INCIDENT ANNEX 2

SEVERE WEATHER RESPONSE PLAN – STORM PLAN

ICS FUNCTION: Operations

LEAD: DEM

SUPPORT: Planning and Community Development
Public Health and Human Services
Facilities Management
Parks and Recreation
Public Works
Sheriff
Fire Services
Town of Coupeville
City of Langley
City of Oak Harbor
ICOM
Island County Chapter – American Red Cross (ARC)
Whidbey General Hospital and EMS
Naval Air Station Whidbey Island (NASWI)
Island County Amateur Radio, RACES/ARES

I. INTRODUCTION

A. PURPOSE

To provide instructions and standard processes for warning, response, and recovery from the effects of a severe storm.

B. SCOPE

This annex addresses pre-storm warning and preparations, response during and immediately after a storm, and general recovery actions. This annex will not address continuing public preparedness education. Damage assessment is covered in ESF 14, Recovery.

II. POLICY

Island County strongly encourages business, individual, and family emergency preparedness actions. During and after a storm caused emergency, Island County emergency response resources will be primarily devoted to immediate life safety actions and the recovery of public infrastructure including roads, streets, and public facilities/utilities. The county's ability to assist in the recovery or preservation of private property or residences is limited to life safety and preventing further damage to public infrastructure. Business and private property owners need to plan ahead of an emergency for such items as sandbags, private property flood protection barriers, emergency power generation, tree trimming and removal, snow removal, and specific hazard insurance (including flood and wind damage coverage and coverage for the contents of residences/businesses).

III. PLANNING ASSUMPTIONS

A. Island County is most susceptible to severe wind, heavy rain or snow, and flooding from seasonal extreme high tides in the December through March period. The primary hazard concern for flooding is the convergence in time and location of an extreme low-pressure storm and a seasonal high tide.

B. The most probable damage is downed trees, blocked roads and driveways, power outages, and localized tidal flooding. Secondary problems will be extended power outages, inability to pump potable water or pump motor fuels, flooding of septic systems, water damage, and resulting mold/mildew health hazards.

C. The most severe consequences result from an extended loss of electrical power. The resulting inability to pump water, operate fuel pumps, operate sewage lift stations and water treatment facilities, and heat residences will immediately and seriously impact business, the elderly, and the very young.

D. Heavy wet snow loads will bring down trees and utility lines, can collapse roofs and other structures, and contribute to ponding or inland flooding. Saturated bluffs and hillsides may slide, damaging buildings, roads, and utilities.

IV. CONCEPT OF OPERATIONS

A. Severe Storm response operations will be carried out in three phases:

- Pre-storm warning and preparation phase
- Storm response operations
- Storm recovery operations

B. Each phase consists of governmental (public) tasks and tasks for private citizens and businesses. Increased warning time and on-going public preparedness education can reduce the impact of a storm if the public is reasonably prepared.

1. Pre-storm Warning and Preparation Phase

   a. The pre-storm warning phase begins when the storm or other weather event is identified and forecasted to impact Island County. (See list of selected weather terms is in TAB A). This phase ends when the storm arrives over the county or the danger has passed. Once the storm track is identified, other factors need to be addressed such as:

      - High tide times related to the storm's arrival.
      - Wind direction and speed (on-shore or off-shore).
      - Amount of precipitation forecasted and type (rain, sleet, hail, snow) and recent precipitation totals affecting ground saturation and run-off levels.
      - Forecasted temperatures (probability of freezing).
      - Special circumstances: (extreme cold, potential or existing flood conditions on the Skagit and Stillaguamish Rivers.)

   b. The Pre-Storm Phase also includes those actions taken by county government, local government, and other

jurisdictions to ensure facilities, equipment, and supplies are checked and ready, response materials are available and pre-staged if appropriate. A general list of pre-storm checks is included in TAB B. Based on the best information available, Public Works road shops may preposition bulk sand close to flood prone areas for the public to use for sandbags. Sandbags for private property are normally the responsibility of the business and property owners.

c. Public preparedness and warning actions will be shaped by the quality of weather information and the time available to plan. Advance forecasting facilitates better warning and focuses preparation actions. General public warning and preparedness tasks are listed in TAB C. Flood protection for residences and businesses is the responsibility of the owner. Owners must decide well in advance of severe weather to construct flood protection structures and to purchase and fill sandbags, remove valuables to higher elevations, and plan/provide for emergency power and potable water.

2. Storm Response Phase

The Storm Response Phase begins when severe weather arrives in Island County and continues until all immediate life safety and public infrastructure issues have been responded to and cleared. This phase may include opening of the County EOC, initial reporting of damage and utility outages, and shelter operations. A formal emergency/disaster declaration may be required then or at a later date.

