



The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**



Thomas S. Burack, Commissioner

**WATER CONSERVATION PLAN APPROVAL**

December 31, 2015

Jason Hobbs  
Icye Hill Cooperative, Inc.  
55 Deep Meadow  
Exeter, NH 03833

**RE:** Exeter – Icye Hill Cooperative (PWS ID #: 0803050)  
Water Conservation Plan, NHDES # 999950

Dear Mr. Hobbs:

On December 8, 2015, the New Hampshire Department of Environmental Services (“DES”) Drinking Water and Groundwater Bureau received a Water Conservation Plan (the “WCP”), signed on November 18, 2015, for Icye Hill Cooperative located in Exeter, New Hampshire. Pursuant to RSA 485:61 and Env-Wq 2101, community water systems seeking permits from DES for groundwater sources shall submit a water conservation plan to DES. Based on review of the WCP, DES has determined the WCP complies with Env-Wq 2101, *Water Conservation* rules.

On December 31, 2015, DES issued a waiver approval to the pump test required per Env-Dw 405, *Design Standards for Small Community Water Systems* and Env-Dw 301, *Small Production Wells for Small Community Water Systems*, conditioned on implementation of a water conservation plan pursuant to Env-Wq 2101, *Water Conservation* rules.

Pursuant to Env-Wq 2101, the Town of Exeter and the Rockingham Planning Commission were provided a copy of the WCP, along with other required materials.

DES approves the WCP based on the following condition: (As Icye Hill is a community water system seeking approvals after-the-fact, the below conditions are effective upon the date of the aforementioned waiver, the same date as this Water Conservation Plan Approval.)

1. Meters shall be installed on all existing and future sources.
2. Source meters, distribution meters, and any other meters measuring water consuming process prior to distribution shall be read on a monthly basis - no sooner than 27 days and no later than 33 days from the last meter reading.
3. All meters shall be tested and maintained based on the schedule proposed in the WCP.

4. All meters shall be installed per the manufacturer's instructions or American Water Works Association standards.
5. Monthly source production volumes shall be reported to the NHDES Water Use Registration and Reporting program on a quarterly basis using the OneStop online reporting tool. DES has assigned Icey Hill Cooperative WUID # 21003. Quarter 1 2016 is due by April 15, 2016. To report data, Icey Hill shall complete one of the below:
  - a. Register as a data provider and utilize the DES OneStop reporting tool to submit water use data. Instructions for becoming a registered data provider and using the tool are enclosed with this letter; or
  - b. Retain the primary operator, Daniel Mattus, who is already an authorized data provider for at least one other facility, to be the registered data provider for Icey Hill Cooperative. If you choose to retain Daniel Mattus to report to the Water Use and Registration Program, please email [stacey.herbold@des.nh.gov](mailto:stacey.herbold@des.nh.gov) or call (603) 271-6685 to provide authorization.
6. Every two years from the date of this WCP Approval, a comprehensive leak detection survey shall be completed in accordance with "Manual of Water Supply Practices, Water Audits and Loss Control Programs", document identification number AWWA M36, American Water Works Association, 2009.
7. Leaks shall be repaired within 60 days of discovery.
8. An outreach and education program shall be implemented as proposed in the WCP.
9. All new non-metallic pipes installed in the system shall be outfitted with detectable tracer tape or detectable tracer wire, or be GPS located and maintained in a GIS system.
10. Every three years from the date of this WCP Approval, a *Water Conservation Plan Ongoing Compliance Reporting Form* shall be submitted to DES documenting how the system has maintained compliance with the WCP. The following records shall be maintained by the water system to include with the report:
  - a. A leak log including the date a leak was discovered, the date a leak was repaired, the type of leak (ex. water main, service line, hydrant, valve), the approximate size of the leak (gpm), and the nearest address to the leak.
  - b. The title of water efficiency materials distributed and the date of distribution.
  - c. Date of installation and replacement of all meters, as well as testing and calibration records.
  - d. Leak detection survey reports.

11. Revisions to the Plan shall not be implemented without further approval from DES.

The *Water Conservation Plan Ongoing Compliance Reporting Form* may be located by going to the DES website, [www.des.nh.gov](http://www.des.nh.gov), clicking on the “A-Z List” in the top right corner of the page, and scrolling down to Water Conservation

Please feel free to contact me with any questions at (603) 271-6685 or via e-mail at [stacey.herbald@des.nh.gov](mailto:stacey.herbald@des.nh.gov) .

