

FORM 1. ENVIRONMENTAL REVIEW FORM
Water Division/Drinking Water and Groundwater Bureau
Drinking Water State Revolving Fund (DWSRF) and
Drinking Water and Groundwater Trust Fund (DWGTF)

RSA 486:14, I(a)&(c)/Env-Dw 1100

This form serves as a template with standard language that is mandatory for the interagency environmental review. **Directions are in bold.** *Examples and suggested language are in italics.* Fillable fields are shaded and allow unlimited characters. Note that the environmental review process takes a minimum of 10 weeks to complete.

Please complete and submit (electronic submittals are preferred) **this form as a word document along with:**

- ☒ 8½" x 11" USGS map showing the boundaries of the entire proposed disturbed areas (both permanent and temporary).
- ☒ Site plans (with scale bar) indicating project location and maximum extent of disturbance.
- ☒ Any other supporting documentation (e.g. shapefiles depicting the project limits of disturbance; consultations/correspondence with other natural resource agencies; environmental review document prepared for other funding agencies; natural resource surveys or investigations; planning documents, etc.)
- ☒ Photographs of proposed project area and any existing structures to be replaced or renovated.

I.

PROJECT APPLICANT/WATER SYSTEM NAME: Gunstock Acres Village Water District

PROJECT ADDRESS: 69 Mountain Dr., Gilford, NH

PROJECT TITLE: Pump House 1 Reconstruction and Decommission Pump 5
If Funds Left Over Well Access 7C&D and Equipment Upgrades
0881020

WATER SYSTEM PWS#/PROJECT #:

PROJECT CONTACT: Joseph Geraci & CC: Howard Epstein TITLE/POSITIONS: Commissioners

EMAIL ADDRESS: compareaquoteaquote2@gmail.com & CC: HOWARD@FCC1.biz

MAILING ADDRESS: PO Box 7118, Gilford, NH 03247

II. INTRODUCTION

The Gunstock Acres Village Water District has applied for funds through the State of New Hampshire Department of Environmental Services (**select one or both of the following options**):

- ☒ Drinking Water State Revolving Fund (DWSRF), in accordance with Chapter Env-Dw 1100.
- ☐ Drinking Water and Groundwater Trust Fund (DWGTF), in accordance with Chapter Env-DW 1300.

This document fulfills the requirements of Env-Dw 1106.01(c) relative to providing information on the environmental review required by Env-Dw 1108 and/or Env-Dw 1305 Environmental Review.

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III. BACKGROUND

Insert 1-2 paragraphs providing an overview of the drinking water system system and the community it serves. Identify any available documents that supplement the background, purpose, and need statements for the project. At least one document must be listed.

The Gunstock Acres Village Water District provides domestic water service to approximately 600 residential service connections in Gilford, NH. The system water sources consist of a total of 9 active bedrock wells and one inactive dug well. The current water source pump stations include:

Pump Station 1

- 4 bedrock wells*
- Estimated 30,000 gallons atmospheric storage (actual capacity not verified)*
- Hydropneumatic storage (quantity not verified)*
- Corrosion control*
- Booster pumps*

Pump Station 7

- 5 bedrock wells*
- Fluoride treatment (offline)*
- Corrosion control*
- 50,000 gallons atmospheric storage*
- 5,000 gallons hydropneumatic storage*
- Booster pumps*

In addition to the two active source stations, the system has one inactive source station (Pump Station 5) and four booster stations to serve higher elevation zones. Static pressures in parts of the system have been observed to exceed 100 psi, with maximum theoretical operating pressures at or above 200 psi in some areas of the system.

In a letter summarizing the results of a December 8th 2020 Sanitary Survey and additional research, the New Hampshire Department of Environmental Services identified several system deficiencies. These primarily included:

- Lack of chemical secondary containment at Pump Station 1 and 7;*
- Confined space conditions at Pump Station 1;*
- Poor/unknown tank conditions at Pump Station 1 and 7;*
- Inadequate atmospheric storage for the system; and*
- Excessive system operating pressures in some areas;*

Additionally, while not in the Sanitary Survey summary, the system has identified that vehicle access to the two primary producing wells at Pump Station 7 is not possible. If a well pump were to fail well access would be difficult to coordinate.

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As project priorities, Gunstock Village Water District proposes to complete the following:

- 1) Construction of a new pump station building, booster system, chemical feed, and atmospheric storage at the Pump Station 1 location;*
- 2) Upgrade/replacement of the hydropneumatics storage, booster system, and chemical feet at Pump Station 7;*
- 3) Decommissioning of Pump Station 5 and the dug well source;*
- 4) SCADA upgrades at all pump stations; and*
- 5) Access road improvements to wells C&D at Pump Station 7.*

The following documents have been developed and are available for public review:

- *Copies of this application package, including preliminary opinions of probable cost, will be available for public review at Town of Gilford office.*

IV. PURPOSE and NEED

Provide 1-2 paragraphs identifying the need and justification for the project.

The purpose of the proposed project is to complete an initial project that addresses deficiencies at Pump Station 1 and 7, decommissions Pump Station 5, and upgrades well access for the system's primary producing wells at Pump Station 7. The project is necessary to address outstanding safety and reliability issues at the two stations. Pressure analysis/reduction and other items identified by the December 8th NHDES letter will be addressed with subsequent projects.

