NEW HAMPSHIRE DEPARTMENT OF
Environmental Services

Report Form for Water Conservation Plans Small Community Water Systems April 2006*

PROJECT NAME:	**Forest View Estates Well No.1 and Well No. 2**
TOWN/CITY:	**Swanzey, New Hampshire**
DATE:	**April 2006**
EPA ID #	**NEW SYSTEM**

PURPOSE: This form will provide the information needed for small community water systems to meet the reporting requirements of Env-Ws 390, *Water Conservation Rules.* Once completed, this form can fulfill the requirements of Env-Ws 390.10. You don't have to use this form. However, based on experience, the Department has found that use of a form speeds the application process. If you prefer to produce an original report, remember to provide all the information required under the rules and the Department recommends that you use this form as a checklist to help ensure your report is complete. Helpful information and reminders are provided throughout the form and are printed in *italics.* Copies of this form, the rules, a summary of the rules, educational materials for public distribution, and other useful publications may be found at the following website: http://www.des.nh.gov/h2o_conservation.htm.

INSTRUCTIONS:

A. Obtain copies of the following materials from either the Department's Public Information Center (603) 271-2975 or by direct download from the above website.

- Administrative Rule, Env-Ws 390, *Water Conservation Rules.*
- The fact sheet, *Summary of the Water Conservation Rule.*
- Any pertinent water efficiency fact sheet.
- Extra copies of this form.

B. Review the water conservation rules and guidance materials obtained above. You should use these materials to prepare your water conservation plan. It is suggested that you submit a draft plan for review prior to meeting your public notification requirements in case substantive changes to the plan are necessary. Resubmittal of the report to the public entities can be avoided if initial review is performed by the Department.
C. Complete the form by answering all questions and providing the appropriate attachments. Answer the questions from top to bottom, unless instructed to skip to another section. Helpful information and reminders are provided throughout the form and are printed in *italics.*
D. Before submitting, review the form to ensure all questions are answered and all attachments are included. When complete submit to:

Water Conservation Plans
Small Community Well Siting Program
Water Supply Engineering Bureau
29 Hazen Drive, Post Office Box 95
Concord, NH 03302 -0095

For help with this form or other water conservation planning concerns call Diana Morgan at (603) 271-2947.

*Information contained in this form is current as of October 2005. Statutory or regulatory changes that may occur after October 2005 may cause part or all of the information to be invalid. If there are any questions concerning the status of the information please contact DES at (603) 271-2947.

Section 1.0 GENERAL INFORMATION

WELL SITING:

Has a Preliminary Well Siting report been submitted to the Department? *(If your answer is **NO**, please contact the Department at 603-271-2947 before you proceed further.)*
YES__**X**_ NO__

(The section below asks you to identify the people and companies responsible for the water conservation plan application. This information will help ensure clear communication during the application process.)

1.1 Project Contacts / System Ownership

1.1a Project Contact: *(Person completing this form?)*

Name:	**Neil W. Helberg**
Address:	44 Stark Lane, Litchfield, NH 03052
Company:	**Lewis Engineering, PLLC**
Phone Number:	603-886-4985

1.1b Project Owner: *(Who is responsible for compliance with the water conservation plan, as approved by the Department?)*

Name:	**Ezra Ketola**
Address:	140 Main Street, Rindge, NH 03461
Company:	**JEMD Developers, LLC**
Phone Number:	603-899-3061 603-566-4187 (cell)

1.1c Person responsible for completing the activities outlined in this plan: *(Please note that the person completing water conservation plan activities must be a certified water system operator or water system personnel supervised by the certified operator.)*

Name:	**New Hampshire Certified Operator**
Company:	**(Water Service Company or Individual)**
Address:	**To be determined**
Phone Number:	

1.1d Will ownership of the water system be transferred at a future date from the person listed in 1.1b to a Homeowner's Association or other entity?
YES__**X**_ NO___

If **YES**, indicate below the contact information for the new owner of the water system.

Name:	**Homeowner's Association**
Address:	**To be determined**
Company:	
Phone Number:	

Section 2.0 Metering & Leak Detection

(This information is needed to help ensure the water conservation plan will meet the intended purpose and that the plan is designed appropriately.)

2.1 Water System *(All systems must complete Sections 3.0-6.0)*

Is this a new water system? YES_ **X** __ NO___ (If **YES**, go to Sections 2.2, 2.3d and 2.3e)

Is this a new source for an existing water system? YES___ NO___ (If **YES**, go to Section 2.3)

2.2 Metering of New Small Community Water Systems

(Meters must be installed on all sources of water and at each service connection on new small community water systems.)

