

All Hazard Mitigation Plan

ADDENDUM 2

City of Montesano

Background

The City of Montesano was established in 1892 on the banks of the Chehalis River as a timber town. The City is located 38 miles west of Olympia and ten miles east of Aberdeen (Map 1) in Grays Harbor County, Washington. The eight square mile community is the home to 3550 residents, and it continues to grow as a suburban rural community. The City's population grew 3 percent from 1990 to 2000, but has increased 3% per year since 2000. According to the 2000 Census, the average household size in Montesano was 1.98 persons and there were 1792 households.

Forestry and government once accounted for much of the employment in the City; however, since forest industries have declined in recent years, residents have found more diversified job opportunities. Many residents now work as State employees in the Olympia/Lacey/Tumwater area with many working in the Aberdeen area.

The City of Montesano has its own fire, police, and public works departments. The City is served by the Montesano School District #66.

Natural Hazards Mitigation Plan

In 2003, responding to the identified need in Grays Harbor County for formal natural hazard mitigation planning, the County, in collaboration with other governmental jurisdictions located within its boundaries, established a multi-jurisdictional planning effort and developed the *Natural Hazards Mitigation Plan for the Grays Harbor Region*.

This countywide regional plan includes a protocol for a new entity to become a part of it under certain conditions. The new entity must develop a plan that coordinates with the regional plan and references portions of the regional plan that meet the planning requirements of the new entity. In October 2006, the Emergency Management Council of Grays Harbor County, which serves as the steering committee and governing body for the regional plan, invited the City of Montesano to develop and integrate its Natural Hazards Mitigation Plan with that of the County's. This Natural Hazards Mitigation Plan for the City of Montesano is in response to that invitation.

Plan Purpose

The following purposes for which the County Plan was developed also apply to the City of Montesano:

- **Provide a Methodical Approach to Mitigation Planning.** The process identifies vulnerabilities to future disasters and proposes the mitigation initiatives necessary to avoid or minimize those vulnerabilities.
- **Enhance Public Awareness and Understanding of Natural Hazards.** The County Plan contains data and information that can be used in a variety of ways to enhance public awareness about natural hazards, including the identification of the four most prevalent natural hazards (storms, landslides, earthquakes, and flooding) threatening the Grays Harbor region.
- **Create a Decision-Making Tool for Policy and Decision Makers.** The plan is intended to provide basic information needed by managers and leaders of local government, business, industry, community associations, and other key institutions and organizations to take action to address vulnerabilities from future natural disasters. It also provides proposals for specific projects and programs needed to eliminate or minimize those vulnerabilities. These proposals or “mitigation initiatives” are related to the needs of each contributing entity. They are evaluated as to their economic benefits and are prioritized for implementation. This approach is intended to provide a decision-making tool for the management of participating organizations and agencies.
- **Promote Compliance with State and Federal Program Requirements.** The *Disaster Mitigation Act of 2000 (Public Law 106-390)*, established a requirement that, for all disasters declared on or after November 1, 2004, applicants for grants for disaster mitigation funds must have an approved local mitigation plan. This plan is specifically intended to assist participating agencies and organizations with compliance of these requirements and to enable them to more fully and quickly respond to state and federal funding opportunities for mitigation-related projects.
- **Assure Inter-Jurisdictional Coordination of Mitigation-Related Programming.** One key purpose of the planning process is to ensure that proposals for mitigation initiatives are reviewed and coordinated among participating jurisdictions within the county. Thus, there is a high level of confidence that mitigation initiatives proposed by one jurisdiction or participating organization will be compatible with the interests of adjacent jurisdictions.
- **Create Jurisdiction Specific Hazard Mitigation Plans for Implementation.** One key purpose of the plan is to provide each participating entity with a specific plan of action that can be adopted and implemented pursuant to its own authorities and responsibilities. It identifies the mitigation initiatives for each participating entity that are adopted and implemented according to the individual needs and schedule for each organization. Therefore, the format of the plan, and the operational concept of the planning process, ensures that proposed mitigation initiatives are prioritized effectively among jurisdictions and organizations, while allowing each to adopt only the proposed mitigation initiatives that it actually has the authority or responsibility to implement when resources are available (refer to Chapter II of the *Natural*

Hazards Mitigation Plan for the Grays Harbor Region for the complete text of the Plan Purposes).

