

Local Mitigation Plan Review Tool

Cover Page

The Local Mitigation Plan Review Tool (PRT) demonstrates how the local mitigation plan meets the regulation in 44 CFR § 201.6 and offers states and FEMA Mitigation Planners an opportunity to provide feedback to the local governments, including special districts.

1. The Multi-Jurisdictional Summary Sheet is a worksheet that is used to document how each jurisdiction met the requirements of the plan elements (Planning Process; Risk Assessment; Mitigation Strategy; Plan Maintenance; Plan Update; and Plan Adoption).
2. The Plan Review Checklist summarizes FEMA's evaluation of whether the plan has addressed all requirements.

For greater clarification of the elements in the Plan Review Checklist, please see Section 4 of this guide. Definitions of the terms and phrases used in the PRT can be found in Appendix E of this guide.

Plan Information	
Jurisdiction(s)	Lehigh- Northampton Counties, PA
Title of Plan	2024 Lehigh Valley Hazard Mitigation Plan
New Plan or Update	Update
Single- or Multi-Jurisdiction	Multi-jurisdiction
Date of Plan	5/1/2024
Local Point of Contact	
Title	Click or tap here to enter text.
Agency	Click or tap here to enter text.
Address	Click or tap here to enter text.
Phone Number	Click or tap here to enter text.
Email	Click or tap here to enter text.

Additional Point of Contact	
Title	Click or tap here to enter text.
Agency	Click or tap here to enter text.
Address	Click or tap here to enter text.
Phone Number	Click or tap here to enter text.
Email	Click or tap here to enter text.

Review Information	
State Review	
State Reviewer(s) and Title	Ernie Szabo, State Hazard Mitigation Planner
State Review Date	Click or tap to enter a date.
FEMA Review	
FEMA Reviewer(s) and Title	Will Ethridge & Matt McCullough
Date Received in FEMA Region	Click or tap to enter a date.
Plan Not Approved	Click or tap to enter a date.
Plan Approvable Pending Adoption	Click or tap to enter a date.
Plan Approved	Click or tap to enter a date.

Multi-Jurisdictional Summary Sheet

In the boxes for each element, mark if the element is met (Y) or not met (N).

[illegible]

#	Jurisdiction Name	A. Planning Process	B. Risk Assessment	C. Mitigation Strategy	D. Plan Maintenance	E. Plan Update	F. Plan Adoption	G. State Requirements

#	Jurisdiction Name	A. Planning Process	B. Risk Assessment	C. Mitigation Strategy	D. Plan Maintenance	E. Plan Update	F. Plan Adoption	G. State Requirements

Plan Review Checklist

The Plan Review Checklist is completed by FEMA. States and local governments are encouraged, but not required, to use the PRT as a checklist to ensure all requirements have been met prior to submitting the plan for review and approval. The purpose of the checklist is to identify the location of relevant or applicable content in the plan by element/sub-element and to determine if each requirement has been “met” or “not met.” FEMA completes the “required revisions” summary at the bottom of each element to clearly explain the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is “not met.” Sub-elements in each summary should be referenced using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each element and sub-element are described in detail in Section 4: Local Plan Requirements of this guide.

Plan updates must include information from the current planning process.

If some elements of the plan do not require an update, due to minimal or no changes between updates, the plan must document the reasons for that.

Multi-jurisdictional elements must cover information unique to all participating jurisdictions.

Element A: Planning Process

Element A Requirements	Location in Plan (section and/or page number)	Met / Not Met
A1. Does the plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement 44 CFR § 201.6(c)(1))		
A1-a. Does the plan document how the plan was prepared, including the schedule or time frame and activities that made up the plan’s development, as well as who was involved?	Section 3	Met
A1-b. Does the plan list the jurisdiction(s) participating in the plan that seek approval, and describe how they participated in the planning process?	Section 3.5 Multi-Jurisdictional Planning Pg. 42-43	Met