3. Storm Recovery Phase

The Recovery Phase begins when all new threats to life and property have stopped. Recovery operations will include "windshield surveys reports, initial damage reporting for EMD reporting, continued debris removal, utility restoral, and shelter closing. The decision to formally declare an emergency or disaster

may be part of this phase.

a. General recovery actions are discussed in ESF #14, Recovery. Recovery actions consist primarily of two parts overlapping in time. Part 1 is restoral and return to service of public facilities, services, utilities, clean up of businesses and residences, and the removal of debris. A general list of recovery tasks both public and private is in TAB D.

b. Part 2 is the implementation of a process to accurately collect and document public and private (including business) damage assessments. This process is critical to future efforts to recover costs associated with the emergency or disaster. The collection of damage assessment information is complex and requires specific information within a short period of time. Damage estimation and documentation is addressed in ESF #14, Recovery.

c. Recovery operations are further detailed in TAB F.

V. RESPONSIBILITIES

A. Department of Emergency Management (DEM)

1. DEM will coordinate storm warnings and preparation actions. Time permitting and with adequate information, DEM will consult with PW, Health, fire services, and other emergency support organizations to determine likely areas of greatest impact. DEM will then focus warning and preparedness information to residents in threatened areas. The use of volunteers to accomplish this activity is essential.

2. During and after the storm, DEM will operate the EOC at the appropriate level, maintain a chronological log of incident events, and coordinate for resources. DEM will provide the County PIO with information for media releases. DEM will activate emergency communication as necessary and coordinate with the Red Cross for any sheltering needs.

3. After the storm, DEM will coordinate recovery actions. Information packets will be made available in areas most impacted. Finally, DEM will manage the process for collection of damage assessments, document and report county recovery actions, and oordinate with Washington State EMD for damage surveys.

4. As necessary, DEM will coordinate with the Sheriff, fire services, Public Works and other organizations to use vehicle mounted public address systems for both early warning, and provide critical information in damaged areas.

5. The DEM information telephone line will be periodically updated with available information. Additionally, current information will also be placed on the county web pages.

B. Other County Departments:

1. Community Development and Planning:

   a. Identify and mark unsafe structures, beginning with public structures and businesses.

   b. Coordinate emergency permitting and inspection processes for public and private property recovery work to ensure compliance with safety, environmental, and fire standards.

   c. Inspect and provide rapid permitting for repairs to seawalls, dikes, and flood control structures.

2. Public Health Department:

   a. Provide instructions for preparing water and septic systems for storms and possible damage. Provide emergency water treatment guidance.

   b. Provide instructions for the recovery of water and septic systems after flood or high water, including water testing and emergency treatment.

c. In coordination with Public Works, Solid Waste Division, advice on collection and disposal of flood generated household hazardous waste (cleaning materials, chemicals, garden chemicals). Provide instructions for the prevention and treatment of mold and mildew.

d. As necessary, inspect potable water and water treatment systems including septic systems. Inspect/monitor flooded areas and shorelines for ground and shoreline contamination.

e. Monitor the county for signs of water/food related infection or illness.

3. Facilities Maintenance:

a. Review severe weather plans including the inspection and test of emergency power generators, fixed emergency lights, and flashlights, and generator fuel status.

b. Review any requirements to sandbag below grade doors and windows or areas where surface water has collected previously.

c. Determine if any internal drains are subject to storm water back-up and flooding

d. Coordinate with suppliers for emergency generator refueling.

4. Public Works:

a. Engineering Section

1) Implement severe weather plans and warn personnel.

2) Designate a Pubic Works EOC team

3) Alert personnel for early damage surveys and assessments. Document all damage and emergency work with digital photographs and GPS locations.

4) Request emergency health, shoreline, and environmental permits for recovery work.

b. Roads Division:

1) Alert all available personnel for recall and extended operations. Implement severe weather plans.

2) Ensure all equipment is fueled and ready for use including power generators and portable gas powered pumps and saws. Fill all truck or trailer mounted bulk fuel tanks. Time permitting, request road shop bulk fuel tanks be filled.

3) As directed, stage sand at known flood areas or pre-planned public access areas. Pre-stage road hazard signage and barriers as necessary.

4) Direct early damage surveys and collection of information including digital photographs, addresses, and GPS location data.

5) Closely document all emergency work under an assigned unique work order including equipment and materials used, fuel consumed, worker overtime, tipping fees and number or volume of debris loads.

c. Solid Waste Division

1) Prepare to receive and process storm debris. Document debris disposition including locations (GPS if possible) and quantities.

2) Request emergency health, shore-line, and environmental permits for emergency work and debris storage.

5. Sheriff

a. Precincts:

1) Implement severe weather plans and warn personnel.

2) Coordinate road closure and debris information with PW-Roads, and ICOM. Emphasize reporting of debris and blocked roads, power outages, power lines, and possible electrical and fire hazards.

b. County Jail

1) Review severe weather plans and staffing requirements.

2) Confirm with facilities Maintenance that generator is checked and fueled. Check all emergency lighting and flashlights

3) Prepare to serve non-cooked meals if kitchen power is lost.

6. County Juvenile Facility (Superior Court)

a. Review severe weather plans and staffing requirements. Coordinate with Jail kitchen for non-cooked meals.

b. Confirm with Facilities Maintenance that generator is checked and fueled. Check all emergency lighting and flashlights.