Planning Partners and Plan Development

Date	Activity	Subject
	Planning Meeting	Met with State and Local Emergency Management Staff to identify planning process
June 7, 2007	Staff Work Session	Developed Mitigation Initiatives, rationale, cost estimates, priorities, and potential funding source
	City Council/ Staff Work Session	Reviewed Mitigation Initiatives and Draft Plan. Discussed Public Involvement Process
	City Council/ Staff Work Session	Reviewed County Plan Hazard Vulnerability and Risk Assessment and also draft of City's Natural Hazards Mitigation Plan.
	City Council/ Staff	Sponsored public meeting at City Hall.
August, 2007	City Council Meeting	City Council review and consideration of plan.
August, 2007	Emergency Management Council	Reviewed by the Emergency Management Council of Grays Harbor County to ensure conformance with the regional plan.
	Plan Delivery and Approval	Delivered Plan to the Washington State Hazard Mitigation Program Manager for review/approval. Subsequent to approval, the state forwards plan to FEMA for review and approval.
	Plan Delivery and Approval	Delivered the plan to the Washington State Hazard Mitigation Program Manager for review and approval. Subsequent to approval, the state forwards the plan to FEMA for review and approval.
	Plan Maintenance	City of Montesano becomes part of the county planning workgroup and participates in future updates and maintenance cycles.

Public Participation

A press release on hazard mitigation planning was distributed on ----- . Information on the public meeting was posted on the Grays Harbor Regional Planning Council (TRPC) website. The public meeting was also advertised by posting notices in three prominent community areas: The U.S. Post Office, the community grocery, and on the bulletin board outside of City Hall (Appendix A). The City sponsored the public meeting at City Hall on _____, where attendees could obtain information and comment on the plan.

Mitigation Goals

The following County Plan mitigation goals guided the development of mitigation initiatives for the City of Montesano, which are expected to be implemented by the year 2025:

- All sectors of the community work together to create a disaster resistant community.
- Local and state entities have the capability to develop, implement, and maintain effective natural hazards mitigation programs in the Grays Harbor region.
- Collectively, the communities in the Grays Harbor region have the capacity to initiate and sustain emergency operations during and after a disaster.
- Local government operations are not significantly disrupted by disasters from natural hazards.
- Reduce the vulnerability to natural hazards in order to protect the health, safety, and welfare of community residents and visitors.
- Local governments will support natural hazards mitigation planning, and will implement the mitigation initiatives for their jurisdiction.
- The local infrastructure of communities in the Grays Harbor region is not significantly affected by a disaster from a natural hazard.
- Residents understand the natural hazards of the Grays Harbor region and are aware of ways to reduce their personal vulnerability to those hazards.

Risk Assessment

The risk assessment detailed in Chapter IV of the *Natural Hazard Mitigation Plan for the Grays Harbor Region* also serves as the risk assessment for the City of Montesano. The purpose of the Risk Assessment chapter is to provide the factual basis for the mitigation initiatives proposed by the City. It describes the type of natural hazard most likely to affect the region; it profiles hazard events, both describing the location and extent of the natural hazard, and includes information on previous occurrences; it assesses vulnerability by providing information on the impact of the hazard on the community, in terms of identifying assets and estimating losses.

Based on the County and other local jurisdictional *Hazard Identification and Vulnerability Analysis* (HIVA) reports—storms, earthquakes, floods, and landslides have been identified as the most likely natural hazards to occur in the Grays Harbor Region. They have been fully analyzed in the plan for the Grays Harbor region because they fall into the following criteria:

1. There is high probability of the natural hazard occurring in Grays Harbor County within the next 25 years.
2. There is potential for significant damage to impacted buildings and infrastructure.
3. There is potential for loss of life.

