North Beach Water District

Emergency Response Plan

Contents

Section 1.
System Information

Keep this basic information easily accessible to authorized staff for emergency responders, repair people, and the news media.

System information

System Identification Number	63000C
System Name and Address	North Beach Water District PO Box 618 2212 272nd Street Ocean Park, WA 98640
Directions to the Main Office	Turn north on Sandridge Road off of Highway 101 and proceed for approximately 12 miles. Turn west onto 272nd Street off of Sandridge Road and proceed for approximately 0.5 miles. The North Wellfield will be on the south side of 272nd Street.
Basic Description and Location of System Facilities	**North Wellfield:** **Location**: 2212 272nd Street Ocean Park, WA 98640 **Directions**: Turn north on Sandridge Road off of Highway 101 and proceed for approximately 12 miles. Turn west onto 272nd Street off of Sandridge Road and proceed for approximately 0.5 miles. The North Wellfield will be on the south side of 272nd Street. **Description**: Business Office: 2,000 sq. ft. office and meeting room. 3,500 sq. ft. vehicle and materials storage. Wellfield: Six 8-inch diameter water wells producing 600 gallons per minute. Treatment Plant: 1,200 sq. ft. bldg. housing filtration equipment to remove iron, manganese, and arsenic. Reservoirs: Three cast in place concrete water storage reservoirs constructed by Mt. Baker Silo, Inc. in 1990. The reservoirs are

	26 feet in diameter by 45 feet tall, with nominal capacities of 179,000 gallons each. Booster Pump Station: 800 sq. ft. bldg. housing 5 booster pumps. Two 25 horse power pumps, one 15 horse power pump, one 7.5 horse power pump, and one 5 horse power pump capable of pumping 1,300 gallons per minute. Shop: 2,200 sq. ft. bldg. housing equipment, tool, materials, and a work station. Standby Generators: Two standby generators are located at the NWF. One 150 kw Katolight diesel generator and one 30 KW Caterpillar diesel generator. **South Wellfield:** **Location**: 25600 Z Street Ocean Park, WA 98640 **Directions**: Turn north on Sandridge Road off of Highway 101 and proceed for approximately 11 miles. Turn west onto 250th Street off of Sandridge Road and proceed for approximately 900 feet. Turn north onto Ash Place off of 250th Street and proceed approximately 500 feet. Turn east onto 252nd Place off of Ash Place and proceed approximately 50 feet. The South Wellfield driveway will be on the north side of 252nd Place. **Description**: Treatment Plant & Booster Station: 2,000 sq. ft. bldg. housing filtration equipment to remove arsenic. Two filtration vessels are located on a slab on the south end of the bldg. The building also contains the booster station with four booster pumps. Two 40 horse power pumps and two 10 horse power pumps capable of pumping 1,800 gallons per minute. Reservoir: One cast in place concrete water storage reservoir constructed by Mt. Baker Silo, Inc. in 2006. The reservoirs are 30 feet in diameter by 50 feet tall, with nominal capacities of 211,000 gallons. Shop: 2,000 sq. ft. bldg. housing equipment, tool, materials, and a work station. Standby Generator:

	One standby generators is located at the SWF. One 150 kw Katolight diesel generator. **Wiegardt Wellfield:** **Location**: 25480 U Street Ocean Park, WA 98640 **Directions**: Turn north on Sandridge Road off of Highway 101 and proceed for approximately 11 miles. Turn west onto 250th Street off of Sandridge Road and proceed for approximately 0.5 miles. Turn north onto U Street off of 250th Street and proceed approximately 1,400 feet. Turn east onto 255th Lane (unmarked) off of U Street and proceed approximately 1,000 feet. The Wiegardt Wellfield driveway will be on the south side of 255th Lane. **Description**: Wellfield: Three 8-inch diameter water wells producing 500 gallons per minute. Standby Generator: One standby generators is located at the WWF. One 30 kw Onan liquid petroleum gas (LPG) generator.		
Population Served and Service Connections	Population: 5,418	Connections 2,709	
System Owner	North Beach Water District A special purpose district authorized by Title 57 RCW "Water-Sewer Districts".		
Name, Title, and Phone Number of Person Responsible for Maintaining and Implementing the Emergency Plan	William "Bill" Neal General Manager	360-665-4144 360-244-0068	Phone Cell

Section 2.
Chain of Command – Lines of Authority

The first response step in any emergency is to inform the person at the top of this list, who is responsible for managing the emergency and making key decisions.