Element A Requirements	Location in Plan (section and/or page number)	Met / Not Met
A2. Does the plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development as well as businesses, academia, and other private and non-profit interests to be involved in the planning process? (Requirement 44 CFR § 201.6(b)(2))		
A2-a. Does the plan identify all stakeholders involved or given an opportunity to be involved in the planning process, and how each stakeholder was presented with this opportunity?	Section 3.5 Multi-Jurisdictional Planning pg. 42-43; Appendix C	Met
A3. Does the plan document how the public was involved in the planning process during the drafting stage and prior to plan approval? (Requirement 44 CFR § 201.6(b)(1))		
A3-a. Does the plan document how the public was given the opportunity to be involved in the planning process and how their feedback was included in the plan?	Section 3, Appendix C	Met
A4. Does the plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement 44 CFR § 201.6(b)(3))		
A4-a. Does the plan document what existing plans, studies, reports and technical information were reviewed for the development of the plan, as well as how they were incorporated into the document?	Section 2.5 Data Sources and Limitations pg. 22	Met

ELEMENT A REQUIRED REVISIONS

Required Revision:

A1-b.) Note:

Pg. 42- Northampton- All communities participated. Lehigh- 10 communities did not participate: Fountain Hill Borough, Slatington Borough, and Washington Township (LC).

A1-b.) Discussion/Required Revision:

Pg. 42

No Meetings Attended:

[Coplay Borough, Fountain Hill Borough, Heidelberg Township, Low Hill Township, Lower Milford Township, Lynn Township, Macungie Borough, Slatington Borough, Washington Township (LC), and Whitehall Township]

No Forms Completed:

Fountain Hill, Slatington Borough, Washington Township (LC)

No Forms Completed or Meetings Attended:

Fountain Hill Borough, Slatington Borough, Washington Township (LC)

One Form:

Macungie Borough, Coplay Borough Low Hill Township

Survey Monkey as a second form:

Heidelberg Borough, Lower Milford Township, Lynn Township, Whitehall Township.

See additional detail added on pages 42-43.

Appendix C:

Others;

Catasauqua Borough is listed as having participated in the June Workshop. How else did they participate during the plan update process?

West Easton Borough- is listed as attending 1 meeting. How else did they participate during the plan update.

See additional detail added on pages 42-43.

Note: Special District Participation

ELEMENT A REQUIRED REVISIONS

Lehigh Northampton Airport Authority- participated in the planning process.

Penn State Lehigh Valley Campus- participated in the planning process.

A1.) Question/Discussion:

Appendix C, Pg. 3- What types of questions were in the Survey Monkey?

See survey information added to Appendix C, starting on page 490.

A2-a.) Required Revision:

Pg. 25 Please provide a listing of all stakeholders (agencies, neighboring communities who were provided an opportunity to participate in the plan update. This could not be found in Section 3 or Appendix C.

See stakeholder information added to Appendix C.

A3-a.) Kudos:

Pg. 35- Public Survey #1- 379 respondents.

Pg. 37- Public Survey #2- 400 respondents.

Pg. 39- Public Survey #3- 34 respondents.

A4-a.) Required Revision:

Section 2.5, Pg. 21-22 – Please provide a listing of all plans, studies, reports and technical information used during plan development.

A reference to Appendix A: Bibliography has been added to Section 2.5.

Element B: Risk Assessment

Element B Requirements	Location in Plan (section and/or page number)	Met / Not Met
B1. Does the plan include a description of the type, location, and extent of all natural hazards that can affect the jurisdiction? Does the plan also include information on previous occurrences of hazard events and on the probability of future hazard events? (Requirement 44 CFR § 201.6(c)(2)(i))		
B1-a. Does the plan describe all natural hazards that can affect the jurisdiction(s) in the planning area, and does it provide the rationale if omitting any natural hazards that are commonly recognized to affect the jurisdiction(s) in the planning area?	Section 4.2.2 Summary of Hazards pg. 48-63; 4.2.3 Excluded Hazards pg. 63	Met
B1-b. Does the plan include information on the location of each identified hazard?	Section 4	Met
B1-c. Does the plan describe the extent for each identified hazard?	Section 4	Met
B1-d. Does the plan include the history of previous hazard events for each identified hazard?	Section 4.3 Hazard Profiles (see “previous occurrences” portion); Section 4.4.1 Methodology pg. 347	Met
B1-e. Does the plan include the probability of future events for each identified hazard? Does the plan describe the effects of future conditions, including climate change (e.g., long-term weather patterns, average temperature and sea levels), on the type, location and range of anticipated intensities of identified hazards?	Section 4.3 Hazard Profiles (under “Future Occurrence” portion)	Met
B1-f. For participating jurisdictions in a multi-jurisdictional plan, does the plan describe any hazards that are unique to and/or vary from those affecting the overall planning area?	Section 4.3 Hazard Profiles (under “Location and Extent” and “Vulnerability Assessment” portions)	Met

