

APPENDIX I

Water Shortage Response Plan

APPENDIX I

Cross Connection Control Program-Information & Documents

Water Shortage Response Plan



Lewis County Department of Public Works

Timothy R. Elsea, PE, Director / County Engineer

Tim D. Fife, PE, Assistant County Engineer

October 12, 2015

Mayor Ken Smith
City of Vader
PO Box 189
Vader, WA 98593

Re: Backflow Assembly Test Notice for Vader WWTP

Dear Mayor Smith,

According to our records, the backflow prevention assembly listed below is due for testing. The last test was conducted in November 2014 and the test should be done annually.

The test must be done by a backflow assembly tester certified to test assemblies in your area. Please refer to the referenced website for a directory of certified testers in good standing at <http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/WaterworksOperatorCertification>.

| SERIAL # | LOCATION |
|----------|---------------------------------------|
| 385576 | In hot box, next to chlorine building |

The tester should forward a copy of the completed test report to Lewis County Public Works and provide the City with a copy. Please ensure that the test is completed by the end of December 2015.

Thank you for working with us to protect our drinking water. If you have questions, please contact our office.

Sincerely,

Shirley Kook, PE
Acting Utility Services Manager

Road Maintenance & Traffic

476 West Main St.
Chehalis, WA 98532
O 360.740.3380
F 360.740.2741
Erik Martin, PE, Manager

*Administration, Engineering,
Utilities & Real Estate Services*

2025 NE Kresky Ave.
Chehalis, WA 98532
O 360.740.1123
F 360.740.1479

Solid Waste Services

Post Office Box 180
Centralia, WA 98531
O 360.740.1451
F 360.330.7805
Steve Skinner, Manager

WATER USE QUESTIONNAIRE

Please indicate whether the special plumbing or activities listed below apply to your premises.

| YES | NO | PLUMBING or ACTIVITY TYPE |
|-----|----|--|
| | | Underground (buried) sprinkler system |
| | | Water treatment system (example: water softener, filter) |
| | | Solar heating system |
| | | Fire sprinkler system |
| | | Other water supply systems (whether or not connected to plumbing system) |
| | | Sewage pumping facilities or grey water system |
| | | Hobby farm |
| | | Animal watering troughs |
| | | Swimming pool or spa |
| | | Greenhouses, hydroponics |
| | | Decorative pond |
| | | Photo lab or dark room |
| | | Dialysis or medical equipment |
| | | Home-based business. If yes, please describe (e.g., beauty salon, machine shop, etc.) _____ _____ _____ |

Completed by (print name): _____

Address (of water service): _____

Phone Number (optional): _____

Customer's Signature: _____ Date: _____

Thank you for your cooperation!

Please Return to: Lewis County Public Works, 2025 NE Kresky Ave, Chehalis, WA 98532

What is a Cross Connection?

A cross connection is a point in a plumbing system where the potable water supply is connected to a non-potable source. Briefly, a cross connection exists whenever the drinking water system is or could be connected to any non-potable source (plumbing fixture, equipment used in any plumbing system). Pollutants or contaminants can enter the safe drinking water system through uncontrolled cross connections when backflow occurs.

Backflow is the unwanted flow of non-potable substances back into the consumer's plumbing system and/or public water system (i.e., drinking water).

There are two types of backflow: **backsiphonage** and **backpressure**. **Backsiphonage** is caused by a negative pressure in the supply line to a facility or plumbing fixture. Backsiphonage may occur during waterline breaks, when repairs are made to the waterlines, when shutting off the water supply, etc.

Backpressure can occur when the potable water supply is connected to another system operated at a higher pressure or has the ability to create pressure. Principal causes are booster pumps, pressure vessels and elevated plumbing.

Backflow preventers are mechanical devices designed to prevent backflow through cross connections. However, for backflow preventers to protect as designed, they must meet stringent installation requirements.

Cross Connections can create Health Hazards

Drinking water systems
may become

Polluted
or
Contaminated
through uncontrolled
cross connections



American Water Works Association
Pacific Northwest Section

For further

information

contact your

local water

purveyor or the

PNWS/AWWA

Cross-Connection

Control Committee

through the

PNWS office at

(877) 767-2992

or on the web at

www.pnws-awwa.org

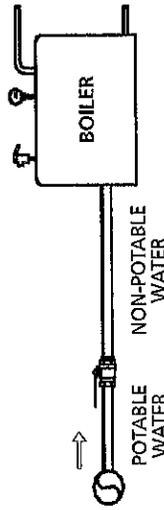
© 2005 R 06703 (Brochure #2)

Why Be Concerned?