7. County Parks and Recreation

a. Implement severe weather plans

b. Direct early damage surveys and collection of information including digital photographs.

c. Coordinate with Public Works for emergency health, shoreline, and environmental permit coverage for emergency work and debris and driftwood removal and storage. Document debris disposition including locations and quantities.

C. Non-County Organizations

1. Fire Services

Implement severe weather plans. Increase staffing if conditions warrant. Prepare to establish Area Commands.

Insure all vehicles are fueled. Inspect/test all gas powered pumps and saws. Inspect and test all station power generators and check fuel supplies.

2. Town of Coupeville, City of Langley, City of Oak Harbor

a. Implement severe weather plans

b. Identify and alert on-call supervisory and response personnel. Review criteria for opening local EOC's.

c. Review water system and water treatment facility emergency power plans and equipment. Ensure all fixed and portable power generators are fueled and tested.

d. Plan for the use of use of vehicle mounted public address systems for warning and recovery information as required.

e. Review shelter plans. Also identify high-risk populations and facilities - group homes and senior care facilities. Verify their plans for dealing with power outages, facility

heating, and medical equipment operation.

f. Review plans for street and road clearing and debris removal. Ensure all response and heavy equipment is fueled; all engine driven pumps and saws are inspected tested and ready.

g. Review any requirements for sandbagging critical facilities. Review any requirements to sandbag below grade doors and windows or areas where surface water has collected before. Determine if any drains are subject to storm water back up. Pre-stage supplies.

h. Document all damage and emergency work using digital photographs and GPS locations.

i. As situation requires, request emergency health, shoreline, and environmental permits for emergency work and debris disposal.

3. Island County Chapter-American Red Cross

a. Review and implement disaster response plans. Based on information available, assess shelter needs and possible locations. Alert disaster teams.

b. Prepare for people using electric medical equipment (ventilators, dialysis, etc).

c. Ask Island County DEM to designate amateur radio emergency support to the chapter headquarters and to any shelters as necessary.

d. Identify a Red Cross liaison to the county EOC.

4. Whidbey General Hospital and EMS

a. Review severe weather plans including inspection and test of emergency power generators, portable emergency lights

and flashlights.

b. Review any requirements to sandbag below grade doors and windows or areas where surface water has collected previously. Determine if any drains are subject to storm water back-up.

c. Fuel all vehicles and check fuel levels of generators.

d. Request from DEM assignment of amateur radio operators to the hospital station if normal communications are interrupted.

e. If power outages are widespread, prepare for influx of patients using medical equipment (ventilators, home dialysis, etc).

5. School Districts

a. Review and update storm and emergency plans.

b. Monitor weather reports and maintain close contact with supporting Island County Public Works road shop for road status and safety of travel.

c. Ensure Island County DEM (tel: 360-679-7370, FAX: 360-679-7376, e-mail: dem@co.island.wa.us) is notified of any school closures or cancellations, schedule changes, or transportation changes.

6. Island Transit

a. Review and update storm plans and other emergency plans. Ensure all equipment is fueled and ready for either planned or emergency dispatch. Ensure emergency power generators are tested and fueled.

b. Coordinate closely with Island County Public Works road shops for road conditions and closures. Ensure Island

County DEM is included in any service or schedule changes or service cancellation announcements.

VI. REFERENCES

A. Washington State CEMP, 2003
B. Island County CEMP, ESF# 14, Recovery
C. Island County CEMP, ESF# 14, TAB A, Damage Assessment
D. Island County CEMP, ESF# 3, TAB A, Solid Waste Management
E. Island County R.A.C.E.S. Plan
F. Local jurisdiction comprehensive emergency management plans (CEMP), emergency operations plans (EOP), and standard operation procedures (SOPs)

TABS

A. Severe Weather Warning Definitions
B. General Pre-Storm Preparedness Planning Checks
C. Typical Pre-Storm Checks for Individuals and Private Property Owners
D. Typical Post-Storm Checks for Individuals and Private Property Owners
E. Damage Assessment and Reporting Process
F. Detailed Response Operations
G. Storm Communications Plan (To Be Developed)

INCIDENT ANNEX 2
TAB A

Selected NOAA Weather Definitions

Flood Stage

A gauge height at which a watercourse overtops its banks and begins to cause damage to any portion of the defined reach. Flood stage is usually higher than or equal to bankful stage.

Flood Statement (FLS)

In hydrologic terms, a statement issued by the NWS to inform the public of flooding along major streams in which there is not a serious threat to life or property. It may also follow a flood warning to give later information.

Flood Warning

(FLW) In hydrologic terms, a release by the NWS to inform the public of flooding along larger streams in which there is a serious threat to life or property. A flood warning will usually contain river stage (level) forecasts.

High Wind

Sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration.

High Wind Advisory

This product is issued by the National Weather Service when high wind speeds may pose a hazard. The criteria for this advisory varies from state to state. In Michigan, the criteria is sustained non-convective (not related to thunderstorms) winds greater than or equal to 30 mph lasting for one hour or longer, or winds greater than or equal to 45 mph for any duration.

