



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



**Thomas S. Burack, Commissioner**

November 2, 2009

Kevin McKinnon  
Town of Colebrook  
Public Works Department  
17 Bridge Street  
Colebrook, NH 03576

**Subject: Colebrook, NH – Colebrook Water Works (EPAID: 0481010)  
Water Conservation Plan**

Dear Mr. McKinnon:

The New Hampshire Department of Environmental Services (Department) mailed Colebrook Water Works (CWW) a letter dated September 9<sup>th</sup>, 2009 summarizing the Department's understanding of CWW's water conservation plan, submitted to satisfy the requirements of Env-Wq 2101 *Water Conservation Rules*. The Department requested CWW perform public notification in accordance with Env-Wq 2101.11 if CWW concurred with the Department's summary. Public notification was subsequently completed on October 8<sup>th</sup>, 2009 and recipients had an opportunity to provide comment until October 29<sup>th</sup>, 2009. No comments were received.

The purpose of this letter is to conditionally approve CWW's water conservation plan as summarized by the Department's September 9<sup>th</sup>, 2009 letter. The water conservation plan is approved with the following conditions:

- CWW recognizes that unaccounted for water is in excess of the 15% threshold established by Env-Wq 2101.05 (j). As such, Colebrook provided a four year plan for water main infrastructure improvements as leaks are believed to be responsible for a large part of the unaccounted for water. Within one year of the date of this letter, provide the Department with a detailed water audit differentiating between sources of unaccounted for water. The audit should follow the guidelines established by AWWA M36 "Manual of Water Supply Practices, Water Audits & Leak Detection." In addition to the audit, include a summary of progress made on the water main infrastructure improvement plan, and the results of leak detection activities conducted in accordance with Env-Wq 2101.05 (g).

In addition to the above, please be advised that Env-Wq 2101.13 requires an ongoing compliance report be submitted every three years from the date of water conservation plan approval. This information shall be supplied on a form provided by the Department and shall include contact information for the water system owner and the person responsible for carrying out the tasks of the plan, all data relating to initiatives outlined in

the plan, and the dates the tasks were performed. CWW's first compliance report is due November 2, 2012. A copy of the current form may be found at:

[http://des.nh.gov/organization/divisions/water/dwgb/water\\_conservation/documents/compliance\\_form.pdf](http://des.nh.gov/organization/divisions/water/dwgb/water_conservation/documents/compliance_form.pdf)

If you have any questions about this approval or water conservation in general, please contact me at 603-271-6685 or email [derek.bennett@des.nh.gov](mailto:derek.bennett@des.nh.gov).

Sincerely,

A handwritten signature in black ink that reads "Derek Bennett". The signature is written in a cursive, flowing style.

Derek S. Bennett  
Drinking Water and Groundwater Bureau

Ec: Stephen Roy, Bob Mann - NHDES, Drinking Water and Groundwater Bureau  
Fred Bickford – Hydrosorce Associates  
Cc: Donna Caron – Colebrook Town Manager  
Michael King – North Country Council



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



**Thomas S. Burack, Commissioner**

September 9, 2009

Kevin McKinnon  
Town of Colebrook  
Public Works Department  
17 Bridge Street  
Colebrook, NH 03576

**Subject: Colebrook, NH Colebrook Water Works, EPA ID 0481010  
Proposed Water Conservation Plan**

Dear Mr. McKinnon:

The New Hampshire Department of Environmental Services (Department) is in receipt of a letter dated July 31, 2009 from Colebrook Water Works (Colebrook) containing additional information relative to Colebrook's intentions for implementing water conservation as required by Env-Wq 2101.02.

The purpose of this letter is to inform you that the Department has completed its review of the materials submitted and anticipates issuing approval of Colebrook's water conservation plan following public notification in accordance with Env-Wq 2101.11. Entities were provided the original water conservation plan on November 8<sup>th</sup>, 2006 but have not had an opportunity to review and provide comment on the final version of the plan.

The Department's decision is based on a review of the following materials:

- November 6<sup>th</sup>, 2006 submittal from Fred Bickford of HydroSource Associates Inc (Hydrosource) to Timothy Nowack of the Department which included a conservation plan dated July 2006.
- January 2<sup>nd</sup>, 2007 letter from Timothy Nowack of the Department to Fred Bickford of Hydrosource. Items 1a through 1g in the letter were specific to the Department's review of the July 2006 water conservation plan
- November 10<sup>th</sup>, 2007 submittal from Fred Bickford of Hydrosource to Timothy Nowack of the Department. Appendix A of the submittal included Colebrook's response to Items 1a through 1g in the January 2<sup>nd</sup>, 2007 letter.
- November 16<sup>th</sup>, 2007 letter from Derek Bennett of the Department to Fred Bickford of Hydrosource requesting additional information in follow up to the November 10<sup>th</sup>, 2007 submittal.