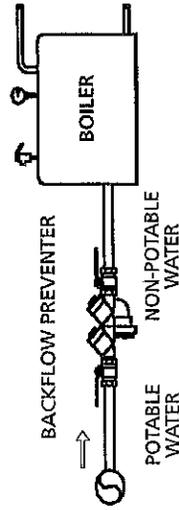
Most water systems in the United States and Canada have good sources of water and/or sophisticated treatment plants to convert impure water to meet drinking water standards. Millions of dollars are spent to make the water potable before it enters the distribution system so most water purveyors think that their supplies are not in jeopardy from this point on. Studies have proven this to be wrong. Drinking water systems may become polluted or contaminated in the distribution system through uncontrolled cross connections.

Cross connections are installed each day in the United States because people are unaware of the problems they can create. Death, illness, contaminated food products, industrial and chemical products rendered useless are some of the consequences of such connections. As a result, many hours and dollars are lost due to **cross connections**.

Wrong: Uncontrolled Cross Connection



Right: Controlled Cross Connection



Where are Cross Connections Found?

Cross connections are found in all plumbing systems. It is important that each cross connection be identified and evaluated as to the type of backflow protection required to protect the drinking water supply. Some plumbing fixtures have built-in backflow protection in the form of a physical air gap. However, most cross connections will need to be controlled through the installation of an approved mechanical backflow prevention device or assembly. Some common cross connections found in plumbing and water systems include:

1. Wash basins and service sinks.
2. Hose bibs.
3. Irrigation sprinkler systems.
4. Auxiliary water supplies.
5. Laboratory and aspirator equipment.
6. Photo developing equipment.
7. Processing tanks.
8. Boilers.
9. Water recirculating systems.
10. Swimming pools.
11. Solar heat systems.
12. Fire sprinkler systems.

Every water system has cross connections. Plumbing codes and State drinking water regulations require cross connections to be controlled by approved methods (physical air gap) or approved mechanical backflow prevention devices or assemblies. The various types of mechanical backflow preventers include: reduced pressure backflow assembly (RPBA), reduced pressure detector assembly (RPDA), double check valve assembly (DCVA), double check detector assembly (DCCA), pressure vacuum breaker assembly (PVBA), spill resistant vacuum breaker assembly (SVBA) and atmospheric vacuum breaker (AVB).

For a backflow preventer to provide proper protection, it must be approved for backflow protection, designed for the degree of hazard and backflow it is controlling, installed correctly, tested annually by a State certified tester, and repaired as necessary. Some states require mandatory backflow protection on certain facilities where high health-hazard-type cross connections are normally found. The following is a partial list of those facilities:

1. Hospitals, mortuaries, clinics.
2. Laboratories.
3. Food and beverage processing centers.
4. Metal plating and chemical plants.
5. Car washes.
6. Petroleum processing and storage plants.
7. Piers and docks.
8. Sewage treatment plants.

What to Do?

It is impossible to cover all of the information pertaining to cross connections in a pamphlet. We hope the preceding information will inspire you to further educate yourself on the hazards of unprotected cross connections. Cross connection control manuals and training schools are offered throughout the Northwest. Information on manuals, schools and cross connection control can be obtained from:

Washington

Department of Health
Agricultural Way Bldg. 3
P.O. Box 47822
Olympia WA 98504-7822
(360) 236-3133

Oregon

Oregon Health Division
3420 Cherry Ave NE, #110
Keizer OR 97303
(503) 373-7201

British Columbia, Canada

BC Water & Waste Association
Ste. 342 - 17 Fawcett Road
Coquitlam B.C. V3K 6V2
(604) 540-0111

Idaho

Idaho Division of Environment
1410 N. Hilton
Boise ID 83706
(208) 373-0275

Additional sources of information may be found on the PNWS-AWWA web site: www.pnws-awwa.org