High Wind Warning

This product is issued by the National Weather Service when high wind speeds may pose a hazard or is life threatening. The criteria for this warning varies from state to state. In Michigan, the criteria is sustained non-convective (not related to thunderstorms) winds greater than or equal to 40 mph lasting for one hour or longer, or winds greater than or equal to 58 mph for any duration.

High Wind Watch

This product is issued by the National Weather Service when there is the potential of high wind speeds developing that may pose a hazard or is life threatening. The criteria for this watch varies from state to state. In Michigan, the criteria is the potential for sustained non-convective (not related to thunderstorms) winds greater than or equal to 40 mph and/or gusts greater than or equal to 58 mph.

Ice Storm

An ice storm is used to describe occasions when damaging accumulations of ice are expected during freezing rain situations. Significant accumulations of ice pull down trees and utility lines resulting in loss of power and communication. These accumulations of ice make walking and driving extremely dangerous. Significant ice accumulations are usually accumulations of ¼" or greater.

Ice Storm Warning

This product is issued by the National Weather Service when freezing rain produces a significant and possibly damaging accumulation of ice. The criteria for this warning varies from state to state, but typically will be issued any time more than 1/4" of ice is expected to accumulate in an area.

Severe Local Storm

A convective storm that usually covers a relatively small geographic area, or moves in a narrow path, and is sufficiently intense to threaten life and/or property. Examples include severe thunderstorms with large hail, damaging wind, or tornadoes. Although cloud-to-ground lightning is not a criteria for severe local storms, it is acknowledged to be highly dangerous and a leading cause of deaths, injuries, and damage from thunderstorms. A thunderstorm need not be severe to generate frequent cloud-to-ground lightning. Additionally, excessive localized convective rains are not classified as severe storms but often are the product of severe local storms. Such rainfall may result in related phenomena (flash floods) that threaten life and property.

Severe Thunderstorm

A thunderstorm that produces a tornado, winds of at least 58 mph (50 knots), and/or hail at least ¾" in diameter. Structural wind damage may imply the occurrence of a severe thunderstorm. A thunderstorm wind equal to or greater than 40 mph (35 knots) and/or hail of at least ½" is defined as approaching severe.

Severe Thunderstorm Warning

This is issued when either a severe thunderstorm is indicated by the WSR-88D radar or a spotter reports a thunderstorm producing hail 3/4 inch or larger in diameter and/or winds equal or exceed 58 miles an hour; therefore, people in the affected area should seek safe shelter immediately. Severe thunderstorms can produce tornadoes with little or no advance warning. Lightning frequency is not a criterion for issuing a severe thunderstorm warning. They are usually issued for a duration of one hour. They can be issued without a Severe Thunderstorm Watch being already in effect.

Like a Tornado Warning, the Severe Thunderstorm Warning is issued by your National Weather Service Forecast Office (NWFO). Severe Thunderstorm Warnings will include where the storm was located, what towns will be affected by the severe thunderstorm, and the primary threat associated with the severe thunderstorm warning. If the severe thunderstorm will affect the nearshore or coastal waters, it will be issued as the combined product--Severe Thunderstorm Warning and Special Marine Warning. If the severe thunderstorm is also causing torrential rains, this warning may also be combined with a Flash Flood Warning. If there is an ampersand (&) symbol at the bottom of the warning, it indicates that the warning was issued as a result of a severe weather report.

After it has been issued, the affected NWFO will follow it up periodically with Severe Weather Statements. These statements will contain updated information on the severe thunderstorm and they will also let the public know when the warning is no longer in effect.

Severe Thunderstorm Watch

This is issued by the National Weather Service when conditions are favorable for the development of severe thunderstorms in and close to the watch area. A severe thunderstorm by definition is a thunderstorm that produces 3/4 inch hail or larger in diameter and/or winds equal or exceed 58 miles an hour. The size of the watch can vary depending on the weather situation. They are usually issued for a duration of 4 to 8 hours. They are normally issued well in advance of the actual occurrence of severe weather. During the watch, people should review severe thunderstorm safety rules and be prepared to move a place of safety if threatening weather approaches.

A Severe Thunderstorm Watch is issued by the Storm Prediction Center in Norman, Oklahoma. Prior to the issuance of a Severe Thunderstorm Watch, SPC will usually contact the affected local National Weather Service Forecast Office (NWFO) and they will discuss what their current thinking is on the weather situation. Afterwards, SPC will issue a preliminary Severe Thunderstorm Watch and then the affected NWFO will then adjust the watch (adding or eliminating counties/parishes) and then issue it to the public by way of a Watch Redefining Statement. During the watch, the

NWFO will keep the public informed on what is happening in the watch area and also let the public know when the watch has expired or been cancelled.

Small Craft

Generally a vessel under 65 feet in length.