V. ALTERNATIVES ANALYSIS

Provide a description and analysis of all reasonable alternatives, including "no-action," that the applicant considered during project planning. For example, alternatives may relate to upgrading an existing facility, building a new facility, regionalization, the location of a project, the process, specific technologies, costs, etc. The preferred alternative should be identified and described more thoroughly in Section VI. Details of Project.

Alternatives .

VI. DETAILS of PROJECT

Insert 1-3 paragraphs detailing all aspects of the project, including pre-construction site work. Be sure to include the following:

- **Project cost.**
- **Maximum area of disturbance (in square feet or acres), both temporary and permanent.**
- **How many trees are planned to be removed and/or trimmed, if any, and when.**
- **Any potential culvert installations on perennial streams and/or impacts to wetlands or surface waters.**
- **If replacement or removal of any structures is proposed, include the year the structure was built**

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Project includes the following components:

- Construction of a new Pump Station 1 facility, including booster pumps, chemical feed, and approximately 50,000 gallons of atmospheric storage. Scope includes site work for access and demo/decommissioning of the existing Pump Station 1 facility;
- Upgrade of the Pump Station 7 chemical feed system and booster pump system, cleaning and inspection of the storage tanks, and potential conversion of the hydropneumatics storage tank to atmospheric storage (no earth disturbance or external building modifications);
- Scada upgrades (no earth disturbance or external building modifications);
- Demolition of Pump Station 5 and decommissioning of Well 5 (dug well); and
- Well access road upgrades at Pump Station 7.

Anticipated Impacts

No surface water impacts are anticipated as part of the project. The sites will be assessed for jurisdictional wetlands impacts, and if impacts are required is anticipate the aggregate will be less than 3,000 square feet. Earth disturbance is anticipated at the Pump Station 1, Pump Station 5, and well access road project areas. In total roughly 1.5 acres of earth disturbance are anticipated between the three areas.

A tree count has not yet been completed, but it is estimated that approximately 10 trees may require removal at the Pump Station 1 project area, and approximately 20 trees may require removal at the Pump Station 7 well access road project area. Tree counts will be verified during preliminary design.

The estimated cost of the overall project is \$1,000,000. For applicants to the Drinking Water and Groundwater Trust Fund, to finance the project, the Gunstock Acres Village Water District has applied to borrow and/or accept grants up to:

\$1,000,000	from the (select all that apply):	<input checked="" type="checkbox"/> DWSRF
\$		<input type="checkbox"/> DWGTF Loan
\$		<input type="checkbox"/> DWGTF Grant

VII. ENVIRONMENTAL CONCERNS and MITIGATION

Complete the following categories of environmental impacts and identify all existing or anticipated environmental permits related to the project. *Sample text is provided in italics-* edit as appropriate for proposed project.

The environmental impacts of the project are anticipated to be limited. Earth disturbance impacts will be temporary except for limited permanent disturbance for the upgraded Pump Station 7 well access road.

The following categories of impacts will illustrate the potential negative and positive effects anticipated from the project:

Air: Air impacts will be limited to temporary dust impacts during construction. Appropriate dust control measures will be implemented during construction to minimize dust impacts to the public and environmental receptors.

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Noise: *Noise impacts will be temporary and limited to construction activities during working hours.*

Surface Water, Groundwater, Wetlands, and Shoreland: *No groundwater, surface water impacts are anticipated. Wetlands mapping will be completed to determine if wetlands impacts are necessary. If so, they are anticipated to be limited in scope. It is not currently known if culverts will be required, but no intermittent or perennial stream impacts are anticipated. Anticipated permits include:*

-Wetlands (yet to be determined but may require impacts)

Floodplain: *No floodplain impacts are anticipated.*

Plants & Wildlife. *Any tree clearing will be completed outside of seasonal limitations for the Northern Long Eared Bat. No other potential wildlife impacts.*

Recreation and Historic: *No deleterious impacts to recreation and historic resources are anticipated.*

* NHDES will initiate the NHB DataCheck and DHR Request for Project Review on behalf of DWSRF/DWGT Fund applicant if the applicant/landowner authorizes permission.

☒ **By checking this box, I affirm that I have permission from the landowner for NHDES to submit NHB DataCheck and DHR Request for Project Review for the proposed drinking water improvement project.**

Social and Economic: *The social and economic impacts of the project are anticipated to be positive. Additional water system reliability will help continue the viability of the Gunstock Acres community.*

Indirect impacts: *There are no indirect impacts anticipated as part of the project.*

For NHDES Use Only

☐ **Whereas this project constitutes only a minor project and no significant environmental impacts are anticipated, a Finding of No Significant Impact (FONSI) is proposed.**

-OR-

☐ **Whereas the project constitutes only a minor project per Env-Dw 1108.03(b), a Categorical Exclusion (CE) is proposed.**

VIII. PUBLIC REVIEW

The Gunstock Acres Village Water District voted to authorize funding in the amount of \$1,000,000 for this project on March 16, 2021.

A public notice will be published by the Gunstock Village Water District and comment period will be held in accordance with the DWSRF and/or DWGTF rules.

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