

**DW 09-117**  
**Tioga River Water Company**  
**Staff Data Requests – Set 1**

**Staff 1-1**

Please provide a copy of the pre-application submitted to DES for each project.

**Response:** See attached Applications for the State Revolving Funds.

**Staff 1-2**

The filing indicates costs of \$151,000 for Belmont and \$115,000 for Gilford, while the DES ARRA drinking water priority list (June 9, 2009) shows \$115,000 for each project. Please clarify the actual estimated cost for each, including whether any disparity between company and DES figures will affect funding availability.

**Response:** Initially, the Company submitted pre-applications amounting to \$115,000 for each project. Subsequently, it submitted applications amounting to \$151,500 for each project. After consulting with its engineers, it now estimates that the Tioga project will cost \$151,000 and the GVWD project will cost \$115,000.

**Staff 1-3**

Regarding the proposed Gilford Village pump station improvements, please indicate:

- a) The general outage history or other factors supporting the need for a generator;
- b) Why new pumps are proposed.
- c) Whether improvements to badly spalled portions of the pump station structure and roof have been made in recent years. If so, please describe. If not, will any be included in the proposed upgrades?
- d) Whether a secure entry door will be part of the improvements.

**Response:**

- a) Gilford Village Water has been out of power on average once per year for the past four years. The length of time of the outage ranges between 2 hours to 4 days. The generator is not included in the base bid. If the base bid is low enough, and there are additional funds available, the generator will be added to the project.
- b) The new pumps are needed to keep up with the flow under peak demands. We currently are running both booster pumps at the same time to keep up with the average flow rather than running one pump and alternating the lead pump.
- c) The concrete pump station roof has been striped and cleaned off. There is no plan for more work to the roof of the structure.
- d) A new entry door was not included in the improvements. We agree that it should be replaced. We will most likely add this as a change order provided we have the money available.

**Staff 1-4**

Regarding the Tioga (Belmont) pump station replacement, please indicate:

- a) Who designed or will design the new station;
- b) The extent to which the station will be vandal-resistant, including type of construction (wood frame, block, etc.);
- c) The approximate age of the existing station and tanks;
- d) Whether the project involves any upgrade or replacement of existing tanks (atmospheric or pressure).
- e) Whether the work will be bid. If not, please indicate how the contractor will be selected, and whether this meets the requirements of the SRF/ARRA funding.
- f) Please provide an approximate breakdown of the \$151,000 cost of the proposed station.

**Response:**

- a) Provan and Lorber designed the new station.
- b) The station is a wood framed structure.
- c) The existing station is approximately 29 years old.
- d) The current 8,000 gallon atmospheric tank is to be reused (if it is in good condition). We have added an alternate to replace the tank in the bid. The pressure tanks are being replaced by constant pressure pumps. ( No pressurized storage is required)
- e) Yes, it will go out to bid.
- f) 

|                        |                     |
|------------------------|---------------------|
| 115,000.00 = structure | \$30,000.00         |
| mechanical             | \$40,000.00         |
| electrical             | \$20,000.00         |
| site work              | <u>\$25,000.00</u>  |
|                        | \$115,000.00        |
| 10% Contingency        | \$ 11,500.00        |
| Engineering            | <u>\$ 25,000.00</u> |
|                        | <u>\$151,500.00</u> |

**Staff 1-5**

Iron and manganese levels in sample results listed on the DES website for each system are very low. In this regard please explain:

- a) Why treatment is proposed in each system.
- b) The nature and purpose of any existing or former treatment in each system, including when it was last operative.

**Response:**

- a) Tioga River Water Company's system customers have complained about a hydrogen sulfide odor. This system will remove the hydrogen sulfide and remove any oxidized iron when we have removed the odor. Gilford Village Water District also has hydrogen sulfide which we currently oxidize in the atmospheric tank and it leaves a high amount of iron particles with in water system. We will remove both with these filters.
- b) Tioga has had no treatment in the past.  
Gilford Village Water District has a water softener which has not been in service for more than 20 years. It was taken out of service due to no permitted backwash discharge area.

**Staff 1-6**

Do alarms exist at either station? If so, please describe. Will alarms be part of the upgrades at either station?

**Response:**

- a) No alarms are present at Tioga or Gilford Village Water District. Both plans for the respective pump stations include alarms being installed.

**Staff 1-7**

Please indicate why a generator is proposed for Gilford but not Belmont, including the extent to which portable generation to serve both systems was considered.

**Response:** Gilford Village Water District is only as an alternate to the bid. Gilford Village Water District has had many more outages than Tioga. We will make future provisions for a generator at Tioga.

