



# **Port Ludlow Neighborhood Emergency Plan (NEP)**

**Approved  
12-3-2020  
Updated  
3-15-2021**

## Table of Contents

<a href="#"><u>OBJECTIVE</u></a> .....	3
<a href="#"><u>BACKGROUND</u></a> .....	3
<a href="#"><u>PURPOSE</u></a> .....	3
<a href="#"><u>ASSUMPTIONS</u></a> .....	3
<a href="#"><u>REALITIES</u></a> .....	4
<a href="#"><u>PORT LUDLOW EMERGENCY TEAM EXPECTATIONS</u></a> .....	4
<a href="#"><u>PORT LUDLOW EMERGENCY MANAGEMENT TEAM</u></a> .....	5
<a href="#"><u>RESOURCES</u></a> .....	8
<a href="#"><u>COMMUNICATIONS PRIORITIES</u></a> .....	10
<a href="#"><u>GENERAL APPENDICES</u></a> .....	11
<a href="#"><u>APPENDIX A - BLOCK CAPTAIN ORIENTATION OUTLINE</u></a> .....	12
<a href="#"><u>APPENDIX B —RADIO COMMUNICATIONS PLAN</u></a> .....	13
<a href="#"><u>APPENDIX C - COMMUNITY MAP-NORTH BAY</u></a> .....	23
<a href="#"><u>APPENDIX C - COMMUNITY MAP-SOUTH BAY</u></a> .....	24
<a href="#"><u>APPENDIX D - HELP – OK SIGNS</u></a> .....	25
<a href="#"><u>APPENDIX E - INDIVIDUAL QUESTIONNAIRE</u></a> .....	27
<a href="#"><u>APPENDIX F - COMMUNITY SKILLS / RESOURCES</u></a> .....	28
<a href="#"><u>APPENDIX G - SHELTER IN PLACE PLAN</u></a> .....	29
<a href="#"><u>APPENDIX H - EVACUATION PLAN</u></a> .....	30
<a href="#"><u>APPENDIX I - RECOVERY PLAN</u></a> .....	31
<a href="#"><u>APPENDIX J – ACRYONYMS</u></a> .....	33
<a href="#"><u>HAZARD SPECIFIC PROCEDURES</u></a> .....	36
<a href="#"><u>ANNEX AA EARTHQUAKES</u></a> .....	37
<a href="#"><u>ANNEX BB LANDSLIDES</u></a> .....	40
<a href="#"><u>ANNEX CC FLOODING</u></a> .....	42
<a href="#"><u>ANNEX DD SEVERE WEATHER</u></a> .....	45
<a href="#"><u>ANNEX EE TSUNAMI</u></a> .....	48
<a href="#"><u>ANNEX FF WILDFIRES</u></a> .....	51
<a href="#"><u>ANNEX GG TERRORISM</u></a> .....	54
<a href="#"><u>ANNEX HH EPIDEMIC/PANDEMIC</u></a> .....	56

### OBJECTIVE

The objective of the Port Ludlow Neighborhood Emergency Plan (NEP) is to document how the Port Ludlow Village Council (PLVC) Emergency Management Committee will provide guidance and support the Port Ludlow community to prepare and respond to the challenges of a major emergency.

### BACKGROUND

Community-based preparedness planning allows for preparation and response to anticipated disruptions and potential hazards following an emergency. Individuals need to prepare their homes and families to cope during that critical period. Through pre-event planning, neighborhoods shall be organized to work together to help reduce injuries, loss of lives, and property damage. Neighborhood preparedness enhances the ability of individuals and neighborhoods to reduce their emergency needs and to manage their existing resources until professional assistance becomes available. The Emergency Management Committee receives financial support and guidance from the PLVC to develop, maintain, operate and communicate the Neighborhood Emergency Plan to the community.

### PURPOSE

This planning guide provides the community of Port Ludlow with an outline of what to expect from the emergency response agencies during the initial recovery period following a major incident, and how we can come together to fast-track outside assistance and hasten restoration of critical services.

### ASSUMPTIONS

These likely scenarios are the root conditions that might require implementation of the Port Ludlow Neighborhood Emergency Plan (NEP). Although they may not all occur, or may occur in varying degrees, plans are based on these fundamental assumptions:

- Normal emergency response resources may be initially overwhelmed or rendered inoperable.
- Communications methods may be disturbed, destroyed, or overloaded. This includes conventional telephones, cellular phones, mobile devices, text capabilities and internet service.
- Expected lifeline services (electric power, water, or sewer/septic systems) may be damaged or destroyed.
- Transportation routes may be impassable due to roadway or bridge damage, downed trees or powerlines, vehicle accidents, or smoke.
- Homes may be uninhabitable due to damage. This may be exacerbated by severe weather.
- Individuals may be injured or killed.

- Medically fragile persons may experience loss of the systems or care necessary for their survival.
- Conditions may result in loss or inaccessibility of essential goods and services, including food, water, fuel, personal medications, and pharmaceuticals.
- Evacuation of all or a portion of a neighborhood may be required to escape an impending hazard.

### REALITIES

This chain of events is generally how the emergency response agencies will deal with a sudden-onset disaster. Remember that in ANY plan there are conditions that prevent, delay, or impair operations.

- Emergency services personnel will take immediate protective actions for themselves
- Rapid assessment of operational status (what is damaged and who is available for duty)
- Automatic implementation of “windshield survey” (fire department personnel and neighborhood block captains will drive a pre-determined route to assess nature and scope of damage). **Their initial assignment is to determine the “big picture” and they may not be able to deal initially with individual problems.**
- Activation of the Jefferson County Department of Emergency Management (DEM) Emergency Operations Center (EOC) for overall coordination of response.
- Activation of the North Bay and South Bay Communication Centers if accessible.
- If North or South Bay Centers are not available, activate Alternate Sites for each

The purpose of these activations is to collect and coordinate information about the situation and to be a conduit to communicate what is taking place back to the EOC.

### PORT LUDLOW EMERGENCY TEAM EXPECTATIONS

**RESILIENCE:** Resilience is a process of positive adaptation before, during and after adversity, highlighting the interconnections between preparedness, relief, and recovery to build longer-term, sustainable outcomes.

- **EDUCATE:** Neighborhood block captains use the Map Your Neighborhood (MYN) process to develop a roster of residents identifying special skills and any that have special needs, physical limitations, or disabilities. In addition, they distribute preparedness information which includes encouraging each resident to have their own preparedness plan, having a supply of food, water, and other essentials to **subsist independently for at least thirty (30) days.**
- **COMMUNICATE:** A Family Radio Service (FRS) radio communication system connects separate Port Ludlow neighborhoods with the South and North Bay

Communications Centers located at the Bay and Beach Clubs. In the event of a disaster, the Captains will survey their neighborhood and relay critical needs to the Communication Centers, which also have an FRS Base radio station. The Communication Centers will consolidate the information and in turn send appropriate information to Jefferson County DEM or Port Ludlow Fire and Rescue, District #3. FRS, is a private, two-way, short-distance voice and data communications service for facilitating family and small group activities.

- **SELF-HELP:** After communicating the situation in their neighborhoods, the Captains will organize uninjured neighbors to provide basic help to others who are in need. In addition, there are certified Community Emergency Response Team (CERT) members throughout the community who are trained to provide more in-depth assistance in a disaster. The skills which are taught in the CERT training include the proper approach to assessment of damaged buildings, management of gas leaks, movement of injured people and early triage.

#### PORT LUDLOW EMERGENCY MANAGEMENT TEAM

**Emergency Management Committee Chairperson** has overall responsibility for developing and maintaining the Port Ludlow NEP in coordination with the Jefferson County Department of Emergency Management (DEM), Jefferson County Emergency Operations Center (EOC), and the Fire Chief of Port Ludlow Fire & Rescue (PLF&R) of District #3. The Port Ludlow Emergency Management Team (PLVC-EM) Chairperson has the leadership role in the PLVC-EM Team.

**Neighborhood Operations Center (NOC) Coordinator** will be responsible for manning, training, and operation of the NOC center when this facility is implemented in the future. The NOC Coordinator will develop and maintain the Communications Plan for emergency operations. During an emergency, the NOC Coordinator will determine if Community Emergency Response Team (CERT) response is required in any area after assessment reports are received from their neighborhood Block Captains. The NOC will have a listing of all CERT qualified residents and will activate the CERT response by notifying the Jefferson County Department of Emergency Management Director, who is responsible to formally activate a CERT team. If this is not possible, then the NOC will contact these individuals by whatever means possible. All Block Captains and individual community members are encouraged to complete the Jefferson County CERT training, provided by community members who have successfully completed formal training from the Federal Emergency Management Agency (FEMA) Emergency Management Institute. Until the NOC is operational, the South Bay Center and Coordinator will act as NOC.

**North and South Bay Emergency Management Coordinators** are responsible for selecting, training, and leading the teams of North Bay and South Bay neighborhood Block Captains. In a disaster situation, they will locate to their respective Communications Centers, man the radios, record the reports from the neighborhood Block Captains and relay appropriate information to the appropriate entities within Port Ludlow or the County.

**Block Captains** are responsible for compiling and maintaining an inventory of residents in their neighborhoods and businesses. In the event of a disaster, after securing their own home and family, **and if safe to do so**, Block Captains are expected to walk through their neighborhood to assess damage and determine needs. They will attempt to contact residents of every home (look for **GREEN OK** sign or **RED HELP** signs) for information during this assessment. They will then communicate their assessment of urgent needs to their Communications Center. They may then help with easy tasks such as opening garage doors or shutting down utilities, if required.

Assessment and neighbor-to-neighbor engagement are characterized by:

- Sensitivity to the willingness of the person or family to be engaged and accept assistance
- Sensitivity to differences in presentation of needs over different phases of recovery
- Respect for the person in a non-threatening manner, about his/her autonomy, culture
- Flexibility and commitment to confidentiality

**Individuals** are responsible for evaluating and securing their homes and families using the 7-step guide in the 'Think Plan Do' brochure:

- Protect your head, feet, and hands
- Take care of your loved ones
- Shut off propane at your home if necessary
- Shut off water at the house main valve if necessary
- Shut off electricity at the circuit breaker box if necessary
- Place the attached "Help or OK" sign on your garage door where it will be visible.
- Check on your neighbors

**The Community Emergency Response Team (CERT)** educates people about disaster preparedness for hazards that may impact their area. CERT volunteers are trained by the DEM provides peer-to-peer training in basic disaster response skills, such as fire safety, light search and rescue, team organization, first aid, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood following an event when professional responders are not immediately available to help.

**Port Ludlow Amateur Radio Personnel** will provide outside communications in coordination with Amateur Radio Emergency Service (ARES) and Radio Amateur Communications Emergency

Service (RACES) groups, which are volunteers assigned by Emergency Radio Communications (VECOM) through the Jefferson County DEM. They will operate the South Bay Communication Center's Ham radio that will communicate from the Bay Club to Jefferson County DEM or the Port Ludlow Fire Station.

Amateur radio operators are community volunteers and must be licensed with one of three license classes regulated by the Federal Communications Commission (FCC). The class levels are: Level 1 – Technician, Level 2 – General, and Level 3 – Amateur Extra. The higher the class of license, the more frequencies are available to the operator and the greater range of responsibilities they may exercise. A minimum of Technician class license is required to operate the VHF/UHF radio systems at the South Bay Comm Center or the Port Ludlow Fire & Rescue station. A non-licensed individual may only operate the VHF/UHF radios under the supervision of a licensed operator. In a life-threatening situation, any person may operate the VHF/UHF radio if no licensee is available.

