

2016 Plan Revisions Summary

This Page Intentionally Blank

2016 Plan Revisions Summary

Background

The *Jefferson County – City of Port Townsend Natural Hazards Mitigation Plan* (the Plan) was originally written and adopted in 2004 and updated and readopted in 2009, as required by law. The mitigation planning regulation at 44 CFR 201.6(d)(3) states:

A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within five (5) years in order to continue to be eligible for mitigation project grant funding.

The following updates reflect the 2016 review and revision process reflected in the Plan and submitted to the Washington State Hazard Mitigation Office for review.

Each participating organization was provided with turn-around documents that detailed their organization profile and goals that were submitted in 2015 and 2016. They were asked to review them against their current situations, and update them to reflect current plans, documents and policies. The updated turn-around documents were then returned to the core writing team to be incorporated into the overall Plan.

Revisions

Overall – Due to the size of the final Plan, only one master copy and one copy for the State Hazard Mitigation Office will be printed unless otherwise requested. All participants and interested parties will receive the Plan in electronic format on a CD, unless specifically requested otherwise. Libraries, for example, may request either or both hard copy and CD format, depending on their needs.

PREFACE contains acknowledgements, the Table of Contents, and introductory material for the Plan. The following revisions have been made to this section:

- *Special Thanks and Acknowledgements* have been updated to reflect current personnel and special contributors to the 2016 revisions.
- *Table of Contents* has been updated to reflect changes in content and order of the Plan. Appendices have been re-ordered into a more logical progression.
- Steering Committee Members and contributors have been updated to acknowledge participation.
- *List of Plan Recipients* has been updated to reflect the current distribution.
- *Promulgation* has been updated to reflect historical adoption resolutions. Adoption Resolution numbers for 2016 will be added as each jurisdiction adopts the revised Plan.

Executive Summary contains a summary of the plan and a five-year action plan matrix.

- The Five-Year Action Plan Matrix has been updated to reflect current revisions to action items as provided by Plan participants.
- Action Plan Matrix has been synchronized with the City, County, and Special Districts.
- Climate Change Summary has been added.

Section I – The Planning Process contains the introduction and an overview of the planning and participation process.

- Text has been updated to reflect that the 2015/2016 Jefferson County *Hazard Identification and Vulnerability Analysis* has served as a foundation document to the development of the 2016 revisions.
- *Plan Methodology* has been updated with the names of current committee participants, jurisdictions, and citizens. Text has been revised to highlight that a number of natural hazard categories have been broken out to provide more detail on locally important disaster issues.
- *Plan Development Process* has been updated with the names of key contributors. The Local Involvement has been expanded to include a Data Flow Diagram (DFD) to show how multiple jurisdictions contributed to the Plan development. The Public Involvement table has been updated with representative 2015-2016 meetings illustrating the scope of public involvement.
- *Plan Participation and Adoption* table has had a column added so that both 2004 and 2009 Adoption Resolutions can be summarized. Adoption Resolutions have been entered in Appendix “F”.
- *Plan Maintenance* has been updated to reflect the Plan update schedule for the period from 2017 through 2022. Text and a Schedule Chart have been added to clarify how jurisdictions participate in the process, including public interaction.

Section II – Multi-Jurisdictional contains information regarding the most serious natural hazards within the State that can affect Jefferson County, and additional man-made hazards that are of concern to Jefferson County.

- *Jefferson County Profile* has been updated to call out the Plan’s current maps. Maps have been updated with most current information available.
- *Jefferson County Profile* narrative has been improved and updated using statistics from the most recent Census.
- *Significant Historical Disaster Events* – “Federal Disaster Declarations for Washington” table has been updated through most current declarations in 2016.
- Climate Change: A voluntary subsection has been added to discuss the possibility of climate change affecting local hazards. The topics include a summary of the Olympic Peninsula warming projections developed by NOPRCD. **Each hazard also has appropriate commentary when applicable.**
- Maps have been updated when more current versions are available.
- All citations have been moved from *Appendix G (Endnotes)* to immediately following the narrative in which it is cited. This makes it easier for researchers to focus on a given topic without having to open the appendices.
- *Avalanche* narrative has been updated. State avalanche risk map has been updated. Added climate change topic. Citations moved to from *Appendix G* to end of topic.
- *Damaging Winds* narrative has been brought up date through 2016. Added climate change topic. Citations moved to from *Appendix G* to end of topic.

