

Whatcom County Sheriff's Office Severe Storm Action Plan



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Table of Contents

1.	INTRODUCTION.....	1-3
2.	OVERVIEW	2-4
2.1.	PURPOSE	2-4
2.2.	MISSION.....	2-4
2.3.	SCOPE	2-4
2.4.	PLANNING REGION	2-4
3.	BACKGROUND.....	3-6
3.1.	VULNERABILITY ASSESSMENT.....	3-6
3.2.	MITIGATION STRATEGIES.....	3-6
4.	KEY STAKEHOLDERS	4-8
5.	ALIGNMENT WITH OTHER PLANS.....	5-1
5.1.	NATIONAL RESPONSE FRAMEWORK	5-1
5.2.	WASHINGTON STATE COMPREHENSIVE EMERGENCY MANAGEMENT PLAN	5-1
5.3.	WHATCOM COUNTY NATURAL HAZARDS MITIGATION PLAN.....	5-1
5.4.	WHATCOM COUNTY DISASTER DEBRIS MANAGEMENT PLAN	5-1
5.5.	WHATCOM COUNTY COMPREHENSIVE EMERGENCY MANAGEMENT PLAN	5-2
5.6.	PLAN MAINTENANCE AND UPDATE	5-2
6.	CONCEPT OF OPERATIONS	6-3
7.	REPORTING OF SEVERE STORM CONDITIONS.....	7-3
7.1.	SEVERE STORM INFORMATION SOURCES	7-3
7.1.1.	<i>National Weather Service</i>	<i>7-3</i>
7.1.2.	<i>Environment and Climate Change Canada (Environment Canada)</i>	<i>7-3</i>
7.1.3.	<i>WeatherNet</i>	<i>7-3</i>
7.1.4.	<i>Visual Observation from the Public.....</i>	<i>7-3</i>
8.	WATCH / WARNING LEVEL ACTIVITIES	8-4
8.1.	WHATCOM COUNTY WATCH / WARNING LEVEL ACTIVITIES.....	8-4
8.1.1.	<i>Notification from National Weather Service of confirmed severe storm conditions</i>	<i>8-4</i>
8.1.2.	<i>Notification of unconfirmed impacts of severe storms (Not Official sources)</i>	<i>8-4</i>
8.1.3.	<i>Confirmed activity impacts of severe storms (Not Official sources)</i>	<i>8-4</i>
9.	EVENT / RESPONSE ACTIONS	9-6
9.1.	AGENCY ACTIONS BASED ON EVENT / RESPONSE	9-6
9.1.1.	<i>Whatcom County Sheriff’s Office Division of Emergency Management Duty Officer.....</i>	<i>9-6</i>
9.1.2.	<i>Whatcom County Sheriff’s Office Division of Emergency Management</i>	<i>9-6</i>
9.1.3.	<i>Whatcom County Sheriff’s Office.....</i>	<i>9-7</i>
9.1.4.	<i>Whatcom County Information Services</i>	<i>9-7</i>
9.1.5.	<i>Whatcom County Public Works.....</i>	<i>9-7</i>
9.1.6.	<i>National Weather Service (NWS).....</i>	<i>9-8</i>
9.1.7.	<i>Whatcom County Sheriff’s Office Division of Emergency Management.....</i>	<i>9-8</i>



1. Introduction

Whatcom County, Washington has prepared this *Comprehensive Emergency Management Plan Action Plan: Severe Storm Action Plan*, which sets forth the general policies and procedures for to protect and ensure public safety, reduce damage to property, and avoid and limit economic disruption before, during, and after severe storm.

This plan complies with existing federal, state and local statutes and is consistent with the capabilities and resources of the various agencies and organizations involved. All individuals, agencies, and organizations assuming responsibility under this plan have developed and shall continue to improve upon detailed procedures necessary to carry out their respective responsibilities, describing how response and recovery functions shall be accomplished. In addition, this plan shall be revised and updated, and related training and exercise programs undertaken, as indicated herein.

The term “Whatcom County” as used in this plan encompasses the entire geographical boundary including the 7 incorporated cities, the Lummi Nation and the Nooksack Indian Tribe.

The Whatcom County Severe Storm Action Plan is a hazard specific plan that establishes a comprehensive framework for management of emergency events associated with severe storms including wind storms, ice storms, snow storms and flooding.

