



# Presumpscot Regional Land Trust

February 10, 2017

Town Manager's Office  
Town of Windham  
School Street  
Windham, ME 04062

Dear Town Councilors,

Please accept this application from the Presumpscot Regional Land Trust for the Town of Windham Watershed Protection Fund 2017 Grant. Presumpscot Regional Land Trust merged with Windham Land Trust and Presumpscot River Watch in October 2016. We would like to thank the Town of Windham for the past four years of support for Windham Land Trust's water quality monitoring projects.

Our project this year will be building on the water quality monitoring work Windham Land Trust has conducted over the last four years, combined with the water quality program that Presumpscot River Watch has run for nearly 25 years.

While the land trust water quality monitoring program will be watershed wide, for this grant we are applying for funds specifically for work in Windham. The Windham project is titled: Protecting Windham's Rivers and Streams: Water Quality Monitoring Project.

Thank you for your consideration in granting funds to help see that monitoring of water quality happens on all major rivers and streams in Windham. Ongoing water quality monitoring is one of the best ways for early detection helping to ensure water protection and restoration for Windham's rivers and streams, which are vital for all citizens in order to fish, swim and recreate.

Sincerely,

Rachelle Curran Apse

Attachments:  
Grant Application  
Project Budget  
Map of Potential Water Quality Monitoring Sites in Windham

Board of Directors

Joanne Chessey  
Sebago

Andy Colvin  
Portland

Matt Craig  
Cape Elizabeth

Richard Curtis  
Gorham

Valerie DeVuyst  
Windham

Fred Dillon  
Portland

Ben Lord  
Gorham

Michael Parker  
Windham

Priscilla Payne  
Windham

Tamara Lee Pinard  
Gray

June Sleeper  
Windham

Glenice Stover  
Windham

Donald Wescott  
Gorham

Executive Director

Rachelle Curran Apse

Contact

info@prlt.org

P.O. Box 33  
Gorham, ME 04038

www.prlt.org

**TOWN OF WINDHAM  
WATERSHED PROTECTION FUND  
2017 GRANT APPLICATION**

**Eligible Projects:** Grant funds can only be used for the protection or restoration of water bodies located in whole, or in part, within the Town of Windham. Preference will be shown toward non-profit organizations that are based in Windham. Preference will also be shown toward projects that will promote the sharing of equipment, knowledge, and other resources with other non-profit groups in the Town of Windham.

**Application Deadline:** The grant application deadline is February 10, 2017. All applications must be delivered to the Windham Town Manager's Office by that date. Incomplete applications will not be accepted. Applicants will be notified of incomplete applications within five days of their receipt at the Town Manager's Office.

**Grant Award and Disbursement:** The Windham Town Council will complete their review of the applications and select grant recipients by March 14, 2017. All applicants will be notified by mail of the Council's decision. Projects that have been awarded a grant will receive the funds by April 11, 2017. The Town reserves the right to grant all, or any part, of the total amount requested.

**Deliverables:** Grant recipients will be required to submit a Final Report upon completion of all project activities. The Final Report shall include an accounting of all income and expenses presented in the same format as the original budget spreadsheet, a list of accomplishments, digital photographs, and the name of the organization responsible for maintaining any equipment or infrastructure associated with the project.

**Applicant Contact Information:**

Applicant Name: Presumpscot Regional Land Trust

Contact Person: Rachelle Curran Apse, Executive Director

Address: P.O. Box 33

City: Gorham State: ME Zip Code: 04038

Phone: 207-839-4633 Fax: n/a

E-mail: rachelle@prlt.org

## **Qualifications and Experience:**

The Presumpscot Regional Land Trust merged in October of 2016 with the Windham Land Trust and the Presumpscot River Watch. The mission of the Presumpscot Regional Land Trust is to support healthy lands, waters, wildlife, and people across the Presumpscot River watershed through conservation, water quality monitoring, education, and public access. The land trust is a non-profit organization working within the Presumpscot River watershed and holds conservation lands in the towns of Gorham, Gray, Sebago, Standish, Westbrook and Windham.