Chain of command – lines of authority

Name and Title	Responsibilities During an Emergency	Contact Numbers
William "Bill" Neal General Manager	Responsible for overall water system management and decision-making. Manages emergencies. Liaison to regulatory agencies and media outlets. Approves all communications and notices to the public, local, state and federal governments and other individuals and organizations.	360-244-0068
Jack McCarty Office Manager	Responsible for administrative functions in the office Receives phone calls and keeps a log of events Provides a standard, carefully pre-scripted message to those who call with general questions (The water system general manager decides if and when to release additional information)	509-791-9309
Jon Fleming Field Supervisor	In charge of operating the distribution system. Performs inspections, assesses damage and oversees procurement of parts and needed repairs for distribution system. Relays critical information to the General Manager.	360-244-0858
Dennis Schweizer Treatment Plant Operator	In charge of operation the water treatment plant, booster stations, and well pumps. Performs inspections, assesses damage and oversees procurement of parts and needed repairs for treatment plant, booster pumps and well pumps. Oversees the disinfection of water mains and collects water samples after repairs. Responsible for all water quality sampling required by the Department of Health.	360-244-0047

Name and Title	Responsibilities During an Emergency	Contact Numbers
	Ensures all water samples are recorded with the Office of Drinking Water after repairs. Relays critical information General Manager	

Section 3.
Events that Cause Emergencies

The events listed below may cause water system emergencies. They are arranged from highest to lowest probable risk.

Events that cause emergencies

Type of Event	Risk (High-Med-Low)	Comments
Wind Storm	High	Power disruptions from high wind events is common.
Construction Accident	Medium	Below grade infrastructure damage by contractors, property owners, and others.
Earthquake/Tsunami	Low	Damage from earthquakes is rare on the North Beach Peninsula. A Cascadia Subduction Zone earthquake has the potential for catastrophic damage to the District's infrastructure.
Ice Storm	Low	Possible power outages, frozen pipes and downed trees.
Vandalism	Low	Facility is secured with fence and an alarm system.
Flood	Low	System does not include any frequently flooded areas.
Drought	Low	Aquifers rely on local recharge. Historically, aquifers are not affected by droughts.
Backflow Incident	Low	District has an effective Cross Connection Control Program.
Terrorism	Low	Provide training for management and staff on awareness and preparedness for terrorism.

Section 4.
Emergency Notification

Notification – High Priority Customers/Government/Law Enforcement

Use these lists to notify high priority customers, local and state governments, and law enforcement, of an emergency.

Organization or Department	Name & Position	Telephone	Night or Cell Phone
Hospitals or Clinic(s)	Ocean Park Clinic	360-665-5181	
Public or Private Schools	Ocean Park Elementary	360-665-4815	
Adult Care Facility	Golden Sands Senior Living	360-665-0190	
Inpatient Facilities	Free by the Sea		
Hotels – Motels – Recreational Vehicle Parks			
Electric Utility Co.	Pacific County PUD #2	360-642-3191	
Local and State Government	Pacific County Environmental Health Washington State Southwest Reginal Office of Drinking Water		
Law Enforcement	Pacific County Sheriff Washington State Patrol Federal Bureau of Investigation		