Small Craft Advisory

This is issued by the National Weather Service to alert small boats to sustained (more than 2 hours) hazardous weather or sea conditions. These conditions may be either present or forecasted. The threshold conditions for it are usually sustained winds of 18 knots (21 mph) (less than 18 knots in some dangerous waters) to 33 knots (38 mph) inclusive or hazardous wave conditions (such as 4 feet or greater). In the Great Lakes, this advisory relates to conditions within 5 nautical miles of shore. As a result, these will be only issued in the Nearshore Forecast. Along the coastal regions of the East Coast, Gulf of Mexico, and West Coast, this advisory relates to conditions out to as much as 100 nautical miles of shore (coastal waters). As a result, these will be only issued in the Coastal Marine Forecast. Mariners learning of this advisory are urged to determine immediately the reason by turning their radios to the latest marine broadcast. Decisions as to the degree of the hazard will be left to the boater, based on experience and size and type of boat. There is no legal definition for a "small craft."

Storm Warning

A warning of 1-minute sustained surface winds of 48 kt (55 mph or 88 kph) or greater, either predicted or occurring, not directly associated with tropical cyclones.

Marine Small Craft Thunderstorm Advisory

A marine warning issued by Environment Canada Atmospheric Environment Branch when the possibility of thunderstorms is greater than 40 percent.

Severe Weather Potential Statement

This statement is designed to alert the public and state/local agencies to the potential for severe weather up to 24 hours in advance. It is issued by the local National Weather Service office.

Severe Weather Probability

This WSR-88D radar product algorithm displays numerical values proportional to the probability that a storm will produce severe weather within 30 minutes. Values determined using a statistical regression equation which analyzes output from the VIL algorithm. It is used to quickly identify the most significant thunderstorms.

Severe Weather Statement

A National Weather Service product which provides follow up information on severe weather conditions (severe thunderstorm or tornadoes) which have occurred or are currently occurring.

Wind Advisory

Sustained winds 25 to 39 mph and/or gusts to 57 mph. Issuance is normally site specific. However, winds of this magnitude occurring over an area that frequently experiences such winds

Wind Chill

Reference to the **Wind Chill Factor**; increased wind speeds accelerate heat loss from exposed skin, and the wind chill is a measure of this effect. No specific rules exist for determining when

wind chill becomes dangerous. As a general rule, the threshold for potentially dangerous wind chill conditions is about -20°F.

Wind Chill Advisory

The National Weather Service issues this product when the wind chill could be life threatening if action is not taken. The criteria for this warning varies from state to state.

Wind Chill Factor

Increased wind speeds accelerate heat loss from exposed skin. No specific rules exist for determining when wind chill becomes dangerous. As a general rule, the threshold for potentially dangerous wind chill conditions is about -20°F.

Wind Chill Warning

The National Weather Service issues this product when the wind chill is life threatening. The criteria for this warning varies from state to state.

Winter Storm Warning

This product is issued by the National Weather Service when a winter storm is producing or is forecast to produce heavy snow or significant ice accumulations. The criteria for this warning can vary from place to place.

Winter Storm Watch

This product is issued by the National Weather Service when there is a potential for heavy snow or significant ice accumulations, usually at least 24 to 36 hours in advance. The criteria for this watch can vary from place to place.

INCIDENT ANNEX 2
TAB B

General Pre-Storm Preparedness Planning Checks for First response Organizations

Verification of personnel recall numbers.
Planned road and facility inspections.
Review severe weather plans and remind employees to prepared their families and homes.
Issue any special safety warning to employees.

Identification of potential flood areas or unstable slopes. Determine if increased inspections are warranted.

Operational checks of selected equipment including power generators, pumps, saws, and radios.

Top-off of all equipment fuel tanks, trailer mounted fuel tanks, and if warranted road shop bulk fuel tanks.

Inventory of sandbags, bulk sand, barriers, and signage. Determine if bulk sand should be staged and the likely locations.

Review emergency plans for critical services in the event of power outages. Determine availability of portable generators. Identify and prioritize any locations to be supported with emergency power.

Review emergency communications procedures and reporting procedures including who to report information to, format for the information; how to contact them, and on what schedule. Review/update emergency contact names and numbers for areas of mutual concern and support. Review how to report road debris, blocked roads, utility outages, and electrical and water hazards.

Provide any special precautions or changes to county DEM or County Public Information Officer (PIO). Plan media releases with county or jurisdiction specific information. Establish and publicize information lines for non-emergency information calls.

Alert volunteer support for possible activation: CERT Teams, Amateur Radio Operators, fire and medical support. Contact DEM for mission numbers to cover emergency volunteer workers.

Review shelter information and planning.

Review procedures for recording all emergency work done, personnel involved and hours, equipment used and hours operated, fuel consumed, sandbags and sand used, any other rental, leases, or purchases specifically for the response.

INCIDENT ANNEX 2
TAB C

Typical Pre-Storm Checks for Individuals and Private Property Owners

The following steps will help private property owners prepare for the next storm and the power outages that generally accompany them.

