

ATTACHMENT J
Metering Program

WATER CONSERVATION PLAN

OVERVIEW

The following water conservation plan is incorporated into the water system design and the operation and management of the system. Additional long-term water conservation measures may be required in the future. Such requirements will be framed in accordance with the Washington State Department of Ecology publication, Water Conservation Planning Handbook for Public Water Systems.

For short-term water conservation measures needed to respond to drought conditions, system operation problems, etc., refer to the Water Shortage Response Plan included in this WSP

COMPONENTS OF PLAN

Metering:

To minimize unaccounted for water, the system has a meter at each well source, and a meter at the service connection.

Water Rate Structure:

Water rates will include a surcharge for excess use to encourage conservation.

Water Audit

Periodically, or at those billing periods when the surcharge for excess water use is applied, a comparison will be made between the source (well) meter and the sum of residential consumption, and the fire hydrant usage. Should unaccounted for water exceed 9 percent of the source production, a cursory water audit should be performed to determine if the difference is due to an unusual occurrence, such as a water main break. If the unaccounted for water exceeds 9 percent of production in a subsequent comparison review, the audit should be extended to include a check of meter calibration, and leak detection survey. If the water loss cannot be accounted for by a cursory audit, a full audit should be conducted as outlined in the American Water Works Association Publication M36, Water Audits and Loss Control Programs (2016).

To permit the customers to assess individual water use, the water bills will be changed to show consumption history. Any abnormal increases on the customer's consumption should initiate an inquiry into a possible leak in the consumer's plumbing system. Any major ongoing increase should initiate a check in the accuracy of the water meter.

To facilitate the water audit procedures, all meters will be tested or replaced at the interval recommended by the American Water Works Association standards C-700 Cold Water – Displacement Type, and C-701 Cold Water Meters – Turbine Type. The source meter should be tested for accuracy at a maximum interval of four years, residential meters at a maximum interval of eight years.

Low Water Use Plumbing Fixtures:

For new construction, all plumbing and related fixtures shall comply with state and local laws and regulations establishing water conservation performance standards, including the water efficiency standards established in Chapter 19.27 of the Revised Code of Washington.

Water for Lawn Irrigation:

Customers are encouraged to adopt landscaping schemes with conservation in view. The use of drip or mechanically timed irrigation systems, drought tolerant plantings, and small lawn areas is encouraged.

Lawn Sprinkling and other Water Use Restrictions:

Through the insert in a notice with the water bill/or during periods of warm, dry weather, customers will be requested to comply voluntarily with restricting lawn irrigation and car washing to once a week. Watering lawns to mornings and later evenings, etc. as outlined in public education materials described below.

Public Education:

The Washington State Department of Health publications, Water Savings Guideline 1, 2, and 3, Pub # 331-120-1, 331-120-2, 331-120-3, shall be distributed to all new customers at the time of application for water service and periodically thereafter with water bills. Future similar AWWA, state and county publications may also be distributed.

Watering Restriction

To meet the District's water use efficiency goals the water conservation program may include the following:

1. Promotion of voluntary conservation at community meetings.
2. Prohibition on lawn watering.
3. Odd-Even day schedule for plant watering.

Source & Service Meters

Source Meters

Metering of all sources is required for all water systems. All CCWUA sources are currently equipped with meters and recorded once per month. The meters are periodically tested and repaired or replaced, as necessary.

Service Meters

All system service connections are to be metered, and all new services will be metered. Industry standard registering, remote-read service meters will be selected. A meter reading program will be implemented with the system's operator delegated to perform monthly service meter reading during the six months of highest occupancy and usage.

Bill Showing Consumption History

According to industry best practices, water billing should display a comparison of current water use with the past use from the same period of the previous year and show a percent increase or decrease.

The CCWUA's water bills will show the previous meter reading, current meter reading, usage in gallons, average daily use and usage for the same period last year for comparison.

Conservation Pricing

The current rate structure is \$400 per year, per connection. Adjustments to CCWUA's water rates are to be structured to increase incrementally in cost as the consumption goes beyond the base usage allowed.