**The Fire Chief of Port Ludlow Fire and Rescue District #3 (PLF&R)** is responsible for integrating the planning of PLF&R, Jefferson County DEM, and the community with the emergency planning of Port Ludlow with guidance from the DEM. The Fire Department will handle fires, provide search and rescue services, and provide emergency medical care. Emergency Medical Technicians and Paramedics from Fire District #3 are the primary resource for medical emergencies.

**The Jefferson County Department of Emergency Management (DEM)** is responsible for planning emergency response, managing the NIXLE alert communication system (Jefferson County text /email message alerts), managing the Emergency Operations Center (EOC), coordinating communication of the needs of Port Ludlow with the professional disaster workers from the Fire Departments and Sheriff's office. DEM is the conduit of information to County, State and Federal government agencies. NIXLE is a privately held U.S. corporation that offers both free and paid notification services for local police departments, county emergency management offices, municipal governments, and their agencies. The NIXLE service allows verified government agencies to send messages to residents via phone, email and web.

**American Red Cross Disaster Action Team / Disability Integration Coordinator** is responsible for making the Port Ludlow Plan compatible with that of the Red Cross and for providing Red Cross assistance to Port Ludlow, as it becomes available.

**Port Ludlow Associates (PLA)** is responsible for managing Olympic Water and Sewer, The Resort at Port Ludlow, the Marina, and the Golf Course.

An organization chart that shows the basic relationship of the Port Ludlow Emergency Management Team is shown in Figure 1

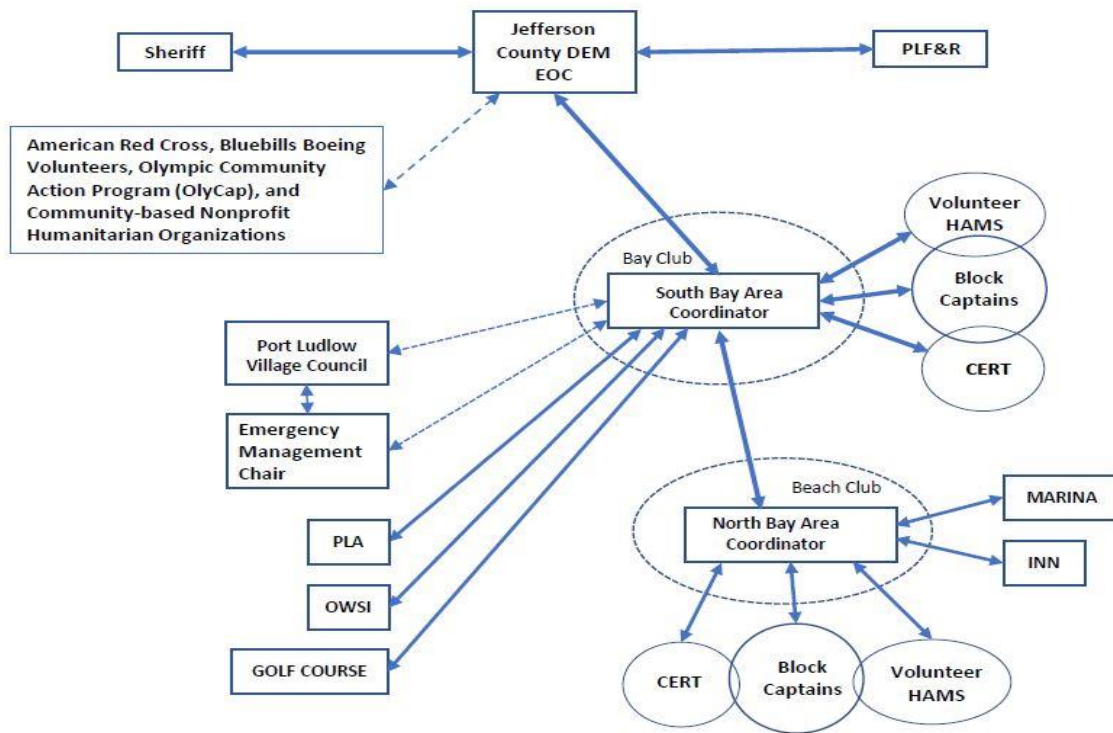


Figure 1: Port Ludlow Emergency Management Team Communications

## RESOURCES

**Neighborhood Operations Center NOC [future]:** The NOC-Center will be equipped with emergency power generator, Ham radio, an FRS Base radio station, antennas, and computers. NOC Coordinator will man the NOC and are responsible for establishing the external emergency communications for Port Ludlow. They will provide guidance and/or direction to both the North and South Bay Communication Center Coordinators for incidents in their respective areas.



**Communications Centers** are located at both the Beach Club for the North Bay Area, 121 Marina Drive, and the Bay Club for the South Bay Area, 120 Spinnaker Place. Each **Communications Center** is equipped with an emergency power generator, an FRS Base radio station, General Mobile Radio Service (GMRS) radios and antennas as well as various emergency management materials. The Bay Club is also equipped with a Ham radio for communications with the DEM. If either Center is unavailable, the Fire Station or Port Ludlow Brokers office are alternate Center locations.

### **RESPONSE PRIORITIES**

Neighborhood Block Captains have been instructed to activate should there be an event that results in the criteria for activation. Advance warning of a threatening event could be issued by the Jefferson County DEM NIXLE text alert / email message system, National Oceanic and Atmospheric Administration (NOAA) radio, radio alerts & warnings (KPTZ 91.9 FM, KROH 91.1 FM and KIRO 97.3 FM), and television news or by telephone, if operational. The Port Ludlow Village Council Emergency Management Chairperson, in coordination with the North and South Bay Area Coordinators, may also make the decision to activate our emergency plan after notification from the DEM EOC.

1. North and South Bay Coordinators will travel to their respective Communications Centers (Beach and Bay Clubs) to handle communications locally from and to their neighborhood Block Captains and externally to the DEM.
2. If the North and/or South Bay Communication Centers are not accessible or inoperable, Fire Station, 7650 Oak Bay Road and/or Port Ludlow Broker's Office, 40 Teal Lake Road & Paradise Bay Road, will be utilized for communications.
3. The neighborhood Block Captains will report to their Communications Center on the status of the residents, houses, businesses, utilities, streets, and infrastructure in their areas by FRS/ General Mobile Radio Service (GMRS) radio. GMRS is a licensed radio service that uses channels around 462 MHz and 467 MHz. The most common use of GMRS channels is for short-distance, two-way voice communications using hand-held radios, mobile radios, and repeater systems.

**COMMUNICATIONS PRIORITIES**

The NEP Communications Appendix illustrates how the Port Ludlow neighborhood organization communicates internally, how to report on conditions up the chain to emergency authorities, and how it receives emergency information. (See APPENDIX B – Communications Plan). Because of the likelihood of overload of networks, ranking messages by category will help manage congestion. The exchange of information in a major emergency will be prioritized by net managers as shown in Table 3.3.06-1, Jefferson County EOC Manual. All communications roll-up to the EOC will be filtered by these categories.

TABLE 3.3.06-1: COMMUNICATIONS PRIORITIES	
CATEGORY (PRIORITY)	TYPICAL MESSAGE CONTENT
<b>RED (CRITICAL)</b>	RED traffic only . . . Immediate life threat Entrapment Fire with life threat or exposures Other critical circumstances <b>Warnings and alerts (incoming)</b>
<b>YELLOW (MODERATE)</b>	All RED traffic and . . . Non life-threatening injuries Major damage reports (roads, bridges, systems) Major wide spread outages and closures Critical shortages <b>Advisories and updates (incoming)</b>
<b>GREEN (DELAYED)</b>	All RED or YELLOW traffic and . . . General needs assessment Individual damage reports (private residences) Periodic status reports Check-in's and roll calls Assignments Administrative and other <b>Scheduled status reports (incoming)</b>

GENERAL APPENDICES

APPENDIX A - BLOCK CAPTAIN ORIENTATION OUTLINE

APPENDIX B - COMMUNICATIONS PLAN

APPENDIX C - COMMUNITY MAPS

APPENDIX D - HELP – OK SIGNS

APPENDIX E - INDIVIDUAL QUESTIONNAIRE

APPENDIX F - COMMUNITY SKILLS/RESOURCES

APPENDIX G – SHELTER IN PLACE

APPENDIX H – EVACUATION PLAN

APPENDIX I – RECOVERY PLAN

APPENDIX J – ACRYONYMS

APPENDIX A - BLOCK CAPTAIN TRAINING

**Block Captain Orientation Outline**

**March 2021**

**I. Team**

- a. Emergency Management Team and Community Roles
- b. Emergency Management Communications Flow Chart
- c. Port Ludlow Community Emergency Response Team (CERT)

**II. Emergency Response Areas (Neighborhood Maps)**

**III. Responsibilities and Expectations of a Block Captain**

- a. Map Your Neighborhood (MYN)
- b. Communication / Organization
- c. Activation
- d. Training
- e. Drills

**IV. FRS (Family Radio System) Radio Procedures**

**V. Resources**

- a. "Think Plan Do" County brochure
- b. "Map Your Neighborhood" State brochure
- c. Port Ludlow Neighborhood Emergency Plan (NEP), 12-3-2020
- d. EM Neighborhood Questionnaire
- e. Village Skills and Equipment/Emergency Response Organization Neighborhood Resource List
- f. How to replace your Red Address Sign
- g. North Bay and South Bay Emergency Response Areas Map
- h. Disaster Supply Kit for Home and Business
- i. Supplies-Acquisition Over 12 Months Calendar
- j. Vehicle Emergency Kit
- k. (Future) You-Tube video links

**APPENDIX B – RADIO COMMUNICATIONS PLAN, Version 2.3**

**I. Communications Mission Statement**

The Port Ludlow Village Council Emergency Management Committee is tasked with developing a Communications Plan for the Port Ludlow Community. As part of that mission, the Communications Committee identified four tasks:

First, assess the current communications equipment located at the designated emergency communications centers located at the Bay Club, the Beach Club, Port Ludlow Fire & Rescue Station and with Emergency Management personnel in the Community.

Second, identify the additions or modifications to equipment at the Bay Club, Beach Club, Fire Station, future Neighborhood Operations Center (NOC) and Port Ludlow Broker’s Office to facilitate reliable communications with the Community and to the County Emergency Operations Center.

Third, equip back-up locations at Fire Station and Broker’s Office with appropriate communications equipment in the event that the Bay or Beach Club are not accessible or functional.

Fourth, validate that the Block Captains assigned to the Beach and Bay Club Communications Centers are able to communicate with the FRS radio channels 6 and 7, respectively, and determine if a repeater location is needed at the LMC RV lot.

The triple redundancy provides the confidence of reliable radio communications between Block Captains and the Communications Centers within the Community and capability to communicate with the County Department of Emergency Management.

**II. Operational Overview**

The County Department of Emergency Management (DEM) has designated Port Ludlow as “Operational Area 3.” During an emergency, the South Bay radio operators will consolidate information from Block Captains by FRS/GMRS portable radios and be the single point of contact from Port Ludlow with the DEM in Port Hadlock/Pt. Townsend to avoid transmission “pileups.” When activated in the future, the NOC will replace South Bay and will operate on both Simplex and Duplex modes to communicate with the County.

