pose an unacceptable risk to the public?”* All of the High Hazard dams in the county were identified in the actions of each of the corresponding municipalities, but in each case the description of the work to be done (i.e. the specific action to be taken for each dam) was insufficient to meet this HHPD criterion.

**SECTION 3:
MULTI-JURISDICTION SUMMARY SHEET**

Plan Summary Sheet
FEMA Review Tool

Plan Name: Warren County Hazard Mitigation Plan

Status by Jurisdiction:

Jurisdiction Name	Designated Approved or APA	Elements Requiring Revisions			
	Yes / No	Element A	Element B	Element C	Element D
Warren County	Yes				
Allamuchy Township	Yes				
Alpha Borough	Yes				
Belvidere Town	Yes				
Blairstown Township	Yes				
Franklin Township	Yes				
Frelinghuysen Township	Yes				
Greenwich Township	Yes				
Hackettstown Town	Yes				
Hardwick Township	Yes				
Harmony Township	Yes				
Hope Township	Yes				
Independence Township	Yes				
Knowlton Township	Yes				
Liberty Township	Yes				
Lopatcong Township	Yes				
Mansfield Township	Yes				
Oxford Township	Yes				
Phillipsburg Town	Yes				
Pohatcong Township	Yes				
Washington Borough	Yes				
Washington Township	Yes				
White Township	Yes				

For the record, each municipality in Warren County participated in this plan.

High Hazard Potential Dam Grant Program

Criteria for Hazard Mitigation Plans

Introduction

FEMA has a new grant program to fund the rehabilitation of high hazard dams. For a local jurisdiction to be eligible for these funds they must 1) have an eligible dam, 2) have an approved hazard mitigation plan, and 3) their hazard mitigation plan or portion of a multi-jurisdictional plan must address all dam risks for eligible dams.

Dams are critical infrastructure. If a dam fails it could impact downstream areas and cause the loss of the value achieved by having the dam created reservoir. While HHPD grants may be used to rehabilitate a high hazard dam, non-HHPD funds may be used to address these other vulnerabilities, including other FEMA mitigation grant program funds.

HHPD Criteria – for determining if a plan has addressed all dam risks

HHPD 1: Does the plan describe the incorporation of existing plans, studies, reports, and technical information for high hazard mitigation dams?

The plan must identify the dam information reviewed and incorporated into the plan. This would include information shared by the state and/or local dam owners for purposes of mitigation planning or documents routinely shared consistent with the State's Dam Safety Program. For example, Emergency Action Plans and the State Dam Inventory should be reviewed, and the review of these documents should be noted in the plan.

HHPD 2: Does the plan address high hazard potential dams in the risk assessment?

Each of the hazards of concern identified and profiled in the plan should address the degree to which they might impact any eligible high hazard dams. The hazards of earthquake, landslide, flooding, and wildfire are often thought to have a potential impact on a dam. The significance of these hazards varies greatly across the county, so in some cases one or more of these hazards may not be included in a mitigation plan as a hazard-of-concern. If this is the case, then the assumption is that the omitted hazard does not impact dams.

Natural hazards-of-concern can impact a dam and cause breaching and overtopping. When this occurs, there can be cascading impacts downstream in the inundation area. Breaching might also cause the loss or lowering of the benefits of the reservoir pool created by the dam, which also should be considered when assessing risk and vulnerability. There could also be a non-breach impact, such as a spillway conveying more water than the downstream channel can manage. Finally, all dams present a residual risk, which is the increased risk above what it would be if the dam did not exist, even though this risk is typically slight.

HHPD 3 Does the plan include mitigation goals to reduce long-term vulnerabilities from high hazard potential dams that pose an unacceptable risk to the public?

A plan's goals and objectives must cover high hazard potential dams. They do not need to explicitly mention dams or use the words 'high hazard potential dam', so long as dams fall within an overarching goal.

HHPD 4: Does the plan prioritize mitigation actions to reduce vulnerabilities from high hazard potential dams that pose an unacceptable risk to the public?

The plan needs to include a mitigation action that will reduce the vulnerability of the eligible HHPD dam and/or mitigate the consequences of dam failure downstream or to the pool area reservoir, except when the applicant or sub-applicant for HHPD grant funding will be an entity other than the local jurisdiction where the dam is located. When the applicant/sub-applicant is another entity, such as a city that owns a dam in another jurisdiction, the plan for the local jurisdiction where the dam is located should include a statement of support for the dam rehabilitation project.