

Section 1

Plan Process Requirements

Planning Process---Requirement §201.7(b):

An effective planning process is essential in developing and maintaining a good plan. The mitigation planning process should include coordination with other tribal agencies, appropriate Federal agencies, adjacent jurisdictions, interested groups, and be integrated to the extent possible with other ongoing tribal planning efforts as well as other FEMA mitigation programs and initiatives.

Documentation of the Planning Process---Requirements §201.7(b):

[The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was defined and involved. This **shall** include:

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval, including a description of how the Indian Tribal government defined “public;” and
- (2) As appropriate, an opportunity for neighboring communities, tribal 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; and

Documentation of the Planning Process---Requirements §201.7(c)(1)(iii) and (iv): [The plan shall:]

[include] (iii) Review and incorporation, if appropriate, of existing plans, studies, and reports; and
(iv) Be integrated to the extent possible with other ongoing tribal planning efforts as well as other FEMA programs and initiatives.

(1) Does the plan describe the review and incorporation, if appropriate, of existing plans, studies, and reports in the new or updated plan?

(2) Does the plan describe how the Indian Tribal Mitigation Plan is integrated with other ongoing Indian Tribal Planning efforts?

(3) Does the plan describe how the Indian Tribal Mitigation planning process is integrated with FEMA mitigation programs and initiatives?

- Does the plan provide a narrative description of the process followed to prepare the new or updated plan?
- Does the plan indicate who was involved in the current planning process?
- Does the plan indicate how the public was defined and involved? How was the public involved? Were they provided an opportunity to comment on the plan during the drafting stage and prior to the plan approval?
- Does the plan discuss the opportunity for other Indian Tribal governments, tribal and regional agencies, businesses, academia, nonprofits, neighboring communities, and other affected stakeholders and interested parties to be involved in the planning process? Does the plan document how the planning team reviewed and analyzed each section of the plan? [Updated only]
- cal information?

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SECTION 1

PUYALLUP TRIBE ALL HAZARDS MITIGATION PLAN 2017-2022 EDITION PLAN PROCESS

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Changes To The Mitigation Plan in this Document

This Process Section includes the following changes that are documented as a result of a complete review and update of the existing plan. The purpose of the following change matrix is to advise the reader of these changes updating this plan from the original document approved on April 18, 2012 by the Tribal Council.

The purpose for the changes is three-fold: 1) the Federal Law (Code of Federal Regulations (CFR), Title 44, Part 201.4) pertaining to Mitigation Planning has changed since the original Plan was undertaken; 2) the Local Mitigation Planning Requirements of the Disaster Mitigation Act of 2000 201.6 (d) (3) Plan Review states Plans **must** be reviewed, revised if appropriate, and resubmitted for approval within five years in order to continue to be eligible for HMGP project grant funding. This document when completed and approved will become the Puyallup Tribe's current All Hazard Mitigation Plan.

Change Matrix

This Matrix of Changes documents the pertinent changes made from the April 2012 - 2017 edition of the Puyallup Tribe's All Hazard Mitigation Plan. Most of the changes are a matter of additional detail, more information provided, some reformatting and in some cases a response to new requirements. This 2017 version represents a complete review and update by the Puyallup Tribe using a detailed process for development and following an established format. During this procedure, all web links have been verified and updated.

Table 1-1 Change Matrix – Puyallup Tribe's All Hazard Mitigation Plan 2017 Update

Section 1 – Plan Development, Process Section		
Section or Part of Plan		New in 2017 Plan
Section 1 – Process Section		Section 1 – Process Section
		The 2017 Process Section contains this Change Matrix Table and summary updates under each of the sections for the changes.
		The 2017 Process Section was updated under the Profile Section to update the year the geo-political and infrastructure GIS calculations were taken.
		The 2017 The Mitigation Strategy Process Section was reviewed for accuracy and relevancy and remains current in the way goals and objectives are identified.
Section 2 – Participating Jurisdiction Profiles		
Section or Part of Plan	Previous	2017 Plan
Section 2 – Profile	Information was current as of	The 2017 version of the Profile has been updated using

	2000 Census Data.	<p>2010 Census Data and most current GIS information from Pierce County.</p> <p>Additional Tribal properties inside and outside of the Reservation were incorporated into the summary matrixes. Base Maps were included for properties in King, Kitsap and Lewis Counties.</p> <p>Base Map for the Reservation was broken into 3 scaled in tighter maps to show specific Tribal Trust Properties.</p> <p>The Economy paragraph and Economic Summary was updated.</p> <p>Land Use and Development Trends paragraph was updated and new figures incorporated into the Infrastructure Summary for 2017.</p>
Section 3 – Capability Identification		
Section or Part of Plan	Previous	2017 Plan
Section 3 – Capability	The Capability Tables shown in the previous plan are in a similar format.	<p>The 2017 Capability Section has been updated to show current information from the Puyallup Tribe.</p> <p>Legal and Regulatory, Administrative and Fiscal were both reviewed by the Tribe and additional departments were added.</p> <p>Updates were made to the Technical paragraph under the Tribal subsets.</p>
Section 4 – Vulnerability, Risk Analysis		
Section or Part of Plan	2017 Plan	
The plan includes charts for previous history of disaster declarations broken down into Geological, Meteorological and	The 2017 Risk Section includes these same charts but it has been updated to show all additional declarations since 2012.	

Technological Hazards.	
The previous plan included a Presidential Disaster Declarations map displaying the FEMA Regions and disaster declarations based on hazard.	<p>The 2017 Risk Section includes the latest version FEMA has available dated from January 1, 2000 to December 31, 2013.</p> <p>Presidential Disaster Declarations map for Washington State was updated to include declared disasters through February 8, 2016.</p> <p>The Region 5 Disaster Assistance Summary was updated to include recent events during the past 5 years.</p>
The previous version of the plan contained 13 hazard maps which hazards were identified within specific areas of the reservation. An additional 5 hazard maps involved the entire reservation as the hazard could occur anywhere on the reservation.	The 2017 Risk Section includes updated maps incorporating new trust properties and hazard specific areas have been zoomed in giving better detail to specific trust parcels in identified hazard areas within the reservation boundaries.
The previous version included specific analysis showing vulnerability of population, land and infrastructure according to 2010 Census data and 2012/13 tax parcel data.	<p>The 2017 Risk Section includes completely updated tables showing vulnerability of population, land and infrastructure using 2010 Census data and October 2016 tax parcel data.</p> <p>Graphs were updated with current information on all hazards that the Tribe is vulnerable to.</p>
The previous version had contained 19 identified hazards within Pierce County. The Tribe adopted the Pierce County HIRA and embedded into their plan for hazard identification.	The 2017 Risk Section continues with the adoption of the PC HIRA with updates to the various sections. Two big changes to the Climate Change Hazard was the addition of Tab 1 and Tab 2. Tab 1 includes a Climate Change Assessment Report for the Puyallup Tribe Reservation and Tab 2 contains the report from the Treaty Tribes in Western Washington on Climate Change and Our Natural Resources.
Section 5 – Mitigation Strategy	
Section or Part of Plan	2017 Plan
The previous document contained a Mitigation Measure Matrix chart followed by written descriptions of each individual measure.	<p>The new document uses the same format as the original plan. Measures completed in the past five years have been identified with an update under the mitigation measure and on the Mitigation Strategy Matrix. A “completed” was added under the Timeline heading. In some instances the timeline was adjusted to ongoing or complete with ongoing</p>

	<p>maintenance.</p> <p>A summary update has been added for each mitigation measure under their written description.</p> <p>All Mitigation strategies were reviewed for their priority order under each of the hazards with the Mitigation Committee representing numerous Tribal Departments.</p>
Section 6 – Infrastructure	
Section or Part of Plan	2017 Plan
<p>The previous plan used a full table with detail on each piece of infrastructure as well as summary information on hazards and dependencies.</p> <p>In addition, an in-depth critical facilities profile was done on each facility to include profile information, vulnerability assessment and mitigation strategies. The Mitigation strategies were prioritized and evaluated using the same methodology that Section 5 mitigation measures uses.</p>	<p>The 2017 plan continues with this same methodology updating infrastructure as the Tribe acquires new properties.</p>
Section 7 – Plan Maintenance	
Section or Part of Plan	2017 Plan
<p>The previous Plan Maintenance remains the same with a few minor changes.</p>	<p>The 2017 version of the Plan Maintenance continues with the only significant changes occurring to the Appendices. Future update changes to the Plan will occur in Appendix E rather than Appendix C as stated in the previous plan.</p> <p>The list of Hazard Mitigation Forum participating jurisdictions was updated to include all 76 jurisdictions falling under the Region 5 All Hazards Mitigation Plan, and jurisdictions within Pierce County with their own stand alone plans.</p>
Section 8 – Other Changes	
Section or Part of Plan	2017 Plan
<p>The previous document contained five Appendices.</p>	<p>The 2017 Plan contains six Appendices adding an additional Appendix. This appendix contains the spatial results from the FEMA Hazus-MH Earthquake Scenario based models</p>

	on three different earthquake scenarios affecting the Puyallup Tribe Reservation.
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Plan Process

The Puyallup Tribe of Indians Mitigation Plan Process section is a discussion of the planning process used to update the Puyallup Tribe of Indians All Hazard Mitigation Plan. This includes how the process was prepared, who aided in the process, and the public's involvement.

The Plan update continued the development around all major components identified in 44 CFR 201, including:

- **Public Involvement Process;**
- **Jurisdiction Profile;**
- **Capability Assessment;**
- **Risk Assessment;**
- **Mitigation Strategy;**
- **Infrastructure Section; and,**
- **Plan Maintenance Procedure.**

Below is a summary of those elements and the processes involved in their development.

Public Involvement Process

Public participation is a key component to strategic planning processes. Citizen participation offers citizens the chance to voice their ideas, interests, and opinions.

“Involving stakeholders who are not part of the core team in all stages of the process will introduce the planning team to different points of view about the needs of the community. It will also provide opportunities to educate the public about hazard mitigation, the process, and findings, and could be used to generate support for the mitigation plan.”¹

In order to accomplish this goal and to ensure that the updated Puyallup Tribe All Hazard Mitigation Plan be comprehensive, the Puyallup Tribe of Indians, in conjunction with Pierce County Department of Emergency Management, developed a public participation process of three components:

- A Planning Team comprised of knowledgeable individual representatives of the Puyallup Tribe of Indians and its hazards;
- Hazard Meetings to target the specialized knowledge of individuals working with populations or areas at risk from all hazards; and
- Public meetings to identify common concerns and ideas regarding hazard mitigation and to discuss specific goals, objectives and measures of the mitigation plan.²

This section discusses each of these components in further detail below with public participation outlined in each. Integrating public participation into the development of the Plan has helped to ensure an accurate depiction of the Area's risks, vulnerabilities, and mitigation priorities.

The Puyallup Tribe defines the "public" as both tribal members and non-tribal members of the community. They are represented by the local workforce, business owners, and residents of the community providing input into the mitigation plan from a variety of perspectives.

The Puyallup Tribe Public Safety Department held one public meeting during the Annual Benefits Fair in August 2016 to present the Tribe's Draft All Hazard Mitigation Plan to the Tribal Membership and Community workforce employed by the Puyallup Tribe. Hazard maps displayed on easels accompanied the All Hazard Mitigation Plan along with preparedness information. The hazard maps drew immediate attention and with many comments centering on a lack of awareness to the many hazards the Tribe is vulnerable to. The Benefits Fair is an annual event and wonderful opportunity to educate many tribal members at large, tribal and non-tribal employees in preparedness to the hazards they are at risk for and engage them with the All Hazards Mitigation Plan. It provides the planning team the opportunity to hear their concerns and learn more about the specific areas they live in. This will be a continuing outreach event the planning team will attend to promote community resiliency.

During these past few years numerous preparedness presentations were conducted throughout the departments in partnership with Pierce County Emergency Management discussing the Tribes vulnerability to hazards and what they could do to prepare themselves, their workplace environments and at home to reduce their risk. These presentations were given to the employees which are both Tribal Members and Non-Tribal Members. The Tribe's All Hazard Mitigation Plan was discussed at many of the presentations and the mitigation measures developed for their buildings to reduce the risk when funding sources became available.