Element B Requirements	Location in Plan (section and/or page number)	Met / Not Met
B2. Does the plan include a summary of the jurisdiction's vulnerability and the impacts on the community from the identified hazards? Does this summary also address NFIP-insured structures that have been repetitively damaged by floods? (Requirement 44 CFR § 201.6(c)(2)(ii))		
B2-a. Does the plan provide an overall summary of each jurisdiction's vulnerability to the identified hazards?	Section 4.3 Hazard Profiles (see "Vulnerability Assessment" portion); Section 4.4.2 Ranking Results	Met
B2-b. For each participating jurisdiction, does the plan describe the potential impacts of each of the identified hazards on each participating jurisdiction?	Section 4	Met
B2-c. Does the plan address NFIP-insured structures within each jurisdiction that have been repetitively damaged by floods?	Section 4.3.4 Flood, Flash Flood, Ice Jam pg. 144 - 145	Met

ELEMENT B REQUIRED REVISIONS

Required Revision:

B1-a.) Discussion/Required Revision:

None of the following hazard types are fully profiled: Windstorm, Straight-Line Wind, Hurricane or Tropical Storm. Straight-line winds are briefly mentioned in the Location & Extent (Pg. 204) under Windstorm & Tornado but not in the other Hazard Identification sections. Tropical Storm and Hurricane are mentioned briefly in the previous occurrence section (Pg. 207) but only in reference as tornadoes being an offshoot as a result of Hurricane Ida.

These hazards are commonly-known for occurring in this planning area. If these hazards are not being profiled, please provide justification for not doing so.

A new section regarding why these hazards were excluded from the plan (section 4.2.3 – Excluded Hazards) has been added to the plan.

Additional information about the location, extent, magnitude, past occurrences, and future occurrences of straight-line winds, windstorms, and winds resulting from tropical cyclones have also been added to the corresponding portions of Section 4.3.13 Windstorm/Tornado.

B1-d.) Required Revision:

Flood Pg. 116 - Please provide an account of Losses/Impacts to the planning areas for Hurricane Irene, Tropical Storm Lee & Super Storm Sandy in the previous occurrences section. NCEI database language references event information from 1996-2023, Table 28 indicates data only from 2012-2023.

Added references to the storms noted above, as well as four additional notable flooding events which occurred between 1996 and 2012 to the table.

B1-d.) Discussion:

The majority of hazards do not provide the full amount of data available. What is the reason for limiting the datasets to about 10 years?

Added commentary regarding the decision to limit certain datasets to Section 4.4.1 Methodology.

B1-e.) Recommended Revision:

Earthquake, Pg. 90- Figure 8, Please identify where Lehigh & Northampton counties are situated in relation to the mapping provided.

Shape added to Figure 8 to show approximate location of the Lehigh Valley.

B1-e.) Required Revision:

Earthquake, Pg. 89- Please provide an analysis of future conditions/climate change impact on the future occurrence of this hazard. If this hazard will not be increased/decreased due to future conditions/climate change, please state so.

Information on the current understanding of how future development and climate change may impact earthquakes has been added to Section 4.3.2 Earthquake.

Hailstorms, Pg. 138 – Please provide an analysis of future conditions/climate change impact on the future occurrence of this hazard. If this hazard will not be increased/decreased due to future conditions/climate change, please state so.

Information on the current understanding of the dynamics between future development, climate change, and hailstorm occurrences has been added to Section 4.3.5 Hailstorms.

Landslide, Pg. 154 – Please provide an analysis of climate change impact on the future occurrence of this hazard. If this hazard will not be increased/decreased due to future conditions/climate change, please state so. (Future Conditions {development} is noted*)

Information on the impacts of climate change on landslides and mudslides has been added to Section 4.3.7 Landslide.

