

PROFILE – PUBLIC UTILITY DISTRICT NO. 1 OF SKAGIT COUNTY

The Public Utility District No. 1 of Skagit County (the District) is a community water system which serves some 20,000 water services, or approximately 50,000 persons in Skagit County, Washington.

AREA SERVED

The District has the largest service boundaries of any water purveyor in Skagit County, encompassing an existing service area of roughly 290 square miles. The District serves these areas with over 500-miles of transmission and distribution pipes. The District currently serves water to the cities of Mount Vernon, Burlington, and Sedro-Woolley, the rural villages of Alger, Conway, Bay View, Rockport, and Cedargrove, and to communities on Guemes Island and Fidalgo Island, as well as rural areas within Skagit County. In the near future, the District will also be the water-supplier for the communities of Marblemount, and Skagit View Village.

SERVICE TRENDS

The growth and overall economic trends of the areas served by the District are a reflection of the growth and economic trends of Skagit County as a whole. Over the period from 1990 to 2000, the number of water services supplied by the District grew by 25%. Forecasts of future growth indicate that the population (and therefore water services) will continue to grow at a rate of 1-2% per year.

INVENTORY OF DISTRICT FACILITIES

The attached table provides information on locations and replacement costs for important and critical District facilities. These facilities were ranked as the most critical based on a vulnerability assessment conducted by the District to meet the requirements of the Bioterrorism Preparedness and Response Act of 2002. It should be noted that this is not a complete inventory of all facilities that the District views as important to meet its customer and emergency needs. However, it does provide a manageable list of the District's most important facilities for the purposes of the Skagit County Multi-Jurisdictional Natural Hazard Mitigation Plan.

NATURAL HAZARD EVENT HISTORY

The floods of 1990 and 1995 caused or contributed greatly to slides at Gilligan Creek, Monte Vista (Mount Vernon) and Salmon Beach (Fidalgo Island), each requiring District labor, materials and equipment to repair damage and reinstate water supply/service.

NATURAL HAZARD VULNERABILITY ANALYSIS RATING

The District considers itself most vulnerable to the following natural disasters, ranked in order:

1. **Flooding:** There is a high probability of flooding events in Skagit County because of the Skagit River (which is the second largest river on the West Coast of the United States). During a flood event, there is some potential for contamination of water in submerged pipes. Further, the flood could cut off movement of District personnel, leaving them unable to respond to leaks or water outages.
2. **Drought:** As a water utility which relies on surface water supplies, the District is very dependant on rainfall to have sufficient water supply.
3. **Earthquakes:** The probability of an earthquake is considered moderate (seismic zone 3), but the effect could be devastating. An earthquake could lead to breaks in the distribution and transmission pipelines, resultant failures of water storage tanks, and liquefaction of soils supporting water facility pipelines and facility foundations, all leading to loss of the water stored for emergency and customer needs. Further, power and communications could be lost in such an event which would also lead to adverse consequences.
4. **Severe Storms:** While a more common occurrence, District facilities have proven to be relatively hardened against severe storms. However, power outages could lead to water outages in areas which are dependent on pumping of water.

EXISTING APPLICABLE NATURAL HAZARD MITIGATION POLICIES, ORDINANCES, AND CODES

In addition to meeting local building codes, the main regulations for water systems in the State of Washington are governed by WAC 246-290. This legislation dictates requirements for virtually all District water facilities; including requirements for items such as emergency water storage volumes. Further, the Washington Department of Health must review all new large construction activities to ensure they meet these requirements.

PRIORITIZED NATURAL HAZARD MITIGATION STRATEGIES OR PROJECTS

1. Purchase of a larger volume water truck (or trailer with tandem dolly) for water distribution during a flood, earthquake, or power-outage event.

LEAD DEPARTMENT:	Engineering
FUNDING SOURCES:	Various grant funding sources
TIME-LINE:	Short Term (less than 3 years)

2. Emergency generators for critical pump stations and headquarters facility.

LEAD DEPARTMENT: Engineering
FUNDING SOURCES: Various grant funding sources
TIME-LINE: Short Term (less than 3 years)

3. Earthquake shut-off valves for water storage tanks (reservoirs).

LEAD DEPARTMENT: Engineering
FUNDING SOURCES: Various grant funding sources
TIME-LINE: Short Term (less than 3 years)

4. Raising of District offices, and/or purchase of back-up equipment storage site on higher ground. The District's main office and construction yard are located within the 100-year floodplain.

LEAD DEPARTMENT: Engineering
FUNDING SOURCES: Various grant funding sources
TIME-LINE: Long Term (greater than 3 years)

5. Replace/reinforce existing unrestrained water transmission pipelines with pipelines that can withstand a DBE3 earthquake event.

LEAD DEPARTMENT: Engineering
FUNDING SOURCES: Various grant funding sources
TIME-LINE: Long Term (greater than 3 years)

APPLICABLE HAZARD MITIGATION PLANS

The District is currently in the development process of completing its Vulnerability Assessment and Emergency Response Plans per the requirements of the Bioterrorism Preparedness and Response Act of 2002. The District will complete and submit the Vulnerability Assessment by December 31, 2003. The District will complete and submit an Emergency Response Plan within 6-months of submission of the Vulnerability Assessment.