The Puyallup Tribe Public Safety Department held the final public meeting to present the Tribe's All Hazards Mitigation Plan in its final draft format in June of 2017. This meeting encouraged the public's participation to comment on the plan and take one final look before it will be presented to the Tribal Council for pre-authorization before it goes to FEMA. Those who were able to attend felt the document was thorough in its coverage of the hazards and were not previously aware of the plans existence. The Planning Team was able to share the document with them outlining the sections in discussion. The public was made aware of the plans existence on the Puyallup Tribe's website for further reading. These meetings allow for interaction with the public and the opportunity to engage them with potential hazards the Tribe may face and how to prepare for them.

Planning Team

The Planning Team continued in the winter of 2015 and discussed the plan update and began to develop a matrix of events to occur during 2016. The Tribe's Mitigation Planning Team members have an understanding of the Planning Area, including how residents, businesses, infrastructure, and the environment may be affected by all hazard events. Most of the planning members are experienced in past and present mitigation activities, and represent those entities

through which many of the mitigation measures would be implemented. For a couple of Stakeholders this was their first experience participating with the mitigation planning process which provided them with a solid foundation with participating in this current update. The Planning Team guided the development of the Plan, assisted in evaluating the existing goals and measures, developed new strategy measures, identified stakeholders, and shared local expertise to create a more comprehensive plan. Table 1-2 identifies the Planning Team by listing the various members and the departments or jurisdictions they represent.

Table 1-2 Planning Team

NAME	TITLE	JURISDICTION-DEPARTMENT
Anita Oldbull-Bigman	Administrative Manager	Puyallup Tribe Administration
Rory Laducer	Public Safety Director	Puyallup Tribe Public Safety
Jason Dillon	Planner Coordinator	Puyallup Tribe Public Safety
Leo Evans	Planner Coordinator	Puyallup Tribe Public Safety
Dennis Young	Public Safety - Security	Puyallup Tribe Public Safety
Joe Duenas	Chief of Police	Puyallup Tribal Police
Richard Dlugosz	Facilities Engineer (retired 10/2016)	Elder Services & Wellness Center
Lorelei Evans	Director Set Aside Housing	Puyallup Tribe Housing Authority
Eugena Buena-Douglas	ROSS Coordinator	Puyallup Tribe Housing Authority
Joanne Gutierrez	Resident Service Manager	Puyallup Tribe Housing Authority
Dwayne Matt	Lead Maintenance	Grandview Early Learning Center
Clifford Jordan	Facilities Manager	Puyallup Tribal Youth Community Center
Blake Matthews	Medical Clinic Coordinator	Puyallup Tribe Health Authority
Ryan Stevens	Associate Superintendent	Puyallup Tribe Chief Leschi School
Larry Mauritsen	IT Director	Information Technology
Stann Sicade	Administration IT	Information Technology
Paul Arnold	GIS Specialist	Information Technology
Dan Kain	Administration	Puyallup Tribe Administration
Kirby Manzanares Sr.	Safety Director	Emerald Queen Hotel & Casino
Valerie Gray	Safety Personnel Officer	Emerald Queen Hotel & Casino
Russ Ladley	Resource Protection Manager	Puyallup Tribe Fisheries/Hatchery/Natural Resources
Chris Toal	Planner/Grant Writer	Puyallup Tribe Planning/Community Development
Carol Ann Hawks	Historian Director	Puyallup Tribe
Robert Yerbury	Assistant Security Director	Puyallup Tribal Gaming Regulatory Office
Tony Cooper	Chief	Riverside Fire & Rescue
Kira Thirkield	Battalion Chief	Riverside Fire & Rescue
Dann Hugo	Assistant Battalion Chief	Riverside Fire & Rescue
Debbie Bailey	Mitigation & Recovery Planner	Pierce County DEM Mitigation & Recovery

Planning Team Meetings

Prior Plan

The Planning Team originally met from November 2003 to November 2004 to begin the development of the first mitigation plan for the Tribe. During that year each meeting presented

an opportunity for discussion, review, and evaluation of the Plan among the Planning Team. Planning Team Members Luke Meyers and Benjamin S. Pierson coordinated those meetings.

The Planning Team reorganized in November 2010 and began to review the draft Mitigation Plan developed in 2004, reviewing and discussing each section of the Plan. The Plan was expanded to encompass technological and man-made hazards in addition to the natural hazards. The Planning Team met monthly from November 10, 2010 until August 24, 2011 to develop the current All Hazard Mitigation Plan. These meetings are documented with the 2012-2017 edition of the plan.

Plan Update

The Planning Team held 19 Planning Team Meetings from November 2015 to February 2017. Each meeting presented an opportunity for discussion, review, and evaluation of each section of the Plan among the Planning Team. Planning Team Members Rory LaDucer and Debbie Bailey coordinated the meetings. The Planning Team met monthly from November 4, 2015 until February 8, 2017 to review and update the current All Hazard Mitigation Plan Table 1-3 documents these meetings including name, date, place and description of each meeting. Riverside Fire & Rescue along with Pierce County Emergency Management were involved during the planning process of this update.

Table 1-3 Planning Team Meetings

Pre-Planning Team Kickoff Meeting #1Meeting	
November 4, 2015	Puyallup Tribe Public Safety Building
Where Planning Team members meet to discuss the upcoming work plan and work schedule for the update and review of the Puyallup Tribe All Hazards Mitigation Plan. Discussion centered on ideas for improving it, potential stakeholder involvement, developing a timeline, developing an outreach strategy and infrastructure updates. Training is always discussed with every meeting with emphasis on the ICS Courses available, opportunities to take the E580 Emergency Management Framework for Tribal Governments, E581 Emergency Operations for Tribal Governments and the E582 Mitigation for Tribal Governments. Heavy promoting the E582 Mitigation course for May 9-12, 2016 in Emmitsburg, MD will provide the planning team a good foundation and further developing a solid mitigation plan.	

Planning Team Meeting #2	
December 2, 2015	Puyallup Tribe Public Safety Building
<p>Where Planning Team members Rory LaDucer and Debbie Bailey conducted the meeting and the Planning Team discussed the development of a timeline for the update of the All Hazards Mitigation Plan. Also discussed was alternating the monthly planning meetings to the various Planning Team departments. This would provide an opportunity to see the facilities and the type of accommodations/capabilities they might provide in an emergency situation. Many Planning Team members were not familiar with each of the Departments accommodations and many departments scattered through the reservation. A tour of the facility was discussed at the end of each planning meeting. It was decided January's meeting would be held at the Elder's Building. The majority of this planning meeting focused on the planning team discussing the THIRA document Core Capabilities and Desired Outcomes on: Mass Care Services, Public & Private Services & Resources, Situational Assessment, Economic Recovery, Health & Social Services and Housing. The THIRA was due to FEMA by December 31, 2015 and the planning team needed to review this document again prior to that submit deadline date.</p>	
Planning Team Meeting #3	
January 13, 2016	Puyallup Tribe Elders Building
<p>Where Planning Team member Debbie Bailey conducted the meeting and the Planning Team discussed the following items: The timeline, outreach strategy with outreach surveys involving the general membership, scheduling the infrastructure updates during the spring/summer months, mapping out all hazards poster sized for seminars/safety fairs for general membership awareness and identifying hazards within their neighborhoods. The Planning Team reviewed Section 2 Profile and identified areas for further review. The Tribal Historic Preservation to review the History for relevancy and accuracy; the following sections need to be updated in addition, Demographics, Economy, Land Use and Development Trends, and the Infrastructure Summary. The Planning Team identified who would be responsible for the updates.</p>	
Planning Team Meeting #4	
February 3, 2016	Housing Authority NE Gym
<p>Where Planning Teams member Rory LaDucer and Debbie Bailey conducted the meeting and the Planning Team discussed the following items: We reviewed Section 2 Profile for any updates that could be finalized and will continue to work on areas still needing to be updated. We reviewed Section 3 Capabilities identifying departments who would be responsible for reviewing their sections; the Legal and Regulatory section to be reviewed by the Legal Department, the Administrative and Fiscal section to be reviewed by the Administration Department with all departments reviewing their own paragraphs for relevancy and accuracy, the Federal Capabilities to be reviewed by the Compliance and Legislative Analysis Grants Department. Community involvement was discussed with planned events to incorporate the hazard awareness preparedness pierce to it. Feedback was very successful from community and presenters when this was done last year at the Health Authority Safety Fair. Discussed in addition was moving the planning meeting down a week to better accommodate work schedules and prior meeting commitments.</p>	

Planning Team Meeting #5	
March 16, 2016	Public Safety Building
Where Planning Team members Rory LaDucer and Debbie Bailey cancelled the meeting due to unforeseen circumstances and felt in the Planning Team's best interest the meeting would be postponed until next month. An email went out to the planning group in the morning advising them of the cancellation and when we would be meeting in April. Also attached in the email was Section 3 Capabilities asking the departments to review their sections for relevancy. There was a low turnout of planning team members last month so it was felt best to continue this section. In addition, another meeting was scheduled in the morning with Anita Oldbull-Bigman the new Tribal Administrative Manager to meet and discuss the Mitigation Plan and planning process. This meeting was also cancelled and rescheduled for Monday, March 21, 2016.	
Planning Team Meeting #6	
April 13, 2016	Public Safety Building
Where Planning Team members Rory LaDucer and Debbie Bailey conducted the meeting and the Planning Team discussed the following items: Continued training with ICS courses, and the E/L580 and E/L581 courses and E/L582 Mitigation for Tribal Governments (May 9-12, 2016 at EMI). No updates for Section 3. We discussed Section 5, Mitigation Strategies and reviewing the existing measures for a continued update. The goals were reviewed and the EMC agreed these were still relevant and consistent with the Tribal goals and will continue with this update. These updates will be included with each measure showing a progress report over time. Once they are completed they will be removed from the current existing measures and a new section will be added to show the completed measures as discussed. Documentation required for developing new measures was discussed with the planning team and they will discuss within their departments possible new measures that should be developed to continue their resiliency development. The meeting rotation was discussed and very beneficial to planning team for COOP planning. Tribe is spread out and this provides opportunity to view each other's departments and potential alternate sites if needed.	
Planning Team Meeting #7	
May 18, 2016	Grandview Early Learning Center
Where Planning Team members Jason Dillon and Debbie Bailey conducted the meeting and the Planning Team discussed the following items: continued training opportunities for ICS courses, DEM Portal course and the E/L 580 course. A review and discussion of the mitigation strategies was discussed. Dwayne conducted a tour of the facility and discussed the accommodations it could provide as an alternate site for COOP Planning.	

Planning Team Meeting #8	
June 22, 2016	Riverside Fire Department
<p>Where Planning Team members Jason Dillon and Debbie Bailey conducted the meeting and the Planning Team discussed the following items: continued training opportunities for ICS courses, DEM Portal course and the E/L 580 course. The Youth Center is planning on an evacuation drill based on their emergency plan in September and a table top exercise the later part of August. Riverside Fire Department offered to ride along providing assistance with alternate evacuation routes, taking the hazards into consideration. Will incorporate these planning efforts into the Shake Out exercise in October. Discussed Public Meetings and comment period and will use the Benefits Fair in September. This draws a large Tribal Membership and great opportunity to discuss the mitigation plan and hazards the Tribe is vulnerable to. A second Public meeting will take place in the Administration Building prior to submitting the final draft to FEMA in December. Discussed meeting with individual departments (Natural Resources, Fisheries, Planning Land Use and the Grants departments) to develop mitigation measures and how the mitigation plan can be incorporated into other plans these departments have during July when the planning team will not meet as a whole group. Also discussion of meeting with Elders to incorporate their knowledge into the risk assessment on the history the Tribe faced to natural hazards. Field trips planned during August to update the infrastructure the Tribe has acquired during the past 5 years to photograph and document into the plan. Further preparedness was discussed with the Shake Out drill in October for the departments to participate in with an increased involvement due to earthquake, liquefaction, and flooding hazards.</p>	
Planning Team Meeting #9	
August 10, 2016	Public Safety Building
<p>Where Planning Team members Rory LaDucer and Debbie Bailey conducted the meeting and the Planning Team discussed the following items: the Youth Center evacuation drill was discussed further and is in the process of scheduling another planning meeting which will discuss alternate evacuate routes taking into account the various potential identified hazards. The Capabilities Section was review with Law Enforcement confirming the accuracy of their paragraph. It was identified that the Youth Center needed to write up a paragraph as it was under construction during the time the previous mitigation plan was developed. Mitigation Strategies were discusses and a follow up meeting will occur with the Youth Center and the Elders Building for updates to a couple of the mitigation measures. The Public Involvement meeting was discussed and maps will be printed for this event. The Benefits Fair draws a large Tribal Membership and will provide a great opportunity to discuss the Mitigation Plan with Tribal members during the update phase of the Mitigation Plan. It is scheduled for August 23, 2016 at the Casino from 9 AM -1:30 PM. The Great Shake Out Earthquake exercise was discussed with the Tribal Departments participating and incorporating PC DEM Public Educators to come in and discuss non-structural retrofits within the office environments and at home, a mitigation measure. Follow up meetings to occur with Youth Center and Elders Building for further discussion on the mitigation measures.</p>	