BEFORE

- Have a disaster plan; and assemble a disaster supplies kit (include several flashlights, battery powered radio, extra batteries and a wind-up clock).
- Anchor outdoor objects that can blow away.
- Fill vehicles with gas in case the gas stations lose power.
- Register life-sustaining equipment with your utility.
- Consider buying a small generator to power electrically powered life-sustaining equipment.
- When installing generators, follow the manufacturer's instructions and have it inspected by the utility company and qualified electrical inspector.
- Have a corded telephone available. Cordless phones do not work when the power is out.
- Post the phone number of the New Construction, Repairs and Power Outage listing of your local utility.
- Learn how to open your electric garage door using the manual override.
- Make sure you have an alternate heat source and fuel supply.
- Determine if you are in a flood prone area, if so, move vehicles to higher ground, time permitting, move furnishings to upper floors or move valuable items to higher ground.
- Clear local storm drains or ditches to move water more effectively.
- Collect valuable papers, other items in case you must leave the residence.
- Prepare and position sandbags in advance.
- Know location of utility shut-offs and how to shut off each.
- Time permitting, obtain extra prescribed medications.

DURING

Do not drive or go outside in high winds. Avoid windows. Avoid driving through high water.

- Stay far away from downed power lines. Report the outage to your local utility; otherwise, use the phone for emergencies only.
- If you are the only one without power, check your fuse box or circuit breaker panel. Turn off large appliances before replacing fuses or resetting circuits.
- If power is out in the neighborhood, turn-off/unplug electrical heaters and appliances to reduce the initial demand and protect motors from possible low voltage damage. If you leave home, turn off or unplug heat-producing appliances.
- If you have an electrical generator read all safety notes and operating instructions. – Never use a generator indoors or in a closed garage.
- Unplug computers and other voltage sensitive equipment to protect them from power surges.
- Conserve water, especially if you are on a well.
- Keep doors, windows and draperies closed to retain heat.
- Keep refrigerator and freezer doors closed. If doors remain closed, a fully loaded freezer can keep foods frozen for two days.
- Be extremely careful of fire hazards caused by candles or other flammable sources.
- When using kerosene heaters, gas lanterns or stoves indoors, maintain ventilation to avoid a build-up of toxic fumes. Do not use charcoal indoors.
- Leave one light switch on to alert you when the power is restored. If you leave, turn on your porch light so that the utility crews on the street will be able to tell when power is restored. To your property.

INCIDENT ANNEX 2
TAB D

Typical Post-Storm Checks for Individuals and Private Property Owners

Taken from the Centers For Disease Control Web-site, complete text at http://www.bt.cdc.gov/disasters/hurricanes/recovery.asp

When returning to your home after a hurricane, flood, or other natural disaster protect yourself and your family by following these tips.

Reentering Buildings

- Stay away from damaged buildings or structures until they have been examined and certified as safe by a building inspector or other government authority. You may want to wait to return to buildings during daylight hours, when it is easier to avoid hazards, particularly if the electricity is off and you have no lights.
- Leave immediately if you hear shifting or unusual noises that signal that the structure may fall or if you smell gas or suspect a leak. If you smell gas, notify emergency authorities and do not turn on the lights, light matches, smoke, or do anything that could cause a spark. Do not return to the house until you are told it is safe to do so.
- Keep children and pets out of the affected area until cleanup has been completed.

General Safety Measures

- Have at least two fire extinguishers, each with a UL rating of at least 10A, at every cleanup job.
- Wear hard hats, goggles, heavy work gloves, and watertight boots with steel toe and insole (not just steel shank) for cleanup work.
- Wear earplugs or protective headphones to reduce risk from equipment noise.
- Use teams of two or more people to move bulky objects. Avoid lifting any material that weighs more than 50 pounds (per person).
- When using a chain saw, operate the saw according to the manufacturer's instructions, wear appropriate protective equipment, avoid contact with power lines, be sure that bystanders are at a safe distance, and take extra care in cutting trees or branches that have gotten bent or caught under another object. Use extreme caution to avoid electrical shock when using an electric chain saw...

- If there has been a backflow of sewage into your house, wear rubber boots, rubber gloves, and goggles during cleanup of the affected area.
- In hot weather, try to stay cool by staying in air-conditioned buildings, taking breaks in shaded areas or in cool rooms, drinking water and nonalcoholic fluids often, and wearing light and loose-fitting clothing. Do outdoor activities during cooler hours. For more information on protecting yourself against heat-related illness,

Carbon Monoxide Exposure

- Never use generators, pressure washers, or other gasoline, propane, natural gas, or charcoal-burning devices inside your home, basement, garage, or camper—or even outside near an open window, door, or vent. Carbon monoxide—an odorless, colorless gas from these sources that can cause sudden illness and death—can build up indoors and poison the people and animals inside.

Mold and Cleanup

- Remove and discard items that cannot be washed and disinfected (such as mattresses, carpeting, carpet padding, rugs, upholstered furniture, cosmetics, stuffed animals, baby toys, pillows, foam-rubber items, books, wall coverings, and paper products).
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks, and other plumbing fixtures) with hot water and laundry or dish detergent.