- *Drought* narrative has been updated through 2016; Table DR-1, *Significant Droughts in Jefferson County* added; 2001 Drought and 2014-2015 drought narrative expanded. Added climate change topic. Citations moved to from *Appendix G* to end of topic.
- *Earthquake* narrative has been rewritten to reflect new information about the Cascadia subduction zone and a possible 9.0 earthquake scenario. Added table showing *Cascadia Historic Earthquakes*. Added topic on earthquake faults affecting Jefferson County. Amplified the narratives on Whidbey Island Fault and Cascadia Subduction Zone generated earthquakes (scenarios). Added results of Hazus simulation for the two scenarios. Added climate change topic. Citations moved to from *Appendix G* to end of topic.
- *Flood* narrative has been updated to include: updated table of flood-related Presidential Disaster Declarations; maps have been updated and photos added; new maps have been added based on modeled flood damage; NFIP discussion added; RiskMAP assessment added. Added climate change topic. Citations moved to from *Appendix G* to end of topic.
- *Heat Wave (Extended)*. Updated the topic through 2016. Added Heat Index Chart. Added climate change topic. Citations moved to from *Appendix G* to end of topic.
- *Landslide* - Updated the topic through 2016. Added Heat Index Chart. Added climate change topic. Citations moved to from *Appendix G* to end of topic. Added “before and after” picture of Ledgewood-Bonair landslide. Updated maps. Added Table LS-1, *Significant Landslides in Washington 1984 – 2014*. Added results of RiskMAP assessment. Added sample Slope Stability Map for Port Townsend.
- *Public Health Emergency* - Updated the topic through 2016. Added Table PH-1, *Pandemic Flu History*. Added paragraph on Zika virus. Added discussion of inoculation rates. Added a “Special Consideration” section for Ebola and the Zika Virus. They have not affected Jefferson County yet, but easily could. Added climate change topic. Citations moved to from *Appendix G* to end of topic.
- *Tornado* has been added as a new natural hazard. Updated the topic through 2016. Added Table TN-1 Tornado Events in Jefferson County. Added charts explaining the Enhanced Fujita Scale. Added climate change topic. Added comic relief. Citations moved to from *Appendix G* to end of topic.
- *Tsunami / Seiche* narrative has been updated to reflect current circumstances in Port Townsend as of 2016. Narrative, in general, has been improved. Added Table TS-1, Recurrence of the “Great Earthquakes” in Washington State. Added Tsunami ETA calculator. Added depiction of South Whidbey Island Fault. Added Figure TS-4, Notable Tsunamis in Washington. Added Figure TS-7, Queets Inundation Zone. Incorporated tsunami analysis from *Risk Report for Jefferson County*. Added a piece on tsunami wave heights generated in the 2011 Tohoku Japan M9.1 earthquake. Added climate change topic. Citations moved to from *Appendix G* to end of topic.
- *Volcano* narrative has been improved and brought up to 2016. Added Alaskan Volcano Map on the premise that Jefferson County is at risk from ash fall from Alaskan Volcanoes. Added Table VO-1, Alphabetical List of Alaskan Volcanoes. Added climate change topic. Added Figure VO-4, Volcanic Explosivity Index. Added Table VO-2, Volcanic Explosivity Classification. Citations moved to from *Appendix G* to end of topic.
- *Wildfire / Forest/ Urban Interface* narrative has been improved and brought up to 2016. Added Table WF-1 Representative Wildland Fires That Affected Jefferson County. (Goes back 8700 years.) Added Figure WF-2 Landfire Mean Fire Return Interval. Added Figure WF-3 WUI throughout Port Townsend. Added Table WF-2, which is a gallery of recent WUI incidents with a photo and short explanation. Added climate change topic. Citations moved to from *Appendix G* to end of topic.
- *Winter Storm* narrative has been made current through 2016. Added Table WS-1, Severe Storms Affecting Western Washington. Included Disaster Declaration Number if there was one. Added climate change topic. Citations moved to from *Appendix G* to end of topic.
- *9-1-1 Outage* has been deleted. The longest outage was in *hours*. For this to take on disastrous proportions would mean something far worse was happening around the county.
- *Aircraft Mishap* has been updated through 2016. Previous Occurrences was enhanced with more incidents, including a C-141 crash in Quilcene area. Citations moved to from *Appendix G* to end of topic.