Block Captains communicate with their respective Communication Center on their assigned neighborhood frequencies to minimize or prevent “pileups” on FRS channels in Simplex mode.

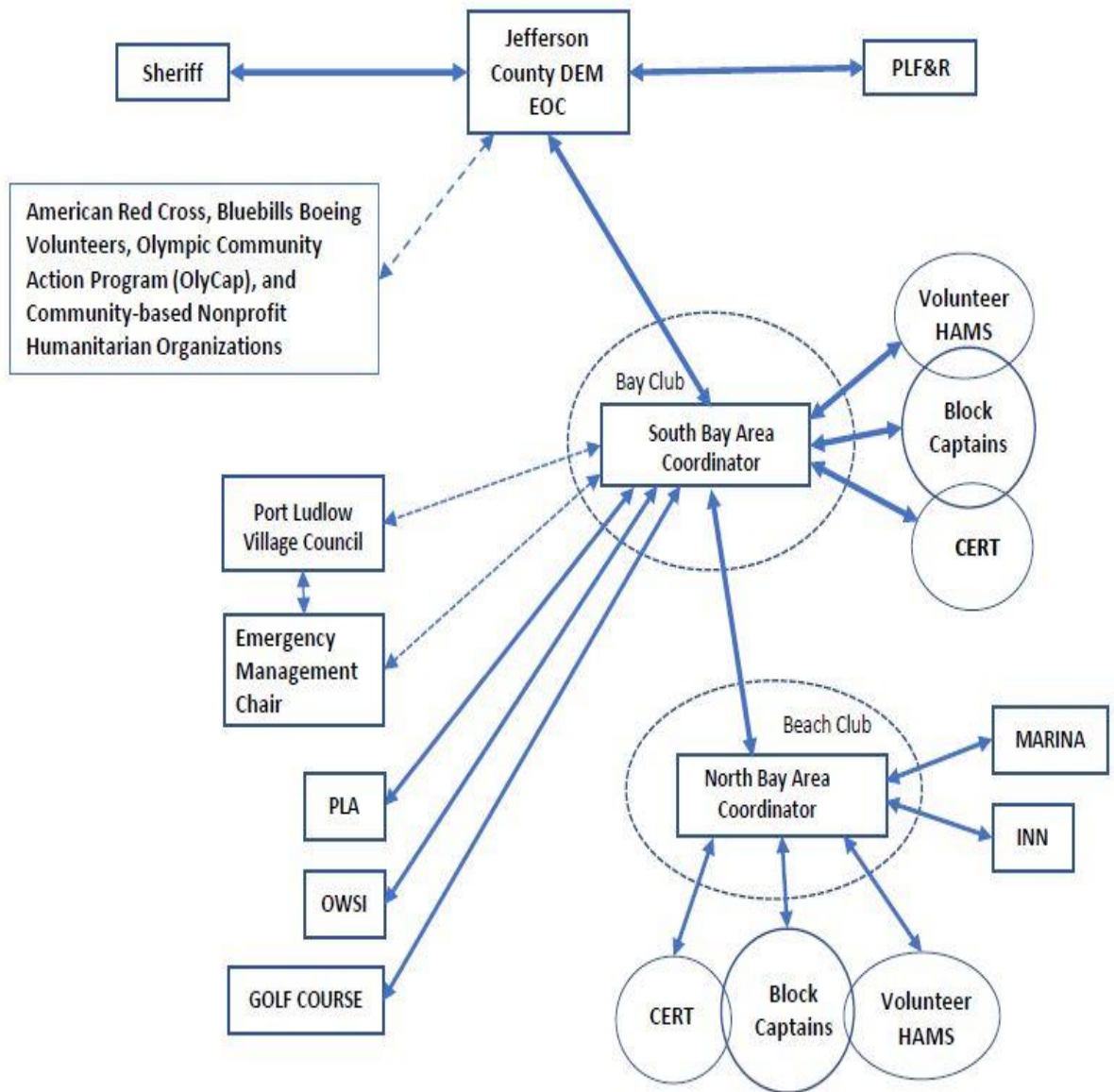
## Port Ludlow Neighborhood Emergency Plan (NEP)

Each neighborhood has been assigned multiple FRS channels. The primary channel is to communicate with their Communication Center. The secondary channels are for communication between other Captains within their local neighborhood.

The elevation of the hill south of the Fire Station interrupts communications to and from that location. A repeater will be evaluated to be placed at the North Bay RV storage yard to facilitate communications to and from the Fire Station.

Port Ludlow Neighborhood Emergency Plan (NEP)

The below chart shows the flow of communications to and from the Block Captains, Community organizations, the Communication Centers and the County.



### III. Communications Priorities

Block Captains and Communications Center personnel will use the following priorities in communicating the nature of emergencies.

TABLE 3.3.06-1: COMMUNICATIONS PRIORITIES	
CATEGORY (PRIORITY)	TYPICAL MESSAGE CONTENT
<b>RED (CRITICAL)</b>	RED traffic only . . . Immediate life threat Entrapment Fire with life threat or exposures Other critical circumstances <b>Warnings and alerts (incoming)</b>
<b>YELLOW (MODERATE)</b>	All RED traffic and . . . Non life-threatening injuries Major damage reports (roads, bridges, systems) Major wide spread outages and closures Critical shortages <b>Advisories and updates (incoming)</b>
<b>GREEN (DELAYED)</b>	All RED or YELLOW traffic and . . . General needs assessment Individual damage reports (private residences) Periodic status reports Check-in's and roll calls Assignments Administrative and other <b>Scheduled status reports (incoming)</b>



#### IV. Operating Frequency Assignments

##### WITHIN PORT LUDLOW

**Family Radio Service** – The family radio service (FRS/GMRS) handheld radios have 22 channels. These have been proposed for Port Ludlow emergency use as follows:

Channels for Block Captain usage

- South Bay Communications Center (SBCC), at the Bay Club will use **Channels 3 – 6**. Channel 6 is the SBCC primary channel, and channels 3, 4 and 5 are to be used as working channels for communications between Block Captains or within Villages. The radio call sign for the SBCC is **Sierra Com Center**.
- North Bay Communication Center (NBCC) at the Beach Club will use **Channels 7 – 11**. Channel 7 is the NBCC primary channel, and channels 9, 10, 11 are to be used as working channels for communications between Block Captains. The radio call sign for the NBCC is **November Com Center**.

##### **Channels NOT for Block Captain Usage**

- **Channel 8** is used by Marrowstone Island for their Emergency Control. Avoid Using Channel 8.
- **Channels 13 and 14** are to be used by Fire District #3. Channel 13 will be the “calling channel” and channel 14 will be the “working channel”.

Port Ludlow NOC – Future      146.540/145.150\*

**OUTSIDE PORT LUDLOW**

	<u>Frequency</u>
Primary EOC – JCSO /DEM – Hadlock	145.150*
Alternate EOC – Port Townsend – Fire Station 1-6	
NBCC – “November Comm Center”	146.540
SBCC– “Sierra Comm Center”	146.540
Quilcene NOC	146.500
Brinnon NOC	146.560
Discovery Bay NOC	146.580
Gardiner NOC	147.570
Marrowstone Is NOC	440.725*
<hr/>	
For reference only	
American Red Cross	47.42
	47.50
*Repeater operation:	
( JeffCo EOC VHF 114.8 tone / UHF 123.42 Tone) -	
(Marrowstone EOC UHF 114.8 Tone)	
<hr/>	

**V. Communication Equipment Listings**

Ideally, all locations should have identical equipment so that operators will be able to quickly setup and get 'on the air' reducing the learning curve and confidence of operation during a real disaster. However, existing equipment and setup will not allow for that immediately.

**NORTH BAY COMMUNICATIONS CENTER, Beach Club**

121 Marina View Drive, 360-437-9201, GM 360-301-0144

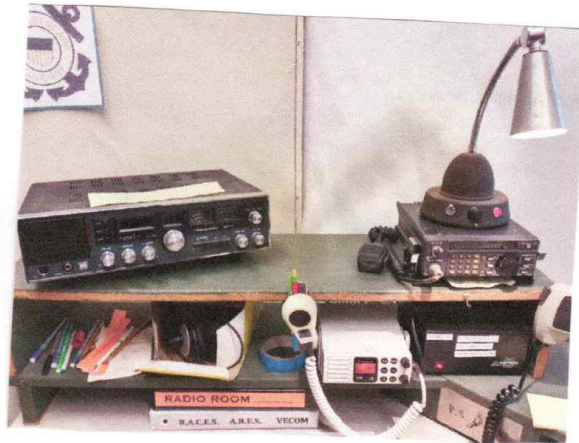
Call sign "**November Com Center**"



- Kenwood GMRS Transceiver
- 12 vDC Power Supply
- Roof mount 5/8 wave UHF Antenna
- Generator, 3500 kw, gasoline fueled, mobile, tested monthly

**NORTH BAY BACKUP LOCATION (Only if Beach Club inaccessible)**

**FIRE STATION, Port Ludlow Fire & Rescue, 7650 Oak Bay Road**  
360-437-2236, non-emergency, 911 emergency  
Call Sign still **"November Com Center"**



- Ham Radio, Kenwood TM-D700A
- GMRS Radio, Kenwood
- Marine Radio, Horizon VHF (Coast Guard Aux)
- Power Supply, Alinco DM 330MVT

**SOUTH BAY COMMUNICATIONS CENTER, Bay Club**

120 Spinnaker Place, 360-437-2208, GM 360-316-1205

Call Sign "Sierra Com Center"



- Yaesu VHF Transceiver
- Kenwood UHF GMRS/FRS Transceiver
- Midland CB/Weather Transceiver
- Alinco 12 vDC Power Supply
- VHF/GMRS 5/8 Wave antenna
- Two position Antenna switch
- CB antenna
- Generator, 3500 kw, gasoline, not tested regularly

**SOUTH BAY BACKUP LOCATION (Only if Bay Club is inaccessible)**

**PORT LUDLOW BROKER'S OFFICE, 40 Teal Lake Rd & Paradise Bay Rd**  
360-437-4111, Broker 360-531-3113  
Call sign still **"Sierra Com Center"**