Call-up lists **–** Service and Repair Contractor

Asphalt Repair	Naselle Rock & Asphalt Co.	360-777-8429	

	Wirkkala Construction	360-642-3288	
Electrician	Ford Electric Wadsworth Electric	360-642-2137 503-325-5501	
Gas/Propane Supplier	Active Enterprises	360-642-2102	
Water Testing Laboratory	ALS Global	360-577-7222	360-501-3342 360-975-4165 360-430-7119
	BSK Analytical	360-750-0055	
Telephone Co.	Charter Communication Century Link	800-314-7195 855-891-4080	
Underground Utility Contractors	DPR Builders & Developers Hill & Son Excavating Taft Plumbing Wirkkala Construction Woody's Septic Specialties	360-665-4225 360-665-4447 360-665-4775 360-642-3288 360-642-4459	360-783-2052 360- 360- 360- 360-
Plumber	Taft Plumbing Belk's Plumbing	360-665-4775 360-783-2951	
Pump Supplier	Pump Tech	360-659-6230	
"Call Before You Dig"	Utility Notification Center (Washington)	811	800-424-5555
Utility Emergency Numbers	Charter Communications Pacific County Public Works CenturyLink Pacific County PUD	503-325-5778 360-875-9368 800-201-40991 360-942-2411	503-325-3041 360-875-9368 800-824-2877 360-942-2411
Rental Equipment Supplier	Clatsop Power United Rentals	503-325-0792 360-425-2350	
Chemical Supplier	Cascade Columbia	503-625-5293	503-625-4335
Well Drilling Co.	Bison Well Drilling	253-847-7744	253-380-9355

Pipe, Valves and Fittings Supplier	HD Supply Brain Haage	360-574-9377	503-572-5913 C
	Core & Main Bailey Faria	360-256-6151	360-558-0820 C
	HB Jaeger Todd Vaughn	360-539-1041	360-489-1041

Call-up lists **-** News Media

Newspaper - Local	Chinook Observer	360-642-8181	
Newspaper – Regional	The Daily News	360-577-2583	
Radio	KMUN 91.9 FM	503-325-0010	
Radio	KAST 1370 AM	503-861-6620	

Notification procedures

Who is Responsible:	**Jack McCarty** **Office Manager**The office manager will, in consultation with the General Manager make the decision to notify customers about a potential water shortage and the need for water-use restrictions. After making the decision the Office Manager will start the notification procedure without delay.

Procedures:	• Office manager confers with key staff to verify problems. • Office manager organizes staff to develop the message delivered to the customers. • Office manager consults with state drinking water staff about the problem. • Office manager, with help from staff, prepares door hangers, signs, phone messages and radio message. • Field supervisor continues to investigate problems and make repairs as necessary. • To distribute the water shortage notification: • Field staff will place “water shortage notices” on doors and along travel routes. • Staff will place signs on main travel routes into the community. • Office manager will ask KMUN & KAST radio to issue the water shortage notice and a request to curtail water use. • Office manager will provide a pre-scripted message to phone callers • Field supervisor continuously updates the office manager on water shortage. • Office manager and staff re-notify customers when water shortage is resolved.

Alert local law enforcement, state, federal and local health agencies

Who is Responsible:	**Bill Neal** **General Manager** The general manager will either contact or delegate someone to contact all agencies that need to be aware of potential problem.
Procedures:	Use pre-made phone lists (above) to contact proper agencies regarding any health advisory. Re-notify the agencies when health advisory is resolved.

Contact service and repair contractors

Who is Responsible:	Jonathan Fleming, Forman Dennis Schweizer, Treatment Plant Operator
Procedures:	• Notify General Manager if there is a need for additional help. • Call contractors from pre-approved phone list (above)

Contact neighboring water systems, if necessary

Who is Responsible:	Bill Neal, General Manager
Procedures:	• For major water problem

Procedures for issuing a health advisory

Who is Responsible:	**Jack McCarty** **Office Manager**
Procedures:	For Boil Water Notice: • Contact customers using the reverse 911 system • Contact KMUN & KAST radio stations to put an update on the radio • Rent digital billboards to advise customers – Set one up at Loomis Lake State Park and Pacific Way and the other at 227th and Sandridge Road • Contact major businesses directly effected

Other procedures as necessary

Who is Responsible:	**Bill Neal** **General Manager**
Procedures:	There may be incidents that do not directly involve the District, but because of the location or circumstance, district services might be requested or may eventually be impacted. There should be a plan in place for responding to scenarios when possible district resources are needed, for what duration and possible hazards that may be encountered.

Section 5.
Effective Communication

Designated public spokesperson

Communication with customers, the news media, and the general public is a critical part of emergency response.

Designate a spokesperson (and alternate) and contact your local primacy agency for delivering messages to the news media and the public.