LEWIS COUNTY
DEPARTMENT OF PUBLIC WORKS
UTILITY DIVISION

**VADER – ENCHANTED VALLEY WATER SYSTEM
WATER SHORTAGE RESPONSE PLAN**



MAY 2015

Table of Contents

| | |
|---|----|
| INTRODUCTION | 3 |
| Development..... | 3 |
| CHAPTER 1 – EVENTS THAT CAUSE WATER SHORTAGES..... | 4 |
| Emergency Categories..... | 4 |
| LEVEL 1 – NORMAL/ROUTINE EMERGENCY | 4 |
| LEVEL 2 – MINOR/ALERT EMERGENCY..... | 4 |
| LEVEL 3 – SIGNIFICANT EMERGENCY | 4 |
| LEVEL 4 – CATASTROPHIC DISASTER/MAJOR EMERGENCY..... | 4 |
| Water Shortage Events..... | 5 |
| CHAPTER 2 – EVALUATE SUPPLY AND DEMAND..... | 6 |
| Supply Source | 6 |
| Consumption Demand | 6 |
| Comparison | 6 |
| CHAPTER 3 – DEFININGS STAGES AND CRITERIA OF A WATER SHORTAGE | 7 |
| CHAPTER 4 – ALTERNATE WATER SOURCES | 8 |
| CHAPTER 5 – EFFECTIVE COMMUNICATION | 9 |
| CHAPTER 6 – DEMAND REDUCTION ALTERNATIVES..... | 9 |
| CHAPTER 7 – WATER SHORTAGE RESPONSE ACTIONS | 10 |

INTRODUCTION

Water shortages can occur for a variety of reasons, including: natural disasters, extreme customer usage, equipment failures, leakage and inadequate source water. Our response will be dependent upon each type of and scope of the water shortage situation. For example, the scope may be system wide or localized.

Development

Water shortage situations arising out of a natural disaster and inadequate source water will involve the Lewis County Board of County Commissioners (BOCC) and other county offices. In the event of a large natural disaster, the BOCC will approve a declaration and designate the official FEMA disaster relief agent for the county, which is done annually. Lewis County has a countywide emergency management plan which outlines coordination efforts among county departments and offices. In the event of county emergencies, the efforts are headed by the Lewis County Sheriff Office, Division of Emergency Management (Emergency Management).

Despite the comprehensive county management and responses to a natural hazard, the water utility must continue or resume water service operations to provide safe and reliable drinking water. Development of the water shortage response plan is a process to help minimize or avoid water shortages during unusual events. This is the aim of the water shortage response plan.

The water shortage response plan is laid out in seven chapters following the guidance document by the State Department of Health (DOH), "Water Shortage Response Plans for Small Public Drinking Water Systems, October 2008, #331-316".

ABBREVIATIONS

| | |
|------|--|
| BOCC | Board of County Commissioners |
| DOH | Washington State Department of Health |
| FEMA | Federal Emergency Management Agency |
| LCC | Lewis County Code |
| WSP | "Water System Plan for Vader-Enchanted Valley Water System" developed by Lewis County, 2015. |

CHAPTER 1 – EVENTS THAT CAUSE WATER SHORTAGES

Emergency Categories

To aid in responding to events that can cause water shortages, a description of four categories of emergencies is provided. The categories are outlined in DOH publication #331-211, “Emergency Response Planning Guide for Public Water Systems, May 2003”.

LEVEL 1 – NORMAL/ROUTINE EMERGENCY

These situations are defined as ones that: can be resolved within 24 hours, will not jeopardize public health, or can be handled normally by utility personnel. Examples are:

- Service and customer line breaks.
- Short power outages.
- Minor mechanical problems in Intake and Plant.

LEVEL 2 – MINOR/ALERT EMERGENCY

These situations are defined as ones that: can cause minor disruption in supply, pose possible contamination to the point of coordination with DOH or issuance of a health advisory to customers, or will take up to 72 hours to resolve. Examples are:

- Disruption in supply such as a transmission line break or pump failure with a potential for backflow and loss of pressure.
- Inadequate storage to handle disruption in supply.
- An initial positive coliform or E. coli sample.
- An initial primary chemical contaminant sample.
- A minor act of vandalism.
- Noticeable and continuing decline of water supply.

LEVEL 3 – SIGNIFICANT EMERGENCY

These situations are defined as ones that: have significant mechanical or contamination problems that will disrupt water delivery to customers to the point of issuing a health advisory, or may need more than 72 hours to resolve. Examples are:

- A verified acute confirmed coliform MCL or E. coli/fecal positive sample requiring an immediate health advisory to customers.
- A confirmed sample of another primary contaminant requiring an immediate health advisory to customers.
- A loss or complete malfunction of the water treatment facilities for the surface water source, including chlorination.
- A major main break or system failure resulting in a water shortage or system shutdown.
- Vandalism or threat such as intrusion or damage to a system facility.
- An immediate threat to the public health of the customers and an advisory is required.

