



ENVIRONMENTAL CONSERVATION

Water Infrastructure Financing Programs
Facilities Engineering Division

APPLICATION

**Vermont Drinking Water State Revolving Fund Letter of Intent
Priority List Application for Water System Improvement Projects**

1. Water System Name Jericho Underhill Water District		2. WSID Number 5096
Contact Person – Authorized representative to make commitments for organization		
3. Name – Joe O'Brien		4. Title - President
5. Mailing address – P.O. Box 174, Underhill, VT 05489		
6. Telephone – (802) 363-8898		8. Email – jpobrien47@comcast.net
9. Ownership Type - <input checked="" type="checkbox"/> Municipal <input type="checkbox"/> Home Owners Association <input type="checkbox"/> Individual <input type="checkbox"/> Private School <input type="checkbox"/> Corporation <input type="checkbox"/> Other (explain)		10. Financial status <input type="checkbox"/> Profit <input checked="" type="checkbox"/> Non-profit
11. If non-profit, is the entity tax-exempt: <input type="checkbox"/> Yes <input type="checkbox"/> No		

PROJECT COSTS & FUNDING SOURCES

12. Estimated total project cost - \$ 350,000	15. List other funds for project	Amount
13. Estimated DWSRF project loan - \$ 350,000		
15. Basis of estimate - PER		

PROJECT SCHEDULE

16. Target application date for this loan - March 2018	17. Target bond vote date – March 2018	18. Target construction start date – Summer 2018
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PROJECT DESCRIPTION FOR THE PURPOSE OF THIS LOAN

19. Maple Ridge pump station includes the abandonment of the existing cistern, construction of a new booster pump station with back-up generator, and replacement of the existing waterline.

LOAN WILL INCLUDE (see instructions)

- A) Feasibility study/preliminary engineering
- B) Final design
- C) Construction
- D) Land purchase
- E) Conservation easement
- F) Consolidation of a water system

20. Estimated loan amount for the purpose(s) identified above: \$

BRIEFLY DESCRIBE ANY WORK ALREADY DONE ON THE PROJECT (e.g. feasibility studies, preliminary engineering, design or construction)

21. A preliminary engineering report was prepared and a 90% submittal was provided to DWGPD in December 2015.

WATER SYSTEM SERVICING

- 22. Current permanent year-round resident population served by water system: 800
- 23. Current transient population (non-resident) served by water system:
- 24. Current number of service connections: 315
- 25. Population to be served by the proposed project:
- 26. Number of new service connections to be served by proposed project: 0

WATER SYSTEM RATE & USER BASE

- 27. Water bills are based on: Metered/Variable Rate Unmetered Flat Rate Both Metered/Unmetered Property Tax Based
- 28. What is the average annual single family home water bill (assuming 48,000 gallons/year used): \$390.40
- 29. What is the total number of equivalent units served by the water system?
- 30. Total estimated annual operations & maintenance budget post project: \$ tbd
- 31. Total capital water system debt annual payment: \$ \$41,950

ENGINEERING CONSULTANT FIRM

- 32. Firm/agency name: Aldrich + Elliott PC Attn. Wayne Elliott, PE
- 33. Mailing address: 6 Marketplace, Suite 2, Essex Jct, VT 05452
- 34. Telephone: (802) 879-7733 35. FAX:
- 36. Email: welliott@aeengineers.com

SIGNATURE

As Authorized Representative, I hereby certify that the foregoing information is true and correct to the Best of my knowledge.

Authorized Representative

Date

System Improvement Information

PLEASE CHECK THE LETTER OF ALL THAT APPLY. Points are only awarded for the deficiency corrected which addresses the highest health risk and compliance concern, and represents a significant portion of the total project cost.