This plan assigns roles and delegates responsibilities to Whatcom County departments and other agencies and organizations that will provide support during activation of this action plan. Agreement to this plan represents a major commitment by the leadership of these agencies and organizations to:

- ✓ Support the Whatcom County Severe Storm Action Plan concept of operations and carry out the roles and responsibilities assigned in the plan to ensure the orderly, timely delivery of assistance;
- ✓ Make maximum use of existing authorities, organizations, resources, systems, and programs to reduce emergency relief costs;
- ✓ Form partnerships with counterparts in municipal, adjacent county, Canadian, and state emergency management offices, voluntary emergency relief organizations, and the private sector to take advantage of all existing resources; and
- ✓ Continue to develop and refine planning, exercise, and training activities specific to assigned roles and responsibilities and consistent with plan development and maintenance procedures identified herein to maintain necessary operational capabilities.



2. OVERVIEW

Whatcom County is subject to a unique set of severe storms that can occur at any time during the year. Severe storms regularly occur in Whatcom County affecting residents, visitors, homes, schools, and businesses. Therefore, it is prudent for Whatcom County to create an action plan that explains how the county responds to severe storms.

2.1. Purpose

The purpose of this plan is to identify actions Whatcom County takes when severe storms occur.

2.2. Mission

The Plan provides direction to facilitate and coordinate the management of actions with regards to a severe storm.

- Mitigate against potential threats to lives, health, safety, welfare, and economic and environmental well-being of the impacted area;
- Identify threats of significant damage to improved public or private property
- Identify and address planning and staff training needs prior to a severe storm;
- Expedite recovery efforts in the impacted area

2.3. Scope

The Plan is intended to address the response and recovery needs of Whatcom County during severe storms. The plan is structured to allow for collaborative and cooperative work between agencies of the federal government, state, county, its cities, and the reservations.

This Severe Storm Action Plan is an important element in a coordinated effort to enhance Whatcom Counties and our region's preparedness for emergencies and disasters. The plan embraces the philosophy and vision of disaster resilience and should empower Whatcom County local communities to minimize the impacts of severe storms on people, property, the environment, as well as the economy of the Pacific Northwest.

2.4. Planning Region

Whatcom County, the northwestern most county of Washington State, comprises an area of 2,120 square miles. It is bordered to the north by Canada and to the west by the Strait of Georgia and the Rosario Strait containing Island County. The eastern half of Whatcom County is composed of the North Cascades Mountain range occupying roughly two-thirds of the entire County, which is controlled by the United States Forest Service and the National Parks Service. No Whatcom County roads that originate in the western half of the County



connect to the eastern half; towns in eastern Whatcom County can only be accessed by driving more than 60 miles through Skagit County to the south. The 2016 United States Census Bureau estimated the population of Whatcom County at 216,800 residents. Only 4.5% of the land area is incorporated, while the majority is unincorporated. An unusual characteristic of Whatcom County is that not all of its populated areas are contiguous with the mainland part of the county; these areas include Point Roberts and Lummi Island. Whatcom County includes lowland river-deltas of the Fraser/Nooksack systems, Mt. Baker Foothills, more than 1,325 miles of river streams, 134 miles of coastline, and 245 lakes.