DES Web Site: [www.des.nh.gov](http://www.des.nh.gov)

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095  
Telephone: (603) 271-2513 Fax: (603) 271-5171 TDD Access: Relay NH 1-800-735-2964

- July 31, 2009 letter from Kevin McKinnon of Colebrook to Derek Bennett of the Department in response to the Department's November 16<sup>th</sup>, 2007 letter.

As components of the water conservation plan exist in multiple locations, the Department has summarized its understanding of Colebrook's intentions below. If Colebrook concurs with the summary, entities may be provided with the updated conservation plan through inclusion of this letter.

**Env-Wq 2101.05 (b) (1) & (2) Installation of Service Meters:** Colebrook has installed water meters on all service connections with the exception of 9 mobile homes located within a single mobile home park. Currently, there is a meter recording the total water delivered to the park. Colebrook will notify the park owner that the remaining homes are required to be metered within three years from the date of this letter. Following installation of the household meters, the Department recommends utilizing the existing park meter in conjunction with household meters to conduct a meter balance. This ongoing exercise would assist Colebrook's leak detection efforts by identifying leaks specific to the mobile home park.

**Env-Wq 2101.05 (b) (3) Installation of Source Meters:** Colebrook requested a waiver to the requirement that the existing wells (GPW-01 & GPW-02) be individually metered on the basis that they will be relegated to back up duty upon new source approval and that the combined withdrawal is already metered. The Department approves the request for a waiver from Env-Wq 2101.05 (b) (3) specific to the two existing sources only. Colebrook will install a water meter to measure the withdrawal from proposed well PW-5 prior to activation. The combined withdrawal from existing sources GPW-01 and GPW-02 shall continue to be metered unless formally inactivated by the water system.

**Env-Wq 2101.05 (d) Meter Maintenance:** Colebrook will maintain water meters in accordance with protocols and procedures described in "Manual of Water Supply Practices, Water Meters-Selection, Installation, Testing, and Maintenance," document identification number AWWA M6, American Water Works Association, 1999. Colebrook will calibrate or rebuild service meters on at least a ten year cycle unless testing data indicates a different rate is necessary. All source meters will be tested and calibrated on an annual basis.

**Env-Wq 2101.05 (e) & (f) Meter Reading:** Colebrook will read all source meters daily. Service meters will continue to be read quarterly. Although reading service meters quarterly is acceptable, the Department recommends increasing service meter reading and billing to a monthly cycle.

**Env-Wq 2101.05 (g) Water Audit:** Colebrook will perform a comprehensive water audit on an annual basis to estimate both real and apparent losses. The audit will be conducted in accordance with "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999.

**Env-Wq 2101.05 (g) & (h) Leak Detection & Repair:** Colebrook will complete a leak detection survey of the entire distribution system each year. The survey will be conducted in

accordance with the AWWA M36 manual cited above. All discovered leaks will be repaired within 60 days of discovery.

**Env-Wq 2101.05 (i), (j), (k), & (m) Unaccounted for Water:** Colebrook recognizes that unaccounted for water is already in excess of the 15% threshold. As a result Colebrook has provided a four year plan for water main infrastructure improvements as the existing water lines are believed to be responsible for a large percentage of the unaccounted for water. The list is prioritized based on mapping performed by Underwood Engineers. Unaccounted for water will continue to be tracked on at least an annual basis and the response plan shall be modified as necessary in coordination with pipe replacement activities.

**Env-Wq 2101.05 (n) Pressure Reduction:** Colebrook stated that pressure reduction is not necessary at this time but did not provide a summary of current pressures within the distribution system. Colebrook shall identify any sections of the system above 80 pounds per square inch (psi) and conduct increased surveillance for leaks within the corresponding areas. Increased surveillance may include the installation of data loggers that “listen” for leaks during low water use periods, or an additional round of traditional leak surveying each year.

**Env-Wq 2101.05 (o) Rate Structure:** Colebrook currently charges a minimum rate of \$50.00 up to the first 1,500 cubic feet (cf) of use. Consumption beyond 1,500 cf are charged at a rate of \$33.00 / 1000 cf. In 2010, the minimum charge is projected to increase to \$60.00 and the usage fee to \$40.00 / 1000 cf.

**Env-Wq 2101.05 (p) Outreach:** Once a year Colebrook will publish an article in a local newspaper. The article will run for one week during the summer and will include a NHDES fact sheet along with a reference to the EPA WaterSense program.

As previously noted, public notification is required in accordance with Env-Wq 2101.11. Please provide the Department with copies of the certified receipts. The Department will allow 21 days from the last date of receipt for notified entities to provide comment.

If you have any questions about this letter or any other water conservation issues, please contact me at 271-6685 or [derek.bennett@des.nh.gov](mailto:derek.bennett@des.nh.gov).

Sincerely,



Derek S. Bennett  
Water Conservation  
Drinking Water and Groundwater Bureau

Ec: Stephen Roy, Rick Skarinka – NHDES

Cc: Fred Bickford – Hydrosorce