Radon, Pg 187- Please provide an analysis of climate change impact on the future occurrence of this hazard. If this hazard will not be increased/decreased due to future conditions/climate change, please state so. (Future Conditions {development} is noted*)

Information on the current understanding of the relationship between climate change and radon has been added to Section 4.3.10 Radon Exposure.

Subsidence/Sinkhole, Pg. 192- Please provide an analysis of future conditions/climate change impact on the future occurrence of this hazard. If this hazard will not be increased/decreased due to future conditions/climate change, please state so.

Information on the current understanding of the relationship between future development, climate change, and land subsidence and sinkhole formation has been added to Section 4.3.11 Land Subsidence/Sinkhole.

Wildfire, Pg. 200- Please provide an analysis of future conditions/climate change impact on the future occurrence of this hazard. If this hazard will not be increased/decreased due to future conditions/climate change, please state so.

Information on the impacts of climate change and future development on wildfire risk has been added to Section 4.3.12 Wildfire.

Windstorm/Tornado, Pg. 209- Please provide an analysis of future conditions/climate change impact on the future occurrence of this hazard. If this hazard will not be increased/decreased due to future conditions/climate change, please state so.

Information on the connection between climate change/future development and windstorms, tornadoes, and straight-line winds has been added to Section 4.3.13 Windstorm/Tornado.

Winter Storm, Pg. 215- Please provide an analysis of future conditions/climate change impact on the future occurrence of this hazard. If this hazard will not be increased/decreased due to future conditions/climate change, please state so.

Information on the impacts of climate change and future development on winter weather has been added to Section 4.3.14 Winter Storm.

B1-f.) Required Revision:

Extreme Temperatures, Pg. 98- Based on the Heat Island factors, please identify which participating communities may be more at risk to this hazard (ie- urban compared to rural)

A list of these communities has been added to pages 100-101.

B2-a.) Question:

Wildfire Pg. 203- Is there data for the number of parcels at risk for the communities listed on this page?

Note added to Section 4.3.12 stating that data quantifying wildfire risk at the parcel level is currently unavailable.

B2-a.) Recommended Revision:

Drought Pg. 81 Please provide a breakdown, per community, of the Planted Acres Exposed.

Note added to Section 4.3.1 Drought stating that community-level crop data is unavailable at the time of writing the Plan.

Earthquake Pg. 92- Please provide a breakdown, per community, of individuals over the age 65 and those living under the poverty line.

Table added to Section 4.3.2 Earthquake detailing the requested information.

Extreme Temperatures Pg. 107- Please provide a breakdown, per community, of: the elderly, infants and children up to four years old, and those with chronic diseases.

Information on vulnerable populations (aged 65+ and 4 and younger) in each jurisdiction has been added in a table in Section 4.3.3. Extreme Temperature.

Landslide Pg. 156- Please provide the communities that are in the high susceptibility/moderate incidence landslide area.

Clarification added on page 167.

Radon Pg. 188- Please provide a breakdown, per community, of the 47,511 buildings across the planning area.

This figure came from the 2023 Pennsylvania State Hazard Mitigation Plan – more granular data is not provided.

Windstorm/Tornado Pg. 211- Please provide a breakdown, per community, of Population and Buildings in Table 65.

Table provides estimated loss data from NCEI Storm Events Database. This database does not provide the number of buildings or populations affected by these events.

B2-a.) Required Revision:

Flood Pg. 127- Notes that “The parcels that intersect the 1% and 0.2% annual chance flood zones were totaled for each municipality. The total number of buildings with their centroid located in the 1% and 0.2% annual chance flood boundaries was also determined, and their estimated building stock replacement value is identified for each municipality.”

Please provide these totals for each municipality.

Please see table 33 and updated text on pages 137-138.

B2-a.) Note:

Pg. 126- It is stated that within the Lehigh Valley, more than 12,000 people are exposed to the 1% annual chance flood.”

Pg. 128- It is stated that “Approximately 11,850 parcels are located in the 1% annual chance floodplain.”

Numbers are accurate – one figure references people, the other references parcels.

B2-a.) Discussion:

Pg. 128 Notes that there are 11,850 parcels located in the 1% annual chance floodplain. Appendix E identifies the Municipality and Facility Name of the approximately 22 Critical Facilities that are within the Special Flood Hazard Area. What is the makeup/function/use of the remaining assets/parcels that are in the SFHA?