2.2a Describe below the size of both the source and service connection meters to be utilized by the water system. *(In selecting, installing, and maintaining water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association.)*

PUMP HOUSE METERS

- WELL METERS.....2 EACH.....1-INCH NEPTUNE
- STATION DISCHARGE.....1 EACH.... 2-INCH NEPTUNE

CONDOMINIUM BUILDING METERS

- 1 1/2 INCH POSITIVE DISPLACEMENT (8 EACH)

2.2b Describe below the frequency in which each type of meter will be read. *(Source meters must be read at least every 30 days and service meters must be read at least every 90 days.)*
Source meters at the pump house will read at least twice a month, and condominium unit service meters will be read every thirty (30) days. Source meters will be read on the same day as the house service meters are read.

2.3 Metering of Existing Small Community Water Systems

(If no further expansion of an existing small community water system is planned the water system may either install meters on all service connections within 3 years of approval of the plan and estimate unaccounted-for water[see section 2.3d], or the system may opt to conduct a comprehensive leak detection survey every 2 years and repair all leaks identified by the survey [See section 2.3e]. If further expansion of the system is proposed, meters must be installed on all new services, regardless of whether the system opts to conduct a leak detection audit rather than metering. Meters are also required on all sources of water for existing small community water systems.)

2.3a Is your system choosing to install meters on your existing system to track unaccounted-for water or is your system adding new service connections to your existing system?

YES___ NO___

If **YES,** your system must estimate unaccounted-for water annually, go to sections 2.3b, 2.3c and 2.3d. If you answered **NO,** your system must perform a leak detection survey every 2 years, go to section 2.3e.

2.3b Describe below the size of both the source and service connection meters to be utilized by the water system. *(In selecting, installing, and maintaining water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association.)*

2.3c Describe below the frequency in which each type of meter will be read. *(Source meters must be read at least every 30 days and service meters must be read at least every 90 days.)*

2.3d Estimating Unaccounted-For Water

Describe below how the water system will estimate the volume and percentage of unaccounted-for water. Also note how often the water system proposes estimating unaccounted-for water. *(All new small community water systems and all existing small community water systems opting for metering and water accounting, or existing small community systems that are adding new connections, must meet this requirement. Estimates of unaccounted-for water must be performed at least once a year. If unaccounted-for water exceeds 15%, the system shall develop a response plan in accordance with Env-Ws 390.05(j) and (k), and submit it to the Department within 60 days.)*

The certified operator will calculate the percentage of unaccounted- for-water percentage twice a year. Unaccounted- for- water is the difference between the total water pumped from the pump station, and the customer metered usage. One calculation will be during a winter month and the other during the month of June, July or August. If the percentage of unaccounted- for-water vs. pumped water exceeds 15%; the certified operator or another qualified water professional will develop a response plan (with a leak detection survey) to be submitted to the WSEB within 60 days.

2.3e Water Audit and Leak Detection Program

Describe below who will be responsible for conducting a leak detection survey, the frequency of the surveys and a brief text description of how those surveys will be conducted. *(Surveys for existing systems that are opting out of metering service connections shall be performed at least every two years. Leaks identified by the survey must be repaired within at least 60 days unless a waiver is obtained from the*

Department. The requirements of this section of the rule must follow the standards set forth in AWWA M36, "Manual of Water Supply Practices, Water Audits and Leak Detection", available from the American Water Works Association.)

Water Audits and leak detection surveys will be completed by the water system's certified operator or another qualified water professional every two years or sooner if the percentage of unaccounted for water exceeds 15%. Any leaks found by the survey will be repaired in less than 60 days unless a waiver is obtained from the NHWSEB.

Section 3.0 Pressure Reduction

(Pressure reduction shall be implemented upon obtaining approval of a new source of water when it is technically feasible, consistent with industry standards, and consistent with public health and safety considerations. Existing small community water systems have one year after approval of the conservation plan to implement this requirement, if feasible. All pressure reduction measures must meet the requirements of Env-Ws 372, Design Standards for Small Community Public Water Systems.)

Is pressure reduction possible for this system? If **YES**, explain below how it will be accomplished for the system. If **NO**, explain why below.

YES_ **X** __ NO___

Pressure leaving the pump house will likely be in the 70+/- psi. The pressure at the highest unit will be 70 psi or greater. The lowest unit will have a pressure of 75+/- psi.

Section 4.0 Conservation Rate Structure

(Unless a small community water system is owned by a landlord who supplies water only to tenants and includes water service in a rental fee, all new small community water systems must adopt a rate structure, and existing systems that either add new service connections or choose to meter existing service connections as part of leak monitoring must adopt a rate structure , as described in Env-Ws 390.04 & .05.)

4.1 Is this system owned by a landlord who supplies water only to tenants and includes water service in a rental fee? If **YES**, go to section 5.0; if **NO**, go to section 4.2.