- *Bankruptcy* has been updated to be current through 2016. Added Figure BR-1 Bankrupt Cities and Municipalities. Added Table BR-1 Selected Municipal Bankruptcies. Citations moved to from *Appendix G* to end of topic.
- *Civil Disturbance* has been updated through 2016. Added Figure CD-1 – Sit-in at NAVMAG. Added Figure CD-2 – Peace March from NAVMAG to Port Townsend. Citations moved to from *Appendix G* to end of topic.
- *Dam Failure* has been updated to 2016. Added discussion of Dam Hazard Classification. Added Table DF-1 Jefferson County Dams in the National Inventory of Dams and created figures to display their locations on relief maps. Added Table DF-2 Downstream Hazard Classifications. Added Table DF-3 Dams listed in WSECY State Dam Inventory. Citations moved to from *Appendix G* to end of topic.
- *Hazardous Materials Incident* has been brought up to 2016. Added Figure HM-1 Total Spills by County. Added Figure HM-2 Facilities and Chemicals by County. Added Figure HM-3 Clandestine Drug Lab by County. Added Table HM-2 Drug Lab Reports 1990 – 2012. Created Table HM-2 Drug Lab Reports per Capita. Added Figure HM-4 Meth Labs Reported Per Year. Citations moved to from *Appendix G* to end of topic.
- *Major Fire Activity* has been updated to 2016. Added photos of Aldrich Market Fire. Added Table MF-1 Significant Fires History. Citations moved to from *Appendix G* to end of topic.
- *Major Law Enforcement Activity* has been updated to 2016. Added photo of car burning during a standoff between police and a mob in Milwaukee, Wisconsin. Added photos and background of 2013 pipe bomb incident in Port Townsend. Citations moved to from *Appendix G* to end of topic.
- *Marine Oil Spill* updated to 2016. Added Figure OS-1 Oil Spills in Jefferson County Vicinity. Added Table OS-1 Maritime Oil Spills over 10,000 gallons. Citations moved to from *Appendix G* to end of topic.
- *Maritime Emergency (Ferry Accident; Ship Collision)* has been updated through 2016. Citations moved to from *Appendix G* to end of topic.
- *Military Ordnance Incident* has been updated through 2016. Citations moved to from *Appendix G* to end of topic.
- *Power Outage* has been updated through 2016. The discussion includes the purchase of power provider assets for Jefferson County from Puget Sound Energy by the Jefferson County Public Utility District No. 1. Added photo of a Mason county wildfire that cut power to 2000 Jefferson County residents. Added climate change topic. Citations moved to from *Appendix G* to end of topic.
- *Terrorism (CBRNE)* has been updated through 2016. Added brief mention of ISIS. Added brief discussion of cyberterrorism. Citations moved to from *Appendix G* to end of topic.
- *Water Shortage / Sewer Failure (Extended)* has been updated to 2016. New discussion on water vulnerabilities in Jefferson County. Added climate change topic. Added Figure H₂O-2 Shift in Hydrologic Basin Types. Citations moved to from *Appendix G* to end of topic.

Section III – Multi-Jurisdictional / Multi-Hazard Mitigation contains multi-jurisdictional community profile information as well as information regarding multi-jurisdiction/multi-hazard mitigation measures and a listing of multi-jurisdictional mitigation strategies and projects suggested by stakeholders and citizens as part of the public process associated with the development of this plan.

- Added or Updated Mitigation Activities to reflect 2016 Status as provided by participants.
- Added an asterisk, “*”, to the Mitigation Activity ID of new or updated activities.
- Completed tasks are highlighted by having their Timeline notations in **Blue**.
- Completed tasks or tasks to be deleted have a strike-through in their Activity ID.

- “*Stakeholder/Citizen Suggested Mitigation Strategies and Projects*” has been updated with additional inputs from current surveys and ad hoc citizen input. These are identified by (rev. 2016) after the item. Items that have been suggested and are underway are flagged with an asterisk (*).
- Added special recommendations from Marrowstone Island Foundation regarding the island’s situation.
- Added recommendations made by public input from the NOPRCD report that could benefit the Port Townsend Water System. These should either be submitted to the City or have the City adopt the NOPRCD report recommendations in its entirety.
- Mitigation strategies suggested in the *Risk Report for Jefferson County, including City of Port Townsend and Hoh Tribe* are included as a table.
- Mitigation strategies (30 pages) presented in the NOPRCD report are included by reference.

Section IV – Jurisdiction-Specific Information; Hazard Vulnerability Assessment and Proposed Mitigation Strategies contains jurisdiction-specific and special purpose district specific information as well as vulnerability assessment information for each jurisdiction and special purpose district that has participated in the hazard mitigation planning process.

- *Natural Hazard Rating Process* has been updated to include all of the natural hazards as broken out in this document. Updated surveys were sent to Plan participants to build a 2016 rating table.
- The Natural Hazard Risk Rating by Jurisdiction table has been updated to include all of the participating jurisdictions.