**Staff 1-8**

How reliable have production meters been in each system? Will either project involve a change or upgrade of meters?

**Response:** The meter at Tioga will be replaced by a source and master meter. The meters at Gilford Village Water District will not be replaced however a master meter will be installed.

**Staff 1-9**

Please clarify the approximate number of people served in the single-connection elderly housing complex in Gilford.

**Response:** Gilford Village Knolls I has 22 units. Gilford Village Knolls II has 24 units.

**Staff 1-10**

Please indicate the meter size used at the elderly housing complex and the rate currently charged.

**Response:** Gilford Village Knolls I and Gilford Village Knolls II each have a 2 inch water meter. Gilford Village Knolls I is charged 14.87 (base charge) x 22 units and .1337 per cubic foot used. Gilford Village Knolls II is charged \$14.87 (base charge) x 24 units and .1337 per cubic foot used.

**Staff 1-11**

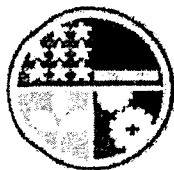
Does the company need authorization to grant a security interest in its real and personal property as a condition of the loan?

**Response:** Yes.

**Staff 1-12**

Please clarify what the company is requesting in terms of rate consideration for the plant assets to be constructed with the loan proceeds. Paragraph 6 of the petition indicates that the company proposes that step increases be effective when the projects are complete in the summer or fall of 2009. The testimony of Mr. St. Cyr, on page 7 lines 20-23, indicates that the company will soon file a rate case which will include step increases.

**Response:** The Company plan to file a rate case in the summer 2009. The Company anticipates using a test year ended 10/31/08 (its most recent fiscal year end). The Company also anticipates incorporating in the rate case the proposed step increase based on its investments to be funded by ARRA / SRF that it is seeking PUC approval for in this proceeding. It is important to the Company to be able to increase rates such that it is able to repay the SRF loan.



# American Recovery and Reinvestment Act

**NHRECOVERY**  
Building a New Future for New Hampshire

## New Hampshire Department of Environmental Services

Water Division

### APPLICATION FOR THE STATE REVOLVING FUND

Re: RSA 486:14

DRINKING WATER: FORM 1

 Public Water System: Gilford Village Water District EPA #: 0881010  
 Town/City: Gilford, New Hampshire Municipal ☐ Private ☒

 Owner: Tioga River Water Company / Norman H. Harris

 Mailing Address: 1440 Lake Shore Road Contact Person: Norman H. Harris, III  
Gilford, New Hampshire 03249 Phone #: (603) 524-6343

The applicant hereby makes application to the State of New Hampshire for loan assistance for the project as described: Replace Booster pumps and install Iron and Manganese Filtration system and back up generator power supply.

### COST INFORMATION

|   |              |
|---|--------------|
| 1. Estimated Construction Cost .....          | \$115,000.00 |
| 2. 10% Construction Contingency .....         | \$11,500.00  |
| 3. Estimated Planning Engineering Costs ..... | \$25,000.00  |
| 4. Estimated Land Acquisition Costs .....     | \$ n/a       |
| 5. Other (please specify) .....               | \$           |

**Total Estimated Costs** ..... \$151,500.00

|   |  |
|---|--|
| Construction Design Begins                    | Date: <u>June 1, 2009</u>              |
| Award of Construction Contract                | Date: <u>July 30, 2009</u>             |
| Project Completion                            | Date: <u>September 15, 2009</u>        |
| Amount of Loan Requested \$ <u>151,500.00</u> | Term of Loan Requested <u>20 years</u> |

The attachments are hereby made part of this application and the undersigned representative of the Applicant certifies that the information in the application and in the attachments is true, correct, and complete to the best of the representative's knowledge and belief.

|  |   |                 |
|--|---|-----------------|
| _____<br>(Signature of Representative) | <u>Vice President / Gilford Well Co., Inc.</u><br>(Title) | _____<br>(Date) |
|--|---|-----------------|



## American Recovery and Reinvestment Act

**NHRECOVERY**  
putting new Hampshire to work

### DRINKING WATER FORM 3 – ENVIRONMENTAL REVIEW

- I. Gilford Village Water District  
EPA# 0881010

1440 Lake Shore Road  
Gilford, NH 03249

Project Title: Water System Improvements

|   |  |
|---|--|
| (For DES use only) DWSRF Project Number |  |
|---|--|

## II. INTRODUCTION

The Gilford Village Water District of Gilford, New Hampshire, has applied for funds from the American Recovery and Reinvestment Act (ARRA) through the State of New Hampshire, Department of Environmental Services, in accordance with provisions of Chapter Env-Dw 1100, rules of the department. These rules prescribe procedures for the application process concerning the Drinking Water State Revolving Loan Fund (DWSRF). This document will discuss the requirements of Part Env-Dw 1107 of these rules, the environmental review.