LEVEL 4 – CATASTROPHIC DISASTER/MAJOR EMERGENCY

These situations are defined as ones that: experience damage from major damage or contamination from a natural disaster, an accident or malicious act of intent; require immediate notification of law enforcement and local emergency management services; immediate issuance of health advisories and emergency declarations to protect public health; or take several days to weeks to resolve.

Examples are:

- Hazards identified in Chapter 8, WSP.
- Contamination of water supply or system with biological or chemical agents.
- Spills or contaminant entry within 2,000 ft of the water source.

Water Shortage Events

The next step in this chapter was to identify the types of events that can cause water shortages by either at the source, treatment and distribution system. These are presented in Table 1 according to their respective category of emergency. Emergencies that fall under Levels 1 and 2 are not included as these are determined to be resolved within 24 hours and up to 72 hours, respectively. The probability of occurrence or risk for each event is given as high, medium or low (H, M, L). The probability of occurrence is based on past occurrences or likelihood as identified in “Lewis County Multi-Jurisdictional Hazard Mitigation Plan” adopted on July 26, 2010. Each event is also rated as either an immediate (I) or anticipated (A) impact to water shortage. The “potential effects on facility types” are provided in Table 1 (columns 4 to 9) to help determine the risk and impact type. Refer to the WSP for a description and response action for each hazard.

TABLE 1 – WATER SHORTAGE CAUSING EVENTS

| EMERGENCY LEVEL | RISK | IMPACT TYPE | POTENTIAL EFFECTS ON FACILITY TYPES: | | | | | |
|-------------------|------|-------------|--------------------------------------|--------|-------|---------|-----------------|--------------|
| | | | SUPPLY SOURCE | INTAKE | PLANT | STORAGE | DISTRIB. SYSTEM | POWER SUPPLY |
| LEVEL 3 | | | | | | | | |
| Water Main Break | H | I | | | | | X | |
| Vandalism | L | I | | X | X | X | X | X |
| LEVEL 4 | | | | | | | | |
| Dam Failure | M | I | X | X | | | | |
| Debris Flow | M | A | X | X | | | | |
| Drought | M | A | X | | | | | |
| Earthquake | H,M | I | X | X | X | X | X | X |
| Extreme Heat | M | A | | | | X | | X |
| Flooding | H | A | X | X | X | | | |
| Hailstorm | L | A | | | | | | X |
| Ice/Snow Storm | L | I | | X | X | X | X | X |
| Severe Windstorm | M | A | | X | X | | | X |
| Volcanic Eruption | L | I | X | X | X | | | X |
| Wildfire | H,M | I | X | X | X | | | X |
| | | | | | | | | |

CHAPTER 2 – EVALUATE SUPPLY AND DEMAND

Supply Source

The supply source is the Cowlitz River. The information is presented in Table 2.

| TABLE 2 – WATER RIGHTS SUMMARY | | | | |
|---------------------------------------|-------------|--------------------------|-------------------------|----------------------------------|
| Source | Certificate | Instantaneous Withdrawal | | |
| | | Water Right (gpm) | Existing Capacity (gpm) | Surplus (+) or Deficit (-) (gpm) |
| Cowlitz River | 9616 | 224 | 200 (=288,000 gpd) | 24 |

Consumption Demand

Consumption is presented in Table 3 which was developed for the WSP.

| TABLE 3 – WATER DEMAND FORECAST | | | | | | | | | | | | |
|--|-------------|---------------|---------------|--------------------|---------------|---------------|---------------|--------------------|----------------|---------------|---------------|--------------------|
| WATER USE CATEGORY | BASE (2014) | | | | 6-YEAR (2020) | | | | 20-YEAR (2034) | | | |
| | #ERU | DEMAND (gpd) | | PHD | #ERU | DEMAND (gpd) | | PHD | #ERU | DEMAND (gpd) | | PHD |
| | | ADD | MDD | | | ADD | MDD | | | ADD | MDD | |
| Residential | 344 | 39,908 | 55,871 | - | 370 | 42,869 | 60,018 | - | 437 | 50,660 | 70,924 | - |
| Commercial | 18 | 2,088 | 2,923 | - | 19 | 2,249 | 3,149 | - | 24 | 2,771 | 3,879 | - |
| Industrial | 0 | 0 | 0 | - | 0 | 0 | 0 | - | 0 | 0 | 0 | - |
| Other | 15 | 1,740 | 2,436 | - | 15 | 1,741 | 2,436 | - | 15 | 1,744 | 2,442 | - |
| Subtotal | 377 | 43,736 | 61,230 | - | 404 | 46,859 | 65,603 | - | 476 | 55,175 | 77,245 | - |
| Non-Revenue Water | 90 | 10,497 | 14,696 | - | 97 | 11,246 | 15,745 | - | 114 | 13,242 | 18,539 | - |
| TOTAL DEMAND WITHOUT CONSERVATION | 468 | 54,232 | 75,925 | 127 gpm | 501 | 58,106 | 81,348 | 134 gpm | 590 | 68,417 | 95,784 | 150 gpm |
| Conservation | N/A | N/A | N/A | N/A | -32 | -3,706 | -4,817 | - | -40 | -4,564 | -5,933 | - |
| TOTAL DEMAND WITH CONSERVATION | 446 | 51,758 | 72,461 | 123 gpm | 478 | 55,448 | 77,627 | 129 gpm | 563 | 65,276 | 91,387 | 145 gpm |