Designate a spokesperson and alternates

Spokesperson	Alternate
William Neal, General Manager	Jack McCarty, Office Manager

Location: 25600 Z Street Ocean Park, WA 98640

Directions: Turn north on Sandridge Road off of Highway 101 and proceed for approximately 11 miles. Turn west onto 250th Street off of Sandridge Road and proceed for approximately 900 feet. Turn north onto Ash Place off of 250th Street and proceed approximately 500 feet. Turn east onto 252nd Place off of Ash Place and proceed approximately 50 feet The South Wellfield driveway will be on the north side of 252nd Place.

Health advisories

During events when water quality and human health are in question, it may be necessary to issue a health advisory that gives advice or recommendations to water system customers on how to protect their health when drinking water is considered unsafe. These advisories are issued when the health risks to the consumers are sufficient, in the estimation of the water system, state or tribal, or local health officials, to warrant such advice.

Health advisories usually take the form of a drinking water warning or boil water advisory. Communication during these times is critical. Health advisories should always be well thought out and provide very clear messages.

The U.S. Environmental Protection Agency has put together a number of tools, including fact sheets, brochures, forms, and templates to help prepare for a health advisory. These are on the web at: http://www.epa.gov/safewater/pn.html

Section 6.
Response Actions for Specific Events

In any event, there are a series of general steps to take:

1. Analyze the type and severity of the emergency;
2. Take immediate actions to save lives;
3. Take action to reduce injuries and system damage;
4. Make repairs based on priority demand, and
5. Return the system to normal operation.

The following tables identify the assessment, set forth immediate response actions, define what notifications need to be made, and describe important follow-up actions.

Power outage

Assessment	In the event of a power outage we will rely on our generators to run power to the reservoirs
Immediate Actions	If after hours, the on-call employee will need to start all the generators and make sure that they running correctly
Notifications	1. Notify Department of Health 2. Notify Fire Department 3. Notify major business
Follow-up Actions	1. Return to normal status when power supply comes back on. If after hours, on-call employee will turn off generators 2. Notify Department of Health, Fire Department, and the major businesses that power is back online

Water Main break (Catastrophic)

Assessment	Distribution lines can break for a variety of reasons. Excessive weight, extremely cold temperatures, defects in the manufacturing process, improper installation and corrosion are just a few. We need to have resources available and in stock to take care of a problem if and when it arises.

Immediate Actions	1. Locate and isolate leak area 2. Call in emergency locates if needed 3. Make sure work area is secure and safe 4. Determine the cause of break 5. Repair the line break
Notifications	1. Notify Department of Health 2. Notify Fire Department 3. If needed, notify major business that are affected
Follow-up Actions	1. Return to normal operations when break is repaired. 2. Notify Department of Health, Fire Department, and the major businesses that water is restored. 3. Monitor the area for follow-up services

KM_nO_4 Saturator Failure (North Wellfield & South Wellfield)

Assessment	
Immediate Actions	
Notifications	
Follow-up Actions	

North Wellfield Treatment Equipment Failure

Assessment	
Immediate Actions	
Notifications	
Follow-up Actions	

South Wellfield Treatment Equipment Failure

Assessment	
Immediate Actions	
Notifications	

Follow-up Actions	

Source Pump Failure (Well Pump)

Assessment	The North Beach Water District has backup pumping at all locations. If one of the pumps has a mechanical failure the Treatment Plant Operator would be the first to know due to low water pressure or pump failure alarms.
Immediate Actions	1. Treatment Plant Operator will trouble shoot the problem 2. Treatment Plant Operator will switch to alternate pumping after reviewing standard operating procedures in pump stations
Notifications	1. Repairs will be made if possible and if not recommendations will be given to the General Manager for outside repairs 2. Treatment Plant Operator will monitor backup pumping
Follow-up Actions	Repair or replace backup pump and restore to active service