Sincerely,

A handwritten signature in cursive script, appearing to read 'Stacey Herbold', written in black ink.

Stacey Herbold  
Water Use and Conservation Program  
Drinking Water and Groundwater Bureau

*Attached: (2) Water Use Registration Guidance and Water Use Reporting Guidance*

ec: Dan Mattus, Granite State Analytical  
Town of Exeter  
Rockingham Planning Commission  
Steve Roy, NHDES  
Emily Jones, NHDES



# Community Water Systems Water Conservation Plan Drinking Water and Groundwater Bureau



## WATER CONSERVATION PLAN: **Icey Hill Cooperative**

A community water system seeking authorization for a new source of water must submit a water conservation plan to the New Hampshire Department of Environmental Services (NHDES) for approval demonstrating how the water system proposes to comply with water conservation standards pursuant to Env-Wq 2101, *Water Conservation*, rules. **Icey Hill Cooperative** is an existing small community water system.

Activities outlined in the water conservation plan will be completed by water system personnel under the supervision of a certified water system operator.

### I. Introduction

#### A. Contact Information

1. Name and location of system: **Icey Hill Cooperative, Exeter**
2. Owner of system and mailing address: **Jason Hobbs, 55 Deep Meadow Road, Exeter, NH 03833**
3. Name and mailing address of preparer of water conservation plan: **Daniel Mattus, 22 Manchester Road, Derry, NH 03038**

#### B. System Overview

1. Brief description of the project and water sources, including water sources to be developed for non-potable uses such as irrigation: **This system contains a single bedrock well with an average daily use of 2,000 gallons per day. The water has treatment for iron and manganese.**
2. Name designation of each proposed water source and any existing sources: **Existing BRW 1**
3. Number of connections proposed for each of the following classes:
  - a) Residential: **15**
  - b) Industrial/commercial/institutional: **0**
  - c) Municipal: **0**
4. The water system does not provide water to any consecutive water systems or privately owned redistribution systems.
5. There are no proposed connections that will receive more than 20,000 gpd.

#### C. Transfer of Ownership

1. The ownership of the water system is a homeowner's type association.

### II. System Side Management

#### A. Water Meters

## 1. Source Meters

a) No later than the source activation date, meters will be installed on each new and any existing water source.

b) An irrigation well is not proposed.

c) Source meter information for existing source and if known, for each proposed source:

Source Name: **BRW 1**

Source Meter Make: **Neptune**

Source Meter Model: **T-10**

Source Meter Size: **1"**

Source Meter Installation Date: **2013**

Last Meter Test/Calibration Date: **n/a**

d) No later than the source activation date, source meters will be read **monthly**.

## 2. Meter Selection, Installation, and Maintenance

a) All meters will be AWWA certified, with the exception of b), below.

b) AWWA does not have standards for magnetic flow meters. If a magnetic flow meter is proposed, the meter make, model, size, and manufacturer specifications will be forwarded to the NHDES Water Conservation program for review. The meter will not be installed until receiving approval for its use from NHDES.

c) The selected size of the meters will be based on projected flow rates.

d) Meters will be installed as specified by the manufacturer including requirements for horizontal or vertical placement, distance of straight run of pipe upstream and downstream of the meter, and strainer installation. If the manufacturer does not supply installation specifics, meters will be installed in accordance with the "Manual of Water Supply Practices M6, Water Meters-Selection, Installation, Testing, and Maintenance," (American Water Works Association, 2012).

e) The following meter testing and calibration schedule or meter change-out schedule will be implemented. If the manufacturer's accuracy warranty extends beyond the below schedule, the meter will be tested or changed-out no later than the warranty expiration date.

Meter Size (inches)	Testing Rate (yr)
<1"	10 yrs
1" - 2"	4 yrs
3"	2 yrs
>3"	yr

f) A log of the date meters were installed, tested, calibrated, repaired, and replaced will be maintained and calibration certificates will be kept on file.

#### B. Pressure Management

1. The design pressures of the system are from **40 psi to 60 psi**.

#### C. Leak Detection and Repair

1. Leak detection methodologies will be conducted in accordance with "Manual of Water Supply Practices M36, Water Audits and Loss Control Programs" (American Water Works Association, 2009).
2. Leaks will be repaired within 60 days of discovery unless a waiver is obtained in accordance with Env-Wq 2101.09.
3. A log of all leaks will be maintained including the date the leak was discovered, the date the leak was repaired, the type of leak (ex. service, main, hydrant, valve), the size of leak (gpm), and the nearest street address to the leak.