ERU = 116 gpd/residential customer

Comparison

A comparison of the supply and consumption information is presented in Table 4.

| TABLE 4 – SUPPLY AND DEMAND COMPARISON | |
|--|--------------------------|
| QUESTIONS | YES/NO |
| Can the source and pumping capability meet average day demand? | Yes |
| Can the source and pumping capability meet peak day demands? | Yes |
| Is there more than normal or significant drawdown in the storage reservoir during times of average and/or peak day demand? | No |
| Does consumption ever exceed the supply resulting in water shortage problems? | No |
| Think about if the supply were reduced by 10%, 20% and 30%. Where is the point at which demand could not be met? | 80% of 2014, 76% of 2034 |
| Is it likely the water system will experience a water shortage? If yes, do you consider the magnitude of the shortage severe, moderate or minor? | No |

CHAPTER 3 – DEFININGS STAGES AND CRITERIA OF A WATER SHORTAGE

Stages and criteria are in Section 13.30.700 Lewis County Code (LCC).

13.30.700 Water conservation program.The utility division may develop and administer any programs necessary to further water conservation or to comply with water conservation requirements of any local, state or federal agency having jurisdiction within the utility service area. [Ord. 1215 §3 (Att. A), 2010]

A Level I water supply problem may be declared at the discretion of the administrator. Voluntary water conservation measures may be requested by notice and education of the customers about “nonessential uses” as defined in this section and in the water shortage response plan for the respective utility.

A Level II water supply problem may be declared by the administrator when water usage exceeds the rate of resupply. Voluntary water conservation measures will be used including reduced or altered outdoor watering schedules.

A Level III water supply problem will be declared by the Board when water supply fails to meet the demand for water and voluntary conservation measures are ineffective or expected to be inadequate. No outdoor watering except as authorized by the administrator, no potable water shall waste in any drainage way, and no nonessential uses are allowed.

The following water uses are considered nonessential water uses during Level III emergencies: washing of any motorbike, motor vehicle, boat, trailer, airplane or other vehicle except at a commercial self-contained washing facility; hosing of any sidewalks, walkways, driveways, parking lots, tennis courts or other hard surfaced areas, buildings or structures; filling and refilling of any indoor or outdoor swimming and jacuzzi pools except where authorized for neighborhood fire control or as required by a medical doctor’s prescription; using water in a fountain or pool for aesthetic purposes except where needed to support fish life; serving water to a customer in a restaurant unless requested by the customer; drawing water from hydrants for construction, fire drills, recreation and non-firefighting purposes; using water for dust control; and irrigating water for recreational fields, golf courses and grounds.

If the administrator determines that any customer failed to comply with the provisions pertaining to a Level III water emergency, then one written warning notice shall be delivered to the customer’s residence or posted at the front entrance of the residence. If the customer fails to respond within the stated conditions, the administrator will authorize disconnection of the customer’s water service. Service so disconnected shall be restored only upon payment to unlock or turn the meter on, service meter charge and other costs incurred in the discontinuance of service, and assurance that the action causing the discontinuance will not be repeated. Prior to restoration of service, the utility may install a flow restrictive device on the customer’s service line. The flow restrictive device will be removed at the expiration of the Level III water emergency and may be removed earlier at the discretion of the administrator.