Electrical Issues

- If electrical circuits and electrical equipment have gotten wet or are in or near water, turn off the power at the main breaker or fuse on the service panel. If you must enter standing water to access the main power switch, then call an electrician to turn it off.
- Never turn power on or off or use an electric tool or appliance while standing in water.
- Do not connect generators to your home's electrical circuits without the approved, automatic-interrupt devices. If a generator is on line when electrical service is restored, it can become a major fire hazard and it may endanger line workers helping to restore power in your area.

Hazardous Materials Issues

- Call the fire department to inspect or remove chemicals, propane tanks, and other dangerous materials.

- Wear protective clothing and gear (for example, a respirator if needed) when handling hazardous materials.
- Wash skin that may have come in contact with hazardous materials.
- Wear insulated gloves and use caution if you have to remove a car battery. Avoid any acid that may have leaked from a car battery.

Hygiene and Infectious Disease Issues

- After completing the cleanup, wash with soap and water. If there is a boil-water advisory in effect, use water that has been boiled for 1 minute (allow the water to cool before washing). Or you may use water that has been disinfected for personal hygiene use (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 minutes. If the water is cloudy, use a solution of 1/4 teaspoon of household bleach per 1 gallon of water.
- If you have any open cuts or sores that were exposed to floodwater, wash them with soap and water and apply an antibiotic ointment to discourage infection.
- Seek immediate medical attention if you become injured or ill.
- Wash all clothes worn during the cleanup in hot water and detergent. These clothes should be washed separately from uncontaminated clothes and linens.

Water Issues

- If the building is flooded, the waters may contain fecal material from overflowing sewage systems and agricultural and industrial waste. Although skin contact with floodwater does not, by itself, pose a serious health risk, there is risk of disease from eating or drinking anything contaminated with floodwater.
- If you have any open cuts or sores that will be exposed to floodwater, keep them as clean as possible by washing them with soap and applying an antibiotic ointment to discourage infection.
- To reduce cold–related risks when standing or working in water which is cooler than 75 degrees F (24 degrees C), wear insulated clothes and insulated rubber boots, take frequent breaks out of the water, and change into dry clothing when possible.

Monitor your radio or television for up-to-date emergency information.

INCIDENT ANNEX 2
TAB E

Initial Damage Assessment Reporting Process

Private Property and Business Damage Reporting

The initial reporting of storm damage follows two separate processes – one series of actions for public property and infrastructure and a separate process for the reporting of damage to private property and businesses. Each process requires the reporting of specific information for the completion of standard forms. Also, this information must be collected and reported to the state EOC within a very short time.

A simplified information collection form for reporting private property damage can be found at **Attachment 1**. This form must be filled out as completely as possible and returned to DEM as soon as possible. Damage estimates or repair estimates are meant to be "best guesses" and submission of the form should not be delayed waiting for professional estimates to be made.

Public Property Initial damage Assessment Reporting

The process and forms for completing the initial damage assessment for public property is contained in the Island County CEMP, ESF 23, Damage Assessment. Additionally, after a storm when damage is sustained, DEM will coordinate with the Washington State EMD for reporting deadlines and any special requirements.

INCIDENT ANNEX 2, TAB F, Attachment 1

PRIVATE PROPERTY
INITIAL DAMAGE ASSESSMENT INFORMATION

The information requested on this form is the information needed by Island County Department of Emergency Services to include your private property damage in the County's initial damage assessment. Please complete as much of the form as possible and return it to a DEM representative, or the Camano County Annex, or any County Road Shop. You may FAX the form to Island County DEM at 360-679-7376. Please do not mail. The information in the same order may also be e-mailed to: dem@co.island.wa.us. Collection of this information is time sensitive.

THIS FORM DOES NOT AUTOMATICALLY QUALIFY YOU FOR ANY CASH OR OTHER ASSISTANCE PAYMENTS BUT WITHOUT THIS INFORMATION YOUR PROPERTY AND THE COUNTY MAY NOT QUALIFY FOR ANY ASSISTANCE.

* Please circle the category that applies to your property:

This is my: Primary Residence Secondary Residence Rental Property

1. **Jurisdiction:** Name of city, or community, or development: _____

2. **Incident Type:** Circle one that best applies:

   a. **WIND DAMAGE** - INCLUDES WIND DAMAGE TO STRUCTURE and TREE BLOW-DOWN DAMAGE TO STRUCTURE

   b. **WIND DRIVEN RAIN AND FLOODING** – same as "a" includes water damage

   c. **TIDAL FLOODING** d. **EARTHQUAKE**

   e. **LANDSLIDE** (NOT EARTHQUAKE) f. **OTHER: _____**

3. **Date(s) of Damage:** From:_____ To: _____

4. **Last Name:_____, First Name:_____, MI:_____**

5. **Street Address: _____ ZIP Code:_____**

6. **Occupant:** Circle one that applies: **OWNER** **RENTER**

7. **Habitable:** Circle one that applies: **HABITABLE** **NOT HABITABLE**

8. **Accessible:** Circle one that applies: **YES** **NO**
(Accessible – can you drive to your property as you normally would, is your driveway or road intact, blocked by trees, covered with water, mud or debris to deep to cross?)