Planning Team Meeting #10	
September 14, 2016	Public Safety Building
<p>Where Planning Team members Jason Dillon, Dennis Young and Debbie Bailey conducted the meeting and the Planning Team discussed the following items; An update on the Youth Center evacuation drill and Targa Exercise scheduled for October. Upcoming ICS training schedule was discussed. The Capabilities Section was addressed again and the IT Department was not included either and will be included with this edition. Additional summaries were written for the mitigation measures in Section 5 and review of those will take place this month by all the planning team members this month for open comments. The second Public Involvement meeting was discussed and various ways to reach the tribal community through a variety of scheduled meetings over the next few months. There may be several meetings to really have the opportunity to reach out to the community for final input and comments. The outreach hazard awareness questionnaire was discussed that was available at the Benefits Fair. Distribution of this questionnaire will occur within each of the departments. The planning team felt there would be a better return of them through a department level as opposed to an outreach event. Although here were several questionnaires taken but none were received back. Information gathered from the questionnaire will help to shape the Public Education component on preparedness for each of the Tribal Departments. Participation in the Great Shake Out was discussed and how each of the Departments will participate in this event. Further discussion centered on the hazard awareness of potential liquefaction, tsunami, flood and lahar all hazards the Puyallup Tribe faces and must mitigate for. Follow up meetings still need to occur with the Elders Center and the Youth Center to follow up on mitigation measure updates.</p>	
Planning Team Meeting #11	
September 28, 2016	Youth Center
<p>Where Planning Team Members Cliff Jordan, Lisa Earle and Debbie Bailey met to discuss the addition of writing up a description of their department which can lead or assist in the implementation of one or more of the mitigation measures. The Youth Center building was not completed at the time the last Mitigation Plan was developed and they need to be included with this update. This description will be added in Section 3, Capabilities under the Administrative and Fiscal sub-title.</p>	

Planning Team Meeting #12	
October 5, 2016	Public Safety Building
<p>Where Planning Team Members Rory LaDucer and Debbie Bailey conducted the meeting and the Planning Team discussed the following items; those who were in attendance reviewed and confirmed their department paragraphs in the Capabilities Section and the Youth Center created a paragraph description for their Department since it was not in existence with the original plan. The Mitigation Strategies Section was reviewed again and a meeting will be set up with the Elders and Youth Center for updates to the Surface Water Reduction Strategy. Both of these Departments incorporated surface water reduction into their current building designs and this needs to be documented under the Mitigation Strategy section. Further ideas were explored for the last Public Involvement Meeting to review the Mitigation Plan once it is completed. The Great Shake Out Preparedness exercise was discussed (event occurring on October 20th) and to what level each Department will participate. The Tribe helps promote this annual exercise by advertising the event on their EQC Reader Board sign located adjacent to the I-5 corridor in a highly visible site to thousands of drivers daily. A happy retirement celebration followed the meeting as the Elders Planning Team member was retiring at the end of the week. A replacement for him was being conducted by his Department.</p>	
Planning Team Meeting #13	
November 16, 2016	Public Safety Building
<p>Where Planning Team Members Rory LaDucer and Debbie Bailey conducted the meeting and the Planning Team discussed the following items; The outcomes of Department participation with the Great Shake Out Earthquake exercise. Another review of Section 2 and Section 3 was conducted with the Planning Team as more updated information was provided by the Tribes GIS Department for demographic information. In addition, the final copies of two Climate Change documents were available for publication and discussion followed about incorporating these documents into the Climate Change section of the Risk Assessment Section of the Mitigation Plan. One of the documents addresses climate change and its affects within the Puyallup Reservation and the other document addresses climate change from the Treaty Tribes in Western Washington and looks at climate change from a broader perspective. Incorporating both documents into the plan was the consensus from the group. Public involvement and comment was further discussed and the protocols. The Tribal Council must authorize this in the format of a CDR. The length of time for comments, where comments can be made and who to address them too will be addressed in the CDR. This cannot happen until after the holidays and the final draft of the plan is completed.</p>	
Planning Team Meeting #14	
November 21, 2016	Public Safety Building
<p>Where Planning Team Members Rory LaDucer and Debbie Bailey conducted the meeting and the Planning Team discussed the following items: our current status with the update of the plan and identifying the Tribal Departments that still need to verify and update if necessary their information in Section 2 (Profile), Section 3 (Capabilities), and Section 5 (Mitigation Strategies). Summarizing mitigation measures were discussed. We need to set up a couple of additional meetings during the next month to discuss a couple of mitigation strategies updates with the Youth Center and Elders Building.</p>	

Planning Team Meeting #15	
December 7, 2016	Public Safety Building
Where Planning Team Members Rory LaDucer and Debbie Bailey conducted the meeting and the Planning Team discussed the following items: our current status with the update of the plan and identifying the Tribal Departments that still need to verify and update if necessary their information in Section 2 (Profile), Section 3 (Capabilities), and Section 5 (Mitigation Strategies). Mitigation measures were discussed along with updating the infrastructure. We discussed meeting with Tribal Elders over the next couple of years to include any stories they would like to share to incorporate into the Risk Section.	
Planning Team Meeting #16	
January 4, 2017	Public Safety Building
Where Planning Team Members Rory LaDucer, Jason Dillon, Leo Evans and Debbie Bailey met to review the plan and discuss a couple items from the Process Section, Profile Section, Capabilities Section, Mitigation Strategies Section and the Maintenance Section. The plan is in its final stages of the update and a quick review of the plan and identifying a few outstanding items left to be updated was discussed. Once these items are completed the plan will go before Administration for direction for the community membership review of the final plan and will be open for Public Comment. Once this is completed and the Crosswalk filled out the plan will be submitted to WA-EMD and FEMA.	
Planning Team Meeting #17	
January 18, 2017	Public Safety Building
This meeting was cancelled due to multiple people out sick. Instead of meeting as a whole group the plan is being sent out to the entire Planning Team for a review and comment period and to share within their departments for open comment. February's meeting will review and address any comments.	
Planning Team Meeting #18	
February 2, 2017	Public Safety Building
Where Planning Team Members Rory LaDucer, Jason Dillon, Leo Evans and Debbie Bailey met to review additional information to incorporate into the mitigation plan from the Planning and Land Service and Administration Department.	
Planning Team Meeting #19	
February 15, 2017	Public Safety Building
Where Planning Team Members Rory LaDucer and Debbie Bailey conducted the meeting and the Planning Team discussed the following items: a complete review of the final update of the draft Mitigation Plan. The entire Mitigation Plan was emailed out to all planning team members on January 23, 2017 giving the planning team members almost 3 weeks to review the plan within their departments and be ready to share any comments with the planning team members. A discussion followed on the process to use in presenting the plan to Tribal Membership and neighboring jurisdictions for the last Public Comment period.	

Hazard Meetings

Plan Update Hazard Meetings

The Puyallup Tribe continues with the hazard awareness identified within the Planning Area and integrates its planning efforts with neighboring jurisdictions with the update of this 2017 – 2022 edition of the mitigation plan. Continuing to build on the theme that hazards do not share boundaries, the Puyallup Tribe participates in a variety of planning efforts from participation in exercises, public education, attending workshops and contributing to the development of regional plans.

Over the past few years the Puyallup Tribe has worked with Pierce County Emergency Management and other neighboring jurisdictions with the update and continued development of the Regional Mt. Rainier Plan. This plan encompasses counties and jurisdictions that will be affected by the volcanic hazards such as lahar and pyroclastic flows and tephra fall out. Evacuation routes, shelters, response and recovery are a few components this plan is currently working on. Potential mitigation measures may be developed as a result of the combined planning efforts to reduce some of the impacts and build resiliency into communities.

The Tribe has representation at a monthly Local Emergency Planning Committee (LEPC) meeting as a function of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). The LEPC focuses on preparing for emergencies of hazardous materials and emergency response plans which is of most importance to the Puyallup Tribe having Trust Properties located in the Port of Tacoma and a marina located on Commencement Bay. Natural Resources are at risk for the Puyallup Tribe if an event were to occur spilling into the waterways. Having emergency response plans and procedures in place, outlining evacuation plans, exercising on them and relationship building are all important functions of the LEPC monthly meetings.

The Puyallup Tribe participated in a Pierce County Hazard Risk Assessment Workshop Pierce County recently on October 19, 2015 which was attended by over 50 participants from scientific, nonprofit and local government community to gather information on best available science relating to natural, technological and human-caused hazards. Hazards were discussed on frequency of occurrence, impacted area, and economic impacts. Discussions considered the health/safety and environmental impacts and operational preparedness/vulnerabilities of all 19 hazards addressed.

The Puyallup Tribe participates in the Pierce County annual Pre-Winter Storm Meeting in October each year, which discusses the severe storm hazard potential for the upcoming fall/winter season in Pierce County. This meeting brings together local cities, schools, utilities and first responder agencies to review the winter storm outlook and to review various plans for potential inclement weather. Ted Buehner from the National Weather Service provides a briefing about the potential winter weather, utility partners provide briefings and any changes to any plans since the previous winter, Pierce County Public Works & Utilities – Surface Water Management and Roads briefs out information on the levees and potential areas at risk along the Puyallup, Carbon and White Rivers. Handouts and resources are provided and new and updated contact information is dispersed out.

The Puyallup Tribe participates in a variety of exercises on a local level to include the annual earthquake “Great Shake Out.” The Tribe advertises this exercise on the EQC Reader sign as a

public outreach to the community at large for earthquake awareness and participation. All departments within the Tribe participate with this exercise and to varying degrees building upon the previous year. The Tribe participated in June of 2016 the Cascadia Rising Exercise involving tribal, state, county, cities across three States. The Tribe recently participated in an exercise involving a Hazmat incident with NuStar in the Port of Tacoma. This exercise allowed the Tribe to interface with a variety of stakeholders such as the Coast Guard, and EPA. The Tribe recently attended another exercise planning meeting in August of 2016 with Targa and participated in an exercise with U.S. Oil in December of 2016. These exercises provide the Tribe the opportunity to relationship build with the local government communities and gain knowledge how the hazards may impact Tribal properties. Integrating known Tribal hazards into preparedness, Tribal Departments design and execute their own exercises. The Youth Center is currently (September 2016) developing a full scale exercise to evacuate the entire building, including staff members and children and have a reunification site at the NE Housing Site in Tacoma. This exercise will prepare them for a flood, lahar, dam breach, or tsunami event all identified hazards, involving the Puyallup River that the Youth Center is located adjacent to.

Prior Plan Hazard Meetings

Hazard Meetings helped verify the current state of hazards identified in the Planning Area and provide a more comprehensive understanding of the ways in which hazards have impacted the Area. Members of the Planning Team coordinated 10 Hazard Meetings including: workshops, hazard expert interviews, and local official interviews with hazard-specific knowledge. Some of these meetings occurred during the development of the Pierce County Plan in which the entire County and its hazards were discussed. The Planning Team used information from these meetings and the experts involved. Table 1-4 documents these meetings including: name, date, place, and description.

Table 1-4 Prior Hazard Meetings

Pierce County Natural Hazard Workshop	
August 23, 2001	Tacoma Public Library
Where Planning Team members attended a Natural Hazard Workshop. The workshop was attended by over forty participants from scientific, nonprofit and local government community to gather information on best available science relating to natural hazards.	
Pierce County Natural Hazard Workshop	
October 2 and 5, 2001	Tacoma Public Library
Where Planning Team members attended a Natural Hazard Workshops attended by over forty participants from scientific, nonprofit, and local government community to gather information on best available science relating to natural hazards.	
Pierce County Flood Hazard Meeting	
January 22, 2003	PC Water Programs
Where Planning Team members Luke Meyers and Benjamin Pierson met with Randy Brake from PC Water Programs and discussed the flood hazard in unincorporated Pierce County's flood hazard areas.	