- A. Microbiological Contaminated Source, 120 points.** Project will replace a documented contaminated source.
- B. Contaminants above MCL, 120 points.** Project will correct a deficiency resulting in water being delivered to consumers exceeding an MCL. This project may be a new source, replacement of contaminated equipment, piping, or treatment.
- C. Unapproved source of water, 110 points.** Water system is routinely using a non-Water Supply Division permitted water source that requires a boil water or do not drink advisory. The project may include a new source or approval of the existing unapproved source.
- D. Action level above DOH and DEC established levels of concern for eight chemicals (benzene; carbon tetrachloride; vinyl chloride; dibromochloropropane (DBCP); 1,2 dichloroethane; 1,2 dichloropropane; hexachlorobenzene, and tetrachloroethylene), 100 points.** Points will also be awarded for other chemicals when DOH expresses a similar level of concern. Project may include a new source, treatment or removal of a contamination source.
- E. Inadequate filtration performance, 100 points.** Documentation of inadequate performance should be available. This deficiency applies to filtration to control microbiological contamination or treatment to reduce an MCL contaminant. Inadequate filtration or other equipment to control secondary contaminants does not meet this criteria.
- F. No treatment for under the influence of surface water, 95 points.** These points are awarded in those instances when a source has not been determined to be microbiologically contaminated; a) applies in those cases.
- G. Inadequate chlorination or disinfection facilities, 95 points.** These points would be awarded to projects where water systems are required to continuously disinfect and maintain chlorine contact time. A project to provide equipment, controls or storage for the contact time could receive these points.
- H. Daily or routine water shortages, 95 points.** These shortages should require either water conservation measures by customers, water hauling or use of an emergency source.
- I. Lack of standby disinfection facilities, 90 points.** These points could be awarded for all community systems without these facilities and for NTNCs where bacteriological sampling or source risk assessment justifies a recommendation for such facilities.
- J. Finished storage vulnerable to contamination, 90 points.** These points could be awarded to correct a deficiency such as a reservoir with a leaking roof or within a building that is not insect or rodent proof.
- K. Lead and Copper corrosion control, 80 points.** These points may be awarded for treatment systems needed to correct lead and copper corrosion control problems.
- L. Contamination below MCL, 80 points.** These points may be awarded if the project is being undertaken to treat or eliminate contamination of a regulated contaminant below an MCL.
- M. Seasonal water shortages, 70 points.** These points may be awarded if a water system experiences water shortages seasonally requiring hauling or water conservation measures. Improvements may include new source, increases in pump sizes or mains or treatment facilities, or replacement of leaking water mains.
- N. Routine pressure below 20 psi in distribution system, 70 points.** Points may be awarded if pressure falls below 20 psi regularly on a weekly basis. Project may include storage, pumping, source, distribution or transmission facilities.
- O. Source vulnerable to PSOCs, 60 points.** Points will be awarded if project is being undertaken to eliminate potential sources of contamination of a water source.
- P. Pressure under 20 psi during fire flow, 60 points.** Points may be awarded if pressures will drop below 20 psi in the distribution system during system expected fire flows. Project may involve storage, transmission, pumping or distribution facilities.
- Q. Redundancy of critical components, 50 points.** Points may be awarded if project will provide redundant facilities such as pumps, sources, storage or treatment facilities.
- R. Iron, manganese, and other secondary contaminants, 50 points.** Points may be awarded if project will eliminate or minimize secondary contaminant problems. Project may involve replacement of piping, treatment facilities or new source.

- S. Inadequate finished storage construction, 50 points.** Points may be awarded to replace or repair storage facilities. Routine operation and maintenance costs are not eligible.
- T. Inadequate transmission main, 40 points.** Points may be awarded to repair or replace transmission mains. Routine operation and maintenance costs are not eligible.
- U. Inadequate finished storage capacity, 40 points.** Points may be awarded to provide additional storage capacity.
- V. Inadequate pumping facilities, 30 points.** Points may be awarded to replace or repair pumping facilities. Routine operation and maintenance costs are not eligible.
- W. Lack of reserve capacity, 30 points.** Points may be awarded to provide system reserve capacity recommended by the Water Supply Rule. Project may include source, pumping, transmission mains or treatment facilities.
- X. Inadequate cross-connection control, 30 points.** Points may be awarded to correct existing or potential cross-connection problems.
- Y. Inadequate distribution facilities, 20 points.** Points may be awarded to replace or repair distribution facilities. Routine operation and maintenance costs are not eligible.
- Z. Inadequate backwash, 20 points.** Points may be awarded to correct inadequate back wash facilities. Projects may include pumping, storage, and backwash disposal facilities.
- AA. Routine distribution pressure below 35 psi, 20 points.** Points may be awarded if project will correct distribution system pressures below 35 psi. Project may include pumping, storage, or distribution facilities.