CHAPTER 4 – ALTERNATE WATER SOURCES

The water system does not have an intertie to an adjacent water supply system or a backup well. It will have to depend on the alternate sources presented in Table 5.

| TABLE 5 – ALTERNATE SOURCES OF WATER | | | | |
|---|---|---|-------------------------------------|---------------------------|
| ALTERNATIVE SOURCES | NAMES | CONTACT INFORMATION | AVAILABILITY | SAFE FOR DRINKING? |
| Bottled water | Home Depot Store #4740 Chehalis, WA | 360-748-2102 | 5-gal, 24 pk of 17 oz bottles. | Yes |
| “ | WalMart | 360-748-1240 | On stock | Yes |
| “ | Costco | 360-357-6580 | On stock | Yes |
| Tanker truck, LCPW | Lewis County Public Works | Public Works Director, 360-740-2697 | Depends on source. | No |
| Tanker truck | Water Buffalo, Inc. | 877-278-2669 | 4000 gal tanker. Depends on source. | Yes |
| “ | City of Chehalis | David Vasilauskas, Water Superintendent, 360-740-748-0238 | Per availability or agreement. | Yes |
| “ | City of Centralia | Kahle Jennings, Public Works Director, 360-330-7512 | “ | Yes |
| “ | City of Napavine | Steve Ashley, Director of Public Works 360-262-9231 | “ | Yes |
| “ | City of Winlock | 360-785-3811 | “ | Yes |
| “ | City of Toledo | 360-864-4564 | “ | Yes |
| “ | City of Mossyrock | 360-983-3300 | “ | Yes |
| “ | Cowlitz County Public Works, Utilities Division | Brent Sanborn, Utilities Manager 360-577-3030 x6538 | “ | Yes |

CHAPTER 5 – EFFECTIVE COMMUNICATION

The Utility uses the following modes to inform our water service customers: 1) Lewis County CodeRED notification system; 2) newsletters & correspondence; 3) doorhangers; 4) message box in water invoices; 5) Lewis County website; 6) Vader Lion's Club billboard; and 7) notices at public places. The CodeRED system is used to send critical communications to registered customers. The Utility uses CodeRED for repairs, disasters and events that will last longer than 24 hours. Messages are reviewed internally before it is sent to the county 911 system for clarity. The procedure is in our Standard Operating Procedures (SOP) manual.

In the event of an impending water shortage, messages can be conveyed in advance using the above listed modes of communication. Messages will be developed, updated and approved by the utility workgroup or Administrator as an event develops. Some example key water shortage messages are provided below.

- There is a potential for a water shortage this year due to drought conditions. We are taking this seriously and will be communicating with you regularly.
- Our primary concern is protecting our customers' health and the quality of the water being supplied by keeping the water system operational.
- What we know right now is ...
- We ask customers to conserve water by implementing water conservation measures. These measures are provided at...
- The potential exists for a less-than-normal water supply. Customers are advised that water use restrictions may become necessary to minimize or avoid water supply problems.
- Please be advised that everyone is required to conserve water in the following ways:...

CHAPTER 6 – DEMAND REDUCTION ALTERNATIVES

Stages and criteria are in Section 13.30.700 LCC. This section of the LCC is in Chapter 3 of this document.

CHAPTER 7 – WATER SHORTAGE RESPONSE ACTIONS

Table 6 summarizes some of the response actions for specific water shortage events that the Utility can take. The criteria for the response action is according to Section 13.30.700 LCC. It is recognized that these suggested actions will be modified by the utility Administrator and the utility workgroup to best address the situation.

| TABLE 6 – WATER SHORTAGE RESPONSE ACTIONS | | | |
|--|---|---|--|
| STAGE | CRITERIA | ACTIONS | GENERAL MESSAGE TYPE |
| I | Low Cowlitz River water levels & forecasts by Tacoma Power | Alerts for voluntary conservation measures | Updates according to Tacoma Power and other forecasters |
| | Discretion of Administrator | Voluntary conservation measures | We may soon experience less than normal water supplies. |
| | “ | “ | Please use water wisely. |
| II | Low Cowlitz River water levels & forecasts by Tacoma Power | Alerts for voluntary conservation measures | Updates according to Tacoma Power and other forecasters |
| | Usage exceeds rate of resupply | Voluntary conservation measures | Please use water wisely. |
| | “ | Outdoor watering schedules | Outdoor watering schedules. |
| III | Water supply is inadequate to meet demand | No outdoor watering except as authorized by Administrator | No outdoor watering, wasting of potable water and nonessential uses. |
| | Voluntary conservation efforts are ineffective or expected to be inadequate | No wasting of potable water in any drainage way | “ |
| | “ | No nonessential uses of potable water | “ |