



**State of Rhode Island and Providence Plantations
Water Resources Board**

Foundry Office Building, 3rd Floor, Suite 394
235 Promenade Street
Providence, RI 02908
(401) 222-1450 ♦ FAX: (401) 222-1454

WATER ALLOCATION COMMITTEE MEETING

**Tuesday, September 14, 2010 @ 2:00 pm – 3:30 pm
Room 280, Foundry Office Building
235 Promenade Street, Providence RI 02908**

AGENDA

I. CALL TO ORDER

II. ITEMS FOR DISCUSSION:

- A. Discussion on WRB Staff draft of Water Use and Efficiency rule (attached)
- B. Discussion on lawn watering policy (attachment under separate cover)

III. ADJOURNMENT

9/7/2010

Date

Kenneth J. Burke, P.E., General Manager

The meeting place is accessible to the handicapped in conformance with RIGL 42-46-2. Individuals requesting interpreter services for the hearing impaired must notify the Board office at tel. -222-1450, at least 72 hours in advance of the meeting date. If requested, tapes of the meeting will be made available.

Rhode Island Water Resources Board

Water Use and Efficiency Rules

1.0 General Provisions

1.1 Purpose

The purpose of these rules is to encourage the efficient use of water supplied by major public suppliers throughout the State.

1.2 Authority

This rule is authorized pursuant to R.I. General Laws §46-15, 46-15.3, 46-15.7, 46-15.8, and 45-39.1-3, and has been promulgated pursuant to the procedures set forth in the R.I. Administrative Procedures Act, R.I. Gen. Laws Chapter §42-35.

1.3 Application

- 1.3.1 The terms and provisions of this rule shall be liberally construed to authorize the Board to effectuate the purposes of state law, goals, and policies.
- 1.3.2 Nothing in this rule shall be deemed to interfere with the Board's power and duty to issue an immediate order pursuant to R.I. General Laws §46-15-1
- 1.3.3 This rule applies to major public water suppliers, and the Board as defined in section 2.0.
- 1.3.4 This rule becomes effective twenty days after filing with the RI Secretary of State.

1.4 Severability

If any provision of this rule or the application thereof to any person or circumstance, is held invalid by a court of competent jurisdiction, the validity of the remainder of the rule shall not be affected thereby.

2.0 Definitions

Agricultural User means a person or firm engaged in the growing of crops, raising of livestock, and/or raising horticultural products. This definition is intended to be consistent with the term *commercial agricultural producers*, as defined in § 46-15.3-4(2): purveyors of at least two thousand five hundred dollars (\$2,500) of agricultural products during a calendar year.

Board means the Rhode Island Water Resources Board, or, for the administration of these regulations, the Staff of the Rhode Island Water Resources Board.

Conservation pricing means a rate structure that encourages efficient water use and discourages non-essential water use.

Force majeure for the purposes of this rule is an unanticipated or uncontrollable event or effect which prevents compliance with a schedule for meeting water use targets.

Gallons per capita per day (GPCD) is determined by dividing the amount water supplied for residential use (total annual volume of water purchased divided by 365) by the number of residents served in their places of residence.

Inefficient water use product means an appliance, product, or fixture that does not meet current building code standards for water efficiency.

Increasing (or inclining) Block Rates means a rate structure where progressively higher quantities of usage are charged at higher unit rates. An increasing block rate is different from a uniform rate structure in that the unit rate for consumption changes (increases) one or more times at higher levels of consumption. Higher levels of consumption are separated into consumption blocks (steps/tiers). Each block of consumption is billed at a different (higher) unit rate as block levels increase.

Leakage is a component of non-billed water and is defined as water that is lost through the water supply system through leaks in pipes, pumps, services connections, etc. For purposes of this rule leakage is calculated by estimating the difference between total non-billed water and the total of the estimated or measured allowances for fire fighting, meter inaccuracy, theft, system usage, main flushing, sewer cleaning, storm drain cleaning, and other allowances that may be developed by the water resources board.

Non-billed water means the difference between water withdrawn and/or purchased by a supplier and water sold by a supplier. Components of non-billed water include fire fighting, meter inaccuracy, theft, system usage, main flushing, sewer cleaning, storm drain cleaning, and other allowances that may be developed by the Board.

Major water customer means a water customer of a major public water supplier that uses more than three million gallons/year or more than 750,000 gallons in any consecutive three-month period and is supplied by a public supplier

Major public water supplier is a water supplier that obtains, transports, purchases or sells more than fifty million gallons of water per year.

Residential Essential uses of water shall include drinking, sanitary purposes, food production and preparation, maintenance of personal property and equipment, flushing of individual supply lines as necessary to maintain water quality, and special health water use requirements.

Residential water use is water used by single and multiunit residential dwellings for household purposes such as drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns, landscapes and gardens.

Seasonal Rates are rate structures that typically charge customers a lower water rate in the winter when water demand is usually lower and a significantly higher rate in the summer when demand is higher. All unit rates or rate blocks by class can be set so that they reflect higher summer demands for each customer class. The simplest form of a seasonal rate is a surcharge added to all block rates that encompass discretionary use for residential customers

Water efficient product means an appliance, product, or fixture that meets current building code standards for water efficiency.

WaterSense certified means an appliance, product, or fixture certified by the U.S. Environmental Protection Agency as using water efficiently.

Water source is a well, reservoir, pond, lake, and river or stream segment used for potable water supply.

