



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

AMENDED
WATER CONSERVATION PLAN APPROVAL

December 31, 2014

David Will
View Point Cooperative, Inc.
93 California Brook Road
Swansey, NH 03446

RE: Swansey – View Point Coop (PWSID: 2303020)
Amended Water Conservation Plan

Dear Mr. Will:

On January 25, 2011, the Department of Environmental Services (“DES”) Drinking Water and Groundwater Bureau approved a Water Conservation Plan for View Point Coop, located in Swansey, New Hampshire. On December 19, 2014, DES received an Amended Water Conservation Plan (the “Amended WCP”). The purpose of this letter is to approve the Amended WCP signed on December 17, 2014, per the following conditions:

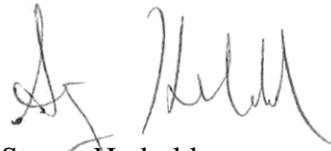
1. Ongoing three year compliance reports shall be submitted every three years from the date of the original Water Conservation Plan Approval, January 25, 2014. The next compliance report is due on January 25, 2017.
2. Source meters, distribution meters, and any other meters measuring water consuming 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. The system shall continue reporting monthly source production volumes to the NHDES Water Use Registration and Reporting program on a quarterly basis.
4. All meters shall be tested and maintained based on the schedule proposed in the Amended WCP.
5. All meters shall be installed per the manufacturer’s instructions or American Water Works Association standards.
6. Night flow analysis shall commence at a rate of twice a year, but no sooner than 173 days after and no later than 187 days after the prior analysis.
7. Leaks shall be repaired within 60 days of discovery.

8. Water efficiency educational materials shall be distributed twice a year to residents as described in the amended WCP.
9. Meter testing and calibration records, night flow analysis records, leak detection and repair logs, and education and outreach information shall be maintained and submitted with the three year compliance report.
10. Revisions to the Amended WCP shall not be implemented without further approval from DES.

A copy of the Amended WCP and the *Water Conservation Plan Ongoing Compliance Form* may be located by going to the DES website, 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) 271-0659 or via e-mail at stacey.herbold@des.nh.gov.

Sincerely,



Stacey Herbold
Water Conservation Program
Drinking Water and Groundwater Bureau

cc: Daniel Crosby, EAI Analytical



Water Conservation Plan

Amended December 15, 2014

View Point Coop Water System

EPA ID # 2303020

93 California Brook Road, Swanzey, NH 03446



Plan Initially Submitted September 8, 2014, by Daniel Crosby, EAI Analytical Labs

AMENDED WATER CONSERVATION PLAN

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 (DES) for approval demonstrating how the water system proposes to comply with water conservation standards pursuant to Env-Wq 2101, *Water Conservation*. **View Point Coop** is an existing cooperatively owned small community water system that became subject to the water conservation rules upon DES approval for the installation of Bedrock Well 5, in 2010.

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

This amended plan reflects changes to the previous plan submitted by SVE Associates, on December 7, 2010. Our leak detection protocol has changed from annual acoustic leak detection to a night flow analysis. This and other minor changes are detailed in this amended plan.

I. Introduction

A. Contact Information

System name and location: View Point Coop, Swanzey, NH

System contact information:

Board of Directors, David Will, (603) 357-4498

View Point Coop, 93 California Brook Road, Swanzey, NH 03446

Operations Manager, Donald R. Allen, (603) 352-1461

View Point Coop, 93 California Brook Road, Swanzey, NH 03446

Water system operator: Daniel Crosby, EAI Analytical Labs, (603) 357 2577

EAI Analytical Labs, 149 Emerald St., Ste. R, Keene, NH 03431

B. System Overview

1. The water system is comprised of five bedrock wells that run simultaneously. Each well is flow metered, utilizing a single hour meter. The submersible well pumps deliver the water to two joined 22,500 gallon cast concrete tanks. Two 130 gpm booster pumps alternately transfer storage to an 8,500 gallon steel pneumatic tank, maintaining roughly 5,000 gallons of water.
2. Wells are identified as BRW 1, BRW 2, BRW 3, BRW 4 and BRW 5.
3. Water is delivered to 98 residential connections.
4. Average daily usage is 17,000. And maximum daily use is 24,800 gal.

C. Transfer of Ownership

The ownership of the water system is the cooperative homeowner's association.