Presumpscot River Watch has been running a water quality monitoring program throughout the Presumpscot River watershed for the past 25 years. In 2009, the Maine Department of Environmental Protection began the Volunteer River Monitoring Program. Presumpscot River Watch has worked closely with the state since the program began. The state program provides a day long volunteer training each year, approves sites for water quality monitoring, and provides up to four water quality testing meters to borrow each year. As a result Presumpscot River Watch has been following best practices in water quality monitoring.

The former leaders of the Presumpscot River Watch, Fred Dillon and Tamara Lee Pinard, are now board members of the land trust and are on the water quality monitoring committee. The committee provides technical advice to the land trust's new water quality monitoring program.

In addition, Windham Land Trust has been conducting water quality monitoring on Black Brook and Otter Brook for the last four years thanks in part to the Windham Watershed Protection Grant. The data and past experience from Windham Land Trust related to water quality monitoring will also be incorporated into the new program.

The land trust is committed to having water quality monitoring be an ongoing program that continues the good work Presumpscot River Watch and Windham Land Trust have been doing monitoring. In addition, the land trust will expand the program to more sites and add outreach to the program including creating a final report each year that will be shared with community members and municipalities.

The project manager will be Toby Jacobs, the stewardship and outreach coordinator for the land trust. Toby has a master's degree in conservation biology and years of experience doing field work. Prior to his current job, Toby worked for the Department of Marine Resources as a Marine Resource Specialist collecting water samples and overseeing volunteers who collected water samples. This will be one of several programs that Toby manages the financial, administrative and technical aspects of the project.

While water quality monitoring will be a new program for the land trust, the expertise from advisory board members, staff experience managing similar programs, and collaboration with the University of Southern Maine's Environmental Science and Policy Department will ensure for a sustainable program into the future.

While this project is watershed wide, over one-third of the water quality sites are within the town of Windham, making Windham a top priority town for this project.

**Project Description:****Project Name:****Protecting Windham's Rivers and Streams: Water Quality Monitoring Project**

**Water Body Names: Presumpscot River watershed in Windham including: Baker Brook, Black Brook, Colley Wright Brook, Ditch Brook, Inkhorn Brook, Otter Brook, Pleasant River and the Presumpscot River.**

**Problem:** The Presumpscot River watershed exists in the most densely populated region of the state of Maine and the population continues to grow quickly. The town of Windham is within the Presumpscot River watershed and one of just a few towns that are central to the watershed. Most rivers and streams in Windham are impaired; one of the most important ways to protect these waterways is to regularly test the water quality. The Maine Department of Environmental Protection only tests the water quality once every 4-5 years; this is inadequate to track ongoing water quality. Because the state recognizes they do not have the resources to adequately monitor water quality, they created the Volunteer River Monitoring Program in which they support local water quality monitoring programs. Regular water quality monitoring is vital for early detection and can help keep water protection and restoration manageable by addressing it in the early stages.

**Solution:** The Presumpscot Regional Land Trust in 2017 is beginning the Presumpscot River water quality program, which is an ongoing program, similar to the land trust's ongoing land stewardship program. The land trust will continue the key aspects of both the Presumpscot River Watch's and Windham Land Trust's past water quality monitoring programs.

The program will have about 40 water quality monitoring sites throughout the watershed, many of which Presumpscot River Watch has been collecting data at for decades, and will also include the sites Windham Land Trust has been testing on Black Brook and Otter Brook for the last four years. Nearly half of the 40 sites will be in Windham because Windham is central to the Presumpscot River watershed.

The program will be managed by Toby Jacobs the land trust field staff and supported by a University of Southern Maine intern. Water quality monitoring data will be collected May – September every other week by 20 citizen science volunteers who are all attend a day long training conducted by the Volunteer River Monitoring Program to ensure high quality data. That means all data must be collected within a two hour window for each sampling date, as a result each Citizen Scientists can monitor only two sites.

Each citizen scientists needs a water meter which accurately measures water temperature and dissolved oxygen. In addition, water is collected and tested for bacteria (specifically E. coli). The bacteria testing will be conducted at the University of Southern Maine labs by the intern with staff supervision.

