



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



**Thomas S. Burack, Commissioner**

**AMENDED**  
**WATER CONSERVATION PLAN APPROVAL**

December 17, 2014

Paradise Estates Condo Association  
c/o Jan Pelchat  
5 Juniper Lane  
Pelham, NH 03076

RE: Pelham – Paradise Estates Adult Housing (EPAID: 1852110)  
Water Conservation Plan (NHDESID: 999472)

Dear Ms. Pelchat:

On April 27, 2011, the New Hampshire Department of Environmental Services (“DES”) Drinking Water and Groundwater Bureau approved a Water Conservation Plan for Paradise Estates located in Pelham, New Hampshire. On October 17, 2014, DES received an Amended Water Conservation Plan (the “Amended WCP”). The purpose of this letter is to approve the Amended WCP signed on October 13, 2014.

DES also received a waiver request with the Amended WCP. The waiver request proposes a waiver to Env-Wq 2101.11, which requires quarterly billing of water. Paradise Estates proposes to meet the intent of the rule by continuing to read service meters quarterly, conduct water balances yearly, and to follow up on above average water consumption for each unit based on two occupants per unit. Pursuant to Env-Wq 2101.23, DES approves this waiver request for 4 years from the date of the Amended WCP Approval, at which time the system may choose to seek the same waiver for an additional 4 years.

The Amended WCP shall be implemented based on the schedule included on page #3 of the Amended WCP, as well as the details included in the Amended WCP.

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](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) 271-0659 or via e-mail at [stacey.herbold@des.nh.gov](mailto:stacey.herbold@des.nh.gov) .

Sincerely,

Stacey Herbold  
Water Conservation Program  
Drinking Water and Groundwater Bureau

cc: Richard Bibeau, Hampstead Area Water Company

Amended Water Conservation Plan  
Paradise Estates  
Pelham, NH  
September 2014



A Water Conservation Plan (“WCP”) was approved for Paradise Estates on April 27, 2011 by DES in accordance with Env-Wq 2101, Water Conservation Rules. All new community water systems and community water systems seeking approval for new sources are required to implement Water Conservation Plans. The developer of Paradise Estates has transferred ownership of the water system to the Paradise Homeowner’s Association (the “HOA”). The HOA has worked with DES to amend the WCP to include the details needed to implement the plan and to ensure all requirements of Env-Wq 2101 are met.

**Waiver Request:**

The HOA is seeking a waiver to Env-Wq 2101.11, requiring quarterly billing of water. The homeowners were not informed during purchase and sale of the required billing of water based on usage. In total, there will be 30 homes at the completion of development to spread all shared costs amongst. The HOA does not have the additional resources to bill and collect these payments on top of regular HOA collections.

The intent of billing based on usage is to promote the efficient use of water by residents. As all the homes are new, each unit has water efficient fixtures and the irrigation system is on separate wells and has a new control system including a rain shut off gauge. Also, no more than two people are allowed to inhabit a home. To further meet the intent of billing, service meters will continue to be read quarterly and analyzed for potential inefficient use including leaks. If usage is higher than expected (more than 65 gpd per person per unit), then the potential for leakage or wasteful water practices will be explored and addressed.

**Actions:**

**Meter Reading**

1. Well source meters, the distribution meter, and irrigation meters (meters in basement of club house) will be read **at least monthly**, preferably on the first of each month and no sooner than 27 days and no later than 33 days apart.
2. Residential service meters (meters on all residential units and the one meter in the basement of the club house measuring water usage at the club house) will be read **quarterly**, preferably on the first of each month, but no sooner than 83 days and no later than 97 days after the date in the prior quarter. (\*On the day that service meter readings are taken, a reading of the distribution meter shall also be taken to determine “system input volume” so the system can calculate a water balance.

**Water Balance**

1. A **yearly** water balance will be calculated.

Water Balance = System Input Volume – Consumption Volume

System Input Volume = Difference between the distribution meter readings at the end of the year and the beginning of the year.

Consumption Volume = The sum of all differences between the service meter readings at the end of the year and the beginning of the year.