Pierce County Severe Storms Hazard Meeting	
February 3, 2003	National Weather Service (NWS)
Where Planning Team Member Luke Meyers met with Ted Buehner from NWS and discussed the severe storms hazard in Pierce County.	
Pierce County Geologic Hazard Meeting	
February 19, 2003	WA State Department of Natural Resources (DNR)
Where Planning Team member Luke Meyers met with Tim Walsh from DNR and discussed earthquake, landslide, and volcanic hazards in Pierce County.	
Pierce County Earthquake Hazard Meeting	
April 2003	PC DEM Conference Room
Where Planning Team members Luke Meyers and Benjamin Pierson met with Craig Weaver and Brain Sherrod about new information on the e Tacoma Fault earthquake hazard.	
Sumner School District's All Hazard Meeting	
April 29, 2004	Sumner School District Administrative Building and the School District Vicinity
Where Planning Team members Luke Meyers, Benjamin Pierson, and Cindy Acosta met and discussed the natural hazards in the School District. The meeting included a driving tour of the School District, an identification of the District's Critical Facilities, and an identification of the District's hazard areas.	

Public Comment

The Planning Team provided many opportunities for public comment throughout the ongoing and open process. Beginning in November of 2015 the Planning Team began the process of updating the plan and monthly meeting notices were sent to most of the Tribal Departments and multiple people within some of the departments. Planning Team members representing their departments were encouraged to discuss the plan reviewing and gather additional information if needed for the update. The Planning Team held informational meetings with some departments to provide a further opportunity for intra-departmental public involvement and to solidify the support and input from these departments. These various opportunities for public comment can be found

Public Information Meetings, March 2016-May 2017

Table 1-5 Public Information Meetings

Planning Team Meeting #1	
March 21, 2016	Public Safety Building
Where Planning Team members Rory LaDucer, Jason Dillon, Leo Evans and Debbie Bailey met with Anita Oldbull-Bigman to discuss the update of the Tribe's All Hazard Mitigation Plan and planning team members participating. Anita is recently new in her position as Administrative Manager and the planning team felt it was important to meet with her to ensure support from the various departments within the tribe and have the opportunity to share and discuss the Puyallup	

Tribe's All Hazard Mitigation Plan. A copy of the current plan will be made available to Anita and a preliminary copy of the updated plan will be provided to her for review and comment.	
Public Information Meeting – Tribal Fisheries	
July 20, 2016	Diru Creek Hatchery Office
Where Planning Team members Jason Dillon and Debbie Bailey met with Russ Ladley, the Puyallup Tribe Environmental Resource Protection Manager to present the All Hazard Mitigation Plan Requirements, the Plan Process, the purpose and benefits of the Plan, the Risk Assessment, Mitigation goals, and to discuss the Risk section in detail for potential additional information he might want to include.	
Public Information Meeting – Puyallup Tribe's Annual Benefits Fair	
August 23, 2016	I-5 Emerald Queen Casino
Where Planning Team members Rory LaDucer, Jason Dillon, Leo Evans and Debbie Bailey staffed a booth at the Annual Benefits Fair. The booth allowed for the public to view the entire plan including the risk assessment results of the plan. At the booth there was the draft copy of the All Hazards Mitigation Plan, Multi hazard maps on easels, preparedness handout on earthquake, flood, emergency kits, and pamphlets on the Pierce County Alert notification systems.	
Public Information Meeting – Public Safety Building	
September 19, 2016	Public Safety Building
Where Planning Team members Rory LaDucer, Jason Dillon, Leo Evans and Debbie Bailey met with JoAnne Webb from the Administration Office and presented the All Hazards Mitigation Plan requirements, the Plan Process, Plan Benefits, Risk Assessment and Mitigation Strategies. The Planning Team updated her with the remaining portions needed to update and Tribal Departments required for that input. She is able to identify the key personnel to review the Plan document. Prior to JoAnne's arrival this team discussed the following items; additional documentation that is required in Sections 2, 3, 4, 5, 6 and any updates to 7. Some Tribal Departments need to review their portions within the various sections of the plan and update if necessary. A matrix was developed to identify the remaining reviews.	
Public Information Meeting – Public Safety Building	
December 2, 2016	Public Safety Building
Where Planning Team Members Rory LaDucer, Jason Dillon, Leo Evans and Debbie Bailey had a special meeting with Tribal Biologist, Russ Ladley to discuss sections in the Risk Assessment to identify any sections that the Fisheries Department could add additional information to. We also discussed a couple of the mitigation strategies that needed summary accountability write ups for.	
Public Information Meeting – Public Safety Building	
June 5, 2017	
Where Planning Team Members Rory LaDucer and Debbie Bailey hosted the final Public Comment meeting in an Open House discussion format to engage the public for their comments regarding the plan. Those who attended were impressed with the plan and were not aware it existed prior to the meeting. Large discussion surrounded the hazards, maps and the preparedness people need to do in the work place.	

Public Information Feedback

A variety of Public meetings occurred during the update of the plan to include key stakeholders within the Tribe that are not a part of the EMC to Tribal Members and public employees of the Tribe. One final Public Comment/Review meeting will be held for Tribal Members and public employees when the plan is finalized. This final review will be coordinated with the Tribal Administrative Manager and publicized in the Tribal Newsletter.

Members of the EMC met with the Resource Protection Manager of the Puyallup Tribe Fisheries to discuss the update for Mitigation Plan and to provide him and the Fisheries Department the opportunity to review and comment on the entire plan and specifically the Risk Assessment Section. The rivers and streams are dynamic and ever changing affecting the complexity of the fisheries and the EMC wanted to ensure the Fisheries Department understood the benefits of the Puyallup Tribe Mitigation Plan and to review the Risk Section and hazards for additional information he may want to include in the plan. In addition, there were a few mitigation actions that were developed with the prior plan that needed updating with the possibility that more maybe developed with the updated plan. He was provided a draft copy of the mitigation plan with this meeting.

The EMC scheduled another meeting with him a few months later to address questions and discuss the Hazard Mitigation Grant Programs and how they could help the Fisheries Department in stream habitat restoration. The EMC discussed developing restoration action strategies that will benefit the natural environment and provide opportunities for recovery of salmonid species. He had read through all the hazards and felt that all the information was adequately covered and said that he would reread parts of it again with the intent of where he might add additional information into the hazards from a Fisheries perspective.

The Benefits Fair is an annual fair open to Tribal members and employees from 8:30 A.M. until 1:00 P.M. This fair is set up that Tribal members and employee can come during that time frame, leaving their jobs to attend the fair. The volume of people has been pretty evenly distributed throughout morning and attendance usually is around 175 people each year. Due to the wide audience attendance and opportunity to speak individually to people or small groups throughout the morning, the EMC felt this was a great opportunity to set up a booth for the Hazard Mitigation Plan and distribute preparedness information as one of our Mitigation Public Outreach meetings.

The booth was set up and hazard maps were displayed on easels for easy viewing. The maps drew in the people wanting to locate where they lived and identify their hazards. It provided a great springboard to discuss the All

Figure 1.1 Annual Benefits Fair – August 2016



Hazards Mitigation Plan and discuss their preparedness level. A wide variety of comments were received from those not wanting to know what hazards they were at risk for, to those surprised they were at risk for so many hazards. The Mitigation Plan was somewhat alarming to them in size but they understood the various sections and their purpose. None of the people we discussed the plan with was aware of its existence but were glad something like this existed.

We also had a questionnaire (see Process Section Tab 1 at the end of this section) for them to fill out at a later time and to turn it into the Administration Building when completed. The EMC was trying to identify the level of awareness and preparedness they were to their risks. Unfortunately there were only a few questionnaires turned in and not enough to gage any accurate conclusions by it. But based on the verbal reactions to the hazards maps and viewing the Mitigation Plan it was most apparent the Public Education components for Mitigation Actions identified within the Mitigation Plan are still relevant and need to be an ongoing effort.

The EMC has recently met with the Human Resource Department along with PC DEM to explore the options available for Preparedness Outreach for all Tribal Departments over a two year period. The PC Public Community Outreach Educator met with the Tribal Human Resource Department and discussed the options and programs available. This is currently an ongoing process to secure the curriculum, training dates, and times over the next few years. The questionnaire will be distributed prior to the Department training days for employees to fill out and then once again a few weeks later after going through the training. This will allow the EMC to quantify the training and identify were gaps still exist for future trainings or refresher trainings.

The Benefits Fair and opportunity to present the Mitigation Plan to the public validated the importance of continuing all the Public Education Mitigation Actions and changing in some instances the timeline to “on-going”.

Additional Stakeholder meetings were held for the Puyallup Tribe’s new Administrative Manager and Administrative Executive Assistant who were both unfamiliar with the Puyallup Tribe’s All Hazard Mitigation Plan. These meetings were informational in describing the plan to them and the benefits for the Tribe in maintaining a current Mitigation Plan. It is critical that the Administrative Manager understands the Mitigation Plan and the role she plays in implementing the mitigation strategies with the departments as outlined in the Maintenance Section of the plan.

Final Draft Public Comment Meeting

The final Draft Public Comment Meeting was held at the Public Safety Office on Monday, June 5, 2017 from 10:00 AM until 3:00 PM. The meeting announcement was made public in the Puyallup Tribal News, Issue No. 315 on June 2, 2017 (see the following page for newspaper announcement and pictures). The final draft version of the plan was made public on the Puyallup Tribe’s internet website. In addition, Planning Team members were given the flyer to distribute amongst their departments as another means of communicating the meeting to all staff. Neighboring jurisdictional partners, Riverside Fire and Rescue and the City of Puyallup were also made aware of the Final Draft Public Comment Meeting.

The Public Safety Office had on display all the hazard maps identified within the Tribe's Mitigation Plan for Tribal Members and employees view. The Preparedness survey was also available with this Public Comment Meeting too so that future follow-up could happen based on the response from the questionnaire. Many brochures were available for preparedness information for families, workplace, car and pets. Pierce County's Alert and Warning pamphlet information was available so that Tribal Members could sign up for this free service and receive alert warning messages. The messages are customized and maybe received on multiple devices such as land line phones, cell phones, email, or text messaging.

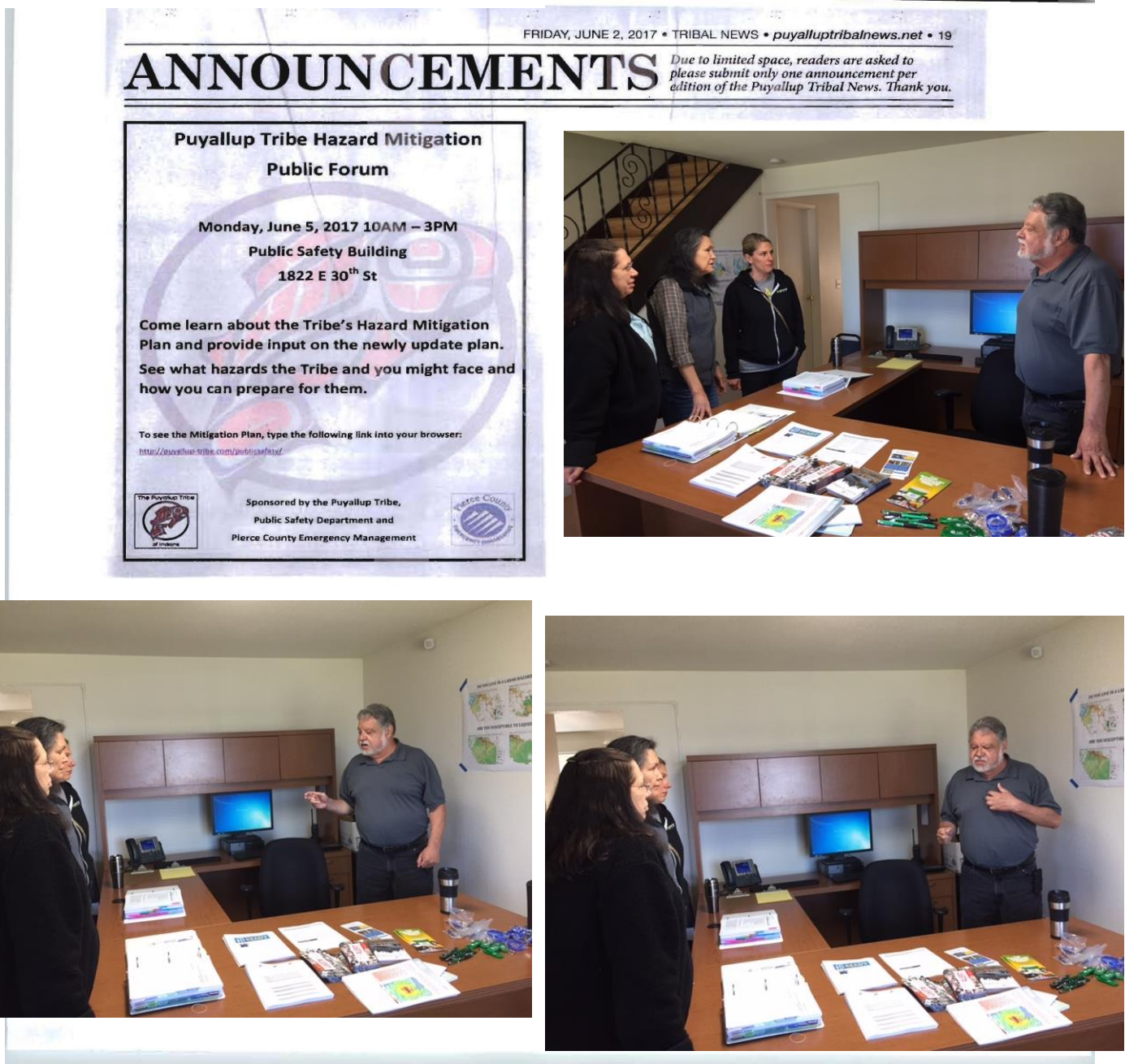
Two hard copies of the entire Tribe's All Hazard Mitigation Plan was available for the Tribal Members and employees to view and comment on. All comments will be considered that are shared with the Planning Team and will be incorporated into the plan.