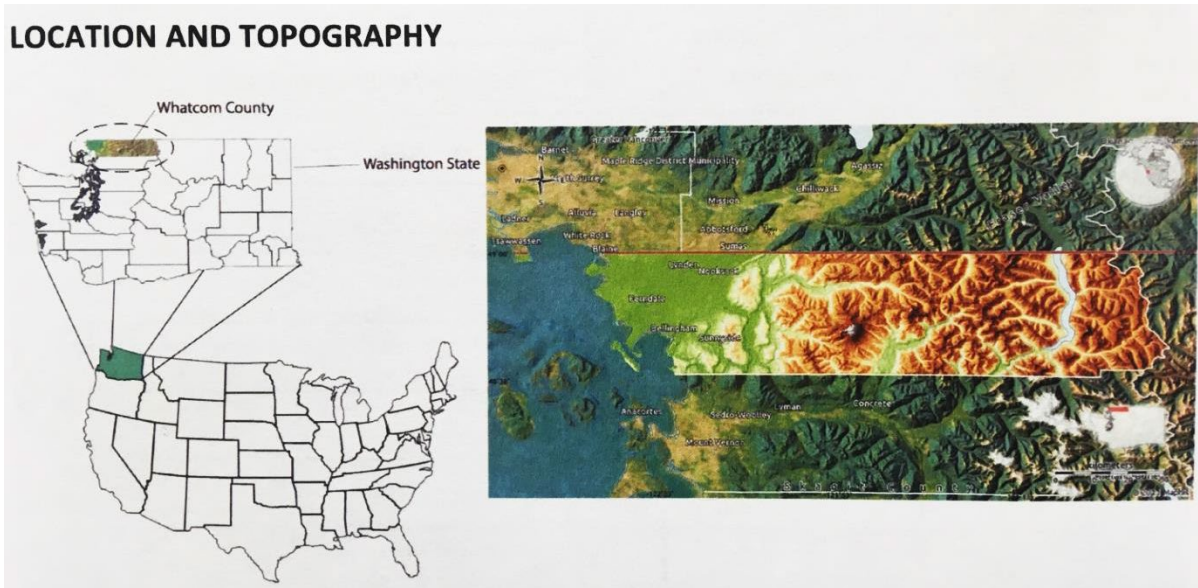


Figure 1 - Whatcom County Planning Region



3. Background

Severe storm weather comes in many forms, the most common for Whatcom County being heavy rain and wind during the winter months. Whatcom County experiences blizzards periodically, though not as commonly as unfrozen or partially frozen precipitation. Three types of winds primarily affect Whatcom County: westerlies, easterlies and northeasters. Westerly wind storms originate from the Pacific Ocean and are caused by pressure differences between deep oceanic storms and adjacent upland areas. This wind pattern is typical for fall and winter. Easterly winds are caused by high pressure systems in eastern Washington, causing strong winds to form west of the Cascade mountain range that occur in late summer and early fall. Northeasterly winds are caused by arctic air masses moving down the Fraser River valley.

3.1. VULNERABILITY ASSESSMENT

Whatcom County is highly vulnerable to severe storms. According to the Washington State Emergency Management Department, Whatcom County lies within an area of Washington that is most vulnerable to high winds.¹ The Washington State Hazard Mitigation Plan identifies Western Washington to be most susceptible to inclement weather during the following time periods²:

1. Primary flood season – November through February
2. Windstorm season – October through March
3. Snow season – November through mid-March

Severe storms can result in costly hazards, due primarily to their frequent occurrence and ability to disrupt lifelines such as arteries of transportation and above-ground electric lines. Because the worst storms typically occur during winter, loss of power/heating can be dangerous, especially for homes with children or elderly residents. Severe weather also poses additional risks resulting from tree fall to both structures and humans.

Whatcom County's location and geography leave it susceptible to heavy storm activity. Coastal systems move in relatively easily and release most of their moisture, being blocked by the Cascade Mountain Range. Multiple marinas along the shoreline of Whatcom County are vulnerable to storm action, and represent a high loss potential for the area. The County's limited routes of transportation mean that inclement or severe weather can slow both intrastate and interstate commerce.

3.2. MITIGATION STRATEGIES

Due to technological advances in meteorology, storm events can be more readily predicted. Unlike most other hazards, severe storms can typically be predicted days in advance. This gives the

¹ Accessed on July 9, 2014 on the Emergency Management Department website at: <http://www.emd.wa.gov/plans/documents/SevereStormNov2007Tab5.7.pdf>

² Washington Military Department Emergency Management Division, 2014. *Washington State Hazard Mitigation Plan*. Approved by the Federal Emergency Management Agency Region 10 Office 2014.



opportunity to notify potentially affected Whatcom County residents prior to the event. However, jurisdictions are still vulnerable to storm events that occur in Whatcom County.

The Whatcom County DEM website contains real-time data for severe storm events and other hazards and can be accessed at www.whatcomready.org. The website also contains educational tools to inform residents of potential hazards, such as severe storms, and how to prepare for them.

Whatcom County DEM also has been awarded designation as “Storm Ready”, by the National Oceanic and Atmospheric Administration National Weather Service for its, monitoring, communication, and warning efforts.



4. Key Stakeholders

Given its physical location and potential for impact to a larger area than just Whatcom County, there are a number of key stakeholders who are considered to develop this response plan and the development, delivery, and evaluation of training and exercising of this plan. The group is made up of members from each jurisdiction, agency, and/or private business and provides subject matter expertise for plan updates.

