



The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner



September 14, 2020

Transmitted via Email

Richard Levine
Wildcat Townhouse Resort Association
PO Box 961245
Boston, MA 02196
richard@levinecompanies.com

**Subject: Water Conservation Plan Approval
Jackson – Wildcat Townhouse Resort (PWS ID#: 1212030)
Water Conservation Plan, NHDES # 005351**

Dear Richard Levine:

On September 10, 2020, the New Hampshire Department of Environmental Services (“DES”) Drinking Water and Groundwater Bureau received a Water Conservation Plan (the “WCP”), signed on September 10, 2020, for Wildcat Townhouse Resort, located in Jackson, New Hampshire. Pursuant to RSA 485:61 and Env-Wq 2101, community water systems seeking permits from DES for new sources of groundwater 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.

Pursuant to Env-Wq 2101, the Town of Jackson and the North Country Council were provided a copy of the WCP, along with other required materials. On September 8, 2020, DES received confirmation of public notification.

DES approves the WCP based on the following conditions:

1. All source meters and data loggers shall be installed on all active sources.
2. Source meters and any other meters measuring water consuming processes prior to distribution shall be read monthly, no sooner than 27 days and no later than 33 days from the last meter reading.
3. All meters shall be installed per the manufacturer’s instructions or American Water Works Association standards.
4. All meters shall be tested and maintained based on the schedule proposed in the WCP.
5. The system shall report monthly source production volumes to the DES Water Use Registration and Reporting Program on a quarterly basis in accordance with Env-Wq 2102. DES has assigned **WUID 21054** to the facility. The water system shall register as a data provider and utilize the DES OneStop reporting tool to submit water use data. Instructions for using the tool are enclosed with this letter. If you have any questions about water use reporting or registering as a data provider, please contact Stacey Herbold by phone at (603) 271-6685 or by email at stacey.herbold@des.nh.gov.
6. The primary operator, Ian Hayes, is already an authorized data provider for at least one other system. If you retain Ian Hayes to report to the Water Use Registration and Reporting Program for your system,

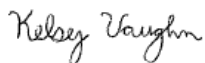
please contact Stacey Herbold by phone at (603) 271-6685 or by email at stacey.herbold@des.nh.gov to provide authorization.

7. No later than six months from the date of this approval, a distribution meter shall be installed and night flow analysis shall commence at a rate of twice a year in accordance with the night flow analysis methodology in the WCP.
8. Leaks shall be repaired within 60 days of discovery.
9. No later than one year from the date of this approval, a water conservation outreach and education program shall be implemented in accordance with the WCP, including the distribution of water efficiency outreach materials to residents twice a year.
10. From the date of this approval, all 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.
11. Every three years from the date of this 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. Data from biannual night flow analyses and a brief summary of the analyses.
12. Proposed changes to the WCP shall not be implemented unless approved by DES.

The *Water Conservation Plan Ongoing Compliance Reporting 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, clicking "Water Conservation," and scrolling down to "Forms/Applications."

Please feel free to contact me with any questions at (603) 271-0659 or via e-mail at kelsey.vaughn@des.nh.gov.

Sincerely,



Kelsey Vaughn
Water Conservation Program
Drinking Water and Groundwater Bureau

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

ec: Ian Hayes, Simply Water
Town of Jackson
North Country Council
Stacey Herbold, Andrew Koff, Kim Bourgoiun; DES

WATER CONSERVATION PLAN: **Wildcat Townhouse Resort**

A community water system seeking authorization for a new source of water must submit a water conservation plan (WCP) 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. Wildcat Townhouse Resort is a landlord owned community water system. This WCP is being developed as part of the system reactivation approval process. Although the system was reactivated in October 2018, the system is now going through a more comprehensive approval process.

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:
Wildcat Townhouse Resort (PWSID 1212030)
Jackson, NH
2. Owner of system and mailing address:
Wildcat Townhouse Resort Association
PO Box 961245
Boston, MA 02196
3. Name and mailing address of preparer of water conservation plan:
Richard D. Levine
President, Wildcat Townhouse Resort Association
PO Box 961245
Boston, MA 02196

B. System Overview

1. Description of the community being served (ex. number of units, apartments, partially attached condos, individual homes, shared common facilities, population, etc.):
The system consists of 11 apartments in 4 buildings serving approximately 28 people. Ten apartments are 3-bedroom units, and one apartment is a 4-bedroom unit. There is a washer/dryer in every unit. There is no irrigation or pool. The leases are long-term (at least year-long).

The system originally started up in 1981 as an 'N' system (transient non-community). The system was deactivated in November 2015, and the townhouses were renovated. The system was reactivated as a 'C' system (community) in October 2018.
2. Description of water sources, including water sources to be developed for non-potable uses such as irrigation:
The system is served by 1 bedrock well, which served the previous 'N' system as well.
3. Name designation of each proposed water source and any existing sources: BRW1

4. Number of connections proposed for each of the following classes:
 - a) Residential: 4 buildings with 11 units total
 - b) Industrial/Commercial/Institutional: 0
 - c) Municipal: 0
5. The water system does not provide water to any consecutive water systems or privately owned redistribution systems.
6. There are no proposed connections that receive more than 20,000 gpd.

C. Transfer of Ownership

1. The system ownership is not proposed to be transferred. (Note: Although the system owner is Wildcat Townhouse Resort Association, it is not a homeowner's association. It functions more as a property management company.)

II. System Side Management

A. Water Meters

1. Source Meters

- a) No later than the source activation date, a meter will be installed on each water source.
- b) An irrigation well is not proposed.
- c) Source meter information for each source:
 - Source Name: BRW1
 - Meter Size: 1"
 - Meter Make: Neptune
 - Meter Model: T-10
 - Meter Installation Date: December 2018
- d) Source meters will continue to be read at least monthly.