## III. BACKGROUND

Gilford Village Water District (GVWD) now obtains its water from three active bedrock wells, BRW 2-003, BRW 3-004, and BRW 4-005. BRW 2-003 is located 75 feet northeast of the pump house, on the pine knoll. It is 430 feet deep, yields 50 gpm and has 6 inch diameter well casing. BRW 3-004 is located 340 feet east of the pump house, along a gated access road to the Town Highway Department Garage. It was drilled on February 13, 1987 by Gilford Well Company. BRW 3 is 277 feet deep, yields 65 gpm, and has 85 feet of 6 inch well casing. BRW 4-005 is located 800 feet south of the pump house, behind Gilford Knolls II Adult Housing Complex. It was drilled on September 6, 2005 by Gilford Well Company. BRW 4 is 552 deep, initial estimated yield was 30 gpm and 113 feet of 6 inch well casing. A follow up pumping test on BRW 4-005 appears to have been conducted after drilling, calculating the well's sustainable yield at 20 gpm with a drawdown 73.13 feet.

Water is pump simultaneously from the three active bedrock wells to the pump house, passing individual source meters and taps and then entering and blending in a 12,000 gallon atmospheric tank. Two booster pumps (5 hp & 3 hp) transfer the water to a 5,000 gallon hydro-pneumatic tank, before distribution to the previous 36 service connections supplying 90 people, and in addition, now supplying the elderly housing complex Gilford Knolls II (24 units; 23 one-bedroom units, 1 two-bedroom unit). The total number of connections is 37 supplying approximately 130 people.

During the summer of 2008 there were continuous issues with brown water, complaints and lack of water pressure during peak demands during the weekends. The booster pumps are unable to keep up with demand.

DRINKING WATER FORM 3 – ENVIRONMENTAL REVIEW continued:

IV. PURPOSE AND NEED

Due to the overwhelming problems with brown water and low water pressure that was experienced during 2008 it is evident these items need to be addressed as soon as possible.

V. DETAILS OF PROJECT

The proposed project is to replace the existing booster pumps with larger constant pressure VFD booster pumps to handle peak demand. The project also proposes the installation of an iron and manganese filtration system to filter the water coming from the well prior to the storage tank to improve the water quality throughout the distribution system. The final improvement of the project would be to install a generator to supply water during power outages.

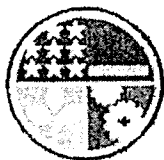
VI. ENVIRONMENTAL CONCERNS AND MITIGATION

There are no environmental concerns or mitigation to be done on this project. The projected work will take place within the existing pump house. The project will have no adverse effect on air, water or wildlife quality. The social economic impact from this project is expected to be favorable. The reduce finance cost for the system will have a direct savings on the impact to the rate base and user fees. The work creation for 2-3 subcontractors to build the structure and provide the construction services will help employ a number of people.

There are no other historic or indirect impacts which this project will have.

VII. PUBLIC REVIEW

Gilford Village Water District is private water system owned by Tioga River Water Company which is owned by Norman H. Harris, Jr. who has authorized funding in the amount of \$140,000.00 for this project.



# American Recovery and Reinvestment Act

NHRECOVERY  
doing new things to work

## New Hampshire Department of Environmental Services

Water Division

### APPLICATION FOR THE STATE REVOLVING FUND

Re: RSA 486:14

DRINKING WATER: FORM 1

Public Water System: Tioga River Water Company EPA #: 0202030  
Town/City: Belmont, New Hampshire Municipal ☐ Private ☒  
Owner: Norman H. Harris  
Mailing Address: 1440 Lake Shore Road Contact Person: Norman H. Harris, III  
Gilford, New Hampshire Phone #: 603-524-6343

The applicant hereby makes application to the State of New Hampshire for loan assistance for the project as described: Removal of the existing underground pump station and replace the station with an above ground pump house with new pumps and filtration system.

### COST INFORMATION

1. Estimated Construction Cost .....\$115,000.00  
2. 10% Construction Contingency .....\$11,500.00  
3. Estimated Planning Engineering Costs.....\$25,000.00  
4. Estimated Land Acquisition Costs.....\$ n/a  
5. Other (please specify) .....\$

**Total Estimated Costs** .....\$151,500.00

Construction Design Begins Date: May 1, 2009  
Award of Construction Contract Date: June 30, 2009  
Project Completion Date: August 15, 2009  
Amount of Loan Requested \$ 151,500.00 Term of Loan Requested 20 years

The attachments are hereby made part of this application and the undersigned representative of the Applicant certifies that the information in the application and in the attachments is true, correct, and complete to the best of the representative's knowledge and belief.

