

Form 14 - Water Conservation Program

Confirm that you have included, or have committed to develop, the following required components by checking the boxes or filling in the requested information:

Completed Completion Date

- June 19, 2011** To adopt a conservation goal to promote wise and efficient use of water (in system rules, bylaws, etc.) **See Attached**

If you have adopted any other conservation goals (e.g., reduce unaccounted for water, peak instantaneous reduction, peak seasonal demand) Please list these additional goals.

See Attached

- _____ To undertake the following conservation education measures:

(Check one or more)

- Distribute DOH conservation brochures
(available free from DOH-call (800) 521-0323)
- Distribute conservation oriented news articles
- Insert conservation information in customer bills
- Other See Attached

- _____ To start or continue to record monthly source meter data (Form 12) in order to evaluate water system usage and effectiveness of the conservation program.

Our water system has done this from the beginning of the system.

ALSO: (1) See attached Summary of Practices and goals as discussed with member/users prior to and during the June 2011 Board Meeting at which the goals were adopted. And, (2) See our WUE Annual Report filings.

Form 14 – Page 2 (Attachments to Page 1)

The following was adopted as the Association's conservation goal, at a meeting of the Board of Directors held on June 19, 2011. Member/users of the Association were given advance notice of this process during May and June, including minutes of the meetings at which this topic was discussed. Members were emailed copies of the following in advance of the Board meeting, and invited to comment. In addition, all members were invited to attend the board meeting in person.

CONSERVATION Policy: "It is WSWA's policy to promote conservation practices and wise use of water, as well as to minimize leaks within our system, so that there will be sufficient water to fulfill member demands at periods of peak use and lowest production."

Other Related Conservation Goals:

1. To reduce unaccounted for water (Distribution System Leakage) to 8% or less, by the FYE 8/31/2014.
2. To develop effective capabilities for leak detection and location.
3. To promote member/user awareness of issues surrounding water leaks and related loss control principles and practices.
4. To promote member users' awareness of leak issues that can develop on their side of the meter, and related loss control principles and practices, with the goal of maintaining average annual per capita water usage by full time occupied residences below 50 gallons per day.

Conservation Education measures include distribution of DOH brochures and:

Reminder emails prior to winter freeze periods and prior to summer peak usage periods, and discussion of conservation at annual meetings (especially in conjunction with the rate schedule).

IN ADDITION: See the attached memorandum distributed to members in advance of the June 19, 2011 Board Meeting, to which all members were invited. See also annual WUE reports, as modified at that meeting and subsequently amended on July 10, 2011.

WUE Practices

As amended by the WSWA Board of Directors,
July 10, 2011

Water Use Efficiency (WUE) is a longstanding regulatory requirement, which has recently been updated by legislation and Department of Health actions. The WSWA Board of Directors is contemplating the new actions outlined on page two, and solicits member input on those proposals and on all other aspects of this important subject.

Current Practices: WSWA has emphasized conservation since its founding in 1988.

The following practices help reduce water demand:

- *A progressive rate structure has always been used by our Association. This policy was revisited in 2009, when the rate structure was revised, and the board felt it was an important conservation incentive. During annual meetings of members, there frequently are opportunities to explain the financial incentives in the rate structure (including the "conservation tier" surcharge).*
- *Each month's water meter readings for the entire system are distributed to all members via email, and also is reported at the annual meeting of members. This allows users to compare their usage with their neighbors.*
- *Users are advised each year in advance of the summer peak season (June-August) to use water sensibly, and to turn off water at the meter if they are leaving overnight or longer so that any leaky faucets or fixtures will not run during the absence. This communication typically includes a reminder and educational messages about controlling leaks and other water conservation measures, such as minimizing irrigation.*
- *Users are advised each fall to turn off water at the meter if they are gone over night or longer, so that if a freeze/thaw causes a leak it will not go unattended.*
- *From time to time, as part of these communications, members are reminded how to check their meter to see if it is spinning when it is not supposed to be.*
- *Our Board's policy for reducing charges in the event of a catastrophic and unpreventable leak specifies that there be no reduction if it occurred during an absence from the Island when the meter is not turned off.*
- *Major changes in water use noted during monthly meter readings are reviewed and/or brought to the user's attention.*