Security Projects – Projects receiving technical points A through AA listed above, will be awarded the following additional points for security improvements.

- AB. Security Improvements, 20 points** - Points may be awarded if project will provide security improvements to water system infrastructure. In order to receive 20 points the project must solely be a security project.
- AC. Security Improvements, 5 points** - Points may be awarded if project scope includes security improvements in addition to other facility deficiency improvements. Project may include fencing and gates, alarm and detection systems, lock systems or other security type improvements necessary for critical infrastructure protection.
- AD. Asset Management, 5 points** - Points may be awarded if the project stems from an asset management plan. The asset management plan must be approved by DEC and the proposed project must be the highest prioritized project per the plan.

PRIORITY LIST APPLICATION INSTRUCTIONS

This application is for use by all water systems and for various types of projects. Some questions may not be appropriate for your particular water system, or the choices for your response may not be complete. Please use attachments if necessary to adequately respond to specific questions.

Assistance in completing the application is available from:

[Ashley Lucht](#), DWSRF Project Manager, 802 585 4904

- 1-2. Self explanatory.
- 3-8. Name of individual and contact information of a person that will have authority to furnish information, data and documents pertaining to the project. Please include the title to the water system, i.e., Responsible Person, Prudential Committee, Town Manager, Principal, etc.
- 9-11. Ownership Type – check the type of organization that owns the water system.
Examples: Municipality, Homeowners Association, Individual, Corporation, Public School District, Private School, etc. Ownership Financial Status: List profit or non-profit and if non-profit are you tax-exempt.
12. Please provide the estimated total project cost to plan, design and construct the improvements.

13. Estimate the loan amount that will be requested from the State of Vermont DWSRF Program for the total project (planning, design and construction).
14. List other sources of available funds for the project. The total funds identified for this item (14) plus the total loan amount (item 13) should equal the total project cost estimate (item 12).
15. Basis of Cost. Some examples include: a) Engineer's estimate; b) Feasibility study; c) Operator estimate; d) Construction bids; e) Previous construction costs; f) Actual costs (with short term financing); g) Option to purchase land or easement.
- 16-18. Self explanatory.
19. Project Description. Please provide a brief description of the project. Some examples include: a) Replace 1,000 feet of transmission main; b) Replace 500 feet of water distribution main; c) Construct 10,000 gallon storage tank; d) Install standby chlorination and 50,000 gallon storage tank; e) Purchase land or obtain easement for source protection; f) improvements necessary for security protection of critical infrastructure. (A detailed description of need for land purchase or conservation easement should be provided which identifies potential sources of contamination addressed including their location relative to the water source.)
20. Self explanatory.
21. Briefly describe work completed to date. Some examples include: a) Preliminary Engineering complete; b) Bond Vote passed; c) Construction bid documents complete; d) Property/rights of way obtained; e) Project under construction; f) Permit to Construct obtained; g) Construction complete (with short term financing); h) Option to purchase easement or land obtained.
- 22-23. Self explanatory.
24. Enter current number of service connections, e.g., a 20-unit apartment building is 20 connections, a four-bedroom house is one connection.
- 25-26. Self explanatory.
27. **Metered/Variable:** Rates are based on a metered rate (cost/flow) which varies month to month plus a base rate.
Unmetered Flat Rate: Customers are charged a flat rate that does not vary based on flow.
Both metered/unmetered: A combination of metered and unmetered methods are used to charge customers
Property Tax Based: Rates are based on property tax
28. **For metered connections:** Single family home annual base charge + (48 * variable charge per 1000 gallons) = Average SFH annual water bill
For unmetered connections: Single family home annual charge = average SFH annual water bill
29. Total Number of Residential Connections
+ total amount of water used last year by non-residential connections/76,650 gallons or 10,240 cuft
= Equivalent Residential Units
- 30-36. Self explanatory.

Please return this application via email to ashley.lucht@vermont.gov

This (fact sheet/form/application) and related environmental information are available electronically via the internet. For information visit at www.drinkingwater.vt.gov

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