According to the Grays Harbor County Hazard Identification and Vulnerability Analysis, the following natural hazards meet the above criteria:

<u>Hazard</u>	<u>Grays Harbor County HIVA Assessment</u>
Earthquake	High Probability of Occurrence High Vulnerability High Risk
Storm	High Probability of Occurrence High Vulnerability High Risk
Flood	High Probability of Occurrence High Vulnerability High Risk
Landslide	High Probability of Occurrence Low Vulnerability Moderate Risk
Tsunami	Moderate Probability Low vulnerability Low Risk
Wildfire	Moderate Probability Moderate Vulnerability Low Risk
Volcano Ash fallout	Moderate Probability Moderate Vulnerability Low Risk
Hazardous Materials Releases	High Probability of Occurrence High Vulnerability High Risk

The City of Montesano is vulnerable to all of the hazards outlined in the plan. Table IV-4 in the *Natural Hazards Mitigation Plan* for the Grays Harbor Region identifies that the City's vulnerability to flooding is fairly low with 2.9 percent of the population (16 dwelling units) in the flood-hazard area. However, the City does have some areas that lie within the 100-year floodplain placing those areas at high-risk for vulnerability and occurrence. The Federal Emergency Management Agency (FEMA) defined the extent of the 100-year floodplain in order to establish actuarial flood insurance rates to assist communities in efforts to promote sound floodplain management. The *Montesano Interim Resource Lands and Critical Areas Protection (Ordinance 312)* requires a site analysis and compliance with the provisions of the National Flood Insurance Program as conditions of development in these areas. Flood insurance rate maps prepared by FEMA indicate that data is unavailable within city limits. The City of Tacoma Department of Public Utilities has prepared an inundation map (Map 2), which includes FEMA data on the 100-year floodplain in the area surrounding Montesano.

The City has several areas characterized by landslide and erosion hazards that have been assessed as acceptable risk putting it at low risk for occurrence and vulnerability. According to data prepared by the Grays Harbor Regional Planning (Grays Harbor Council of Governments) for the 1992 Natural Resource Lands and Critical Areas document. Several areas within the City are characterized by landslide and erosion hazards. Erosion hazards occur along the south facing slope defined by East Satsop Street to Talbot street and along the southern boundary of the Swiss Meadows Estates subdivision. Erosion hazards also occur along the southern boundary of the City along the Chehalis river. The City of Montesano's vulnerability to earthquakes and storms is estimated to be equal to that identified for the county as a whole. During the 2001 Nisqually earthquake, the water storage tank was damaged cutting the City's water storage capacity and seriously limiting fire flow for a period of two months. In 2002, the City mitigated this risk with repairs to the water storage tank but, without a second storage tank the vulnerability remains.

For the full analysis of all of the natural hazards and the complete risk assessment upon which the City of Montesano has based its mitigation initiatives, refer to Chapter IV of the *Natural Hazard Mitigation Plan for the Grays Harbor Region*.

Implementation through Existing Programs

The City Council will be responsible for implementation of its mitigation initiatives based on funding availability, availability of resources, and funding priorities. In the 2007 final draft update to the City's comprehensive plan, the City identified wastewater facility protection as a priority. This need was also expressed in a mitigation initiative included in this plan. The City's comprehensive plan outlines capital facilities projects to be carried out over the next five years and serves as the mechanism for implementing mitigation activities in the City.

Monitoring, Evaluating, and Updating the Plan

The Local Emergency Planning Committee of Grays Harbor County will review this plan for conformance with the Grays Harbor Regional Plan. Subsequent to that review, and review and approval by the Washington State Hazard Mitigation Program Manager and by FEMA, the plan will be forwarded to the Department of Emergency Management of Grays Harbor County for incorporation into the existing *Natural Hazards Mitigation Plan for the Grays Harbor Region*. Upon FEMA approval, the City of Montesano will: become part of the planning workgroup, carry out the responsibilities outlined in the plan, and participate in future plan updates and maintenance cycles (Refer to Chapter VI of the *Natural Hazards Mitigation Plan for the Grays Harbor Region* for the complete process of monitoring, evaluating, and updating the plan).

Mitigation Initiatives

Mitigation initiatives are the central piece in the City of Montesano Natural Hazards Mitigation Plan. It is through the implementation of these initiatives that the City will become more disaster resistant. For the purpose of this document, mitigation initiatives are defined as activities designed to reduce or eliminate losses resulting from natural hazards.