Percent Water Balance = (Water Balance/System Input Volume) x 100

If the water balance exceeds 15% of the system input volume, then the next step is to complete a water audit and submit the audit to DES. Based on the water audit, DES will work with the system to determine if a response plan to reduce losses is required.

#### **Leakage on the System Side (outside of the residential units)**

2. All discovered leaks will be repaired with 60 days.
3. A leak log will be maintained including the day a leak was identified, the date repaired, the type of leak (main, service line, valve, hydrant) and the estimated size of leak (gpm).

#### **Meter Testing/Calibration/Replacement**

1. **Every 5 years**, the source, distribution, and irrigation meter(s) will be tested and calibrated or replaced. The system went online in 2012; therefore, the first testing and calibration or replacement date will be 2017. The system will retain documentation of testing, calibrating, and/or replacing meters.
2. Residential service meters will be replaced based on the manufacturer's accuracy warranty or if found to be inaccurate prior to warranty expiration. For Badger Recordall 25 the accuracy **warranty is 15 years**. The first five homes were complete in 2012; therefore service meter replacement shall begin in **2027**. The system will maintain records of service meter ages and documentation of purchase of new meters.
3. All meters shall be installed, maintained, and replaced in accordance with "Manual of Water Supply Practices M6, Water Meters–Selection, Installation, Testing, and Maintenance," (American Water Works Association, 2012).

#### **Education and Outreach**

1. A link to the DES Water Efficiency Fact Sheets and WaterSense website will be posted on the Paradise Estates Website: [http://des.nh.gov/organization/divisions/water/dwgb/water\\_conservation/categories/education.htm](http://des.nh.gov/organization/divisions/water/dwgb/water_conservation/categories/education.htm)
2. Water efficiency outreach materials will be distributed to residents **yearly**.

#### **Reporting to DES**

1. On a **quarterly basis**, monthly production volumes based on the source meter readings and irrigation volumes based on the irrigation meter readings will be reported to the DES Water Use Registration and Reporting Program using the OneStop online reporting tool. The system has 15 working days from the end of the quarter to report.

2. By March 1 of each year, the water balance will be reported for the previous year using the Water Balance online reporting tool. Go to the "A-Z List" at [www.des.nh.gov](http://www.des.nh.gov), scroll down to "Water Conservation", scroll down to "Forms/ Applications" and click on "Annual Water Balance Reporting Form".
3. **Every three years** from the date of the original Water Conservation Plan Approval (April 27, 2011), the water system will submit a three-year Ongoing Compliance Report Form to DES documenting how the system has maintained compliance with the Water Conservation Plan. The next three year report will be due **April 27, 2017**. The compliance report will include:
  - a. Certification of meter testing and calibration or change-out for past three years.
  - b. Dates and explanation of outreach and educational yearly efforts.
  - c. Service meter readings and consumption volumes for each unit for each quarter over the past three years, along with identification of suspected high usage in individual units and how high usage was addressed.
  - d. A leak log.

Monthly	Read well source meters, distribution meter, and irrigation meter(s).
60 days from discovery of a leak on the distribution system	Repair the leak.
<b>Quarterly</b>	<b>Report monthly production volumes from Well # 1 and the irrigation well(s) using the DES OneStop reporting tool.</b>
Quarterly	Read service meters (residential meters and one for club house) and analyze readings for high usage.
<b>Yearly</b>	<b>By March 1, use the online Water Balance reporting tool to report the previous year's water balance.</b>
Yearly	Distribute water efficiency materials to residents.
<b>Every 3 years from April 27, 2011</b>	<b>Submit a Water Conservation Ongoing Compliance Report Form to DES.</b>
Every 5 years from 2012.	Test and calibrate or replace well source meters, distribution meter, and irrigation meters.
Every 15 years from 2012	Replace residential service meters.

### Actions and Reporting Schedule Summary

**\*Items in bold are those that include reporting to DES.**

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):

*Roy J Hebert*

Owner Signature:  Date: 10/13

Owner Name (print): JANICE PELCHAT

Owner Signature: Janice M. Pelchat Date: 10/13/2014

Owner Name (print): JANICE M CREFFIN

Owner Signature: Janice M Creffin Date: 10-13-2014

owner's d/b/a as Paradise Estate Care Assoc.