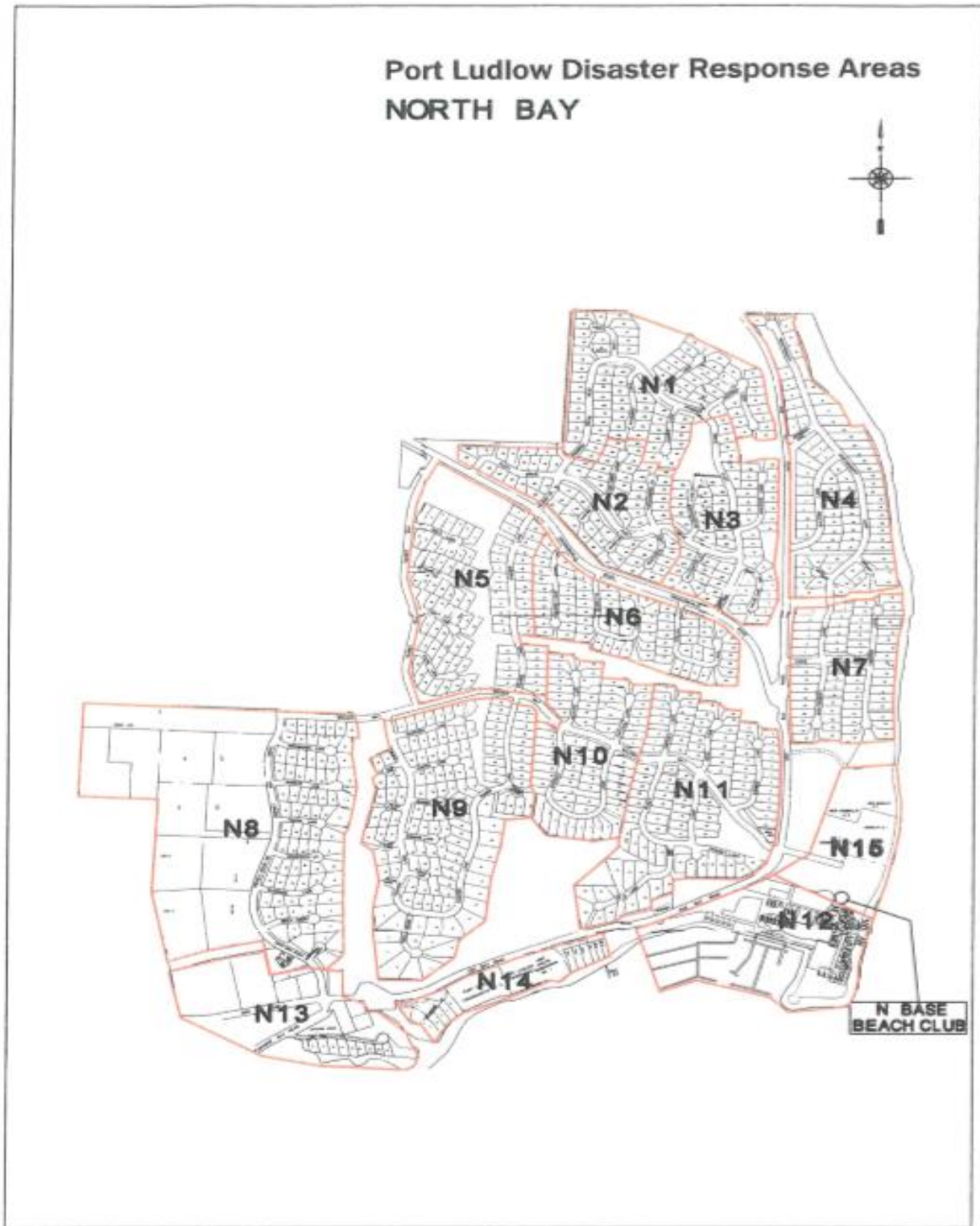
- Outside HAM and GMRS/FRS antennas
- Connection for antennas to handheld GMRS and HAM radios
- (Future) Base Station HAM radio
- (Future) Base Station GMRS radio
- (Future) Battery backup power/generator

**NORTH BAY**

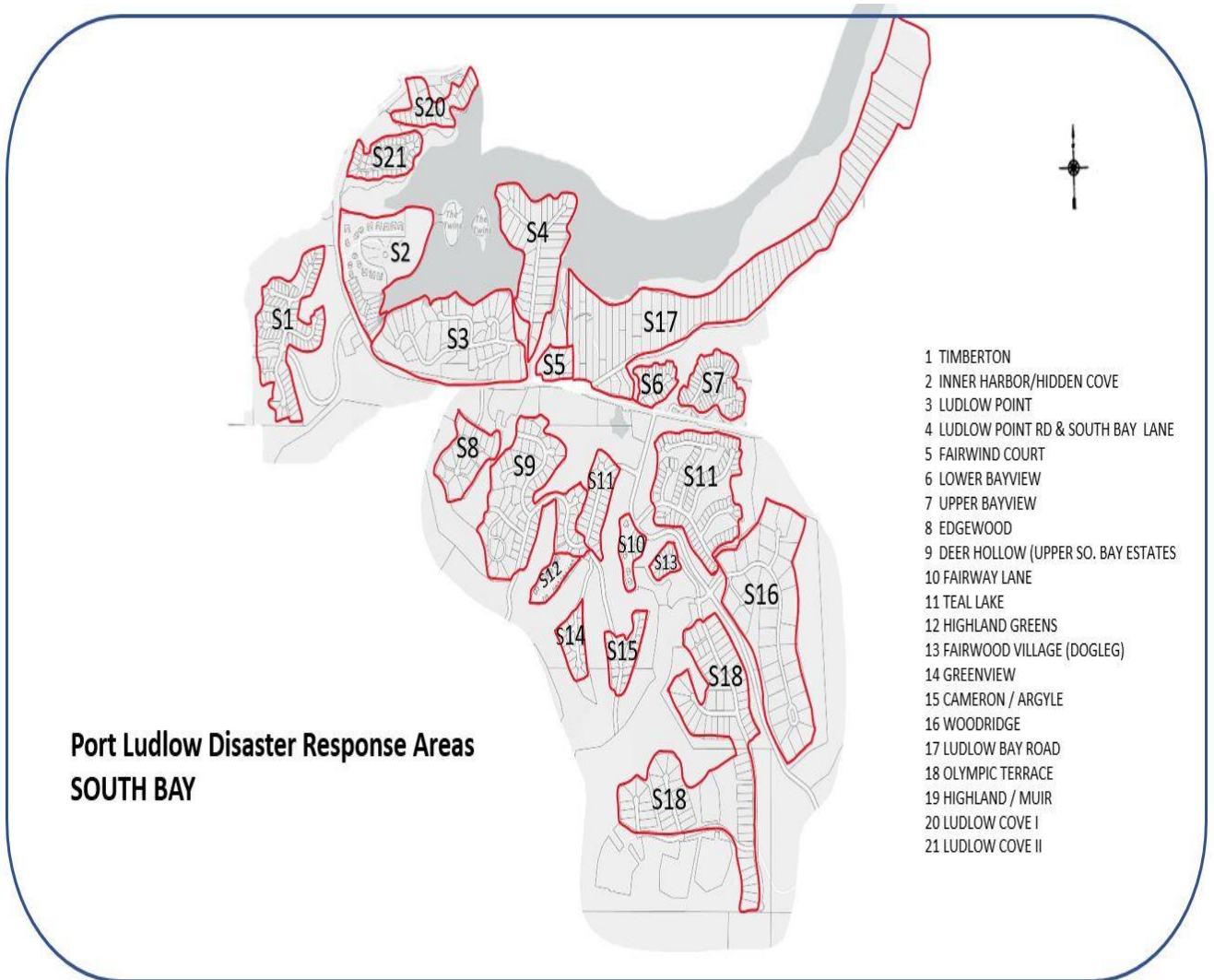
**REPEATER** - In RV Storage lot off Swansonville Rd

- (Future)
- Repeater radio
    - Battery Backup
    - Antenna
    - Portable Generator for powering batteries

APPENDIX C - COMMUNITY RESPONSE AREA MAP – NORTH BAY

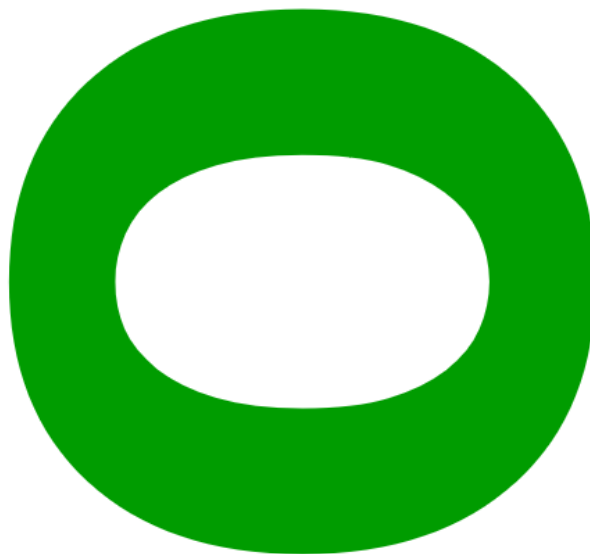
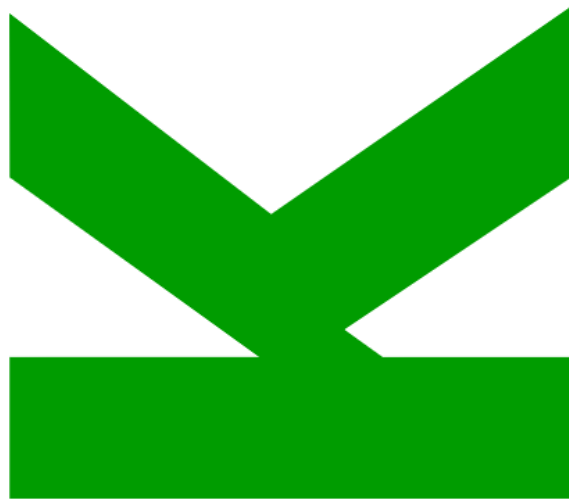


APPENDIX C - COMMUNITY RESPONSE AREA MAP - SOUTH BAY





APPENDIX D - HELP – OK SIGNS







**PORT LUDLOW VILLAGE COUNCIL EMERGENCY MANAGEMENT (PLVC-EM)**

**NEIGHBORHOOD QUESTIONNAIRE**

The following information will enable your PLVC-EM Emergency Management Team to better assist you and your household in the event of a natural disaster or other widespread emergency. The information you provide is confidential for Emergency Management use only.