YES___ NO_X__

4.2 Describe below the conservation rate structure the water system proposes adopting, **or** if not practical or feasible for the system, describe below how the water system will manage water service fees to meet the intent of the rule and promote water conservation. *(You will need to fill out a waiver application form found at the end of this document.)*

Water leaving the pump house and water entering each condominium building will be metered. The placement of the 1 ½ inch meters in the 8 buildings will account for all condominium water usage and for any leakage between the pump house and each condominium unit. Individual meters for each condominium unit will not be installed. It is estimated that monthly water usage will be 800 cubic feet per month. Each condominium unit will be charged $30.00 / month to maintain the water system and to provide for future capital costs. The water rate is based upon $3.50 / ccf (hundred cubic feet) with a $2.00 / month flat customer fee.

FLAT MONTHLY RATE = $30.00 / UNIT

Section 5.0 Public Notification

(Within 7 days of submitting the final water conservation plan for review by the Department a small community water system must provide a copy of this report via certified mail to the governing board of the municipality in which a proposed source is located, to all wholesale customers [if any], and to the regional planning commission for the location of the proposed source. The water system shall supply the governing boards with a copy of a summary of the requirements of Env-Ws 390. This document can be found on the website noted at the beginning of this form. You must also note in your correspondence to the above-mentioned governing boards that a copy of the Well Siting Application is available for their review at the Department and provide them with Department contact information. The water system shall request that the governing boards amend any site plan submitted to them for review so that it reflects the requirements of Env-Ws 390 and promotes water conservation landscaping principals.)

List the names and addresses of the governing boards receiving public notification. Attach a copy of the cover letter sent to the governing boards and a copy of the certified mail receipts when available. List the educational/outreach materials that the system is providing to the municipalities for review.

Board of Selectmen Town of Swanzey PO Box 10009, Town Hall Swanzey, NH 03446-0009	Tim Murphy, Executive Director Southwest Region Planning Commission 20 Central Square, 2nd Floor Keene, NH 03431

Section 6.0 Educational Outreach Initiative

(Such an initiative may be achieved in many ways, but must be implemented immediately upon approval of the conservation plan and should include the pertinent water efficiency fact sheets that can be found at the website listed at the beginning of this report. These educational mailings can be included with wellhead protection program educational mailings as required by Env-Ws 378.18 or with the water system service bills. Other acceptable outreach initiatives include water system or homeowner's association newsletters, posting of water conservation fact sheets in public areas used by water system customers, or any other initiative that meets the intent of the rules.)

Provide a brief description of your educational outreach initiative. Include implementation procedures, the person responsible for the initiative, the content of educational mailings proposed (if any), and the wording of any newsletter insertions or public postings. *(There is no need to provide copies of educational outreach materials that you are acquiring from the Department website. Only provide copies of educational outreach materials generated by the water system.)*

Educational Outreach fact sheets will be distributed yearly with the Consumer Confidence Report. Educational outreach materials will be obtained from the NHDES WSEB.

Before submitting, thoroughly check this form to be sure all applicable questions are answered, all information is provided, and all necessary attachments are included. Incomplete submittals will significantly slow the approval process.

If strict compliance with any of the requirements of Env-Ws 390 is not feasible, the small community water system may apply for a waiver to a specific portion of the rule. A waiver application form is provided at the end of this document for your convenience.

Preparer's Signature: _____

Date: 4/14/06

As a reminder, have you included the following?

- Educational outreach initiative documentation and materials created by the water system.
- Public notification documentation (certified mail receipts).
- Public notification cover letters and pertinent documents.
- Other pertinent or supportive materials.

Waiver Application

Project Name: **FOREST VIEW ESTATES CWS** Town/City: **SWANZEY**

Date: **April 17, 2006**

Which section of the **rule** are you requesting be waived? Env-Ws 390._04__.
Specifically, the requirement that states:

Water meters must be installed for all private water users.

Explain why this requirement needs to be waived. Also describe what hardship would be caused if the rule were adhered to. Provide diagrams where helpful.

There will be eight condominium buildings within the project. Each condominium building will have 6, 8, or 10 condominium units. It would not be practical to install individual water meters in the basement of each multiunit building and to pipe individual water lines to each of the condominium units.

Explain an alternative solution in detail. Provide diagrams where helpful.

Water usage for each condominium unit will vary very little. Water usage will likely range between 75 and 150 gallons per unit per day. There will be no underground lawn watering system. It is proposed that a 1-½ inch water meter be installed to measure the water entering each condominium building. A 2-inch meter will be installed at the pump station distribution entry point.

Explain how the alternative would adequately address water conservation measures as required by the rule.

The 1-½ inch water meters will provide water usage information for each building. Average water usage per unit may be easily calculated based upon the number of gallons passing through each building's 1-½ inch water meter and the number of occupied units. Reading the pump station distribution entry point meter and the three building meters will allow the system operator to calculate unaccounted for water.