3.0 Non-Agricultural Water Efficiency and Demand Management Targets

- 3.1** Achieve residential water use of 65 gallons per capita per day (GPCD) which takes into consideration;
 - 3.1.1 Fluctuations in the population served.
 - 3.1.2 Multi-unit residences that in some systems may be categorized and billed as commercial.
 - 3.1.3 Other factors as appropriate as determined by the Board
- 3.2** Efficient outdoor water use
- 3.3** Efficient indoor water use
- 3.4** A full accounting of non-billed water.
- 3.5** Leakage of no more than 10% of the withdrawals and/or purchased water measured as an annual average.
- 3.6** Accurate metering and billing to account for all water supplied

4.0 Required Methods for Achieving Targets

- 4.1** 100% metering of all water use.
- 4.2** Maintenance and replacement of meters in accordance with AWWA standards and water supply system management plans.
- 4.3** Initiate a program for installation of radio frequency reading systems not later than December 31, 2012.
- 4.4** Record metered usage and bill quarterly or more frequently by December 31, 2013.
- 4.5** Public Education to encourage the efficient use of water for all customers.
- 4.6** Rate structures that are adequate to pay for all costs associated with water supply, are equitable, sensitive to economic impacts to businesses, and encourage the efficient use of water.
- 4.7** Implement leak detection programs in accordance with AWWA standards and water system supply management plans. If leakage is more than 10% of the withdrawals and/or purchased water, a system-wide leak detection program shall be initiated during the following fiscal year.

5.0 Optional Methods for Achieving Targets shall be used in combinations appropriate to the water supplier that recognize the differences in supply systems and sources and may include but are not limited to:

- 5.1** Residential conservation pricing including inclining block rates and seasonal rates
- 5.2** Methods to reduce outdoor non-agricultural water use
 - 5.2.1 Limit landscape irrigation to no more than one inch per week, net of natural precipitation.
 - 5.2.2 Limit landscape irrigation to evening and/or early morning hours to reduce evaporative loss.
 - 5.2.3 Limit the size of landscapes that require irrigation.
 - 5.2.4 Establish new plantings during the spring and fall.

- 5.2.5 Select landscape plantings to varieties that, once established, require little or no irrigation.
- 5.2.6 Use soil moisture sensors on in-ground irrigation systems.
- 5.2.7 Use non-potable water (such as rainwater) where appropriate.
- 5.3** Methods to improve efficiency of indoor water use.
 - 5.3.1 Encourage and wherever possible incentivize the replacement of inefficient water use appliances and fixtures with products that meet current building codes, *WaterSense* standards, or equivalent.
 - 5.3.2 In new construction encourage and wherever possible incentivize the installation of water efficient products that meet current building codes or *WaterSense* standards, or equivalent.
- 5.4** Methods for improving efficiency of water use by major water customers.
 - 5.4.1 Performance of Water Audits that determine opportunities for reuse and the reduction of water use.
 - 5.4.2 Installation of water efficient products for reduction in water demand
 - 5.4.3 Performance of industry specific best management practices, excluding proprietary processes.
 - 5.4.4 Renovations or new construction that utilize architectural and green building design standards such as LEED certification, Low Impact Design and other best management practices.
 - 5.4.5 Employee education.
 - 5.4.6 Outdoor water use methods as specified in section 5.2 of these rules.

6.0 Water Use and Efficiency Reporting

- 6.1** A Demand Management Strategy and Schedule to achieve targets identified in section 3.0 shall be submitted as an amendment to the Water Supply System Management Plan by June 30, 2011.
- 6.2** All Major Public Suppliers shall report annually to the Board no later than July 1;
 - 6.2.1 Withdrawals from each water source;
 - 6.2.2 Wholesale purchases and sales on a monthly basis;
 - 6.2.3 The amount of water used by each category of use (residential, commercial, industrial, agricultural, government) on the shortest time scale available;
 - 6.2.4 Estimate of the number of residents served, including seasonal fluctuations, and with a description of the basis of the estimate;
 - 6.2.5 Non-billed water and the components of non-billed water (to include leakage);
 - 6.2.6 After December 31, 2013 annual reports shall be based on, at a minimum, quarterly billing.
 - 6.2.7 Progress in achieving targets.

7.0 Enforcement

- 7.1** The Board may issue a Notice of Violation to any supplier that has failed to take reasonable steps to comply with its Demand Management Strategy for water use or for reporting as established according to this rule, or to municipalities who fail to carry out their responsibility in assisting water suppliers in achieving their targets.

The supplier shall have twenty (20) days to respond to the Notice of Violation in writing. After an opportunity to be heard before the Board, in accordance with R.I. Gen. Law §42-35-9, failure to resolve the outstanding Notice of Violation in a manner consistent with the schedule as determined by the Board may result in the issuance of an administrative order. The issuance of an administrative order shall be deemed a final agency order subject to an immediate appeal in the superior court of Providence County or in the superior court in the county in which the cause of action arose. Any appeal taken and subsequent review by a court with jurisdiction shall be in accordance with chapter 35 of title 42.

- 7.2** Any order issued by the Board to require the implementation of the requirements of this rule may be deemed to be an environmental quality standard as that term is defined in R.I. General Laws § 10-20-1 et seq.
- 7.3** The Board shall issue to any major public water supplier failing to comply with the requirements of section 6.0 (Water Use and Efficiency Reporting) an order requiring submission of the required information. In addition, the Board shall list the names of such suppliers on the Board's website and may issue a press release to announce this posting.
- 7.4** Any finding by the Board of non-compliance by a major public water supplier listed in R.I. General Laws § 39-15.1-2(4) with the requirements of R.I. General Laws § 46-15.3-7.5 or § 46-15.3-7.6 shall be forwarded to the Division of Public Utilities and Carriers as required by R.I. Gen. Laws § 46-15.3-20.
- 7.5** Failure to comply with any administrative order issued by the Board may subject a public supplier to the penalties set out in R.I. General Laws § 46-15-11(b). Each day of failure to comply with such an order shall constitute a separate offense.