

**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 – Peter Mitchell President		4. Title -
5. Mailing address – District: PO Box 174 Underhill, Vt. 05489, Home: 390 VT RT 15 Jericho, VT 05465		
6. Telephone – 899-4076 pete.mitchell@myfairpoint.net	7. Fax –	8. Email –
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 private Non-profit, is the organization tax exempt? Yes <input type="checkbox"/> or No <input type="checkbox"/>		

PROJECT COSTS & FUNDING SOURCES

2. Estimated total project cost - \$ 120,000	15. List other funds for project	Amount
13. Estimated DWSRF project loan - \$ 120,000		
15. Basis of estimate – contractor estimates		

PROJECT SCHEDULE

16. Target application date for this loan - 03/13/2009	17. Target bond vote date – Prior to 05/15/2009	18. Target construction start date – 06/15/2009
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PROJECT DESCRIPTION FOR THE PURPOSE OF THIS LOAN

19. This is an update of an application submitted September 24, 2008. Item 19.9 added Mar 13, 2009.

19.1 Emergency replacement of exposed water line in the river. This water line supplies water from our wells to the system. If the water line were to fail because of ice or debris, the water supply to the system would be cut off. Estimated cost \$47,000.

19.2 Install an air gap in the treatment bypass piping. The 2009 Sanitary Survey noted a minor deficiency in which untreated well is separated from the distribution by a single valve. Adding an air gap would correct this situation, and prevent untreated water from leaking into the system. Estimated cost \$9,000.

19.3 Install backup power (a 10kw generator and fuel tank) at the Poker Hill Tank. When a power failure occurs, water flows by gravity to customers. Customers at elevations near those of the tank experience low pressure. This addresses a concern raised in the 2006 Sanitary Survey. Estimated cost \$5,000.

19.4 Install backup power (a 60kw 3 phase generator and fuel tank) at the River Road Control Building. This generator would provide backup power for the district well pumps and the control building. This would allow operation of the water system in the event of a prolonged disruption of electric power. Estimated cost \$19,000

19.5 Install backup power (a 10kw generator, transfer switch, and fuel tank) at the Maple Ridge Cistern. This would allow water to be pumped to the cistern in the case of a power failure. At present there is no way to do this. Estimated cost \$6,000.

19.6 Install inline testing of chlorine, fluoride, and phosphate in water input into the distribution system. This would meet the requirement to have daily testing of water input to the distribution system. Estimated cost \$11,000

19.7 Convert to propane heat from electric heat in the Poker Hill and River Road Control Buildings. This will be a cost and energy saving change. Estimated cost \$4,000.

19.8 Install dehumidification equipment in River Road Control Building. This will reduce corrosion of piping and other fixtures in the control building. Estimated cost \$1,000

19.9 Install security fence at Maple Ridge Tank. A fence is needed to prevent vandalism and prevent the use of the tank site as a place to park, drink, or ride motor bikes. Other District sites have security fences. Estimated cost. \$18,000.

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: \$120,000

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

21. This is an update of an application submitted September 24, 2008.

21.1 Emergency replacement of exposed water line in the river. In the fall of 2008, with the approval of the VT State Stream Alteration Engineer, the district placed stones in the river over the existing main. This is viewed as a temporary fix. A permanent fix is required by the fall of 2010. The District has received three bids for directional boring. The District is working to update two of these bids. The District has previously received environmental approval, but this needs to be updated also. The District has received previously a cost estimate for the required engineering work. The District is preparing for a bond vote.

21.2 Install an air gap in the treatment bypass piping. No work has been done on this item. However, the Board believes that doing this work in conjunction with 21.1 would be the most cost effective. The District has received one quote for this item.

21.3 Install backup power (a 10kw generator and fuel tank) at the Poker Hill Tank. The District has installed a manual transfer switch which would support the use of the generator. The District has received one quote for this item.

21.4 Install backup power (a 60kw generator and fuel tank) at the River Road Control Building. A manual transfer switch is available for connecting the generator. The District would purchase a generator capable of being converted to use natural gas as a fuel. The District has received one quote for this item.

21.5 Install backup power (a 10kw generator, transfer switch, and fuel tank) at the Maple Ridge Cistern. This would allow water to be pumped to the cistern in the case of a power failure. At present there is no way to do this. The District has not received a quote for this item.

21.6 Install inline testing of chlorine, fluoride, and phosphate in water input into the distribution system. This would meet the requirement to have daily testing of water input to the distribution system. Estimated cost is based on web information. The District has not received a quote for this item.

21.7 Convert to propane heat from electric heat in the Poker Hill and River Road Control Buildings. This will be a cost and energy saving change. The District has received a quote for this item.

21.8 Install dehumidification equipment in River Road Control Building. The District has received a quote for this item.

21.9. Install security fence at Maple Ridge Tank. The district does not have a current quote for this item

WATER SYSTEM SERVICING

22. Current permanent year round resident population served by water system: 910

23. Current transient population (non-resident) served by water system: 600

24. Current number of service connections: 306

25. Population to be served by the proposed project: same

26. Number of new service connections to be served by proposed project: same

WATER SYSTEM RATE & USER BASE

27. Water bills are based on: flat rate metered rate or both tax rate (**Attach Your Rate Schedule**)

28. What is the household water rate: \$36 base fee/qtr and \$4.00/thousand gallons. The base fee will be raised to \$40/qtr to cover this work/loan.

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.

X 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.

X 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 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.

X 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.

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:

Eric Blatt, Engineering & Financial Services Section Chief, (802) 241-3425

Bryan Redmond, DWSRF Program Development Specialist, (802) 241-3408
(contact for construction loans)

Eric Law, DWSRF Project Development Specialist, (802) 241-4656 (contact for
planning and design loans)

Ian Schrauf, Vermont Rural Water Association, (800) 556-3792, ext. 321

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.
- 27-28. Self explanatory.
29. For systems serving non-residential users i.e., schools, businesses, etc., these organizations are often assigned a specified number of equivalent units for billing purposes. Please list the total number of equivalent units used for billing purposes. For example, a system may serve 50 homes and a school; the school may be considered equal to 10 homes. The total number of equivalent units would be 60.
- 30-36. Self explanatory.

Please return this application to the DWSRF program at the following address:

Honorable Jim Douglas, Governor George Crombie, ANR Secretary Laura Pelosi, DEC Commissioner
This (fact sheet/form/application) and related environmental information are available electronically via the internet. For information visit us through the Vermont Homepage at <http://www.vermont.gov> or visit VT WSD directly at <http://www.vermontdrinkingwater.org>

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103 South Main Street
Waterbury, VT 05671-0403
Toll free 1-800-823-6500
Out of State 1-802-241-3400
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