ELEMENT B REQUIRED REVISIONS

The parcel data available to the planning team does not contain sufficient detail to answer this question.

B2-c.) Required Revision:

Pg. 130, Table 31- Please provide the breakdown for the RL and SRL structures by type (residential, commercial, etc....).

Two new tables (Table 36 and Table 37) provide a breakdown of the repetitive loss properties by occupancy types.

Element C: Mitigation Strategy

Element C Requirements	Location in Plan (section and/or page number)	Met / Not Met
C1. Does the plan document each participant's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement 44 CFR § 201.6(c)(3))		
C1-a. Does the plan describe how the existing capabilities of each participant are available to support the mitigation strategy? Does this include a discussion of the existing building codes and land use and development ordinances or regulations?	Section 5	Met
C1-b. Does the plan describe each participant's ability to expand and improve the identified capabilities to achieve mitigation?	Section 5, Community Annexes	Met
C2. Does the plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement 44 CFR § 201.6(c)(3)(ii))		
C2-a. Does the plan contain a narrative description or a table/list of their participation activities?	Section 5.2.2 Administrative and Technical Capability Pg. 379 – 389;	Met
C3. Does the plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement 44 CFR § 201.6(c)(3)(i))		
C3-a. Does the plan include goals to reduce the risk from the hazards identified in the plan?	Section 6.2.2	Met

Element C Requirements	Location in Plan (section and/or page number)	Met / Not Met
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 44 CFR § 201.6(c)(3)(ii))		
C4-a. Does the plan include an analysis of a comprehensive range of actions/projects that each jurisdiction considered to reduce the impacts of hazards identified in the risk assessment?	Section 6.4, Table 121 & Community Annexes	Met
C4-b. Does the plan include one or more action(s) per jurisdiction for each of the hazards as identified within the plan's risk assessment?	Section 6.4, Table 121 & Community Annexes	Met
C5. Does the plan contain an action plan that describes how the actions identified will be prioritized (including a cost-benefit review), implemented, and administered by each jurisdiction? (Requirement 44 CFR § 201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))		
C5-a. Does the plan describe the criteria used for prioritizing actions?	Pg. 404, 405 – Table 123	Met
C5-b. Does the plan provide the position, office, department or agency responsible for implementing/administrating the identified mitigation actions, as well as potential funding sources and expected time frame?	Pg. 393, Table 121	Met
ELEMENT C REQUIRED REVISIONS		
Required Revision: C2-a.) Required Revision: Please provide perspective, from each participating municipality, on their floodplain management activities. Please see the attached “Checking In On the NFIP” form to assist communities with documenting this information. See Table 124 – NFIP Participation by Community. C1-b.) Recommended Revision: Limited analysis on the ability to improve capabilities are noted. Actions to address the improvement of some capabilities are also noted.		

Element D: Plan Maintenance

Element D Requirements	Location in Plan (section and/or page number)	Met / Not Met
D1. Is there discussion of how each community will continue public participation in the plan maintenance process? (Requirement 44 CFR § 201.6(c)(4)(iii))		
D1-a. Does the plan describe how communities will continue to seek future public participation after the plan has been approved?	Section 7.3 Pg. 414	Met
D2. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a five-year cycle)? (Requirement 44 CFR § 201.6(c)(4)(i))		
D2-a. Does the plan describe the process that will be followed to track the progress/status of the mitigation actions identified within the Mitigation Strategy, along with when this process will occur and who will be responsible for the process?	Pg. 413	Met
D2-b. Does the plan describe the process that will be followed to evaluate the plan for effectiveness? This process must identify the criteria that will be used to evaluate the information in the plan, along with when this process will occur and who will be responsible.	Pg. 413	Met
D2-c. Does the plan describe the process that will be followed to update the plan, along with when this process will occur and who will be responsible for the process?	Pg. 413	Met
D3. Does the plan describe a process by which each community will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement 44 CFR § 201.6(c)(4)(ii))		
D3-a. Does the plan describe the process the community will follow to integrate the ideas, information and strategy of the mitigation plan into other planning mechanisms?	Pg. 413	Met
D3-b. Does the plan identify the planning mechanisms for each plan participant into which the ideas, information and strategy from the mitigation plan may be integrated?	Pg. 413, Capability Assessment	Met
D3-c. For multi-jurisdictional plans, does the plan describe each participant's individual process for integrating information from the mitigation strategy into their identified planning mechanisms?	Pg. 413	Met

