

CLALLAM COUNTY PUD DROUGHT RESPONSE PLAN

Adopted: June 26, 2006

Introduction

Clallam County PUD water systems rely on a variety of sources for water. Several systems use wells, two have surface water sources, and water is purchased from the City of Port Angeles (the City).

The City has adopted a Water Shortage Response Plan and it is the intent of the PUD to cooperate and complement the City Plan for those systems supplied by water from the City. In addition, the PUD will cooperate with the City of Sequim in water shortages periods.

This Plan was developed by PUD staff and approved by the PUD Board of Commissioners on the date noted above. The Plan will remain in effect until modified or rescinded by the Commissioners.

This drought response plan is divided into several stages. Each stage has its own level of activity. The conditions triggering the raising and lowering of each stage are described. The early stages of the plan are expected to be used during the late winter to early-summer period as drought conditions may emerge. The later stages are likely to be used during the summer and mid-fall period. Conservation goals are specified for each of Stages 2 through 5. Drought stages will not be lowered until demand is reduced to achieve these goals, and/or source water levels begin to rise consistently.

As the drought stage increases, the amount of demand reduction increases. The conservation goals are based on Washington Department of Health guidelines (DOH, 2005). The levels of demand reduction are based on these goals. Monitoring of demand (primarily using chlorination reports) will determine when and how long the goals are met.

Drought conditions persisting into the late-fall and winter would be severe. In this case, lowering of the drought response stage would not occur until source water levels rise to acceptable levels. Short-term emergency curtailment plans are not included in the drought response plan.

Stage 1—Forecast Alert

The key elements of Stage 1 are to alert utility commissioners and personnel of the forecasted drought conditions and to prepare for a possible drought response. This action may be triggered by a USDA Natural Resource Conservation Service's (NRCS) March 1 water supply forecast (<http://www.wcc.nrcs.usda.gov/cgibin/ssf.pl>) of less than 70 percent of average streamflow conditions in the North Olympic Peninsula Region (see also <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>). The alert will require PUD personnel to review the following hydrological monitoring station reports on a daily basis:

- <https://fortress.wa.gov/ecy/wrx/wrx/flows/station.asp?sta=18C150>
- ftp://ftp.wcc.nrcs.usda.gov/data/snow/basin_reports/washington/wy2006/basnwa4.txt

The drought response would end upon a reported snowpack of greater than 50 percent of normal on April 30; however forecasting will continue. Subsequent monthly water supply forecasts of less than 70 percent of average streamflow conditions in the North Olympic Peninsula Region will reinstate the Forecast Alert. After a reinstatement of a Forecast Alert, two consecutive weeks of rising source water levels would allow the District to end the drought response.

Stage 2—Voluntary Conservation

The key elements of Stage 2 are communication of public information and cooperation from customers. This action may be triggered by a Stage 2 declaration by the City of Port Angeles (Gales Addition, Monroe and Mount Angeles only), or a NRCS streamflow forecast of less than or equal to 65 percent of average. The goal of this stage is to reduce water consumption by 5 percent. The following web-site describes how customers can conserve water: <http://www.wateruseitwisely.com/100ways/nw.shtml>.

- The PUD prepares News Releases and distributes them to newspapers, radio stations, local television, PENCOM, and associated web pages.
- Water conservation information is made available to customers through News Releases, mail-outs, handouts, etc.
- The PUD will provide education for employees on cause and effect of the shortage and the message that should be conveyed to customers.
- The PUD will begin water conservation measures in its own facilities.
- Fire districts will be alerted to the shortage and requested to minimize unnecessary use of water.
- Begin semi-monthly well water level monitoring.
- Monitor streamflow gauge on Morse Creek below Aqueduct. Per the PUD Morse Creek water right, diversions shall cease when this gauge reports a discharge of less than 25 cfs. Request permission from Ecology to begin withdrawals from supplemental drought wells.

A reduction in consumption of 5 percent and consistently rising source water levels would allow the District to lower the drought response.