1. Name: \_\_\_\_\_
2. Physical Address: \_\_\_\_\_
3. Cell Phone: (1) \_\_\_\_\_ (2) \_\_\_\_\_
4. Email: (1) \_\_\_\_\_ (2) \_\_\_\_\_
5. Full Time: \_\_\_\_\_ Snowbird \_\_\_\_\_ Home Phone: \_\_\_\_\_  
If Snowbird, alternate address: \_\_\_\_\_
6. Number of people in the household : Adults(18+): \_\_\_\_\_ Dependent Children: \_\_\_\_\_
7. Special Needs: \_\_\_\_\_ Pets: \_\_\_\_\_
8. Local Contact: Name: \_\_\_\_\_ Cellphone: \_\_\_\_\_
9. Out of Area Contact: Name: \_\_\_\_\_ Cellphone: \_\_\_\_\_
10. Durable Power of Attorney: \_\_\_\_\_
11. What special skills and/or background knowledge would/could you volunteer to share with our neighborhood in the event of an emergency? *Please circle all that apply.*
  - A. Doctor – Nurse – First aid/CPR
  - B. Teacher – Child
  - C. Veterinarian – Animal care
  - D. Search and Rescue
  - E. Construction – Electrician – Plumber
  - F. Police - Security
  - G. Firefighter -EMT
  - H. Psychologist - Counselor
  - I. Other: \_\_\_\_\_
12. What special equipment and/or resources do you have available in the event of a disaster? *Please circle all that apply.*
  - A. First aid – medical supplies
  - B. Walker – wheelchair-crutches-cane
  - C. Cot-spare bed-tent-spare bedding
  - D. Propane heater-propane stove
  - E. Lantern-portable lighting
  - F. Portable toilets-buckets
  - G. Ham radio-FRS radio/Walkie Talkie
  - H. Long ladder-crowbar-chainsaw-axe
  - I. RV-camper-trailer
  - J. Drone, Licensed Operator: \_\_\_\_\_
  - K. Other: \_\_\_\_\_Do you have a propane tank? \_\_\_\_\_ If so, where is it located? \_\_\_\_\_
13. Would you be willing to serve on a neighborhood team in the event of a disaster?  
\_\_\_\_ First Aid \_\_\_\_ Housing \_\_\_\_ Childcare \_\_\_\_ Pet Care \_\_\_\_ Communications \_\_\_\_ Resources Coordinator  
\_\_\_\_ Search and Rescue \_\_\_\_ Safety and Security \_\_\_\_ Other \_\_\_\_\_
14. Are you interested in attending a Community Emergency Response Team Training (CERT) course to teach volunteers about disaster preparedness for the disasters that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization and medical operations? Yes \_\_\_\_ No \_\_\_\_

Questions? Concerns? Suggestions? Contact a PLVC Emergency Management Team Coordinator:

- <http://www.plvc.org/plvc-committees/emergency-management>

**APPENDIX F - COMMUNITY SKILLS / RESOURCES**

**Note: To be maintained by each Block Captain for their specific area**

The image shows a screenshot of an Excel spreadsheet titled "Village skills and equipment - Excel". The spreadsheet is set up with a table structure. The columns are labeled as follows:

- Column B: ADDRESS
- Column C: CERT TRAINING
- Column E: SKILLS
- Column F: SPECIAL NEEDS
- Column H: GENERATOR
- Column J: EQUIPMENT /SERVICES
- Column L: ANIMALS

The rows are numbered 1 through 20. A small green box is visible in cell J9. The Excel interface includes the ribbon (FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, VIEW), the formula bar, and the status bar at the bottom showing "Sheet1" and "100%".

## APPENDIX G - SHELTER IN PLACE PLAN

### **Sheltering in Place**

Staying in your home, if safe to do so, is always preferable over an emergency shelter or hotel.

#### **Is Your Home Safe?**

An important step in family preparedness is the identification of hazards in your home. Once hazards are identified, it does not take much time or effort to make your home a safer place to live.

See resources on Jefferson County Department of Emergency Management Online Library - Individual & Family Preparation Kits & Information – [Think-Plan-Do.PDF](#)

<https://www.co.jefferson.wa.us/1183/Library---Preparation-Kits-Information>

## APPENDIX H - EVACUATION PLAN

**BACKGROUND** – Evacuation is a sub-strategy for the protection of people by moving them a safe distance from an imminent threat to their health and safety, and by limiting entry or re-entry into hazardous areas until determined safe to do so by authorities. This framework allows for scaling of the evacuation based on the magnitude of the root trigger event.

An evacuation “order” does not compel persons at risk to evacuate. The term “evacuation order” means the formal notice to the public at risk that an evacuation is being carried out for their protection, and to encourage compliance with the evacuation instructions disseminated by the responsible authorities. Short term small scale evacuations may be carried out by on-scene command without a formal declaration. Longer term or wider scope evacuations may require formalizing the order as a means of authorizing the incident command agency to carry out the provisions of this plan.

The legislative body of the jurisdiction in which the incident occurs (Board of County Commissioners or City Council) is the primary authority for ordering an evacuation. Under certain conditions identified by this plan, execution of an evacuation is delegated to the designated incident command agency.

**EXCEPTION** – The County Health Officer may compel a limited evacuation as needed to prevent or control the spread of any dangerous, contagious, or infectious diseases that may occur in the jurisdiction.

**REFUSAL TO EVACUATE** – No public official has the legal authority to impose a mandatory evacuation order on citizens in their own homes. Refusals should be noted and reported to the Communications Center. Citizens who refuse should be advised that authorities may not be able to protect them or provide rescue-relief if they remain.

NIXLE is the primary source of evacuation information in Port Ludlow. Residents are encouraged to monitor their phone for text messages in any emergency situation. Additionally, the Port Townsend radio station, KPTZ, FM is a source of information, along with monitoring Channels 6 and 7 on a FRS Radio.

If evacuation is directed there are very limited routes available from Port Ludlow. To go South, it is either State Route 104 or 101 and to go North, it is State Route 104 or Oak Bay Road thru Port Hadlock to State Route 19. When the visibility is limited the Fire Department strongly recommends not venturing out on your own without directions.

## APPENDIX I - RECOVERY PLAN

### **ACTIVATION OF THE RECOVERY PROCESS**

The Department of Emergency Management is the primary point of contact for disaster recovery preparedness and is the focal point for implementation of the recovery plan. Recovery from a disaster will involve coordination of local, state, Federal, and private sector resources. Recovery priorities will be established on the basis of the data collected in the damage assessment process.

### **SHORT TERM RECOVERY**

The actions needed to stabilize the immediate health and safety needs of the community. Typical actions in this phase might include:

- Completion of emergency response activities.
- Impact assessment (effect on community viability).
- Declaration of disaster (a request for state and federal assistance).
- Rough estimation of the cost of public and private damage.
- Restoration of essential transportation routes.
- Emergency debris removal.
- Restoration of basic lifeline services (water and power systems).
- Security of damaged/evacuated areas.
- Distribution of potable water, food and critical goods.
- Identification and resolution of unmet needs.
- Resumption of the essential business of local government.
- Temporary housing.
- Management and distribution of donated goods and services.
- Coordination with State and Federal disaster relief authorities.
- Enhancement of regular communications with the public.
- Setting up disaster coordination centers for public relief.

### **LONG TERM RECOVERY**

The actions taken to promote redevelopment of community vitality. Typical actions in this phase might include:

- Completion of the Federal damage assessment process.
- Identification of restoration priorities.

- Completion of debris removal and demolition.
- Rebuilding of damaged public facilities.
- Resumption of commerce.
- Stimulation of housing repair and reconstruction.
- Development of hazard mitigation projects.
- Mitigation of environmental impacts.



## **APPENDIX J – ACRONYMS**

**ARES** - Amateur Radio Emergency Service is a volunteer organization comprised of licensed amateur radio operators providing emergency communications during a declared incident or disaster.

**BC** - Designated Block Captains with FRS handheld radios to communicate with their respective COM CTR on an assigned channel or other Block Captains on a neighborhood channel. (See map)

**CB** – A citizen operator using the Citizen’s Band frequencies that do not require a license. Not an essential element to the communications plan but is considered due to truckers and RV’rs that may be using CB.

**COM CTR** – The South Bay Communications Center (SBCC) at the Bay Club and North Bay Communications Center (NBCC) at the Beach Club.

**CERT - COMMUNITY EMERGENCY RESPONSE TEAM, FEDERAL DESIGNATION**

**CDC** - U.S. Centers for Disease Control and Prevention

**CDP - CENSUS DESIGNATED PLACE**

**DEM - DEPARTMENT OF EMERGENCY MANAGEMENT, JEFFERSON COUNTY**

**DUPLEX** – Operating a VHF/UHF/GMRS radio with transmission on a designated frequency and receiving on another frequency. Used typically for repeater operations.

**EOC - EMERGENCY OPERATIONS CENTER** – Emergency Operations Center (the designated Jefferson County Department of Emergency Management radio center.) The Primary EOC is located at the Sheriff’s office in Port Hadlock and the alternate EOC is located in Port Townsend at the Harrison St Fire Station). The EOC operates with communities on VHF/UHF amateur radio frequencies.

**ERP** – Effective Radiated Power in watts is a metric of how effective your transmitted radio power is out the antenna into the air in a predicted pattern. It is equal to how much power is input through the antenna and multiplied by the gain of the antenna.

**FCC** - FEDERAL COMMUNICATIONS COMMISSION

**FRS** – Family Radio Service is a citizen operator using the public Family Radio Service frequencies that do not require a license. FRS radios are considered low power, simplex, ‘line of sight’ for reliable communication. FRS is significantly limited in range compared to GMRS or Amateur radios. FRS also shares channels with GMRS.

**FEMA - FEDERAL EMERGENCY MANAGEMENT AGENCY**

**GMRS** – General Mobile Radio Service is an FCC licensed radio operator holding a General Mobile Radio Service license permitting use of all GMRS/FRS frequencies for low/high power or repeater operation by the licensee.

**HAM OPERATOR** - A licensed radio operator that holds a Tech/General/Extra FCC license permitting operation on HF/VHF/UHF amateur voice within the FCC amateur band plan.

**HF** – High Frequency HAM operating bands covering frequencies from 1.8 Mhz to 58 Mhz and requires a General or Extra class FCC license. Also referred to 160/80/60/40/30/20/17/15/12/10/6 meters in HAM jargon.

**MBR** - Marine Band Radio - to communicate with the Port Ludlow Marina and Boaters in the area.

**MPR - MASTER PLANNED RESORT, WASHINGTON STATE AND JEFFERSON COUNTY DESIGNATION FOR PORT LUDLOW.**

**NBCC** – North Bay Communications Center, located at the Beach Club with a backup location at the Port Ludlow Fire & Rescue Station off Oak Bay Road. Over-air call sign “**November Com Center**”.

**NEP - NEIGHBORHOOD EMERGENCY PLAN**

**NIXLE - JEFFERSON COUNTY DEM EMERGENCY TEXT ALERT SYSTEM**

**NOC - NEIGHBORHOOD OPERATIONS CENTER** - **To** be located at a selected high elevation site to provide coordinated radio communications with the SBCC and NBCC and Block Captains regarding conditions and needs in each neighborhood. The NOC will then coordinate the communications with the Jefferson County EOC. Until the NOC is activated, the SBCC will act as the NOC.

**PILEUPS** – Situation that occurs when multiple radio stations attempt to contact the same location resulting in poor or non-existent communications.

**PLA - PORT LUDLOW ASSOCIATES, DEVELOPER OF PORT LUDLOW**

**PLF&R - PORT LUDLOW FIRE AND RESCUE STATION 31**

**PLVC - PORT LUDLOW VILLAGE COUNCIL**

**PLVC-EM - EMERGENCY MANAGEMENT COMMITTEE, PART OF THE PLVC.**

**RACES – RADIO AMATEUR COMMUNICATION EMERGENCY SERVICE**

**REPEATER** – A radio configured to receive transmissions on one frequency and transmit on an assigned frequency according to suggested operating band plans. It is also referred to as “DUPLEX” operation, providing longer receive/transmit range capability at higher power. (25-50 Watts will provide coverage and distance depending upon the operating band)

**SBCC** – South Bay Communications Center, located at the Bay Club with a backup location at the Port Ludlow Broker’s Office at Paradise Bay Road and Teal Lake Road. Over-air call sign “**Sierra Com Center**”.

**SIMPLEX** – Operating from radio to radio when both transmitting and receiving is on the same frequency.

**SWR** – Standing Wave Ratio is a simple way to assess the integrity and efficiency of your transmission from the radio through the antenna. A ratio of 1:1.2 up to 1:2.0 is desirable.

**UHF** – Ultra High Frequency HAM operating bands covering 420-450 Mhz. May also be referred to as 70 centimeters in HAM jargon.

**VHF** – Very High Frequency HAM operating bands covering 144 Mhz to 148 Mhz. May also be referred to as 2 meters in HAM jargon.