ELEMENT D REQUIRED REVISIONS

Required Revision:

Element E: Plan Update

Element E Requirements	Location in Plan (section and/or page number)	Met / Not Met
E1. Was the plan revised to reflect changes in development? (Requirement 44 CFR § 201.6(d)(3))		
E1-a. Does the plan describe the changes in development that have occurred in hazard-prone areas that have increased or decreased each community's vulnerability since the previous plan was approved?	Section 2.4, Section 4.4.4, Community Annexes	Met
E2. Was the plan revised to reflect changes in priorities and progress in local mitigation efforts? (Requirement 44 CFR § 201.6(d)(3))		
E2-a. Does the plan describe how it was revised due to changes in community priorities?	Pg. 4-9, 23-24, 386	Met
E2-b. Does the plan include a status update for all mitigation actions identified in the previous mitigation plan?	Section 6.1.2 Pg. 380	Met
E2-c. Does the plan describe how jurisdictions integrated the mitigation plan, when appropriate, into other planning mechanisms?	Section 2.5.2	Met
ELEMENT E REQUIRED REVISIONS		
Required Revision:		
E1-a.) Recommended Revision:		
In the next plan update, provide in greater detail an analysis of the anticipated development, located in the Community Annexes, and how that development is potentially increasing or decreasing risk. Identify which hazard zone(s) they are located in, as well as if the construction has been completed.		
Added additional action in strategy on 434.		
E2-b.) Note:		
Appendix C contains review and re-prioritization of existing actions.		

Element F: Plan Adoption

Element F Requirements	Location in Plan (section and/or page number)	Met / Not Met
F1. For single-jurisdictional plans, has the governing body of the jurisdiction formally adopted the plan to be eligible for certain FEMA assistance? (Requirement 44 CFR § 201.6(c)(5))		
F1-a. Does the participant include documentation of adoption?	N/A	Choose an item.
F2. For multi-jurisdictional plans, has the governing body of each jurisdiction officially adopted the plan to be eligible for certain FEMA assistance? (Requirement 44 CFR § 201.6(c)(5))		
F2-a. Did each participant adopt the plan and provide documentation of that adoption?	N/A	Choose an item.
ELEMENT F REQUIRED REVISIONS		
Required Revision: Click or tap here to enter text.		

Element G: High Hazard Potential Dams (Optional)

HHPD Requirements	Location in Plan (section and/or page number)	Met / Not Met
HHPD1. Did the plan describe the incorporation of existing plans, studies, reports and technical information for HHPDs?		
HHPD1-a. Does the plan describe how the local government worked with local dam owners and/or the state dam safety agency?	Section 6.3 Identification and Analysis of Mitigation Techniques Table 127; community annexes	Met
HHPD1-b. Does the plan incorporate information shared by the state and/or local dam owners?	Section 4.3.16	Met

HHPD Requirements	Location in Plan (section and/or page number)	Met / Not Met
HHPD2. Did the plan address HHPDs in the risk assessment?		
HHPD2-a. Does the plan describe the risks and vulnerabilities to and from HHPDs?	Section 4.3.16 Dam Failure	Met
HHPD2-b. Does the plan document the limitations and describe how to address deficiencies?	Pg. 230 & 244	Met
HHPD3. Did the plan include mitigation goals to reduce long-term vulnerabilities from HHPDs?		
HHPD3-a. Does the plan address how to reduce vulnerabilities to and from HHPDs as part of its own goals or with other long-term strategies?	Pg. 387	Met
HHPD3-b. Does the plan link proposed actions to reducing long-term vulnerabilities that are consistent with its goals?	Pg. 393, Action 2	Met
HHPD4-a. Did the plan include actions that address HHPDs and prioritize mitigation actions to reduce vulnerabilities from HHPDs?		
HHPD4-a. Does the plan describe specific actions to address HHPDs?	Section 6.4 2024 Mitigation Action Plan pg. 416 – 427; Community Annexes	Met
HHPD4-b. Does the plan describe the criteria used to prioritize actions related to HHPDs?	Pg. 404, 405 – Table 123	Met
HHPD4-c. Does the plan identify the position, office, department or agency responsible for implementing and administering the action to mitigate hazards to or from HHPDs?	Pg. 393, Action 2	Met