2. Meter Selection, Installation, and Maintenance

- a) All meters will be American Water Works Association (AWWA) certified.
- b) The selected size of the meters will be based on projected flow rates.
- c) 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" (AWWA, 2012).
- d) The following meter testing and calibration schedule or meter change-out schedule will be implemented. If the manufacturer's accuracy warranty extends beyond the schedule below, the meter will be tested or changed-out no later than the warranty expiration date.

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

e) A log of the date meters were installed, tested, calibrated, repaired, and replaced will be maintained. 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. All non-metal pipes will either be GPS located and stored in a GIS system or equipped with detectable tracer tape or detectable tracer wire.
2. Leak detection will be conducted in accordance with the "Manual of Water Supply Practices M36, Water Audits and Loss Control Programs" (AWWA, 2016).
3. Leaks will be repaired within 60 days of discovery unless a waiver is obtained in accordance with Env-Wq 2101.23.
4. 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 the leak (gpm), and the nearest street address to the leak.

D. Water Loss Minimization- Night Flow Analysis

1. Night flow analysis will be implemented no later than six months from the date of water conservation plan approval.
2. The system will conduct a night flow analysis at least twice a year.
3. A distribution meter capable of reading low flows will be installed on the distribution line. The make, model, and size of the proposed distribution meter is currently being determined.
4. See Appendix B for the night flow analysis methodology.

III. Consumption Side Management

A. Educational Outreach Initiative

1. No later than one year from the date of water conservation plan approval, the system will begin distributing water efficiency outreach materials twice a year to residents via hand-delivery or email. The materials distributed will be NHDES Water Efficiency Fact Sheets located at <http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm#efficiency>, EPA WaterSense materials located at <http://www.epa.gov/watersense/>, or a newsletter.
2. The system will maintain a log indicating how the system has complied with III. A.1., above. The log will include dates the outreach and education actions were taken and what was done.

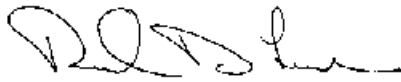
IV. Reporting and Implementation

- 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* rules, is being achieved.
- B. The data collected with each night flow analysis from the previous three years, as well as a statement as to whether a leak was suspected or not, will be submitted with the report form in IV.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 User Identification Number from NHDES. Monthly means once every calendar month, but no 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): Wildcat Townhouse Resort Assoc., Richard D. Levine, President

Owner Signature:



Date: 9/10/2020

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 at 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
Night Flow Analysis Methodology

1. Distribution Meter

- a. A meter capable of measuring flows less than 2 gallons per minute (gpm) will be installed on the distribution line and located after treatment, any other water consuming processes, and storage. The meter make, model, and size will be forwarded to NHDES prior to purchase/installation for review and approval.

2. Determining Baseline Flow

- a. Baseline flow will be determined when the system is tight. The system will be considered tight when (this may vary based on the size and age of the system):
 1. A leak detection survey is conducted and all leaks discovered are repaired; or
 2. An initial night flow analysis is conducted and night flow decreases to 0 gpm.
- b. The results of the initial night flow analysis and the proposed baseline flow will be submitted to NHDES for review.

3. Night Flow Analysis

- a. Night flow analysis will be conducted at least twice a year and no sooner or later than 6 months apart.
- b. Water usage will be recorded every minute for one hour during a period of anticipated low water demand using a distribution meter (between 1 am and 3 am is recommended). Prior to the night flow analysis, users of the system will be requested to refrain from using water during the date and time of the scheduled night flow analysis. (Night flow analysis will be conducted prior to sprinkler season.)
- c. If the lowest flow is above the baseline flow, then water usage will continue to be recorded every minute for an additional hour.
- d. If the lowest flow is more than 2 gpm above the baseline, a leak will be suspected.
 1. All residents will be asked to check their homes for leaks, including running toilets and outdoor spigots. The previous steps will then be repeated in 3 days. If the lowest flow is still above the baseline flow, the actions in Steps 2 and 3 below will be taken.
 2. Select portions of the system will be isolated and evaluated by closing valves while monitoring the change in flow as measured by the distribution meter. For example, when one valve is closed, the person in the field operating the valve will then communicate with a second person observing the distribution meter to monitor for a change in the background flow.
 3. No later than two weeks after isolating the leak to a branch of the system, a sub-contractor skilled in acoustic leak detection will be retained and will assist with pinpointing the leak.
- e. Records will be maintained of each night flow analysis, including recorded flows and leak repair results.

Appendix C Notification Process

Public Notification Instructions

Once a final draft of the water conservation plan is agreed upon by the applicant and NHDES, NHDES will send a signature line to the applicant for addition to the plan along 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.

Within 10 working days of receiving the summary from NHDES, the applicant is required to provide a copy of the water conservation plan and rules summary via certified mail with return receipt requested to:

- the governing board of the municipality in which a proposed source is located,
- the governing board of all municipalities that receive water from the water system (if any),
- the governing board of all wholesale customers of the water system (if any), and
- the regional planning commission serving the location of the proposed source.

The applicant must also request that the governing board amend local site planning requirements to reflect the requirements of Env-Wq 2101 and to promote water conservation landscaping for new projects.

All signed copies of the certified mail return receipts (the green cards) must be forwarded to NHDES along with the final, signed water conservation plan before approval of the water conservation plan will be issued.

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 of the following:

- The projected source activation date; and
- The system will be subject to Env-Wq 2101 as of the source activation date, pursuant to Env-Wq 2101.13 and should contact the NHDES Water Conservation Program using the contact information below.

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