**HAZARD SPECIFIC PROCEDURES<sup>1</sup>**

[ANNEX AA EARTHQUAKES](#)

[ANNEX BB LANDSLIDES](#)

[ANNEX CC FLOODING](#)

[ANNEX DD SEVERE WEATHER](#)

[ANNEX EE TSUNAMI](#)

[ANNEX FF WILDFIRE](#)

[ANNEX GG TERRORISM/CIVIL DISTURBANCE](#)

[ANNEX HH EPIDEMIC/PANDEMIC](#)

---

<sup>1</sup> <https://www.co.jefferson.wa.us/1177/Library---CEMP>

## ANNEX AA EARTHQUAKES



### DEFINITION

Earthquakes are the sudden, violent shaking of the ground caused by an abrupt shift along a fracture in the earth, known as a fault. The earth's crust is divided into eight major plates and numerous smaller plates. The plates are constantly moving and when they create enough friction, release stress, which in turn can create significant earthquakes.

### HISTORY

Washington State is littered with many large and small faults with most being located within the Puget Sound or coast. Hundreds of small earthquakes are recorded each year within the state with ones in 1949, 1965, and 2001 causing more than \$1 billion in damages to the Puget Sound region. The most recent large earthquake was the 2001 Nisqually earthquake that occurred 11 miles north of the city of Olympia.

### HAZARD IDENTIFICATION AND VULNERABILITY ASSESSMENT

There are multiple major fault lines that are in or near Washington and have the potential to create powerful earthquakes.

The Southern Whidbey Island Fault crosses directly between Northeastern Jefferson County and the Southwest portion of Whidbey Island and has the potential to cause strong earthquakes more than 6.5 on the Richter scale as well as tsunamis in the upper sound. Due to the proximity, this has the potential to cause large amounts of damage within the City of Port Townsend and Jefferson County.

The Seattle Fault bisects the Kitsap Peninsula across the Puget Sound through Seattle into the Cascade Mountains. Like the SWIF, it too has the potential to create strong earthquakes and tsunamis within the Puget Sound region.

The Cascadia Subduction Zone is a 600-mile long fault that separates the Juan de Fuca and North American Plates. This fault has the potential to create earthquakes similar in strength and damage to that of the 2011 Tohoku event which was registered at 9.0 and caused a tsunami that was up to 130 feet tall. An earthquake of this strength generally causes more than a minute of continuous shaking and numerous powerful aftershocks that can cripple any infrastructure that was not destroyed in the initial shock.

The primary ways these earthquakes can cause damage is from:

- Strong ground shaking
- Landslides
- Liquefaction
- Subsidence
- Tsunamis

A lot of the casualties caused by earthquakes are due to building collapse or the resulting tsunami if near the coast. The disruption of utilities such as gas, power, sewer, water, telephone, and waste can hasten the disruption of economics within the City and County. The loss of which would be huge given the limited capability that currently exists.

Another principal concern is soil liquefaction which occurs when water saturated sands, silts, or gravels are shaken so violently that the grains rearrange and the sediment loses strength, begins to flow out as sand boils or causes lateral spreading of overlying layers. Liquefaction commonly causes loss of bearing strength under foundations and roadways, can trigger landslides, and can float low-density structures and objects.

The areas of Jefferson County that would be most affected in the event of an earthquake is the City of Port Townsend and the smaller communities of Quilcene, **Port Ludlow**, and Port Hadlock as they all contain the highest population density and a lot of the economic income. Port Townsend itself contains many older masonry buildings that are unreinforced making them very susceptible to damage. There are other infrastructure issues faced by the City and County

involving bridges and transportation nodes such as Highway 101, 104 and the Washington State Ferry Terminal in Port Townsend. Each of these faces the risk of earthquake caused landslide or the complete structural failure in the case of the ferry terminal. These vulnerabilities can severely affect response times and help from outside agencies.

Some additional assumptions:

- Overloaded healthcare systems
- Disturbance of community services (schools and government closures)
- Failure of wireless/internet structure
- Damage or closure of food and pharmaceutical outlets
- Competing demands for relief and recovery resources
- General public communications disturbance and extreme anxiety

## **IMPLEMENTATION**

When responding to an earthquake, emergency personnel will prioritize the following:

- Life safety
- Property protection
- Protection of the environment
- Preservation of the economy

For detailed response information, see Jefferson County DEM Emergency Management Plan at:

[www.co.jefferson.wa.us/1177/library--CMEP](http://www.co.jefferson.wa.us/1177/library--CMEP)

## ANNEX BB LANDSLIDES

### DEFINITION

A Landslide is the sliding movement of masses of loosened rock and soil down a hillside or slope. Landslide causes depend on the rock type, precipitation, seismic shaking, land development and zoning practices, soil composition, moisture, and slope steepness.

### HISTORY

Landslides are a common hazard in Jefferson County. Slides have been an ongoing issue on the road between Port Hadlock and Port Ludlow. Heavy rains or winter storms have caused numerous landslides to occur over the years with areas such as Discovery Bay, Oak Bay, and much of Highway 101. The area south of Brinnon has experienced many landslides causing road closures for several days.

### HAZARD IDENTIFICATION AND VULNERABILITY ASSESSMENT

As the county continues to grow and the desire of people to have homes with a view, an increasing number of structures are built on top of or below slopes subject to land sliding. Many people believe that if a piece of land has not yet moved, or hasn't moved in the past fifty years, then it is safe from possible future slides. As trees are removed to make way for new homes, the nature of erosion and water absorption makes the slopes and bluffs in these areas a dynamic and changing environment. Characteristics that may indicate a landslide hazard area include:

- Pre-existing landslide area
- Toppling bowed, or jack-sawed trees
- Tension or ground cracks along or near the edge of the top of the bluff
- Structural damage caused by settling and cracking of building foundations and separation of steps from the main structure
- Mid-slope ground water seepage from a bluff face

As more homes are built with the goal of having a view, trees below the house are often cut to help maintain that view. When trees are removed, the slope becomes more prone to sliding. Future slides are expected to continue to be caused by periods of heavy or prolonged rainfall or other severe weather events, large earthquakes, and the continued desire to build homes with a view. The potential for earthquakes to create a massive number of slides is high especially along highway 101, Oak Bay Road, and on the Port Townsend waterfront.



### **IMPLEMENTATION**

A landslide would likely only see a major response if it were to occur on the scale of the 2014 Oso Landslide. Smaller scale slides would see continued monitoring of the situation from DEM while local jurisdictions move to remove debris from the affected area.

## ANNEX CC FLOODING

### DEFINITION

River building floods: River building floods are caused by heavy, prolonged rain, melting snow, or both. Heavy rains over prolonged periods of time are the most common cause of flooding within Jefferson County. Runoff from melting snow and ice in the Olympic Mountains adds to these floods especially in the spring.

Tidal Floods: These can occur when high tides, strong winds, heavy swell, and low atmospheric pressure all combine and create flooding in coastal areas.

Flash Floods: Caused by rapid rise of water in small rivers or streams that move quickly downhill. Usually caused by brief intense rainfall from thunderstorms. These are rare for Jefferson County.

Flooding generally occurs along the Duckabush, Dosewallips, and both the big and little Quilcene rivers as a combination of river building and tidal. These rivers flow from the east side of the Olympic Mountains into the Hood Canal. Flooding that may occur in West Jefferson County is commonly caused by the Hoh, Clearwater, Bogachiel, and Quinault Rivers that run west down into the Pacific Ocean.

### HAZARD IDENTIFICATION AND VULNERABILITY ASSESSMENT

In the history of Jefferson County, there have been eight Presidentially-declared floods dating back to December 1979. Occurring principally during the winter months, flooding has inflicted loss of life and property, damage to infrastructure and has been the cause for suspension of economic activity in communities near the Big and Little Quilcene, Duckabush, and Dosewallips Rivers in Eastern Jefferson County. Eastern Jefferson County has short, steep rivers that rise quickly and recede quickly. The flood plains are alluvial in nature and are greatly affected by tidal action.

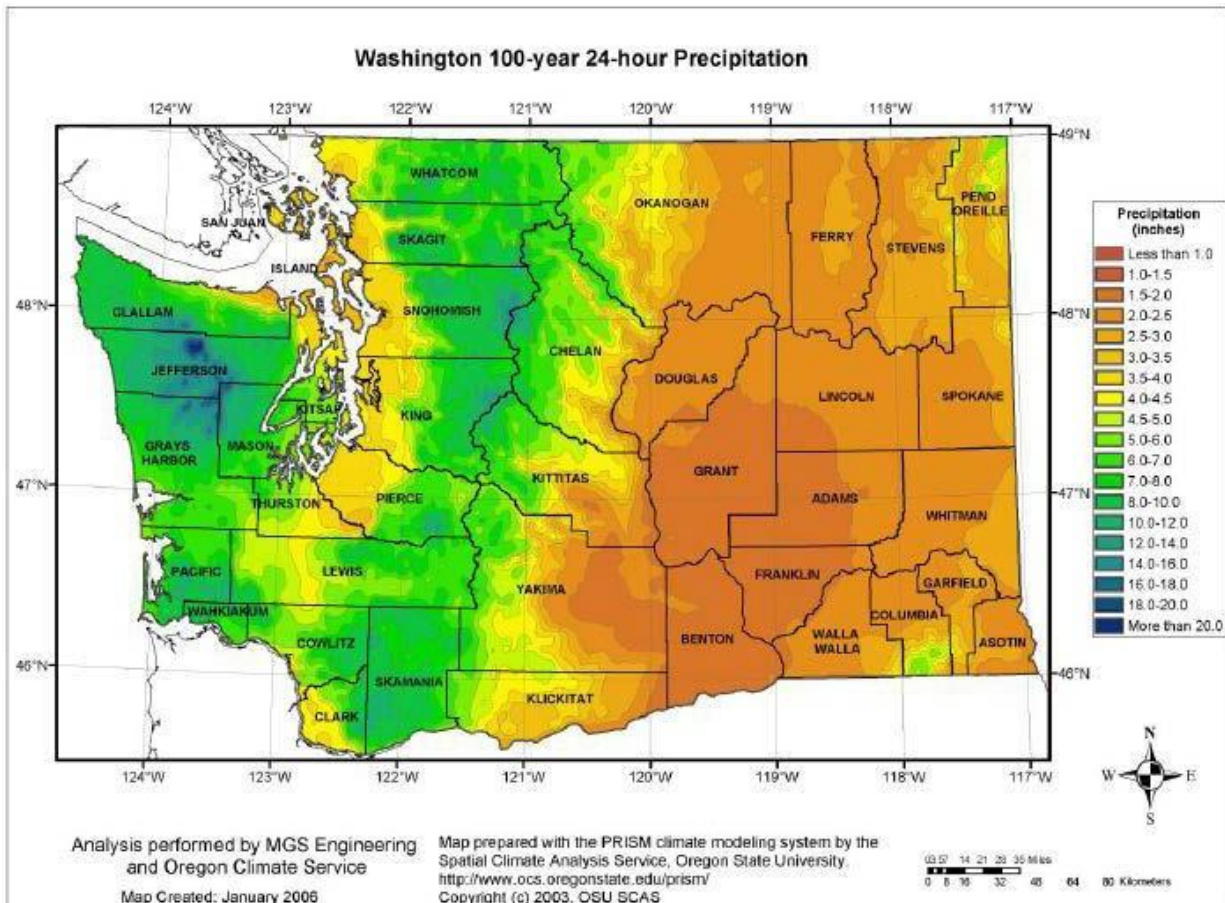
Southern winds tend to hold water against the shores compounding the effects. Most floods are short term, however the potential for extreme damage is possible. In the past ten years, the annual expense of damages caused by flooding and landslides to the county has been \$750,000.