- **CITY OF PORT TOWNSEND**

- Updated demographics and Current Hazard Mitigation Codes/Plans/Ordinances List
- Updated NFIP Participation through June 30, 2016
- Updated Disaster Event table for Port Townsend.
- Updated Codes and Comprehensive Plans Table
- Update List of Information for Hazard Mitigation Plan.
- Update Port Townsend Assets at Risk.
- Updated Critical Facilities List
- Updated Port Townsend Police and Port Townsend Library profiles.
- Updated and synchronized Mitigation Activity List
- *Added Mitigation Activity Write-up for Resiliency Center*
- Updated maps to most current available.

- **JEFFERSON COUNTY**

- Updated demographics and Current Hazard Mitigation Codes/Plans/Ordinances List
- Updated NFIP Participation June 30, 2016
- *Added Damage Events Table for 2008 - 2016*
- Updated Disaster Event table for Jefferson County including adding columns for PA.
- Updated Codes and Comprehensive Plans Table
- Update List of Information for Hazard Mitigation Plan.
- Update Jefferson County Assets at Risk.
- Updated Critical Facilities List
- Updated Jefferson County Sheriff’s Office profile.
- Updated and synchronized Mitigation Activity List
- Updated maps to most current available.

- **SPECIAL DISTRICTS**
- Brought all participating special districts’ profiles up to most current data available in 2016.
- Added photos or symbols and mission statements from each district to make the background profile more interesting.
- Updated and Synchronized Mitigation Strategies with the Special Districts and Executive Summary
- Removed Water Districts 1, 2, and 3. One has been absorbed by the PUD and the other two are so small that they have opted out since 2004.

Section V – Mitigation Strategies

- Added or Updated Mitigation Activities to reflect 2016 Status as provided by participants.
- Added an asterisk, “*”, to the Mitigation Activity ID of new or updated activities.
- Completed tasks are highlighted by having their Timeline notations in **Blue**.
- Completed tasks or tasks to be deleted have a strike-through in their Activity ID.

Section VI – Coordinating Entities

- Added Clallam County Emergency Operations Center
- Added Fort Worden State Park
- Added KPTZ 91.9 FM
- Added Neighborhood Emergency Preparedness Groups (NPREP)
- Update Propane Providers
- Added Washington State Department of Ecology
- Added Washington Military Department – Emergency Management Division
- Added Clallam County Fire District 3 – JCFD8
- Added School District 323
- Reviewed, updated and gave all previously used coordinating entities a chance to edit their write-ups.

Section VII – Appendices

- *Appendix A - Acronyms* – New acronyms have been added. Acronyms that have been added or had their description changed in the 2016 revision have been flagged with an asterisk.
- *Appendix B - Contributors & Contact Points* – Updated – All contacts and contributors have been updated to reflect contributions that are in the 2016 revision.
- *Appendix C - Endnotes* have been moved to the end of each topic for ease of access by researchers. Appendix C title page has been changed to reflect this and has no content. More thorough use of footnotes. Every footnote that has a link to the internet has been tested.
- *Appendix D - Frequently Asked Questions* – No changes.
- *Appendix E - Resources* – Major update of resources. All tested and verified.
- *Appendix F- Adoption Resolutions* –Summary table has a column added to track 2004, 2009, and 2016 Adoption Resolutions. Adoption resolutions will be in new Appendix G because they will be the last thing to go into the Plan and would screw up the page numbering if they weren’t last. Adoption resolutions will be added after FEMA approves the Plan and the subsequent adoptions

occur, as recommended by the State Emergency Management Division.

- *Appendix G - Public Participation Documentation* – Updated with representative samples of public participation within the year of the update.
- *Appendix H – Plan Development Meetings* – Created to document Steering Committee and JPREP Meetings relating to Plan development and demonstrate that the Special Districts participated.

Section VIII – FEMA CROSSWALK

- *Plan Review Tool Introduction* has been updated to reflect the use of the 2011 version of the crosswalk.
- *2011 version of Plan Review Tool* has been added from the *Local Multi-Hazard Mitigation Planning Guidance*.
- Updated all page references from topic to “Location in Plan” in *Section 1: Regulation Checklist*.
- Updated *Section 3: Multi-Jurisdiction Summary Sheet* to reflect current Plan POCs
- Added commentary detailing changes mandated by FEMA to approve the Plan for Jefferson County and the City of Port Townsend.

ADDITIONAL ENHANCEMENTS

- Created website, www.jpaphazmitplan.org, for the public to access the Plan as it was developed and to make comments and suggest changes in real-time.
- Created ***Distribution Disk Menu System*** for recipients of the Plan on disk to use to easily drill down to the topics they want to see.

This Page Intentionally Blank