Three Natural Resource employees stopped by to review and discuss the Mitigation Plan at length. The Planning Team explained the plan breaking down each of the sections and going into detail about them and how they benefit the Tribe. A lot of the discussion centered on the Risk Assessment Section and many of the hazards were discussed and the maps within each of the hazards was looked at. They acknowledged the amount of time spent updating the plan and will access the plan on the Tribe's website for further detailed reading. They said they would share any comments about the plan with the Planning Team once they had finished their comprehensive review of it. The Planning Team encouraged any additional information they wanted to add to the hazard sections would be great. One of their biggest concerns centered on preparedness items for vehicles and when they are out in the field with their jobs and knowing the hazards they might encounter. They appreciated the depth the Risk Section went into the hazards. In addition they were taking the questionnaire survey with them to fill out and bring back to the Public Safety Office for follow up preparedness training within their department. Potential preparedness training was discussed and will be followed up with the Human Resource Department for scheduling. Pierce County Emergency Management will work in conjunction with the Puyallup Tribe in presenting these preparedness trainings to the various departments. The Planning Team discussed possible avenues to increase Public participation from Tribal Members and employees for future outreach meetings. The group felt the Benefits Health Fair held annually in August was a great opportunity to reach many Tribal Members during the day (a heavily attended event) and that any other Fair outreach program would be a good way to promote the Hazard Mitigation Plan and preparedness information. Continuing to encourage hazard awareness and preparation will occur monthly with the Planning Team pushing out a monthly preparedness newsletter to their departments.

2013 Prior Plan

The Planning Team coordinated the public comment process. This allowed for a greater level of inter-jurisdictional coordination and involvement among the Tribe and regional jurisdictions. The Planning Team used the Pierce County Hazard Mitigation Forum distribution list to notify other jurisdictions about the Plan status and updates.

Figure 1.2 Final Public Comment – June 2017



The Planning Team provided many opportunities for public comment throughout the process. Beginning on January 12th, 2004, the Planning Team published information about the process on the Plan's webpage³ through which it notified the public of any changes or upcoming meetings.

The Planning Team held informational meetings to provide a further opportunity for intra-jurisdictional public involvement. During these meetings Planning Team members presented the All Hazard Mitigation Plan Requirements, and the process, benefits and status of the plan to the Tribal Council.

The Planning Team, in coordination with PC DEM, operated a booth at the “2004 Little Puyallup Fair” from April 15th-18th to inform the public of the Plan’s status and scope. This four day event allowed for a four-day window during which the public could engage in dialogue regarding not only the Puyallup Tribe’s Planning Area, but mitigation planning in general and how citizens of the region could make their communities disaster resistant.

The Planning Team also held a public comment meeting in order to provide an opportunity for residents, local businesses, neighboring jurisdictions, and all other interested parties to comment on the draft Plan. The meeting was conducted by the Planning Team at the Puyallup Tribe’s Administrative Building Planning Team and advertised in the “Tacoma News Tribune”, “The Tribal Newspaper”, on the Plan’s website, and by way of email distribution to local regional emergency management contacts.

Table 1-6 Prior Public Involvement

Puyallup Tribe of Indians Plan Webpage Information	
January 12, 2004	Plan Area Webpage on Pierce County DEM Website
Published webpage identifying that Puyallup Tribe of Indians were in the process of developing an All Hazard Mitigation Plan.	
Hazard Mitigation Information Meeting For Tribal Entities	
Jan 14, 2004	Puyallup Tribe of Indians Health Authority Building
Where Planning Team members and the various Tribal Entity Representatives were presented the All Hazard Mitigation Plan Requirements, the Plan Process, the Plan Benefits, and various emergency management hot topics by Representatives from Region X.	
Hazard Mitigation Plan Presentation For Tribal Council	
March 23, 2004	Puyallup Tribe of Indians Administrative Building
Where Planning Team members Sheri Davis, Rory Laducer, Luke Meyers, and Benjamin presented the All Hazard Mitigation Plan Requirements, the Plan Process, the Plan Benefits, and the Plan Status to the Tribal Council at a regularly scheduled Council Meeting.	
Hazard Mitigation Plan Public Comment Booth	
April 14-18, 2004	Little Puyallup Fair (Puyallup Fair Grounds)
Where Planning Team members Luke Meyers and Benjamin Pierson staffed a booth at the Little Puyallup Fair. The booth allowed for the public to view the risk assessment results of the Plan. At the booth there were sign in sheets, fact on the Planning Requirements, Hazard Maps, Plan Webpage hand outs, etc.	
Hazard Mitigation Plan Presentation For Tribal Council	
December 16, 2004	Puyallup Tribe of Indians Administrative Building

Where Planning Team members Sheri Davis, Rory Laducer, Luke Meyers, and Benjamin discussed the following items with the Tribal Council: the Plan Status, NFIP Options, Lahar Warning Siren Placement at Chief Leschi, Seismic Non-structural Retrofit at Grandview Elementary School, and Next Steps.	
Sumner/Bonney Lake Area Plan Webpage Update	
June 21-July 2, 2004	Plan Area Webpage on Pierce County DEM Website
Published draft Sumner/Bonney Lake Area Plan and provided a point of contact for public involvement (input) information by way of phone, email, and fax.	
Public Comment Meeting Notice	
June (Various)	“Bonney Lake & Lake Tapps Courier-Herald”, Pierce County Intranet, and Plan Website
Where Planning Team published a notice regarding the Public Comment Meeting in the “Bonney Lake & Lake Tapps Courier-Herald”, on each jurisdiction’s website, and on the Plan Website.	
Public Comment Meeting For Hillside Area	
June 22, 2004	City of Bonney Lake Public Safety Building
Where Planning Team members Luke Meyers, Benjamin Pierson, and Dave Wakefield presented the following items to the attendees: Mitigation Planning Requirements, Purpose of the Plan, Definition of Mitigation, Process used to Develop the Plan, Public Involvement Status, Risk Assessment Summary, Mitigation Goals, a Detailed Overview of Potential Mitigation Measures and Public Comments on Each Potential Measure.	
Public Comment Meeting For Valley Area	
June 24, 2004	City of Sumner Fire Department
Where Planning Team members Luke Meyers, Benjamin Pierson, and Steve Stringfellow presented the following items to the attendees: Mitigation Planning Requirements, Purpose of the Plan, Definition of Mitigation, Process to Develop the Plan, Public Involvement Status, Risk Assessment Summary, Mitigation Goals, a Detailed Overview of Potential Mitigation Measures and Public Comments on Each Potential Measure.	
Mitigation Strategy Public Comment Meeting Email Notice	
June 28, 2004	Email Notice
Where the Planning Team sent out email notices regarding the Draft Plan to the following jurisdictions: American Red Cross Mt. Rainier Chapter, Bethel School District, Carbonado School District, Clover Park School District, Dieringer School District, Eatonville School District, Orting School District, Peninsula School District, Puyallup School District, University Place School District, White River School District, Firgrove Mutual Water Company, Franciscan Health System, Central Pierce Fire and Rescue, Pierce County Fire Protection District #3, City of Dupont, City of Edgewood, City of Fife, City of Fircrest, City of Gig Harbor, City of Lakewood, City of Milton, City of Puyallup, City of Roy, City of Tacoma, City of University Place, Town of Eatonville, Town of Steilacoom, Puyallup Tribe of Indians, Pierce County DEM, Tacoma Pierce County Department of Health, Tacoma Power, and Tacoma Water.	

Profile Process

The Profile Section of the All Hazards Mitigation Plan paints a comprehensive picture of the Planning Area through a series of tables, a base map, and Mission Statement. Included in the Profile Section is the History, Geography, Geology, Climate, Population, Economy, Transportation, and Development Trends of the Planning Area. The information was collected from a number of sources including budgets, websites, various departments, the Small Business Administration, and the United States Census Bureau. The Plan profile structure is based on other mitigation plan profiles such as the Pierce County All Hazard Mitigation Plan, the Riverside Fire and Rescue All Hazard Mitigation Plan profile, and the Clackamas County Mitigation Plan.⁴

Services Summary

In regards to the services provided, the Planning Team was given a survey to fill out regarding their Planning Area. This is the same survey that was developed with the Region 5 cities and towns Planning Groups to portray a picture of the services they provide.

Geo-Political Summary

The Geo-Political Summary information was derived from the Pierce County GIS application, CountyView Pro (10/2016) and updated from 2004 and 2011. The Base Map that follows is also a product of CountyView Pro (10/2016). The information was broken into three categories to include; the Reservation, Trust Lands and Pierce County.

Population Summary

Data from the 2010 census was used for the demographics. The Special Population numbers were derived from the Pierce County GIS application, County View Pro (10/2016) using geoprocessing as was done the previous plan. Special Population numbers were calculated the same for the 65 Plus category but have increased with the younger population. Rather than a population under 18 they were calculated from 20 and under. This was due to the way the census data was calculated. This census population is based on the entire area within the reservation boundaries or Tribal Trust Lands and is not an accounting the Puyallup Tribal members.

The demographic information was obtained using the same methodology as the previous plan using the Pierce County GIS application, County View Pro based on 10/2016 tax parcel information provided by the Pierce County Assessor Treasurer's Office. This data is dynamic, constantly going through updates every couples of weeks and is only a snap shot reflecting the time the analysis was completed.

Prior Plan

Data from the 2000 census was used for the demographics. The Special Populations numbers were derived from the Pierce County GIS application, CountyView Pro (3/11) using

geoprocessing. In most cases, the current population numbers are greatly increased since it has been eleven years. Although the 2010 census has been taken it is not currently available in the Pierce County GIS application.

Demographic information was obtained through the Pierce County GIS application, CountyView Pro (3/11) using a geoprocessing derivative. Through a process of special analysis using parcels within the Planning Area and calculating the information from those parcels, we were able to obtain base information for the Planning Area. This includes the Special Populations information.

Infrastructure Summary

General

The number of parcels and value was derived from the Pierce County GIS application CountyView Pro (3/11) and updated in October of 2016.

Jurisdiction Infrastructure⁵

A small table of owned infrastructure for each jurisdiction is derived from the very comprehensive infrastructure survey and site visits that were completed in 2004 and are continually going through annual updates. Because of the sensitive nature of this information, only the total number of infrastructure identified is shown, basic categories of those structures, and total value as provided by the Planning Team. These categories are based on the Department of Homeland Security Infrastructure Sectors.

Capability Assessment Process

For State level planning efforts, Disaster Mitigation Act (DMA) 2000 requires

“a discussion of the State’s pre- and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the area, including: an evaluation of State Laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas; a discussion of State funding capabilities for mitigation projects; and a general description and analysis of the effectiveness of local mitigation policies, programs, and capabilities.”

The DMA requires a “review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.” For the purpose of this Plan, these elements are referred to as capabilities and their “review and incorporation” as a capability assessment. The capability assessment provides a scope for what mitigation measures can and cannot be implemented and identifies specific capabilities that each jurisdiction has which may help in the implementation of mitigation measures. Further it identifies those actions already undertaken that mitigate hazards, whether labeled as such or not. The assessment therefore canvasses all aspects of each jurisdiction’s government that relate both directly and indirectly to mitigation activities.