Stage 3—Outdoor Restrictions

The key elements of Stage 3 are to reduce and/or eliminate outdoors use of water. This action may be triggered by an emergency drought declaration by the Governor, or a Stage 3 declaration by the City of Port Angeles (Gales Addition, Monroe and Mount Angeles only), or a NRCS streamflow forecast of less than or equal to 60 percent of average. The goal of this stage is to reduce water consumption by 10 percent.

- Customers will be expected to comply with alternating days for outdoor watering. Even numbered addresses water only on even numbered days, odd numbered addresses water only on odd numbered days, and all customers minimize watering use. Minimizing total use will be emphasized.
- Customers will be provided information on outdoor watering requirements for lawns and landscaping such that only the amount absolutely necessary is used.
- News releases are released to indicate the need for greater reduction in water consumption.
- Information will be provided to customers on water efficient appliances.
- Vehicle washing will be prohibited except for safety related purposes.
- Water will not be available from PUD systems for construction projects to reduce dust or other routine County road surface preparation.
- Continue semi-monthly well water level monitoring.
- Monitor streamflow gauge on Morse Creek below Aqueduct. Per the PUD Morse Creek water right, diversions shall cease when this gauge reports a discharge of less than 25 cfs. Request permission from Ecology to begin withdrawals from supplemental drought wells.

A reduction in consumption of 10 percent and consistently rising source water levels would allow the District to lower the drought response.

Stage 4—Mandatory Outdoor Restrictions and Indoor Conservation

The key elements of Stage 4 will be to eliminate outdoor use and minimize indoor use by consumers. This action may be triggered by an emergency drought declaration by the Governor or a Stage 4 declaration by the City of Port Angeles (Gales Addition, Monroe and Mount Angeles only), and a NRCS streamflow forecast of less than or equal to 55 percent of average. The goal of this stage is to reduce consumption by 10 to 20 percent.

- News releases are revised to communicate information applicable to this stage.
- A message is inserted with PUD bills or a direct mailing made.
- No outdoor use is permitted except in critical or emergency situations.
- Customers are asked to reduce indoor use of water.
- Door hangers or personal contact is used to notify violators.
- Repeat violations will subject the consumer to potential shutoff.
- Begin weekly well water level monitoring.

- Monitor streamflow gauge on Morse Creek below Aqueduct. Per the PUD Morse Creek water right, diversions shall cease when this gauge reports a discharge of less than 25 cfs. Request permission from Ecology to begin withdrawals from supplemental drought wells.

A reduction in consumption by 20 percent and rising source water levels would allow the District to lower the drought response.

Stage 5 – Water Rationing

The key element of stage 5 is to ration a limited supply of water so as to serve only essential uses. This action may be triggered by an emergency drought declaration by the Governor, and a Stage 5 declaration by the City of Port Angeles (Gales Addition, Monroe and Mount Angeles only), and a NRCS streamflow forecast of less than or equal to 45 percent of average. The goal of this stage is to continue to reduce consumption from 20 percent upwards of 30 percent.

- News releases and other communications emphasize that only essential use of water is allowed.
- A direct mailing to customers is utilized to ensure that information about the severe nature of the situation is communicated.
- Non-critical accounts are turned off after notification to the customer.
- Penalties, such as monetary or shutoff, will be applied for violations.
- Water availability in areas may be reduced or other restriction applied by the PUD at its discretion.
- Continue weekly well water level monitoring.
- Continue monitoring streamflow gauge on Morse Creek below Aqueduct.

Essential Use—water consumption associated with personal use only.

Examples: cooking, drinking, bathing, sanitation, personal hygiene.

Non-critical Account—irrigation, lawn watering, vehicle wash facilities.

A 30 percent reduction in consumption and consistently rising source water levels would allow the District to lower the drought response.

References

- DOH, 2005 Guidance Document, Preparing Water Shortage Response Plans. Washington Department of Health. DOH PUB. #331-301 (Rev.). June 2005. Olympia, Washington.