In Western Jefferson County, floods on the Hoh, Clearwater, Bogachiel, and Quinault Rivers have damaged roads and bridges, eroded both public and private properties, and have caused interruptions in transportation and economic activities. Rivers in Western Jefferson County are highly erosive to the low riverbanks of the flood plains. Many acres of farm and timberland disappear annually. Road and bridge washouts on Highway 101 in the “West End” have been

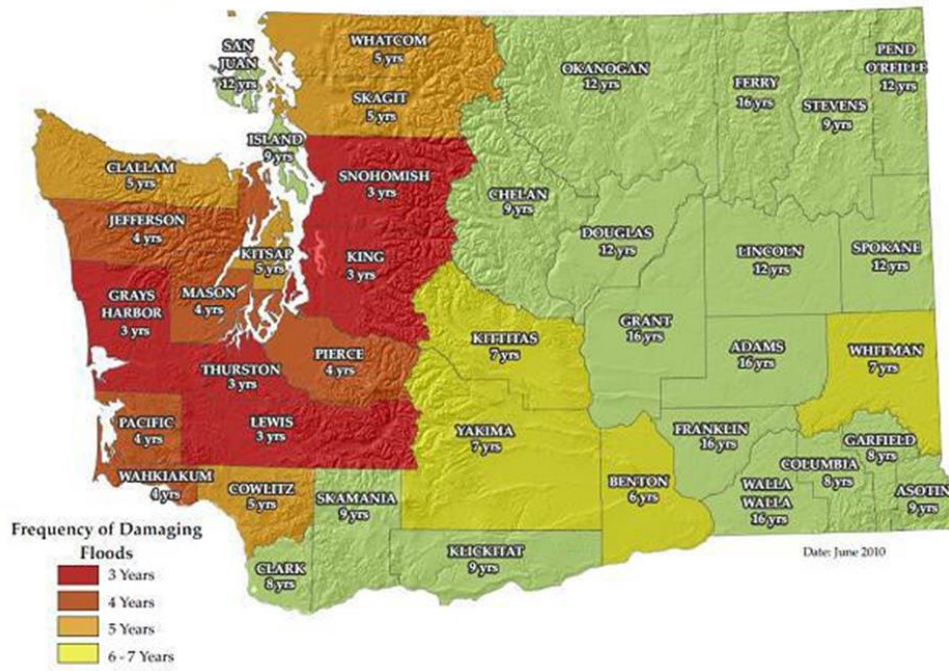
common over the last several years. Rising waters on the Hoh have necessitated sandbagging and other emergency measures for members of the Hoh Tribe residing on reservation lands at the end of the Lower Hoh Road.

Although Jefferson County has less than 3% of its land in a riverine floodplain, there are two factors which argue for the county's flood vulnerability:

- Nearly all of its population centers are in coastal floodplains to one degree or another,
- The majority of the county's economic engine is in or near the floodplains, and
- Significant critical assets are within or adjacent to the coastal floodplains.



### Frequency of Flooding Causing Major Damage, 1956 - Present



## ANNEX DD SEVERE WEATHER



Hood Canal Bridge shortly after collapse 1979

### DEFINITION

Severe weather encompasses a variety of atmospheric hazards that range in impacts. Severe weather can be:

- Winter storms
- Damaging winds
- Drought
- Thunderstorms

Severe Weather can also be strong winds which have a high probability of occurrence every year between October and April. Of all hazards that can occur within Jefferson County, damaging winds occurs the most often and usually causes the most damage. Most storms move into Washington from the Pacific Ocean with a southwest to northeast airflow. Maritime air reaching the Olympic Mountains rises upwards and cools. As this airflow reaches higher elevations and cools, there is less ability to hold moisture and precipitation occurs. Impacts and effects include:

- loss of life,
- damage to homes,
- businesses and critical transportation infrastructure;
  - loss of timber resources;
  - delays in emergency responses;
  - damage or loss of recreation facilities;
  - disruption of utilities;

## Port Ludlow Neighborhood Emergency Plan (NEP)

- loss of jobs due to damaged equipment and facilities;
- school and business closures resulting in economic impacts

Damaging winds are considered storms with sustained winds of 50 mph or gusts 65 mph or higher.

### HISTORY

Jefferson County has had a history of these types of severe weather with winter storms being the most impactful. Between 2006 and 2016, there were eleven instances of winter storms occurring in Western Washington causing landslides, flooding, and wind damage to thousands of homes and businesses as well as over a billion dollars in damages. One of the most famous storms to strike Jefferson County caused the collapse of the Hood Canal Bridge in 1979 leaving the Olympic Peninsula largely cutoff from Kitsap County and all roads leading from there.

### HAZARD IDENTIFICATION AND VULNERABILITY ASSESSMENT

Severe weather happens almost annually within Jefferson County and have proven to be very dangerous. Due to the amount of trees within the county, many are at risk for power outages or being cutoff as trees can fall blocking roads or disrupting power and utilities to homes and businesses in the area. This also has the effect of disrupting emergency responses from fire, EMS, and law enforcement as it cuts them off from where they may be needed.

In general, these storms have the effect of causing immobility, the loss of electrical power, telephone service, and internet. Physical damage to homes and businesses can occur from wind damage or the accumulation of snow and ice. Most homes or businesses have trees very close to the building which leave them incredibly vulnerable if that tree were to fall in a storm causing potential loss of life or major damage to the property.

### IMPLEMENTATION

Jefferson County and Port Townsend plans should provide a priority for road and street clearance, provision of emergency services, mutual aid with other public entities, and procedures for requesting state and federal aid if needed. As part of the public information campaign, county residents are regularly informed on how to prepare for and react when severe weather strikes.

### **NATIONAL WEATHER SERVICE (NWS) CRITERIA:**

**HIGH WIND WATCH** – Conditions are favorable for the HIGH WINDS in the next 48 hours but are not yet certain

**HIGH WIND WARNING** – A potentially life-threatening HIGH WIND event is occurring or is about to happen. Winds are or will be at the WARNING level or above. HIGH WIND WARNING threshold: **Sustained winds of 40 MPH with gusts to 58 MPH or higher.**

**HIGH WIND ADVISORY/OUTLOOK** – Events that are not life threatening, but may cause limited power outages or other inconvenience. Sustained wind of 30 to 39 mph or gusts of 45 to 57 mph.

**TRIGGER LEVELS** – The NOAA/NWS HIGH WIND WARNING thresholds usually do not require activation of DAMAGING WINDS protocols unless the upper gusts are in excess of 70 MPH. (See SUGGESTED THRESHOLDS below).

## ANNEX EE TSUNAMI



### DEFINITION

Tsunamis are waves, or a series of waves generated in a body of water by sudden disturbances such as earthquakes, landslides, or volcanoes. Tsunamis can travel at speeds up to 1000 km/h and have waves as high as 30 meters when they make landfall. The speed and height of a tsunami make it incredibly important for those in the path to seek high cover immediately.

### HISTORY

The actual history of tsunamis in Jefferson County is quite small with the 1964 Good Friday event being the only recorded tsunami to have hit Washington in the past 60 years. The 1700 Cascadia earthquake is thought to have caused a massive tsunami on the Washington coast according to Native American Tribal records dating back to the period. There have been multiple false alarms over the years where Tsunami Warning Center has issued Tsunami watches or warnings to Washington State but all of these had little real impact.

### HAZARD IDENTIFICATION AND VULNERABILITY ASSESSMENT

Jefferson County and the rest of the Washington Coast face a high vulnerability to tsunamis. Tsunamis can come from across the Pacific Ocean near Japan or the Philippines and travel to the west coast in less than 16 hours. Additionally, earthquakes off the coast of South America or Alaska also have the potential to cause large waves that travel up or down the coast damaging anything in its way.



The most significant risk comes from a Cascadia Subduction Zone earthquake event with thoughts on impact being similar to what happened in Japan in 2011. A tsunami of this size and power can wash away much of the thinly populated west end as well as move through the Strait of Juan de Fuca into the Puget Sound causing damage to Port Townsend and the neighboring communities. Minor, but still potentially dangerous tsunamis can come from earthquakes that strike along the South Whidbey Island Fault or Seattle Fault lines that could cause damage to Port Townsend and other communities that lie along the water as referenced in the figures below.

**Figure 2:** This figure includes the portion of Northeastern Jefferson County that sits at the mouth of the Puget Sound. This is the most populated part of the county which includes the City of Port Townsend, and the various communities of Port Ludlow, Discovery Bay, Port Hadlock-Irondale, Mats Mats, Chimacum, Cape George, as well as Indian and Marrowstone Islands. The low lying nature of many of these communities make them especially vulnerable to any significant wave event that might occur. Downtown Port Townsend is a critical component of the economy within the county and its loss could prove catastrophic. Other notable concerns include the loss of both the Hood Canal Bridge and the Ferry Dock servicing the Port Townsend-Coupeville route of the Washington State Ferries as both serve as the only other way in or out of the county apart from Highway 101.