9. **Insurance:** Circle one: **homeowners, flood, earthquake, hurricane, NONE**

10. **Insurance Deductible:** Enter $$ amount or % amount:

by $ Amount:_____

by % of Structure fair Market Value (FMV)_____

11. **Estimated Structural Loss in Dollars ($$), BEST GUESS $_____**
Do not wait for an insurance estimator or contractor's estimate.

12. **Estimated personal property loss in dollars ($$): $_____**
Your BEST GUESS value for essential items: clothing, furniture, cars, and appliances.
For renters this will be the only damage reported. Do not wait for other estimates.

13. **Damage Category**: **DESTROYED** **MAJOR** **MINOR** **AFFECTED**

Destroyed: Total Loss, Permanently Uninhabitable

Major: Significant or structural damage greater than 50% of value, uninhabitable

Minor: Conditional use, repairable in less than 30 days, few $1000's for repairs

Affected: Living space damaged, but still habitable

14. **BRIEF DESCRIPTION OF THE DAMAGE.** Be brief. Comment on the damage to the structure and contents and any access problems or restrictions. Damage to outbuildings and landscaping is not eligible. **Bulkheads, Seawalls, Dikes are eligible.**

_____

_____

_____

16. **Contact information:**

Current address:_____

Current telephone phone number: _____

Cell Phone Number: _____

E-mail address: _____

[This is a feeder form for HS form 1-PR. Information will be consolidated on to the 1-PR and transmitted to Washington State EMD]

INCIDENT ANNEX 2
TAB F

Detailed Recovery Operations

PART 1

Jurisdiction recovery actions will vary greatly depending on the facilities and utilities involved and the damage sustained. First consideration will be to life safety, public health issues and actions. Issues and tasks may include:

- Identification, marking, reporting of downed power lines.
- Restoration of utilities and public facilities and structures.
- Identification of any HAZMAT spill or release including natural gas lines damage, fuel or oil storage tank rupture, and industrial or agricultural chemical storage issues.
- Consideration of emergency potable water and sanitation service issues.
- Flood water control and pumping, debris removal, road clearance, slide stabilization, drainage clearance. Opening of areas to collect and store debris.
- Provide updated information to the public regarding services and facilities.
- Compile extensive documentation of all damage and emergency work. Obtain emergency permits for emergency work and debris disposal.

Depending on the severity of the storm and damage, extended power outages may result in large areas that cannot pump water from wells and will either have to be provided access to potable water for drinking and sanitation or they will have to relocate to other areas. This will be especially problematic for businesses, schools, and health care/nursing facilities.

PART 2

Part 2 are those actions required to compile quick and comprehensive damage assessments and estimated costs. A local damage reporting form for private property and businesses is shown at TAB E. This form can be printed and distributed and when completed faxed in or handed in at designated county locations. DEM must quickly determine and publicized the deadline for the submission of these forms. The form will

also be available on the DEM web pages on the County web site. Once filled in, the form can be e-mailed to the DEM office. This form requests the same information as the Human Services forms HS Form 1-PR [Private Residences] and Human Services Form HS 2-BU [Businesses] but in a more user-friendly form. The information will have to be transferred to these forms prior to submission to the state. These forms and instructions are also part of the CEMP, ESF 14, Recovery.

Damage assessment is also critical to public entities so that the cost of damage to public property and the cost of emergency and clean-up work can be recovered from Federal funding. The collection and reporting of public facility damage is more detailed than that for private property. The instructions and forms are contained in the CEMP, ESF 14, and Recovery. Additionally, as soon as possible, the DEM office will prepare damage assessment books with forms and instructions and provide them to all the impacted jurisdictions.

ANNEX B
TAB G

Storm Communications Plan

Telephone

When the National Weather Service (NWS) issues a severe storm warning or a high wind warning, DEM and the county PIO will coordinate to put a recorded message on the county telephone system so that callers can access current information about the storm and about any changes to county operations and office hours.

Amateur Radio

The Island County RACES Radio officer will plan for and coordinate primary and back-up radio operators at selected locations around the county such as: city EOC's, Whidbey General Hospital, selected fire stations, and other locations. As often as is practical, these radio operators will participate in any drills or emergency briefings conducted by these organizations.

When NWS issues a severe storm warning or a high wind warning, or when the EOC is opened, DEM will coordinate with the County Radio Officer/Area EC for the opening of RACES and ARES nets within the county. Amateur radio operators will not be deployed but will be warned and ready. Amateurs will initially operate from their home locations and provide information as to weather, road, and utility conditions around the county. They will not be deployed until directed by DEM. DEM will obtain a mission number from the state EOC to cover their employment.

County CEMNET

Island County has or will deploy CEMNET radios to jurisdiction EOCs around the county including NASWI EOC. The county will use CEMNET channel 4 for county communications. CEMNET channel 1 is reserved for county EOC to county EOC or county EOC to state EOC communications.