The ability of a community to develop an effective hazard mitigation plan depends upon its capability to implement policy and programs. The FEMA 386-3⁵ publication describes a capability assessment and outlines the types of capabilities that should be considered:

- Legal and Regulatory
- Administrative and Technical
- Fiscal

Legal and regulatory capabilities refer to the laws, regulations, authorities, and policies that govern current and potential mitigation measures. Administrative and technical capabilities refer to a jurisdiction's staff and technical resources, as well as completed plans and studies that have considered, directly or indirectly, mitigation of hazards. Technical capabilities also includes the existing electronic and systemic resources political and fiscal capabilities refers to the level of support from elected officials for pursuing mitigation and the financial resources available to achieve the identified mitigation strategies.

In determining the structure of this section, the Planning Team viewed those employed by other jurisdictions' in their planning efforts. The Sumner/Bonney Lake Area Plan Capability Identification Section is a modification of the following plans: Pierce County, WA, Hazard Mitigation Plan;⁶ Pitt County, NC, Mitigation Plan;⁷ the Town of Wendell, NC, Mitigation Plan;⁸ and the Clackamas County, OR, Mitigation Plan.⁹ Because the four jurisdictions represent widely varying authorities and capabilities, PC DEM adjusted the structures of the sections to better fit each jurisdiction's unique status.

For the organizational purposes of this Plan, administrative capabilities are identified and categorized by which segments of each jurisdiction (i.e., department, division, etc) conduct activities relevant to mitigation. The fiscal capabilities at the City level are thus correlated to the budgets and expenditures of these departments as well as the separate funds available for mitigation-related activities. For special purpose districts, fiscal capabilities center around levies, contracts, and grants. Political leadership of each jurisdiction is identified within the structure of the aforementioned administrative capabilities. Thus fiscal capabilities at the City level are assumed to be an inextricable element of the administrative/political capabilities. Therefore the structure of this plan was altered from 386.3 to review and identify capabilities in three separate categories:

- Legal and Regulatory
- Political, Administrative, and Fiscal
- Technical

For special purpose districts, Fiscal Capability warrants its own section and discussion.

Each jurisdiction has its own capability identification section. Each section includes the following, presented in the order most relevant to the jurisdiction's structure:

- **State and Federal:** These are the regulations that dictate what the specified jurisdiction in Washington can and cannot pursue with regards to mitigation, as well

as what assistance may be available. While not necessarily focusing on the state and federal *capabilities*, this section identifies those mechanisms that provide the basis for that which follows at the local level identification.

- **Local Legal and Regulatory:** This section illustrates the legal parameters within which the jurisdiction operates. It also identifies the jurisdiction's authorities. For cities there is particular emphasis on the Comprehensive Plans and Development Regulations as these guide land use and building decisions. For special purpose districts, these authorities are much more limited and rely on the land use and development regulations enacted in the cities or county.¹⁰
- **Local Political, Administrative, and Fiscal:** This section identifies those segments of a jurisdiction that conduct activities related to mitigation. These departments/divisions represent existing mitigation mechanisms as well as the responsible agents for carrying out the measures identified in this plan. For cities, this section deals with fiscal capabilities as well, as department budgets and project funding dictates much of what is accomplished. For special purpose districts, the scope is one of designating future responsibility, with funding largely dependent on securing grants.
- **Local Technical:** This section identifies the studies, plans, programs, and projects that the jurisdiction is engaged in that relate to mitigation. These can provide a mechanism through which mitigation measures can be implemented. These can range from an evacuation plan to a transportation improvement program.

Some of Section 3 relies on information and studies conducted by the Municipal Research and Services Center of Washington and other resources as noted. The products of each jurisdiction's capability identification process are summarized in tables representing each of the sections noted above.

The section serves as a catalogue of existing mitigation measures in which the jurisdictions are currently engaged and should continue. Further, it provides a catalogue of the funding sources and departments that are referenced in each mitigation measure. When new mitigation measures are suggested, the capability identification section will provide some of information required for the evaluation of that measure (see "mitigation strategy process" below). Finally, it provides the template for plan maintenance in its identification of existing avenues of implementation (see "Plan Maintenance Section").

The Capabilities Section was reviewed in detail by numerous Tribal Department personnel for the 2017-2022 All Hazard Mitigation Plan update. New departments with staff and building sites were added to this section that did not exist with the previous plan. Those departments developed a paragraph describing their department and were included with the current plan. In other cases minor changes of current numbers were replaced to reflect the 2016 dollar amounts and FEMA projects utilizing HMGP grant funding were included too.

Risk Assessment Process

Various methodologies are available to facilitate risk assessment. A common approach was needed to enable the setting of mitigation priorities both within and among the Planning Area. The Planning Team developed a framework that assesses risk as a function of threat, vulnerability, and consequence.

What follows is a description of the methodology of hazard/threat identification, vulnerability analysis, and consequence analysis.

Hazard Identification Description

A primary part of the Puyallup Tribe Planning Area's Risk Assessment is identifying the Area's hazards. The hazard identification process used for this assessment is derived from the PC DEM Hazard Identification Process. The Pierce County Hazard Identification Risk Assessment (HIRA) was the starting point for assessing risk in the Planning Area. The Pierce County HIRA uses, HIRA's and Risk Assessments from individual jurisdictions, Pierce County's computer mapping software, scientific studies and papers, and interviews with local hazard experts and Planning Area's officials to develop a list of hazards and the risk they pose for the Planning Area.

The process actually began after Congress passed the DMA 2000; Pierce County Emergency Management (PC DEM) began updating its HIRA using "best available science and information." In early October 2001, PC DEM convened a series of 1-2 hour workshops over a two-day period, during which prominent regional earth scientists, and other professionals, presented current information about known hazards, and facilitated discussion of mitigation measures.

The workshops increased the participants' understanding of the devastating potential of some hazards, e.g., lahars, and raised the issue of providing an adequate definition for "hazards". Some natural conditions have the potential to cause loss of life, property damage, environmental impacts, but may not become "disasters"

- *Hazard*: a condition, natural or human-caused, which has the potential to threaten human life, property, and environment.
- *Vulnerability*: the probability that any physical, structural, socioeconomic, or environmental element will be damaged destroyed, or lost to a natural or human-caused hazard.
- *Disaster*: occurs when a hazard impacts a community and outstrips that community's ability to cope with injury, death, property damage, environmental impacts or disruption to essential functions. It is the intersection of a hazard with the human environment that produces a disaster.

Since the purpose of the plan is to mitigate *disaster*, DEM reduced the hazard list to:

- Single, infrequent events which cannot be anticipated or predicted, and whose potential for loss of life, property, and environment is significant to the community, and;

- Repetitive events that can be predicted with reliability within days or hours, and cause injury or death, property damage, or environmental impacts.

After assessing hazard maps produced by Pierce County's computer mapping software and interviews with County officials and local experts¹¹, the list of potentially *disastrous* natural hazards to the County was narrowed to these nine:

- Earthquakes
- Floods
- Severe Storms
- Volcanic
- Wildland/Urban Interface Fires
- Landslides
- Tsunami and Seiches
- Drought
- Avalanche

The Planning Team began to consider technological and human-caused disaster also within the Planning Area. Some of these hazards have no specific boundaries and can potentially affect the entire Planning Area or could happen anywhere within the Planning Area. Other hazards were somewhat more location predictable. These additional nine hazards are included with Pierce County's Hazard Identification Risk Assessment (HIRA) and are listed below.

- Abandoned Mines
- Civil Disturbance
- Dam Failure
- Energy Emergency
- Epidemic/Pandemic
- Hazardous Materials
- Pipeline Hazard
- Terrorism
- Transportation Emergency

The Planning Team removed wildland/urban interface fires from consideration for the following reasons. According to the County Wildland/urban interface map, the Planning Area is not in a fire hazard area. The Area also has limited freestanding timber or undergrowth areas. Undeveloped areas are largely used for agricultural use and therefore maintained to light growth cleaned or tilled each year. The balance of the Planning Area contains mostly light fuels with adequate defensible space between structures and vegetation. It has adequate resources to fight any Wildland incident that occurs within the district with contracts with local fire service providers such as the Riverside Fire District and Tacoma Fire. And while avalanches have been killers in Pierce County's history, they primarily occur within Mt. Rainier National Park and do not impact the populated areas within the County.

Evaluating the hazards that were listed and consolidating the storms section into one category was decided on by the planning group. Once the decision was made on which hazards to cover extensive research was done to further update the HIRA with the latest information available. The decision was also made to add material on Climate Change as an informational piece.

The Planning Team believes that the various officials' experiences within the area, as well as their capabilities to derive reasonable estimates of the geographic area at risk and the potential impacts of the hazard, is adequate for the purposes of this planning effort.

The recurrence probabilities were based on best available science, the historical record when available, and information from local hazard experts. For some hazards, like severe weather or floods, the historical record is pretty well defined. For others, like volcanic eruptions or spontaneous lahars, the record has to be read from the geologic evidence and therefore the recurrence rate can only be determined over time by scientific enquiry.

After each hazard was profiled in the Risk Assessment, a consequence analysis of its affects on different portions of the County was added. That section asks seven questions that evaluated the overall impact on the Region. These are:

- How is the health and safety of persons in the affected area at the time of the incident affected?
- How is the health and safety of personnel responding to the incident affected?
- How is the Planning Areas continuity of operations affected and can it continue to deliver services to the impacted area?
- What is the affect on the Planning Area's property, facilities and infrastructure?
- What are the effects on the environment?
- How will the economic/financial environment be impacted?
- Who will the public's confidence in the Planning Area be impacted or changed?

The Planning Area

Hazard Identification

Once the Hazard Identification was completed, the hazard evaluations were done for the Planning Area. Hazard maps were produced for those hazards that had adequate information to do so and matched against the Planning Area. The Planning Team produced the maps using data from the following agencies: U. S. Geological Survey (USGS); National Oceanic and Atmospheric Administration (NOAA); Pierce County Water Programs; Pierce County Planning and Land Service; FEMA; Washington State Department of Ecology (DOE); Washington State Department of Natural Resources (DNR), and any maps provided by the Planning Team. Spatial analysis was completed for the Planning Area when possible and the threat to the population, land, and improved property was placed on tables in each section. Using a table format, this section portrays the threats via a table of past incidents and declarations per specific hazard. This information includes impacts to property, facilities, and infrastructure in the entire Planning Area whether or not owned by the Planning Area.

Four decisions were made that affect the tables in the Risk Section of the Planning Area. First, the earthquake threat section of the table is determined by the soft or liquefiable soils. It should be noted that the entire County has an earthquake threat, but that will not show up on the table only the expected areas that will experience enhanced shaking. Second, the tables showing the volcano treat are looking at the lahar threat, not the threat from other volcanic hazards like tephra. The potential area threatened by tephra will also include the entire Region. Third, the entire County would be affected by Climate Change and although real, this is not a hazard whose consequences can be specifically mapped at this time. Two separate reports from different sources were included in the Risk Section on Climate Change. Finally, the tables show the Wildland Urban Interface (WUI) threat as a “N/A” due to the lack of current data to substantiate and produce jurisdictional hazard maps. This does not imply the hazard does not exist within the Reservation Boundaries or Pierce County. Currently the best available science data only identifies two checker boarded WUI areas in the Ashford and McKenna area, along with a small area around Greenwater. This data is from the Department of Natural Resources with the theme based on data from the current National Fire Protection Association (NFPA 299), risk assessment. The publication is dated September 2004 and multiple Fire Chiefs within Pierce County have expressed concern that this is outdated and does not accurately portray the WUI hazard within their fire districts. Pierce County Emergency Management is trying to secure the funding to update this data and will work with the necessary agencies to ensure the accuracy and relevancy of the data collected for future identification of WUI hazard areas within Pierce County. As a result there may be Tribal Trust properties located on and off the reservation that are identified and vulnerable to a WUI hazard and the Tribe may develop mitigation measures accordingly to mitigate this hazard.

Vulnerability

The vulnerabilities are portrayed using information derived from the Pierce County mapping system County View Pro and determining the following information for the Planning Area by hazard or threat:

- General Exposure
- Population
- Infrastructure Exposure

To determine the vulnerability of the Planning Area, the location and extent of each hazard was applied spatially to the Planning Area profile. The analysis describes exposure of population, both generally and categorically, to each hazard. The analysis also describes exposure of general infrastructure, in terms of property and value, to each hazard. Using this spatial analysis, the Planning Area can track the overall affects of vulnerability reduction measures by determining the change in exposure of population and property to specific hazards.