HHPD Requirements	Location in Plan (section and/or page number)	Met / Not Met
HHPD Required Revisions		

Required Revision:

HHPD1-a.) Required Revision:

Pg. 230 States that Local Dam Owners will be contacted for the next plan update. Please create a mitigation action that speaks to the strategy of engaging them as targeted partners in the next plan update.

An additional action was added as action 29, as reflected in table 127 and relevant annexes.

HHPD-1.) Note:

Pg. 230 mentions an email was sent asking PADEP for data.

HHPD1-b.) Note:

Limited data available for incorporation.

HHPD2-a.) Discussion

Pg. 244 states that “Based on the information available from the NID, there are no dams in Lehigh or Northampton County that appear to be eligible for funding under the High Hazard Potential Dam (HHPD) grant program.”

Pg. 244 Is this statement based on the HHPD NOFO criteria? This statement is based on the HHPD grant eligibility criteria regarding dam condition. Language in this section has been updated for clarity (now on page 257).

Note:

All HHPDs should be profiled and included in the review of dam risk in the planning area. This is due to evolving HHPD NOFO language, as well as potential changing assessed conditions of each dam, as time goes on.

It is suggested to remove the statement on Pg. 244.

Updated the language in this section to reflect this feedback.

HHPD2-a.) Discussion/Required Revision:

Pg. 230 & 244 notes data limitations to develop more refined risk understanding of this hazard. FEMA has a free tool available that can begin to carve out more detail for each of the HHPDs listed in the plan. Resilience Analysis & Planning Tool (RAPT)- provides an opportunity to focus on areas surrounding HHPDs that identify at-risk assets. Although this data is not a one for one match of an inundation area, it does allow the plan to begin documenting potentially at-risk elements of the community.

[Resilience Analysis and Planning Tool \(RAPT\) | FEMA.gov](#)

-Location and size of the PAR from HHPDs.

HHPD Requirements	Location in Plan (section and/or page number)	Met / Not Met
-Potential impacts to institutions and critical infrastructure/facilities/lifelines. Because the RAPT data does not include inundation information, it's impossible to use this tool to generate accurate or useful estimates of the population at risk or of the impacts to infrastructure and institutions. It is possible to simply note what assets are in the general vicinity of the dams, but that creates the possibility of implying erroneously that they are at risk in a public-facing document. HHPD4-a.) Required Revision: Please provide additional action types for HHPDs. Please see pg. 5 of the attached Local Mitigation Planning Tips resource guide. (Reference- Pg. 235, Table 74 & Community Annexes- Upper Saucon Township, Lynn Township, Roseto Borough, South Whitehall Township (No actions mentioned for HHPD), Upper Mount Bethel Township, Bethlehem Township) An additional action was added as action 30, as reflected in table 127 and relevant annexes.		

Element H: Additional State Requirements (Optional)

Element H Requirements	Location in Plan (section and/or page number)	Met / Not Met
This space is for the State to include additional requirements.		
Click or tap here to enter text.	Click or tap here to enter text.	Choose an item.

Plan Assessment

These comments can be used to help guide your annual/regularly scheduled updates and the next plan update.

Element A. Planning Process

Strengths

- [insert comments]

Opportunities for Improvement

- [insert comments]

Element B. Risk Assessment

Strengths

- [insert comments]

Opportunities for Improvement

- [insert comments]

Element C. Mitigation Strategy

Strengths

- [insert comments]

Opportunities for Improvement

- [insert comments]

Element D. Plan Maintenance

Strengths

- [insert comments]

Opportunities for Improvement

- [insert comments]

Element E. Plan Update

Strengths

- [insert comments]

Opportunities for Improvement

- [insert comments]

Element G. HHPD Requirements (Optional)

Strengths

- [insert comments]

Opportunities for Improvement

- [insert comments]

Element H. Additional State Requirements (Optional)

Strengths

- [insert comments]

Opportunities for Improvement

- [insert comments]