The following practices address the challenge of controlling loss or unaccounted for water usage on the Supply Side of our system:

- *A protocol has been established for determining the approximate location of a leak on the supply line from the well house up to the storage tanks.*
- *A program for leak location along the distribution lines and spurs also is being implemented, to include several pressure gauges which can be used to isolate the location of leaks.*
- *Meters have always been required on every connection.*
- *A Preventive Maintenance program has been established, for rebuilding system PRVs on a schedule, in advance of the peak usage system, rather than waiting for a failure.*

- *Water loss from storage tanks is minimized in the event of a catastrophic leak downhill, by installation of “stop loss” systems which ensure no more than half of each tank can be drained in a leak situation.*

Policy Statement: “It is WSWA’s policy to promote conservation practices and wise use of water, as well as to minimize leaks within our system, so that there will be sufficient water to fulfill member demands at periods of peak use and lowest production.”

The following goals and initiatives are intended to promote more efficient water use:

1. *Conservation Goals adopted June 19, 2011:*
 - a. *To reduce unaccounted for water (Distribution System Leakage) to 8% or less, by the FYE 8/31/2014.*
 - b. *To develop effective capabilities for leak detection and location.*
 - c. *To promote member/user awareness of issues surrounding water leaks and related loss control principles and practices.*
 - d. *To promote member users’ awareness of leak issues that can develop on their side of the meter, and related loss control principles and practices, with the goal of maintaining average annual per capita water usage by full time occupied residences below 50 gallons per day.*
2. *We are developing a program to regularly monitor the accuracy of users’ water meters, and recalibrate or replace them on a periodic basis. This program was amended by the Board of Directors to read as follows on July 10, 2011 :*
 - a. *Member/owners will be responsible for purchasing the first meter and “meter setter”. The Water Manager will oversee installation and provide the equipment.*
 - b. *New hookups are required to have a “corp stop” connection to the WSWA spur, which is a WSWA water system requirement and will be installed at the Association’s expense. Owners should consult the WSWA Water Manager prior to hookup to determine procedural and equipment requirements. Such consultation is provided as a service at WSWA’s expense. The Water Manager may install the “corp stop”, the meter and meter setter; except for the corp stop, this will all be at the expense of the property owner (including installation costs). Alternatively, if the member/owner wishes to have this work performed by another contractor, then the Water Manager will provide the equipment and bill the owner, will oversee the installation to ensure consistency with WSWA guidelines and will inspect the work before it is buried.*
 - c. *WSWA will henceforth assume responsibility for replacing meters whenever appropriate in the judgment of the water system, as a general fund maintenance expense of the Association. Any changeover will include a meter setter to minimize future replacement costs and a freeze*

protection jacket to protect the meter. The Water Manager shall replace meters after reading 800,000 gallons or sooner at his discretion if he feels a change would be in the best interests of WSWA.

- 3. Looking toward future conservation actions, we are hoping to develop a long term program for monitoring key water system parameters in real time (via internet connection and/or relying on autodialers), to provide more rapid identification of leak situations. We are now evaluating the available equipment and technology, as part of the capital budget cycle, and if we feel a cost-effective approach may be feasible we would then develop a financial plan for our long term capital budget process.*

We can not accurately estimate the impact of either past efforts or planned actions on total system gallons used, because the total water usage of our very small water system is so significantly impacted by things like a change in occupancy patterns, or tourism at the restaurant and B&Bs. Nevertheless, we believe that the actions outlined above can help prevent one major leak per year, and perhaps address several minor issues such as leaky toilets. This could easily save 20,000 gallons of water per year, or the rough equivalent of making an additional .5 to 1.0 ERU available to system users.