The risk assessment considers all three components of risk and is conducted at three levels; the Planning Area level, the population level, and the infrastructure level. At the Planning level, the assessment considers the fundamental characteristics of the population and property within the Planning Area to determine vulnerability and consequence of a given threat. Table 4-3 shows the area in square miles of the Planning Area and the parcels and then breaks down those

numbers by the hazards or threats that affect the Planning Area. At the population level, Table 4-4 in the Planning Area shows the total population of the Planning Area and then breaks down the population by specific hazard or threat. At the infrastructure level, the assessment considers the land value, improved value, and total assessed value of the Planning Area and using GIS information calculates for each hazard or threat in the Planning Area. Table 4-5 shows the general infrastructure exposure.

The Planning Team conducted a vulnerability assessment for the Planning Area. Both threat-based and asset-based methods were used to determine the vulnerability of infrastructure to hazards. To determine the threat-based vulnerability, the location, extent, and historical impact of each hazard is applied to the infrastructure. The result is a determination of the infrastructure's exposure and previous experience in relation to each hazard. This is found in the Infrastructure Hazard Vulnerability Analysis Table, Table 4-5, found in the Planning Area's Risk Assessment Section.

Consequence Analysis

Consequence Analysis asks: How would the identified hazard events damage or disrupt the Planning Area? When discussing the effects of an incident one must include not just the immediate damage, but the consequences of the disruption both short and long term.

The seven questions in the Risk Assessment also form the basis of the consequence analysis in the Planning Areas Risk Assessment. In this case the 19 hazards profiled a yes or no answer was asked for each of the following:

- Impact to the Public?
- Impact to the Responders?
- Impact to COG or COOP in the Planning Area?
- Impact to the environment?
- Impact to the Planning Area's Economic Condition?
- Impact to the Public Confidence in the Planning Area's Governance?

The results of this are shown in the Consequence Analysis Chart that appears in Table 4-6a, 4-6b and 4-6c.

Hazard Update for 2017

With the Tribe's usage of the Pierce County Hazard Identification Risk Assessment (HIRA) as the primary source for their hazard identification it is important to keep these hazards current. All 19 hazards were reviewed and updated where necessary to incorporate the new information. Some of the hazards had minor changes while other had more extensive changes.

The Geological Section had updates only to the avalanche hazard to update the six fatalities that had recently occurred in May of 2014 on Mt. Rainier. The Meteorological Section had some significant updates to the Climate Change Section including two Climate change reports that were added to this section. Climate change will continue on the front burner of hazards to assess

as the cascading effects of global warming increases our local temperatures, precipitation, and wind patterns. Additional maps were added to the Flood hazard to provide a better detailed analysis of the Tribal Trust Lands that are specifically located in the floodplain and have a greater risk for flooding. These updated maps will provide better opportunity for future mitigation efforts in these identified areas. The Severe Weather Section added two tornadoes to the list of notable severe weather in Pierce County. The Technological Hazards Section added additional information to the Civil Disturbance Section under the *Recurrence Rate, Property, Facilities and Infrastructure* headings. The Energy Emergency Hazard had similar additions to multiple headings as did the Hazardous Material and Terrorism Hazards.

Mitigation Strategy Process

The hazard mitigation strategy includes a description of mitigation goals to reduce or avoid long-term vulnerabilities to the hazards identified in the Risk Assessment. The mitigation strategy identifies and analyzes a comprehensive range of specific mitigation measures to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

The development of a mitigation strategy, described in more detail below, begins with a review of the **FEMA Mitigation Goal Categories**. To ensure that goals for the multi-jurisdictional plan are community-specific, each jurisdiction's mission statement was applied to the FEMA categories, resulting in **Planning Area Mitigation Goals**. Based upon these goals, the Planning Team members identified **Jurisdiction-Specific Mitigation Measures** through the Risk Assessment and the Capability Evaluation. Each jurisdiction then **Prioritized the Mitigation Measures** through a process that includes continual public participation, a concentration on the jurisdiction and area's unique needs and capabilities, and a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed measures and their associated costs.

FEMA Mitigation Goal Categories

The FEMA 386.3 document outlines six categories into which all mitigation measures can be grouped. They are as follows:

- 1. Prevention:** Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and storm water management regulations.
- 2. Property Protection:** Actions that involve the modification of existing buildings or structures to protect them from a hazard, or removal from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- 3. Public Education and Awareness:** Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them.

Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.

4. Natural Resource Protection: Actions that, in addition to minimizing hazard losses, also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

5. Emergency Services: Actions that protect people and property during and immediately after a disaster or hazard event. Services include warning systems, emergency response services, and protection of critical facilities.

6. Structural Projects: Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, levees, floodwalls, seawalls, retaining walls, and safe rooms.

Planning Area Mitigation Goals

The Planning Team localized the FEMA Mitigation Goal Categories by using the Puyallup Tribe of Indians Mission Statement and goals. This union of FEMA Goal Categories with this mission statement results in goals specific to the Planning Area that ensure the greatest benefit in hazard reduction. The Tribe's mission statement is:

“The Puyallup Tribe of Indians is committed to protecting and exercising the inherent inalienable sovereign rights of the Tribe and individuals in the interest of the Medicine Creek Treaty Territories, as stewards to ensure the preservation of our cultural and environmental integrity for the common good and prosperity of all.”

The Planning Team considered Washington State Mitigation Plan Goals, the FEMA goal categories, community education, public understanding of risks, and the ability of the Tribe to fund and implement mitigation measures. After applying the above factors to the each jurisdiction's mission statement, the Planning Team developed the following hazard mitigation goals for the whole Planning Area:

- **Protect Life and Property**
- **Establish and Strengthen Partnerships for Implementation**
- **Ensure Emergency Services**
- **Increase Public Preparedness**
- **Promote A Sustainable Economy**
- **Preserve or Restore Natural Resources**

The Planning Team combined the FEMA categories of “Prevention,” “Property Protection,” and “Structural Projects” in to a broader goal of “Protect Life and Property.” The remaining three

categories generally remained. The Planning Team also added two other categories: “Establish and Strengthen Partnerships for Implementation” and “Promote A Sustainable Economy.” Because the Puyallup Tribe shares geo-political boundaries with several municipalities and the County, partnerships for implementation are important in ensuring that a coordinated effort in mitigation planning and implementation be undertaken. Promoting a sustainable economy is important due to the areas vulnerabilities and the Tribe’s overall goal of self-determination.

The Puyallup Tribe Mitigation Plan goals describe the overall direction that the Tribe and its members can take to work toward mitigating risk from all hazards. These goals are stepping-stones between the broad direction of the plan purpose and the specific recommendations outlined in the subsequent mitigation measures.

Mitigation Measures: Identification and Evaluation

The Mitigation Strategy includes a description of mitigation goals to reduce or avoid long-term vulnerabilities to the hazards identified in the Risk Assessment. The mitigation strategy includes sections that identify and analyze a comprehensive range of specific mitigation measures that reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. Facility-specific mitigation measures are located in the Facility Evaluation Section.

Mitigation strategy development begins with a review of the categories of mitigation goals, as outlined by FEMA. Using this template, and adjusting it to fit the Tribe’s mission statement, the Planning Team developed goals specific to the Planning Area. Through incorporation of the analysis and conclusions found in the Risk Assessment and the Capability Evaluation, the Planning Team identified specific mitigation measures and prioritized them through a process of public participation and cost/benefit review tailored to the Tribe’s unique needs and capabilities. Central to this entire process is the continual public involvement.

To help achieve each of the planning goals, the Plan identifies mitigation measures—specific actions or projects that help mitigate risk. The planning process of data collection, research, and public participation leads to the development of these measures. This process ensures that the measures speak to the risks and that these measures be implementable. The Risk Assessment is central to the process of selecting mitigation measures from the Plan’s goals.

The outcomes of the Risk Assessment illustrate the hazards to which the Area has the most vulnerability. The Risk Assessment provides focus for the Plan’s goals through identification of the Area’s vulnerability to specific hazards. Based on these hazards, the Planning Team identified specific mitigation measures.

Once the measures are identified, they are further defined in terms of the goals they address as well as the hazards they mitigate. Evaluation of the measures follows their identification and definition. Using the Capability Identification, the Planning Team evaluated the list of measures with regards to each measure’s ability to be implemented.

Through meetings, the Planning Team continued with the following eight categories to comprehensively evaluate each measure:

1. Goal(s) Addressed

What mitigation goals does the measure address?

2. Cost of Measure

How much will the measure cost to implement?

3. Funding Source and Situation

What is the potential funding source? Choose the statement(s) below that most accurately defines the funding situation for the proposal:

- Funding could be obtained through local budget.
- Funding could be obtained through state or federal grants.
- Funding could be accomplished with local budgets or grants.
- No potential funding sources can be readily identified.

4. Lead Jurisdiction(s)

Which jurisdiction(s) will be leading the implementation of the measure?

5. Timeline

How long will it take to implement? Measures include ongoing, short-term, and long-term activities. Each measure includes an estimate of the timeline for implementation:

- Ongoing measures are activities which the jurisdiction is already implementing.
- Short-term measures are activities which the jurisdiction is capable of implementing with existing resources and authorities within one to two years.
- Long-term measures may require new or additional resources or authorities, and may take between one and five years to implement.

6. Benefit

Does it benefit all jurisdictions and/or is it Facility Specific?

7. Life Expectancy of Measure

How long will the measure last?

8. Community Reaction

Choose the statement(s) that most accurately describes how the community would react to the implementation of the proposal:

- The proposal is likely to be endorsed by the entire community.
- The proposal would benefit those affected, with no adverse reaction from others.
- The proposal would be somewhat controversial.
- The proposal would be strongly opposed by most.
- The proposal would be strongly opposed by nearly all.

The evaluation process involved meetings in which the Planning Team discussed the measures with specific attention paid to their definitions, the ability of the measures to be implemented, the

extent to which they address the hazards in the planning area and jurisdictions, and their cost-effectiveness. Following the evaluation of mitigation measures is their prioritization.

Mitigation Measures: Prioritization

The measures having been identified, defined, and evaluated, the rest of the process involves prioritization. The process relies upon the Tribe's identified risks and vulnerabilities, the planning team's expertise, public participation, and the Tribal Council's authority and duty as the jurisdiction's chief elected officials. Over the course several weeks, the Planning Team presented, outlined, categorically defined, and ranked each mitigation measure (see Table 1-4 Puyallup Tribe of Indians Public Involvement). In order to promote implementation of the measures, they are grouped based on the level at which they will be implemented, as described in the Plan Maintenance Section. These levels are:

- **Hazard Mitigation Forum (HMF):** Multi-jurisdictional implementation mechanism
- **Emergency Management Committee (EMC):** Tribal implementation mechanism
- **Public Education:** Localized level based on targeted communities and their needs and vulnerabilities.

The measures are prioritized within each implementation category. In order to provide consistency, the evaluation process, including the eight categories, was used as the basis for the prioritization of measures. The process allows for emphasis on the extent to which each measure is cost-effective. While it may be important to emphasize a positive cost/benefit review in the prioritizing of mitigation measures, it is also important to emphasize the influence of regional political factors, community needs and values, historic properties, and habitat and environmental issues upon the selection of specific mitigation measures. Therefore, the prioritization process addresses the Tribe's unique needs, expressed here in terms of the measure's ability to be implemented and the extent to which it would mitigate one or more relevant hazards. The eight categories address these issues.

A measure's ability to be implemented is illustrated in Categories 2 (Cost of Measure), 3 (Funding Source and Situation), 4 (Lead Jurisdiction(s)), and 5 (Timeline). The extent to which a measure would mitigate one or multiple hazards is addressed in Category 1 (Goals Addressed) which further helps to encapsulate Tribe's unique vulnerabilities and needs. The issue of the number of hazards addressed is also inherent in Category 6 (Benefit). For cost benefit review, categories 2, 3, and 5 directly address cost. Categories 6 and 7 (Life Expectancy of Measure) directly address benefit. Category 8 (Community Reaction) indirectly considers both potential costs and potential benefits of the measure in terms of public opinion.

After presentation and discussion, the Planning Team ranked the potential mitigation measures based on goals addressed, with special attention paid to the measure's cost benefit review, its ability to be implemented, and the extent to which it would mitigate one or multiple relevant hazards. The Planning Team combined these rankings into one prioritized list, which the Team then presented to the public for comment. On December 16, 2004, at the Public Comment Meeting, the Planning Team presented each mitigation measure with its draft prioritization to the

attendees. The Plan was also available online from December 22nd through January 4th for further review.

