

memo

TO: Hazard Mitigation Plan (HMP) Public Meeting #1 Attendees

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CC: MaryAnn O'Connor, City of Medford Health Director & Emergency Manager

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RE: Response to Public Comment from HMP Public Meeting #1

Overview: Medford is updating its Hazard Mitigation Plan and responding to public comments from the first meeting:

- **Flooding:** People are concerned about flood risk and severity. Updated maps will show important buildings (critical infrastructure) and areas that flood often (repetitive loss sites), using FEMA data.
- **Dam Safety:** The risk is low, but people have concerns. A list of Middlesex County dams and their relative risk is included in this response.
- **Brush Fires:** The risk is low now but may increase due to climate change.

Resources, including FEMA flood maps and national hazard databases, are available for more information.

Flooding

Community members identified flooding as a key concern. Past data shows that flooding is one of the most serious hazards affecting Medford.

Question: What do we have a plan for? Do we have maps and models?

- Yes! Flooding is identified as a serious hazard for Medford. Past plans include models of flood-prone areas and show which locations would be most affected. We are currently working to strengthen and update this information.
- The Planning Committee for our newest update includes the city's Engineering Department and Building Department.
- [You can take a look at some of the maps and models we are using here.](#) The "View in MassMapper" tool allows you to see the mapping of flood risk for your community. The tool also shows cultural resources and infrastructural sites, geographic features, and more.

Question: The maps presented at the Public Meeting show the likelihood of risk but not the severity of risk. Are we using the best data?

- Our maps use the best data available to us. We mainly use data from the Flood Insurance Rate Maps of the Federal Emergency Management Agency. This is the official source for the United State's government. For example, this information is also used by the National Flood Insurance Program.
- Flood maps usually show the likelihood of flooding which is based on historical and environmental data
- Likelihood is also more important for planning and risk management. Likelihood allows communities to plan based on where floods are most likely to happen in the future.
- The severity of floods and their community impacts depends on factors that are difficult to predict like rainfall. By showing likelihood, flood maps avoid making potentially false claims.
 - [You can learn more about FEMA flood maps here.](#)
- The maps presented at Public Meeting 1 have been changed to address the concerns of community members on flood severity. The maps now include critical infrastructure and repetitive loss sites.

- “Critical infrastructure” is defined as essential places and systems. Examples of critical infrastructure include healthcare facilities and public safety systems.
- “Repetitive loss sites” are defined as structures with at least two paid flood losses of more than \$1,000 in any ten-year period.
- We have identified sites of community concern based on both current and past community discussions.
 - For example, the areas on Main Street and Salem Street have been identified as sites of concern for heavy rain.
 - This concern was brought up by the Climate Equity Council and has been included in the updated plan.

Comment: Dam failure and associated collateral risks are a concern among community members.

- The risk of dam failure in Medford and surrounding areas is low.
- Our update will include a list of all Middlesex County dams, with their risk of failure and hazard potential.
 - [You can browse the inventory of Middlesex County dams here](#), including sites of concern such as the Amelia Earhart Dam and Horn Pond Dam.
- Many dams in Medford are labeled as having “high” hazard potential. This grading tells us the potential consequence of a dam failure and not the likelihood of dam failure. This grading is called the Hazard Potential classification. This assessment tests for safety issues to show the risk of dam failure. In Medford, the South Reservoir Dam has a higher risk in comparison to other dams.
 - [You can browse the full list of dam inventory terms here](#).
- The newest Hazard Mitigation Plan will include environmental concerns such as sewage overflow and water contamination.

Brush Fires

- The risk of brush fires in Medford and surrounding areas is low.

- [You can check your community or location's risk of brush fires and related damages here.](#)
- Yet, the number and severity of brush fires are expected to increase due to climate change. Brush fires causing climate change include rising temperatures, precipitation changes, and prolonged drought.
- We are working with the Medford Fire Department. Our updated Hazard Mitigation Plan update will include data from federal and local-level climate data and projections.

Summary of Resources

- [You can check out the 2023 State of Massachusetts Hazard Mitigation and Climate Adaptation Plan here.](#) This guide describes and identifies key hazards, impacts, and areas of risk.
 - The link also includes a summary of findings in seven languages: English, Spanish, Portuguese, Cape Verdean Creole, Haitian Creole, Mandarin Chinese, and Vietnamese.
- [You can access the federal National Risk Index for hazards here,](#) this includes descriptions of common hazards across the United States and region-specific information.
- [Federal storm events database.](#) You can browse by county, state, and event.

Flooding

- [FEMA Flood maps and models.](#)
- [How to read a flood map.](#)

Dams

- [National Inventory of dams: Middlesex County locations.](#)
- [Dam Inventory data dictionary](#)

Brush Fires

- [Check your risk of brush fires and related damages here.](#)