The attached mitigation initiatives were prepared by the City of Montesano Natural Hazard Mitigation Planning work group following the template and process used for the *Natural Hazards Mitigation Plan for the Grays Harbor Region*. For a complete explanation, refer to Chapter V of the *Natural Hazards Mitigation Plan for the Grays Harbor Region*.

Governmental Entity:

City of Montesano

Hazard Type:

Multi-Hazard (MH)

Category:

Critical Facilities Replacement/Retrofit

Priority:

2 of 3

NHMP Plan No. and Mitigation Initiative R-SH-1: Install City-owned natural gas/propane generator at City Hall.

Rationale: It is important that City operations are not significantly disrupted during power outages. The City Hall is the Emergency Operations Center (EOC) during emergencies and disasters. It also can provide shelter if other shelters are overflowing; however, there is no way to use the EOC if there is an electrical outage. This initiative would provide power by generator and install a City-owned natural gas generator at City Hall. This funding would provide for the electrical panels, plumbing, slab, and enclosure for the generator.

Relates to Plan Goal(s):

3, 4, and 5

Relates to Plan Objective(s):

Implementor:

City of Montesano Public Works

Estimated Cost:

\$12,500

Time Period:

2007 to 2009

Funding Source:

Grant (Hazard Mitigation Grant Program)

Implementation Status:

To be implemented when funds become available.

Governmental Entity: City of Montesano
Hazard Type: Flood Hazard (FH)
Category: Hazard Damage Reduction
Priority: 2 of 3

NHMP Plan No. and Mitigation Initiative: Construct 750,000 gallon Reservoir on City Property.

Rationale: The existing reservoir is not seismically designed and is susceptible to earthquake and landslide damage. As the only impoundment of potable water for the city this poses a high risk. A second reservoir would protect the Cities ability to sustain the city residents in times of earthquake and provide fire flow.

Relates to Plan Goal(s): 5, 7

Relates to Plan Objective(s):

Implementor: City of Montesano Public Works

Estimated Cost: \$3,000,000

Time Period: 2007 to 2008

Funding Source: Grants (Transportation Improvement Board, Natural Hazards Mitigation Grant Program)

Source and Date: City of Montesano Comprehensive Plan, Capital Facilities Chapter, 2007 Final Draft

Implementation Status: To be implemented when funding becomes available.

Governmental Entity: City of Montesano
Hazard Type: Flood Hazard (FH)
Category: Hazard Damage Reduction
Priority: 1 of 3

NHMP Plan No. and Mitigation Initiative: Long term Stabilization of Wynoochee River Bank

Rationale: The Wynoochee River has eroded the river bank endangering the Cities Sewage treatment plant and holding lagoons. Further encroachment by the river will cause the lagoons to fail and dump sewage into the Wynoochee River.

Relates to Plan Goal(s): 5, 7

Relates to Plan Objective(s):

Implementor: City of Montesano Public Works

Estimated Cost: \$3,000,000

Time Period: 2007 to 2008

Funding Source: Grants (Transportation Improvement Board, Natural Hazards Mitigation Grant Program)

Source and Date: City of Montesano Comprehensive Plan, Capital Facilities Chapter, 2007 Final Draft

Implementation Status: To be implemented when funding becomes available.

Vicinity Map of Montesano

Project site map

**City of Montesano
Workshop
January 11, 2005
6:00 p.m.**

Presentation on Natural Hazards Mitigation Plan

**Regular City Council Meeting
January 11, 2005
7:00 p.m.**

Next Ordinance No. 522
Next Resolution No. 470

1. Call to Order
2. Pledge Allegiance
3. Roll Call
4. Approval of Agenda
5. Consent Agenda
 - a. Approval of December 28, 2004, Public Hearing
 - b. Approval of December 28, 2004, Regular Meeting Minutes
 - c. Approval of Claim Warrants/Payroll
6. Public Comment (on any issue **NOT** on printed agenda)
7. Reports
8. Old Business
 - a. Street Standards Sections
 - b. Compression Brake Ordinance
 - c. Discussion on Policy and Procedure Manual
9. New Business
 - a. Rochester Street – Street Light Request
10. Executive Session
11. Adjournment