United States Federal

- Bonneville Power Administration
- Bureau of Indian Affairs
- Federal Emergency Management Agency
- Fish & Wildlife Service
- National Weather Service
- United States Army Corps of Engineers
- United States Customs and Border Protection
- United States Environmental Protection Agency
- United States Forest Service
- United States Geological Survey
- United States Park Service

Native American Tribes

- Samish Nation
- Sauk-Suiattle Tribe
- Upper Skagit Tribe
- Lummi Nation
- Nooksack Tribe
- Semiahmoo First Nation (British Columbia)

Washington State

Washington Emergency Management Division,
Military Department

Washington Department of Natural Resources

Washington Department of Transportation

Washington State Patrol

Washington Department of Ecology

Washington Department of Fish and Wildlife

Universities

University of Washington Pacific Northwest
Seismic Network

Western Washington University

County, and Local Government

- Whatcom County Sheriff's Office

- Whatcom County Sheriff's Office Division of Emergency Management
- Whatcom County Fire District #14
- Whatcom County Fire District #1
- Whatcom County Fire District #16
- Whatcom County Fire District #19
- Whatcom County Public Utility District #1
- Mount Baker School District
- Nooksack Valley School District
- City of Bellingham Office of Emergency Management
- Skagit County Emergency Management
- City of Seattle - Seattle City Light
- Island County Emergency Management
- San Juan County Emergency Management
- Chelan County Emergency Management
- Okanogan County Emergency Management

Private Sector

- Mt Baker Ski Area
- Trans Mountain Pipeline
- Bellingham International Airport
- Williams Pipeline
- Cascade Natural Gas
- BP Pipelines
- Puget Sound Energy

Canada

- Public Safety Canada
- Emergency Planning Canada
- Emergency Management British Columbia
- Abbotsford British Columbia Emergency Management
- Canadian Border Services Agency
- Royal Canadian Mounted Police
- Natural Resources Canada/Geological Survey of Canada



5. Alignment with Other Plans

5.1. National Response Framework

The National Response Framework (NRF) provides the concept of operations for federal response to events by listing the responsibilities for each federal agency and outlining how federal agencies will interact with other public-sector agencies at all levels, the private sector, and nongovernmental organizations (NGOs). The NRF also emphasizes the importance of personal preparedness by individuals and households. This plan aligns with the Long-Term Recovery Annex of the Department of Homeland Security's (DHS) NRF by providing for coordination of disaster debris operations through all levels of government using the National Incident Management System (NIMS) organization structure.

5.2. Washington State Comprehensive Emergency Management Plan

The State Comprehensive Emergency Management Plan (CEMP) provides the concept of operations for state agency response to disaster events by listing the responsibilities for each agency and outlining how state agencies will interact with each other and other regional and local public-sector agencies. This plan aligns with the CEMP ESF #3: Public Works and Engineering Annex, and ESF #14: Long-Term Recovery Annex, by providing operational instructions to organize disaster debris operations at the local level.

5.3. Whatcom County Natural Hazards Mitigation Plan

The Whatcom County Natural Hazards Mitigation Plan identifies specific hazards, including earthquakes, volcano, and severe weather, that may cause significant increases in debris and damage to necessary routes for debris transportation. This plan acts to take into account all hazards as well as prepare for the worst case scenario. This plan should be integrated into the mitigation plan by highlighting resources and a clear plan for debris pick up after a natural hazard.

5.4. Whatcom County Disaster Debris Management Plan

This Disaster Debris Management Plan is written in coordination with FEMA's Debris Management Guidelines, including the June 28, 2013 Pilot Project Program. The plan is an Annex to the Whatcom County Comprehensive Emergency Management Plan.



5.5. Whatcom County Comprehensive Emergency Management Plan

The Whatcom County Comprehensive Emergency Management Plan provides the general policies and procedures for County departments and supporting agencies and organizations to protect and ensure public safety, reduce damage to property, and avoid and limit economic disruption before, during, and after an emergency.

5.6. Plan Maintenance and Update

The Plan was assembled by Whatcom County Sheriff's Office Division of Emergency Management. The Whatcom County Sheriff's Office is the Plan Manager and responsible for the ongoing maintenance of the Plan.

In the event of a revision outside of the normal review period, it is the responsibility of the Plan Manager to ensure that revised information is distributed. During the plan review process, specific attention will be directed towards key plan components, including specific assigned roles and responsibilities, reviewing and updating contracts, contact information for internal staff and external resources, and the location and status of identified Debris Management Sites.



6. CONCEPT of OPERATIONS

This plan is based on the premise that each agency with responsibilities for preparedness, response, or recovery activities has, or will develop, individual operations plans or procedures that cover its organization and emergency operations. This plan establishes a mechanism for communicating among and coordinating with the agencies, public or private, impacted by, responding to, or recovering from a severe storm.