II. System Side Management

A. Water Meters

1. Source Meters

a) There are no irrigation wells, nor are any proposed.

b) Source meter information for existing sources:

BRW 1: Badger Meter model 25 Recordall 5/8", 3/4", serial # 40420734

BRW 2: Badger Meter model 25 Recordall 5/8", 3/4", serial # 40420733

BRW 3: Badger Meter model 25 Recordall 5/8", 3/4", serial # 40420732

BRW 4: Badger Meter model 25 Recordall 5/8", 3/4", serial # 40420816

BRW 5: Badger Meter model 25 Recordall 5/8", 3/4", serial # 40420731

Source meters were installed in 2010.

Meter Test/Calibration Date: 2020

c) Source meters are read on a monthly basis. Meter readings, production and usage data are included as an enclosure to this plan.

The following meter testing and calibration schedule or meter change-out schedule will be implemented upon expiration of the manufacturer's accuracy warranty.

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

2. Meter Selection and Installation

- a) All proposed meters to be installed will meet AWWA meter standards.
- b) The selected size of the meters will be based on projected flow rates.
- c) 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 DES Water Conservation program for review. The meter will not be installed until receiving approval for its use from DES.
- 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).

B. Pressure Management

1. The design pressures of the system are from 45 psi to 90 psi.
2. The system is a single pressure zone not requiring any pressure reduction.

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), and the size of leak (gpm).
4. The system utilizes Night Flow Analysis for the detection of leaks. The system will conduct a night flow analysis every six months. A low flow distribution meter was installed on August 7, 2014. Valves in the pumphouse are configured so that the water flows through the garden hose low-flow-meter manifold rather than past the 4" main bearing the master meter. The low flow meter is a ¾" Sensus model SRII-as. The following is the Night Flow Analysis Method utilized by the system:
 - a) The calibration testing rate for ¾" Sensus model SRII-as meter is every ten years. Installed in 2014, it is to be calibrated in 2024.

- b) The distribution meter will be selected, installed, and maintained in compliance with "Manual of Water Supply Practices M6, Water Meters-Selection, Installation, Testing, and Maintenance," (American Water Works Association, 1999).
- c) Baseline flow has been established at 1.2 gpm during the initial night flow analysis, performed on August 14, 2014.
- d) Water usage is recorded every minute for one hour between 1 am and 3 am using a distribution meter. Prior to the night flow analysis, users of the system are requested to refrain from using water during the testing interval.
- e) a. If flows are observed above the baseline, flows will continue to be recorded for an additional hour.
- f) If sustained flows are observed greater than 2 gpm above the baseline, a leak will be suspected.
- g) If flows are still above the baseline, but no more than 2 gpm above baseline, all residents will be asked to check their homes for leaks including running toilets. The previous step will then be repeated again in 3 days.
- h) If again flows are above the baseline, a leak on the service side of the system will be assumed.
- i) b. If a leak is suspected, valves will be closed to isolate select portions of the system and to evaluate the change in flow as measured by the distribution meter to isolate the leak. For example, when one valve is closed, one person in the field (operating the valves) will then communicate with a second person observing the distribution meter to monitor for a change in the background flow.
- j) No later than two weeks from isolating the leak to a certain branch of a system, a sub-contractor skilled in acoustic leak detection will be retained and assist with pinpointing the leak.
- k) 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).
- l) Leaks will be repaired within 60 days of discovery unless a waiver is obtained in accordance with Env-Wq 2101.09.

III. Consumption Side Management

A. Educational Outreach Initiative

1. The system will distribute water efficiency outreach materials/fact sheets twice a year, including efficiency tips and links embedded in the Consumer Confidence Report. The materials distributed will be either:

[WD-DWGB-26-1 Introduction to Water Use and Water Efficiency](#)

[WD-DWGB-26-18 Home Water Efficiency: Bathrooms](#)

[WD-DWGB-26-19 Home Water Efficiency: Kitchen and Laundry](#)

Located on the DES website at:

<http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm#efficiency>

2. There are no service meters nor are residents billed for their water use.

II. Reporting and Implementation

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

B. With the compliance report, the system will also submit will submit the data and analysis from night flow analysis along with the ongoing three year compliance report.

C. The water system will report monthly production volumes, quarterly to the DES Water Use Registration and Reporting Program upon receiving a Water Use ID number from DES.

Additional Attachments

Water use and well production spreadsheet

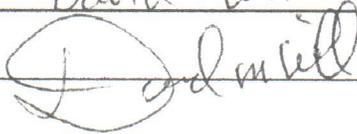
Data sheet from Night Flow Analysis

DES Contact

Stacey Herbold, Water Conservationist
New Hampshire Department of Environmental Services
Drinking Water and Groundwater Bureau
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095
stacey.herbold@des.nh.gov
Ph: (603) 271-0659
FAX: (603) 271-0656

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): David Will

Owner Signature:  Date: 12/17/14