#### D. Leak Detection Methodology

1. An acoustic leak detection survey of the entire system will be completed every two years. *by Randy Troupe of New England Water Distribution Services*
  - a) Testing schedule: Every other year 100% of the system will be surveyed:
  - b) The survey will be conducted by a professional leak detection consultant retained by the system. (Performed by Randy Troupe of New England Water Distribution Services)
2. Acoustic leak detection will be conducted in accordance with "Manual of Water Supply Practices M36, Water Audits and Loss Control Programs" (American Water Works Association, 2009).

### III. Consumption Side Management

#### A. Educational Outreach Initiative

The following education and outreach initiative will be implemented within one year of final source approval.

The system will begin distributing water efficiency outreach materials twice a year with the Consumer Confidence Report. The materials distributed will be either NHDES Water Efficiency Fact Sheets located at

IV. Reporting and Implementation

A. The water system will submit a form supplied by NHDES once every three years from the date of the water conservation plan approval documenting how compliance with the requirements of Env-Wq 2101 *Water Conservation* are being achieved.

B. A leak detection report for each leak detection survey conducted over the previous three years, will be submitted with the report form in V.A., above.

C. The water system will report monthly production volumes, quarterly to the NHDES Water Use Registration and Reporting Program upon receiving a Water Use ID number from NHDES. Monthly means once every calendar month, but not sooner than 27 days after and no later than 33 days after the previous reading.

I certify that I have read this Water Conservation Plan, understand the responsibilities of the water system as referenced in the plan, and that all information provided is complete, accurate, and not misleading.

Owner Name (print): Jason Hobbs

Owner Signature: Jason Hobbs Date: 11/18/2015

Appendix A  
Definitions

**Authorized metered consumption:** billed metered water plus unbilled metered water.

**Community water system (CWS):** a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

**Consecutive water system:** a public water system that buys or otherwise receives some or all of its finished water from one or more wholesale systems for at least 60 days per year.

**Final Source Approval:** the date of final well siting approval or the date of issuance of the large groundwater withdrawal permit.

**Large community water system:** a community water system that serves more than 1,000 persons.

**Privately owned redistribution system (PORS):** A system for the provision of piped water for human consumption which does not meet the definition of a public water system and meets all of the following criteria:

(1) Obtains all of its water from, but is not owned or operated by a public water system; (2) serves a population of at least 25 people, 10 household units, or 15 service connections, whichever is fewest, for a least 60 days per year; and (3) has exterior pumping facilities, not including facilities used to reduce pressure, or exterior storage facilities which are not part of building plumbing.

**Public water system (PWS):** a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

**Small community water system:** a community water system that serves 1,000 people or less.

**Source activation date:** the date the source is placed into use.

**System input volume:** the volume of water input to the water supply system after treatment, analysis, and storage.

**Water balance:** the difference between the system input volume and authorized metered consumption.

**Water conservation:** any beneficial reduction in water losses, waste, or use.

**Wholesale system:** a public water system or an industrial, commercial, or institutional (ICI) water user that treats source water and then sells or otherwise delivers finished water to a consecutive water system or privately owned distribution system.

Appendix B  
Notification Process

**Public Notification Instructions**

Within 10 days of submitting the conservation plan to NHDES, the applicant is required to provide a copy of the plan via certified mail with return receipt requested to the governing board of the municipality in which a proposed source is located, all municipalities that will receive water from the water system (if any), all wholesale customers (if any), and the regional planning commission serving the location of the proposed source. In most cases, only the municipality and the regional planning commission will require notification. All signed copies of the certified mail return receipt (the green card) must be forwarded to NHDES.

**Additional Attachments**

The applicant must provide the governing boards with a summary of the requirements of Env-Wq 2101, which may be found at [http://des.nh.gov/organization/divisions/water/dwgb/water\\_conservation/index.htm](http://des.nh.gov/organization/divisions/water/dwgb/water_conservation/index.htm), and request that the governing board amend local site planning requirements to reflect the requirements of Env-Wq 2101 or to promote water efficiency.

**Notification of Consecutive Water Systems and Privately Owned Redistribution Systems**

Within 5 working days of obtaining final approval of the source from NHDES, the system is required to notify any consecutive water system or privately owned redistribution system receiving water from the system, that pursuant to Env-Wq 2101.13, the systems must implement a water conservation plan and should contact the NHDES Water Conservation Program using the contact information below.