Following the public meeting and any necessary changes, the mitigation measures, publicly salient and meeting the Tribe's unique needs and capabilities, achieved their final prioritization. In so doing, the public, the Tribal Council, and the Planning Team aided in the development of a long-term, cost-effective, environmentally sound, and sustainable mitigation strategy.

The mitigation measures are organized by hazard vulnerability, with multi-hazard measures presented first, and further subdivided by implementation mechanism. The measures are prioritized within each implementation mechanism subset. A detailed description of each mitigation measure follows the table.

Each measure's priority is presented in the following format using the acronyms above:

“Hazard(s) Addressed-Implementation Mechanism-Ranking”

For example, the Continuity of Operations Planning measure may be prioritized as follows:

“Priority: MH-EMC-7”

Thus it would be the seventh ranked measure within the Emergency Management Committee implementation mechanism for addressing multi-hazard vulnerabilities.

The Planning Team reviewed all mitigation measures and further evaluated the priority ranking for each measure which is organized according to the hazard. The eight categories were addressed with each mitigation measure and in some instances they were changed and updated. The “Timeline” category was changed on some to reflect “ongoing” especially if the measure consists of an educational component. The Puyallup Tribe will continually promote preparedness, educating the Tribal Members on hazard awareness. Some measures had been completed and were changed to reflect that. Additionally, a Summary Update was added for each mitigation measure and a paragraph follows indicating the progress made towards that measure.

Critical Facility Process

The critical facilities section is not a required element of the local hazard mitigation plan requirements but it is instead optional. The Planning Team determined that this section would be developed in order to make the Plan a more comprehensive blueprint for reducing the potential losses identified in the Plan's Risk Assessment. Sumner School District, EPFR, the City of Bonney Lake, and the City of Sumner have completed Critical Facility Sections.

The infrastructure section is exempt from public disclosure pursuant to RCW 42.56.420. Requests for public disclosure of this section or parts thereof should be revered immediately to the appropriate representative as shown in Tables 1-1 through 1-4 of this section.

The products of this process are the Critical Facility Mitigation Plans. Each facility's plan includes a profile, vulnerability assessment, and mitigation strategy. The Planning Team developed the section through: **Definition of Critical Facility; Identification of a Jurisdiction's Critical Facilities; Critical Facility Profiles; Critical Facility Vulnerabilities; and Critical Facility Mitigation Measures.**

Definition

The Planning Team determined that the primary focus of the plan (to create disaster resistant communities) necessitated that the plan address critical facilities. The Planning Team determined that the plan should include, but not be limited to, those facilities that fit FEMA's definition of a "critical facility" ("State and Local Mitigation Planning: Understanding Your Risks" Publication 386-2):

"Critical Facilities: Facilities that are critical to the health and welfare of the population and that are especially important following hazard events. Critical facilities include, but are not limited to, shelters, police and fire stations, and hospitals."

This broad definition identifies many facilities related to disaster response and recovery. Each jurisdiction in the Planning Area further included facilities that should not fail, such as sewage treatment plants, or facilities necessary for the functioning of the jurisdiction, such as schools (which can also be shelters). To delineate how critical a critical facility is, the Planning Team developed a "Criticality Rating" that ranks each facility based on how critical its operation is to disaster response and recovery activities. The Planning Team assigned these ranks based on the functions outlined in the County, Sumner, and Bonney Lake Comprehensive Emergency Management Plans and standard operating procedures for jurisdictional and county-wide mitigation and recovery efforts. The rankings are defined as:

- **High (H):** The facility is critical and needs to be operational for the first 72 hours after a disaster.
- **Medium (M):** The facility is essential for the long-term continued operation of jurisdictional services. While not essential, having these facilities operational during the first 72 hours after a disaster would be greatly beneficial to each jurisdiction's capabilities.
- **Low (L):** The facility, while useful in the post-disaster environment, is not essential for continued functioning of critical operations during the first 72 hours after a disaster.

Identification

The Planning Team analyzed facilities throughout the planning area based on the agreed upon definition and in conjunction with the hazard identification. To refine the analysis, the jurisdictions focused primarily on those facilities over which they had immediate control or ownership. Over the course of several Planning Team meetings, the Planning Team identified a

broad range of critical facilities. The facilities are presented by jurisdictional control. For example, Bonney Lake contracts for wastewater treatment with Sumner, but Sumner owns the wastewater treatment plant. Therefore it is addressed in the Sumner section, but of course has a great deal of importance to both cities.

Having identified the facilities, and based on this categorization, the Planning Team identified individuals most knowledgeable of each critical facility, and, where available, scheduled meetings regarding the development of critical facility-specific mitigation plans. Critical facility mitigation plans include: **profiles each facility; assesses its risks and determines its vulnerabilities, and outlines a prioritized list of mitigation measures specifically for each facility.**

During the meetings, members of the Planning Team and facility representatives filled out the forms which in turn helped develop the hazard identification and risk information for given locations. The assessment is not intended to require detailed engineering information or expensive studies and analysis or to necessarily require onsite inspections or measurements. It is simply intended to rely on the best judgment of the representative about the facility, its environment and its functioning.

Profile

Fundamental information was required for each piece of infrastructure. In order to gather the information a template was developed to identify the individual pieces of infrastructure. It includes the following information:

- Address of infrastructure
- Shelter: Yes or No
- Auxiliary Power Source:
- Year built
- Number of floors if structure
- Major remodels, upgrades or additions
- Insured value
- Occupancy day and night
- Population served
- Homeland Security Infrastructure Category
- Critical within 72 hours or not

Once the infrastructure had been identified, the Planning Team met with the Planning Team representative, took a tour of each location with respect to photographing the infrastructure, and identified the hazard vulnerability of the infrastructure. The assessment was not intended to require detailed engineering information or studies, or to necessarily require onsite inspections or measurements. It was simply intended to rely on the best judgment of individual(s) with knowledge about the building or system, its environment, and its function.

Infrastructure Summary

Each Infrastructure Section begins with a summary table of total infrastructure and total value as assigned by the jurisdiction through their budgetary process and found in Table in Table 6-1.

Infrastructure Category Summary

Using the primary Homeland Security Infrastructure Segments, the infrastructure was categorized and listed according to the primary category of each location. In some cases, categories were broken down further into type of infrastructure within a category. This information is depicted in Table 6-2.

Infrastructure Dependency Summary

A table was compiled using the six primary dependencies for any for any jurisdiction: Emergency Services, Power, Sewer, Telecommunication, Transportation, and Water. When the site visits took place, each piece of infrastructure was evaluated on the basis of these six categories. Table 6-5 is a summary of how many pieces of infrastructure fall into each category and assigns percentages as well.

Infrastructure Hazard Summary

Another table was compiled using the nine hazards identified for the Planning Area in this planning effort. When the site visits were completed, each piece of infrastructure was evaluated on the basis of these 19 hazards. Table 6-4 is a summary of how many pieces of infrastructure fall into each category and assigns percentages to those hazard categories.

Dependency

In addition to the four categories of capabilities for the Planning Area, there is an additional table, Table 6-5, which illustrates the primary external departments, agencies, and organizations the individual jurisdictions depend upon to do business on a daily basis.

Vulnerability Assessment

Planning Team also conducted numerous vulnerability assessments during the planning period. These assessments build on the identification of hazards, and the risk that they pose to each jurisdiction's critical facilities. The vulnerability assessment process examines more specifically how the identified hazard events would damage or disrupt these facilities.

The Planning Team developed a form based on "Mitigation 20/20 Software" routines to conduct vulnerability assessments for the critical facilities. A total of eighteen qualitative numeric criteria were utilized in the assessments. This meant that each of the identified infrastructures was evaluated with respect to the identified hazards and the six primary dependencies. Each piece of infrastructure was given a rating for each hazard and dependency of from 0 to 3 with 0 being no vulnerability to that particular and 3 being the highest vulnerability. These ratings were listed in the large infrastructure matrix, Table 6-6, and also a completed list of the basis for these ratings is shown in Tables 6-7 and 6-8. The following scale was devised for the ratings.

0-1 → Low Hazard Composite Vulnerability Rating (L)

- 2 → Medium Hazard Composite Vulnerability Rating (M)
- 3 → High Hazard Composite Vulnerability Rating (H)

The facility mitigation plans are summary products compiled by the facility owners and the Planning Team showing the composite vulnerabilities score and ratings of each critical facility. For some critical facilities information was unavailable due to time restraints and fiscal resources. This information will be gathered in the next five years. A “TBD” (To Be Determined) is used to show that the critical facility information will be gathered in the future. Within each of the three groups, the facilities are arranged alphabetically.

Facility Mitigation Measures

With the results of the critical facilities vulnerability assessments having been identified, “Mitigation 20/20” Mitigation Measure Forms were administered to the facility owners where available. The critical facility owners and/or Planning Team members proposed, evaluated, and finally prioritized specific mitigation measures to mitigate the defined vulnerabilities. The measures were developed with the same eight categories used for the mitigation measures (see Mitigation Strategy Process above).

Plan Maintenance Process

The planning process is just the foundation of breaking the disaster cycle. For the Planning Area the Mitigation Plan that has been developed is a beginning; a beginning on the path to a disaster resistant community. However it is essential that a plan be a living document, evaluated, updated or revised as necessary. The Plan Maintenance process is an attempt to do this.

The initial review of the Plan will be a “Pre Adoption Review” allowed by Washington State EMD and FEMA Region X. Washington State EMD and FEMA Region X will review the All Hazard Mitigation Plan and either approve it subject to adoption or require some changes along with adoption prior to final approval. Once this is complete, the Tribal Council will then formally adopt the Plan and resubmit it for final approval.

This Plan Maintenance Section details the formal process that will guarantee the Tribe Plan remains an active and relevant document. The Section also describes: the method and schedule of monitoring, evaluating, and updating the Plan; the process for incorporating the mitigation strategy into existing mechanisms, and; the process for integrating public participation throughout the plan maintenance. The section serves as a guide for implementation of the hazard mitigation strategy.

The section details the formal process that will guarantee the Plan remains an active and relevant document. The section includes:

- Documentation of the Plan’s formal adoption (Appendix A);
- A schedule of monitoring, evaluating, and updating within a five-year cycle;
- A process for submitting the Plan to Washington State EMD and FEMA Region X at the end of the five-year cycle in 2022;

- An explanation of how each jurisdiction intends to incorporate the mitigation strategies outlined in the Plan into existing mechanisms; and
- A process for integrating public participation into plan maintenance procedures.

Endnotes

¹ Clackamas County, Oregon, Natural Hazard Mitigation Plan. September, 2002.

<http://www.co.clackamas.or.us/emergency/hmp.htm>.

² *Ibid*, Modified Clackamas County template.

³ <http://www.co.pierce.wa.us/pc/abtus/ourorg/dem/EMDiv/MitPTI.htm>

Hosted by Pierce County Department of Emergency Management.

⁴ Clackamas County, Oregon, Natural Hazard Mitigation Plan. September, 2002.

<http://www.co.clackamas.or.us/emergency/hmp.htm>.

⁵ The Infrastructure Section is exempt from public disclosure pursuant to RCW 42.56.420. Request for public disclosure of this document or parts thereof should be referred immediately to the Person identified in the local jurisdiction's Annex.

⁶ Pierce County, Washington, Draft Natural Hazard Mitigation Plan. 2004

<http://www.co.pierce.wa.us/pc/abtus/ourorg/dem/EMDiv/MitPlan2.htm>

⁷ Pitt County, North Carolina, Natural Hazard Mitigation Plan. 2000.

<http://www.co.pitt.nc.us/depts/planning/hazmit/hazmitplan.pdf>

⁸ Town of Wendell, North Carolina, Hazard Mitigation Plan.

http://www.dem.dcc.state.nc.us/mitigation/Library/wendell_assessment.pdf

⁹ Clackamas County, Oregon, Natural Hazard Mitigation Plan. September, 2002.

<http://www.co.clackamas.or.us/emergency/hmp.htm>.

¹⁰ The structure of some of this analysis is based on the document "Optional Comprehensive Plan Element for Natural Hazard Reduction" published by the Washington Department of Community Trade and Economic Development in 1998. The purpose of that document is to aid communities in establishing an element within their Comprehensive Planning effort (as mandated by the Growth Management Act) to reduce the impacts of natural hazards. It focuses on consolidating the aspects found throughout each required element that deal with natural hazard mitigation into one element. In effect, this section does the same, not as an element to the Comprehensive Plan, but as an identification of current legal mitigation measures and legal/regulatory means for implementing mitigation.

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