7. Reporting of Severe Storm Conditions

7.1. Severe Storm Information Sources

It is highly likely Whatcom County will receive early warning about severe storms. Sources of information for activity on Mount Baker include:

7.1.1. *National Weather Service*

- ✓ The National Weather Service has the scientific lead for severe weather warnings in Washington State.
- ✓ The National Weather Service distributes the watches and warnings using a variety of products available to the public as well as communication with the Whatcom County Sheriff's Office Division of Emergency Management.

7.1.2. *Environment and Climate Change Canada (Environment Canada)*

- ✓ Environment Canada has the scientific lead for severe weather warnings in Canada and British Columbia.
- ✓ Environment Canada distributes the watches and warnings using a variety of products available to the public as well as communication with the Whatcom County Sheriff's Office Division of Emergency Management.

7.1.3. *WeatherNet*

- ✓ WeatherNet is a private weather forecasting service hired by Whatcom County due to the unique nature of Whatcom Counties weather and who provide detailed forecasts for specific microclimates of Whatcom County.
- ✓ WeatherNet distributes reports twice a day using a variety of products available to Whatcom County Public Works as well as communication with the Whatcom County Sheriff's Office Division of Emergency Management.

7.1.4. *Visual Observation from the Public*

- ✓ The severe weather in our County on a broader scale can affect several million people who are frequently the source of specific impacts first.



8. Watch / Warning Level Activities

A normal level of activity generally requires no special activities by stakeholders in Whatcom County beyond the usual planning activities. However, the National Weather Service and Environment Canada do issue unusual but nonthreatening events or to an increase in interest by the public or media. For situational awareness, every effort will be made to alert the entities listed in this plan prior to the issuance of statements. The information sharing may occur through e-mail and / or a conference call.

8.1. Whatcom County Watch / Warning Level Activities

8.1.1. *Notification from National Weather Service of confirmed severe storm conditions*

The Whatcom County Sheriff's Office Division of Emergency Management Duty Officer will take the following actions when notified of impending or potential severe storm conditions:

- ✓ Create Incident in TRG Software.
- ✓ Obtain an Incident Number from the State Emergency Operations Officer (if appropriate).
- ✓ Email notifications will be made to:
 - Whatcom County Sheriff's Office Duty Staff Officer
 - Whatcom County Fire Chiefs
 - Whatcom County Law Enforcement
 - Whatcom County Public Works Agencies
 - Whatcom County School Districts
 - Cherry Point Industries
 - Emergency Management BC
 - Abbotsford Fire Department
 - Washington State Duty Officer
- ✓ Consider posting on social media with approval of the Deputy Director or Sheriff.

8.1.2. *Notification of unconfirmed impacts of severe storms (Not Official sources)*

The Whatcom County Sheriff's Office Division of Emergency Management Duty Officer will take the following actions when notified of unconfirmed unusual activity:

- ✓ Log all entries in 214A
- ✓ Notifications will be made regarding unconfirmed activity to:
 - Whatcom County Sheriff's Office Duty Staff Officer
 - Appropriate County agency to consider field verification of unconfirmed activity.

8.1.3. *Confirmed activity impacts of severe storms (Not Official sources)*

The Whatcom County Sheriff's Office Division of Emergency Management Duty Officer will take the following actions when notified of confirmed unusual activity:

- ✓ Create Incident in TRG Software if not already done.



- ✓ Obtain an Incident Number from the State Emergency Operations Officer.
- ✓ Telephone or text notifications will be made to the following.
 - Whatcom County Sheriff's Office Duty Staff Officer
 - Washington State Duty Officer
 - Appropriate County Agency
- ✓ Email notifications will be made to the following.
 - Whatcom County Fire Chiefs
 - Whatcom County Law Enforcement
 - Whatcom County Public Works Agencies
 - Emergency Management BC
 - Abbotsford Fire Department
- ✓ Consider posting on social media or issuing a press release with approval of the Deputy Director or Sheriff.