Microbial (coliform, *E. coli*) contamination

Assessment	In the event of a microbial contamination, testing for total coliform and E.coli is a standard first test and if detected it is a signal that the system may be contaminated. Coliform bacteria are organisms that are present in the environment and in the feces of all warm-blooded animals, including humans. Coliform bacteria generally do not cause illness, but other disease-causing organisms (pathogens) may be present in the water system. The presence of E. coli is an indication that pathogens have been introduced into the water system during the event. Most pathogens that contaminate water supplies come from the feces of humans or animals.
Immediate Actions	1. Treatment Plant Operator will trouble shoot the problem 2. Broadcast a “boil water order” to all affected customers
Notifications	1. Notify Department of Health 2. Notify all customers affected 3. Contact local media

Follow-up Actions	

Chemical contamination

Assessment	Many chemicals that are routinely transported can harm humans directly or by contaminating air or water. No drinking water system is safe from a hazardous chemical spill and the resulting contamination. Spills can come from motor vehicles, trains, airplanes, boats, or fixed containers. They can occur at any time without warning, and many solvents are able to leach through PVC pipes.
Immediate Actions	
Notifications	
Follow-up Actions	

Vandalism or terrorist attack

Assessment	**Vandalism** is generally a spur-of-the-moment act using materials at hand rather than pre-planned or pre-meditated activities. Vandals often break into systems and damage facilities. These acts are relatively easy to prevent by enhancing security, increasing lighting, installing locks on doors and hatches, and putting up security fencing. ***Terrorism:*** Acts of terrorism are conducted by someone whose intent is to instill fear or induce harm to people and facilities. Acts of terrorism are a very real threat in America. Even though it may seem unlikely, it would only take one well-staged event to undermine confidence in drinking water safety. Being prepared and knowing what to look for are crucial elements of preventing an attack on the system.
Immediate Actions	
Notifications	

Follow-up Actions	

Reduced or Failed Water Well Yield

Assessment	
Immediate Actions	
Notifications	
Follow-up Actions	

Drought

Assessment	
Immediate Actions	
Notifications	
Follow-up Actions	

Flood

Assessment	Heavy rains may cause flooding in low lying areas. Floods or standing water are common on the peninsula. Areas that are susceptible to flooding or high water need to be located and marked on a map.
Immediate Actions	After, or as soon as the conditions permit, inspect the water mains for any damage. As long as the areas have maintained a positive pressure during these times, then no further action is required.
Notifications	If negative pressure occurs by a line failure, then it may be required to contact customers, as well as, sampling bacteria before the line is put back in service.
Follow-up Actions	Continue to monitor the flood areas during that time of year.

Earthquake

Assessment	
Immediate Actions	
Notifications	
Follow-up Actions	

Hazardous materials spill in vicinity of sources or system lines

Assessment	
Immediate Actions	
Notifications	
Follow-up Actions	

Electronic equipment failure

Assessment	
Immediate Actions	
Notifications	
Follow-up Actions	

Section 7.
Alternative Water Sources

Intertie to adjacent water supply system

Water Systems Within One-Quarter Mile of our System	Feasibility of Connecting

Alternate source(s) of water

Alternative Sources	Names	Phone	Availability	Is the Water Safe for Drinking?
Bottled water Suppliers for potable water use				
Tanker trucks in the area available to deliver bulk water for non-potable use				

Section 8.
Returning to Normal Operation

Returning to normal operations

Action	Description and Actions
Inspect, flush, disinfect and sample when the system experiences reservoir problems, transmission problems, and/or distribution main breaks.	Field superintendent and/or the Treatment Plant Operator will inspect all system facilities, ensure all water quality tests have been done and the system has been flushed and disinfected if necessary. Either the Field Superintendent or Treatment Plant Operator will make a report to the General Manager. General Manager will make decision on current conditions of the system.
Verification of water quality	General Manager verifies water quality sampling results
Coordinate with the Department of Health	General Manager coordinates with the Department of Health on system conditions and water quality results.
Notify customers	Office Manager/General Manager will meet with either the Field Superintendent or Treatment Plant Operator to determine results and notify the customers.

Section 9.
Plan Approval

Plan approval

This plan is officially in effect when reviewed, approved, and signed by the following people:

Name/Title	Signature		Date
Brian Sheldon/Commissioner Position #1			
Gwen Brake/Commissioner Position #2			
Glenn Ripley/Commissioner Position #3			
Bill Neal/General Manager			