Revised March 2018

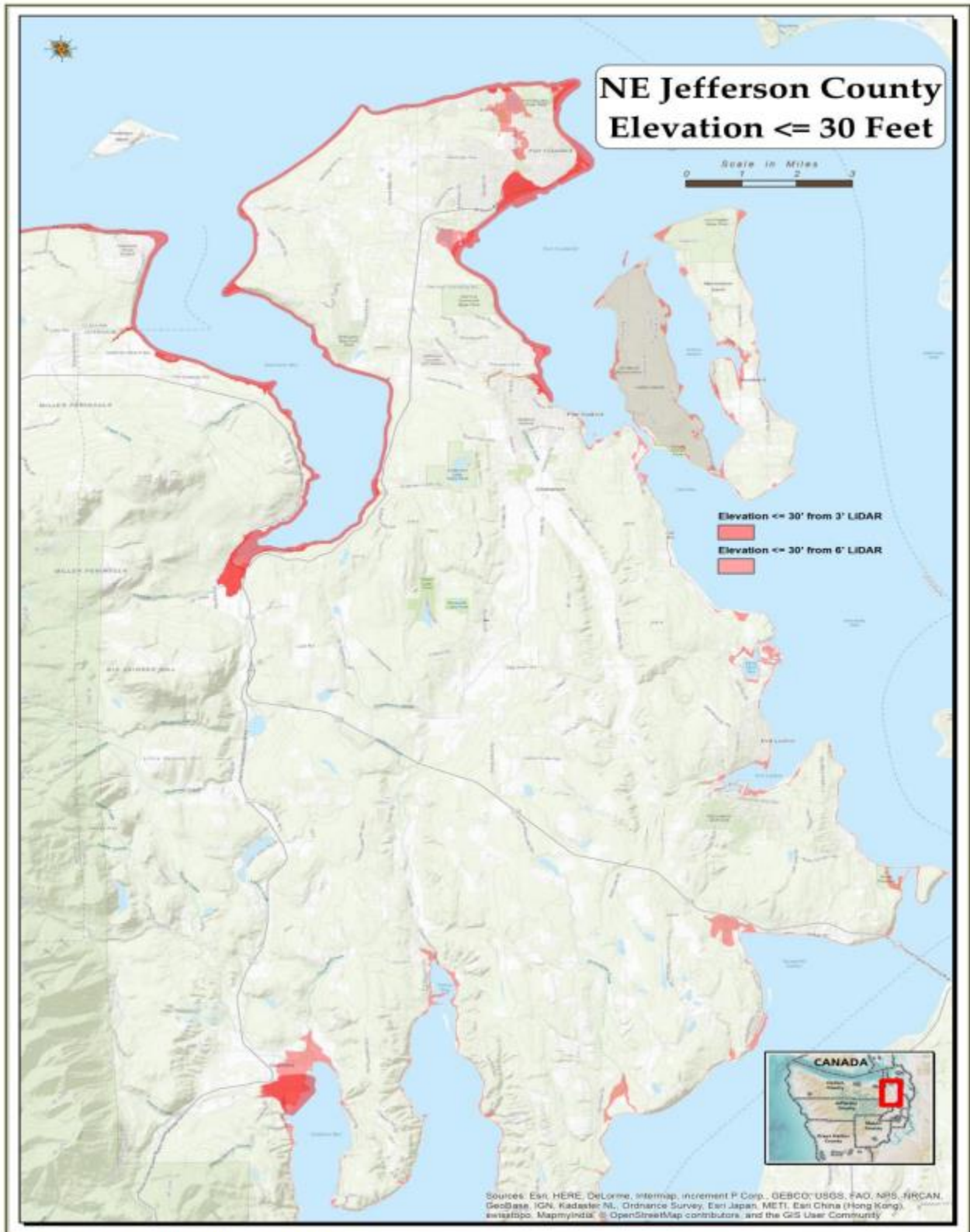


Figure 2: Northeast Jefferson County

ANNEX FF WILDFIRES



PHOTO OF 2014 CHIWAUKUM CREEK FIRE NEAR LEAVENWORTH

DEFINITION

Forest or wildland fires are the uncontrolled destruction of forested and wildlands by fire caused by natural or human-made events. Forest and wildland fires occur primarily in undeveloped areas. Interface fires are fires that occur in developed forest and wildlands, only partially cleared, and occupied by structural development. When weather conditions are dry and fuels are abundant, rapidly spreading fires can cause significant loss of life and property.

HISTORY

Jefferson County has a long history of wildfires in the past thousand years. However, it is difficult to trace the fire history of the area back more than 350 years. Some old-growth trees and fire scars to indicate that fires occurred about 450, 480, 540, AND 670 YEARS AGO.

HAZARD IDENTIFICATION AND VULNERABILITY ASSESSMENT

Jefferson County’s fire season usually runs from mid-May through October. Any prolonged period without significant precipitation presents a potentially dangerous situation, particularly if strong dry, east winds prevail. The probability of a forest fire or an interface fire in any one location depends on fuel conditions, topography, the time of the year, past weather conditions, and if there is a human activity such as debris burning, camping, etc.

## Port Ludlow Neighborhood Emergency Plan (NEP)

Short-term loss caused by fires is the complete destruction of valuable resources such as timber, wildlife, habitat, scenic vistas, and watersheds. Vulnerability to flooding increases due to the destruction of watersheds. Long-term effects are reduced amounts of timber for building and recreation areas.

Home building near forests and wildlands increases the loss from fires. There is a trend for families to move into more rural and forested areas. Many homes are built with an effort to maintain the scenic aspects of the surrounding area. These are farther from firefighting assets. Frequently, there is little clearance of vegetation resulting in a lack of defensible space.

Narrow access roads frequently found in these areas interfere with fire suppression efforts. Frequently roads are so narrow that the standard sized fire apparatus cannot adequately turn around or pass on the roads. More diverse fire apparatus such as brush rigs and smaller engines are needed, however smaller fire districts may not be able to financially support these additional requirements.

### IMPLEMENTATION

A number of activities can be undertaken which will reduce the actual numbers of fires and resulting loss of fires.

- Forest fire education and enforcement programs must be emphasized to include early reporting of fires
- Effective early fire detection and emergency communication systems are essential
- Effective early warning systems are essential to notify local inhabitants and persons in the area of the fire. An evacuation plan detailing primary and alternate escape routes should be developed if possible.
- Fire-safe development planning should be undertaken by jurisdictions to include:
  - Sufficient fuel free areas around structures
  - Fire resistant roofing materials
  - Adequate two-way routes and turnaround areas for emergency vehicles
  - An adequate water supply
  - Development of local ordinances to control human caused fires
- Road closures should be increased during peak fire periods to reduce access to fire prone areas
- Enforcement of “no-burn” periods

### **WILDFIRE SMOKE**

#### **Overview**

## Port Ludlow Neighborhood Emergency Plan (NEP)

Wildfire smoke is a public health concern in the United States. Exposure to wildfire smoke can lead to eye and respiratory tract irritation, exacerbations of existing respiratory and cardiovascular conditions, and premature death.

Cleaner air shelters are used by many communities to provide spaces where people can shelter overnight or for extended periods of time. School gymnasiums, buildings at public fairgrounds, and civic auditoriums are examples of spaces used as cleaner air shelters during wildfires.

Cleaner air spaces are used by many communities to provide temporary relief from wildfire smoke; they are often used by individuals who cannot create spaces with adequately clean air in their homes.

Examples of cleaner air spaces include libraries, museums, shopping malls, senior centers, and other indoor areas with effective particle filtration and air conditioning.

## ANNEX GG TERRORISM / CIVIL DISTURBANCE

### DEFINITION

Terrorism or civil disturbance comprises a political effort to oppose the status quo by inducing fear in the civilian population through the widespread and publicized use of violence, including murder, injury, and destruction. The FBI definition of terrorism is “the unlawful use of force or violence against person or property to intimidate or coerce a government; the civilian population; or any segment of it, in furtherance of political or social objectives.

### HISTORY

Jefferson County residents, businesses, schools, and government have received numerous threatening phone calls over the years regarding bomb threats. Although many reports of pending explosions are received, most are malicious mischief. A few mailboxes have been blown up, and a few cases of arson have occurred. Arson commissions have been for personal gain, some for revenge and some for a “thrill”.

### HAZARD IDENTIFICATION AND VULNERABILITY ASSESSMENT

Terrorists and individuals intent on creating a civil disturbance hope to instill fear and panic in the civilian populations by convincing them that their governments cannot:

- Protect its own population
- Protect symbols of its authority
- Protect society’s institutions
- Protect society’s infrastructure
- Protect its own officials
- End the threat of more terrorism, and as a result,
- Cannot maintain normal, peaceful conditions in society.

Cyberterrorism is a relatively new phenomenon that can be used to potentially disrupt society and exploit our continuing reliance on computers and telecommunication. Cyberterrorism threatens the electronic infrastructure supporting the social, health, and economic well-being of all citizens. Interlinked computer networks regulate the flow of power, water, financial services, medical care, telecommunication networks, and transportation systems.

If one were able to accurately predict, it would be more likely that a site in Seattle or Tacoma or a nearby military installation would be the direct target rather than one located in the County. The consequences are that Jefferson County could appear (or it could be announced to the Seattle-Metro area) that this area could be a haven for people fleeing from a terrorist situation. County resources would be quickly overloaded, food supplies would quickly be depleted, lodging would be scarce, and management of people (both local and “refugees”) could be

## Port Ludlow Neighborhood Emergency Plan (NEP)

extremely difficult. County leaders have addressed such scenarios and are becoming cognizant of potential problems and the implications of such an event.

### IMPLEMENTATION

Specific response and recovery actions for Terrorist incidents are difficult to plan for as they can occur a dozen different ways in almost any location within the County or City. The Jefferson County Mass Casualty Incident Plan provides the Incident Commander with a game plan of how to respond to this type of scenario.

In general, residents are encouraged to avoid areas where activities are taking place, but record factual information for possible relay to Emergency Management Communications Centers, if needed. Block Captains should turn on their FRS radios and remain vigilant to instructions.

## ANNEX HH EPIDEMIC/PANDEMIC

Residents are encouraged to monitor county Health Department website for guidance:

[www.jeffersoncountypublichealth.org/202/public-health](http://www.jeffersoncountypublichealth.org/202/public-health)

### THE HAZARD

Public Health Emergencies can be food or water contamination or medical emergencies such as diseases, epidemics, or a pandemic that have the potential to affect people and animals over a significant area. Water emergencies are discussed in the sections on man-made hazards.

### IMPACTS AND EFFECTS

- Potential deaths due to toxins or illness
- Increase in illness
- Potential illness and death of commercial livestock as well as domestic pets
- Increased stress on local health care system and providers
- Demands made on local health care system beyond capacity to respond
- Disruption of local commerce
- Spot shortages of food, supplies due to commerce disruption
- Economic impact due to loss of sales from people sheltering in place
- Economic impact of lost work-time due to illness

### **Limit the Spread of Germs and Prevent Infection**

- Follow public health guidance regarding drinking water as the situation develops.
- **Avoid close contact** with people who are sick.
- When you are sick, **keep your distance** from others to protect them from getting sick too.
- **Cover your mouth and nose** with a tissue when coughing or sneezing. It may prevent those around you from getting sick.
- **Washing your hands** often will help protect you from germs.
- **Avoid touching your eyes, nose or mouth.**
- **Practice other good health habits.** Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.

### **People who need to take extra precautions**

People at higher risk for severe illness from COVID-19 may include:



## Port Ludlow Neighborhood Emergency Plan (NEP)

- People 65 years or older
- Persons of any age with serious underlying medical conditions including chronic lung disease, serious heart conditions, and diabetes. See CDC's website for a complete list of [people at higher risk](#), and check regularly for updates as more data become available.
- Higher risk shelter residents should be prioritized for COVID-19 testing and personal protective equipment if resources are available but limited.
- Some staff and volunteers may be at higher risk for severe illness. Plan for alternative staffing resources to replace high risk staff and volunteers during the COVID-19 pandemic. Consider pre-deployment of additional healthcare workers and mental health personnel to shelters.

Other people who may need to take extra precautions include:

- People with disabilities
- Pregnant or breastfeeding mothers
- People experiencing homelessness
- Racial and ethnic minority groups

### [Considerations for Cleaner Air Shelters and Cleaner Air Spaces to Protect the Public from Airborne Virus during Wildfire](#)

This document provides interim guidance to reduce the risk of introducing and transmitting SARS-CoV-2 (the virus responsible for causing COVID-19) in cleaner air shelters and cleaner air spaces. Cleaner air shelters and cleaner air spaces are public spaces where people can seek relief from wildfire smoke. This interim guidance is intended for use by federal, state, local, and tribal jurisdictions in the United States. It should be used in conjunction with existing cleaner air shelter information, procedures, guidance, and resources.

The use of cleaner air shelters and cleaner air spaces can result in congregating of groups of people, including older adults and those with heart or lung conditions. Congregation of people in cleaner air shelters and cleaner air spaces can potentially provide a route for the transmission of SARS CoV-2, the virus that causes COVID-19, among individuals using the facilities, staff, and volunteers.