(Signature of Representative)

Vice President / Gilford Well Co.  
(Title)

May 28, 2009  
(Date)





# American Recovery and Reinvestment Act

**NHRECOVERY**  
DRINKING WATER STATE REVOLVING LOAN FUND

## DRINKING WATER FORM 3 – ENVIRONMENTAL REVIEW

- I. Tioga River Water Company  
EPA# 0202030

Tioga Drive  
Belmont, NH 03220

Project Title: Water System Improvements

|   |  |
|---|--|
| (For DES use only) DWSRF Project Number |  |
|---|--|

II. INTRODUCTION

The Tioga River Water Company of Belmont, New Hampshire, has applied for funds from the American Recovery and Reinvestment Act (ARRA) through the State of New Hampshire, Department of Environmental Services, in accordance with provisions of Chapter Env-Dw 1100, rules of the department. These rules prescribe procedures for the application process concerning the Drinking Water State Revolving Loan Fund (DWSRF). This document will discuss the requirements of Part Env-Dw 1107 of these rules, the environmental review.

III. BACKGROUND

The Tioga River Water Company obtains its water from one active bedrock well, BRW 1. BRW 1 is located 8 feet north of the underground pump house (PH), which is located off South Road. There is also an inactive well, BRW 2, on site. BRW 2 is located 88 feet northeast of the PH.

Water is pumped from BRW 1 into the underground, confined space PH, where it passes a source sampling tap and a water meter and leaves the PH and enters a 10,000 gallon atmospheric tank (screened vent outside PH). Two 3 hp booster pumps transfer the water from the atmospheric tank into two WX-252 pressure tanks (volumes unknown). The untreated water is then distributed to 22 service connections supplying a population of about 55.

IV. PURPOSE AND NEED

The current underground pump station is a confined space hazard that is at risk of flooding. The current pumps and controls are 20 + years old and very unreliable.

V. DETAILS OF PROJECT

The proposed project is to build a new above ground pump station with new constant pressure pumps and an iron and manganese filtration system. The existing 10,000 gallon storage tank which is buried in a damp location will be removed from its current location and reburied in a dry location to minimize any more corrosion.

The anticipated cost of this project is \$140,000.00

DRINKING WATER FORM 3 – ENVIRONMENTAL REVIEW continued

VI. ENVIRONMENTAL CONCERNS AND MITIGATION

There are no environmental concerns or mitigation to be done on this project. The project is above the 100 year flood plane and will have no adverse effect on air, water or wildlife quality. The social economic impact from this project is expected to be favorable. The reduce finance cost for the system will have a direct savings on the impact to the rate base and user fees. The work creation for 2-3 subcontractors to build the structure and provide the construction services will help employ a number of people.

There are no other historic or indirect impacts which this project will have.

VII. PUBLIC REVIEW

The Tioga River Water Company is a private water system owned by Norman H. Harris, Jr. who has authorized funding in the amount of \$140,000.00 for this project.

STEPHEN P ST CYR  
STEPHEN P ST CYR & ASSOC  
17 SKY OAKS DR  
BIDDEFORD ME 04005

Docket #: 09-117      Printed: July 20, 2009

**FILING INSTRUCTIONS:    PURSUANT TO N.H. ADMIN RULE PUC 203.02(a),**  
**WITH THE EXCEPTION OF DISCOVERY, FILE 7 COPIES (INCLUDING COVER LETTER) TO:**  
DEBRA A HOWLAND  
EXEC DIRECTOR & SECRETARY  
NHPUC  
21 SOUTH FRUIT STREET, SUITE 10  
CONCORD NH 03301-2429

**PURSUANT TO N.H. ADMIN RULE 203.09 (d), FILE DISCOVERY**

**DIRECTLY WITH THE FOLLOWING STAFF**

**RATHER THAN WITH THE EXECUTIVE DIRECTOR**

LIBRARIAN

NHPUC

21 SOUTH FRUIT ST, SUITE 10

CONCORD NH 03301-2429

BULK MATERIALS:

Upon request, Staff may waive receipt of some of its multiple copies of bulk materials filed as data responses. Staff cannot waive other parties' right to receive bulk materials.

LEGAL DEPARTMENT

NHPUC

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