9. Event / Response Actions

9.1. Agency Actions Based on Event / Response

9.1.1. *Whatcom County Sheriff's Office Division of Emergency Management Duty Officer*

- ✓ As appropriate obtain an Incident Number from the State Emergency Operations Officer if not already in place.
- ✓ Create or update Incident in TRG Software.
- ✓ Text and Email notifications are to be made by the Duty Officer when notified of a Warning to the following.
 - Whatcom County Sheriff's Office Duty Staff Officer
 - Whatcom County Fire Chiefs
 - Whatcom County Law Enforcement
 - Whatcom County Public Works Agencies
 - Whatcom County Elected Officials
 - Whatcom County School Districts
 - Local Washington State Agencies
 - Local US Federal Agencies
 - Tribes and Tribal Nations
 - Cherry Point Industries
 - Cross Border Working Group
 - Emergency Management BC
 - Abbotsford Fire Department
 - Washington State Duty Officer

9.1.2. *Whatcom County Sheriff's Office Division of Emergency Management*

- ✓ Issue regular Public Safety Officials update briefings.
- ✓ Consider changing to Level II activation of the Whatcom County Comprehensive Emergency Management Plan and notify all agencies listed above of status of Emergency Operations Center.
- ✓ Evaluate potential impacts on Private Sector (e.g. Mount Baker Ski Resort, etc.)
- ✓ Evaluate potential impacts on Tribes (e.g. fishing, etc.)
- ✓ Evaluate potential impacts on Schools (e.g. Mt Baker School District, Nooksack Valley School District, etc.)
- ✓ Evaluate potential impacts on Agriculture/Farming/Dairy, etc.
- ✓ Prepare to assume role of incident command and coordinate command of field operations.
- ✓ Assign appropriate personnel to staff a Planning Section
- ✓ Issue periodic Public Safety Officials Briefings as appropriate.
- ✓ Establish a separate section for the Incident Hotline and update daily.



- ✓ Issue Press Release and post to social media with approval of the Deputy Director or Sheriff.
- ✓ Consider activation of the Call Center
- ✓ Request Whatcom County Search and Rescue to stand by.
- ✓ Request Whatcom County Sheriff's Office Auxiliary Communications Service to stand by and to develop an ICS 205 plan.
- ✓ Evaluate situation to determine whether the Whatcom County emergency operations center (EOC) should be activated.
- ✓ Survey and poll shelter partners for capability and capacity
- ✓ Obtain Whatcom County Proclamation of Emergency if appropriate
- ✓ Notify via email Incident Management Team of potential for activation.
- ✓ Review actions taken to ensure that all organizations are engaged, activated or in process.
- ✓ Create, implement and monitor Incident Action Plan(s) for each defined operational period.
- ✓ Consider implementation for 24 Hour Level III activation of Whatcom County Emergency Operations Center
- ✓ Activate appropriate levels of the Whatcom County Incident Management Team based on conditions.
- ✓ Broadcast coordinated emergency public information.
- ✓ Assign and deploy operational staff to field command posts, as required.

9.1.3. *Whatcom County Sheriff's Office*

- ✓ Upon request, assign a dedicated liaison to the Whatcom County Sheriff's Office Division of Emergency Management to coordinate law enforcement resources operating in Whatcom County for potential response to Mount Baker.
- ✓ The Whatcom County Sheriff, or designee, will serve as the Whatcom County Incident Commander.
- ✓ Assign the Whatcom County Sheriff's Office Public Information Officer to the Whatcom County Sheriff's Office Division of Emergency Management to serve as the lead for Whatcom County Information and to coordinate with other Information Officers.
- ✓ Create News Flash and NotifyMe, Public Signup on AlertSense on Whatcom County Website

9.1.4. *Whatcom County Information Services*

- ✓ Upon request assign a GIS specialist to the Planning Section.
- ✓ Upon request assign a web application specialist to the Planning Section.

9.1.5. *Whatcom County Public Works*

- ✓ Evaluate potential impacts on utilities, roads, airports, US/CA, etc.)
- ✓ Prepare to have road crews on alert
- ✓ Deploy road crews



- ✓ Public Works deploy “road closed” and other appropriate signage or reader boards.

9.1.6. *National Weather Service (NWS)*

- ✓ Mobilize all necessary personnel
- ✓ Assign National Weather Service forecaster to support Whatcom County Emergency Operations Center.
- ✓ Issue advisories, watches / warnings and updates.

9.1.7. *Whatcom County Sheriff's Office Division of Emergency Management*

- ✓ Review actions taken to ensure that all organizations are engaged, activated or in process.
- ✓ Create, implement and monitor Incident Action Plan(s) for each defined operational period.
- ✓ Consider implementation for 24 Hour Level III activation of Whatcom County Emergency Operations Center
- ✓ Activate appropriate levels of the Whatcom County Incident Management Team based on conditions.
- ✓ Broadcast coordinated emergency public information.
- ✓ Assign and deploy operational staff to field command posts, as required.