All water quality monitoring data collected throughout the season will be compiled into an end of the year report that will be shared widely with community members and the town of Windham. The purpose of the report is to make sure the community knows of the current state of water quality related to healthy fishing and swimming in the rivers and streams in Windham.

**Project Benefits:**

Protecting Windham's Rivers and Streams – water quality monitoring project will provide annual data on the health of Windham's waterways that can be shared with all citizens of Windham. Fundamental indicators of a healthy community include having fishable and swimmable waters. Windham has some of the premiere stream and river fishing and promotes swimming at Dundee Park along the Presumpscot River.

One of the best way to ensure Windham's rivers and streams stay swimmable and fishable is to regularly monitor the water quality.

For the past four years, Windham has granted funds to Windham Land Trust to monitor Black Brook and Otter Brook at five different sites. Our newly merged land trust which has more capacity and partners will now be monitoring the water quality on all major streams and rivers in Windham at about twenty different sites (see map at the end of this packet). This expanded water quality monitoring will better help the citizens of the town of Windham understand the health of rivers and streams in Windham. To ensure the water quality monitoring is best utilized we will create a citizen friendly guide to understanding the water quality of the streams and rivers in Windham based on the data collected throughout 2017. The report will also incorporate the data collected in past years from both Windham Land Trust and Presumpscot River Watch.

This will be an ongoing program so each year the annual report will compare results to past years and the citizens of Windham will be able to see trends in the health of the streams and rivers. Trends in water quality are key to early detection in order to further protect and restore waterways to ensure all citizens of Windham can safely fish, swim and recreate in the rivers and streams of Windham into the future.

**Project Schedule and Cost:**

Planned Duration:      Start Date: May 2017              End Date: October 2017

Total Cost of the Project within Windham \$ 13,500

Amount Requested from the Windham Watershed Protection Fund \$ \$4,000

Matching Funds:      Cash: \$ 4,000              Services: \$5,500

Who will provide the matching funds/services?

- Casco Bay Estuary Partnership
  - \$3,500 grant funds
- University of Southern Maine, Environmental Science and Policy Department
  - \$1,000 towards an intern and lab space
- 9 Citizen Scientist volunteers will help the project
  - \$4,000 volunteer time
- Maine Department of Environmental Protection – Volunteer River Monitoring Program
  - \$500 for training and equipment loan
- Presumpscot Regional Land Trust
  - \$500 indirect costs: insurance

Will there be any other sources of funding?

The full Presumpscot River watershed water quality monitoring program will cost \$37,000 and the same funders as above will be providing more funds for the program as a whole. For this grant, we just included the expenses and income that will be used within the town of Windham.

**Sustainability:**

The Presumpscot River watershed water quality monitoring program will be an ongoing program of the land trust. We expect to receive annual grant funding from Casco Bay Estuary Partnership, annual in-kind support from Maine Department of Environmental Protection – Volunteer River Monitoring Program, and annual in-kind support from University of Southern Maine through providing intern support and lab space. We have committed our field staff to program management for this program and the land trust will cover all indirect costs for this program.

The anticipated annual funds for the whole project will vary from \$30,000 - \$40,000 a year depending on equipment needs and \$10,000-\$15,000 specifically for the Windham project. Through our staff time and our partnerships we have identified nearly 90% of the costs for this program into the future.

We are hopeful that the town of Windham will consider helping to provide grant funds, for the remaining amount of funds needed for this program through the Watershed Protection grant.

**Resource Sharing:**

Equipment: This program currently has four water quality meters from the previous Presumpscot River Watch program, plus four borrowed from Maine Department of Environmental Protection each year. Because we are expanding the program this year, we need to purchase an addition twelve meters. Casco Bay Estuary Partnership has already agreed to help purchase most of these. We would be glad to share our water quality meters with other non-profit groups in Windham and we plan to reach out to the Highland Lake Association and the Little Sebago Lake Association to see if they would be interested in sharing equipment or collaborate in other ways.

We plan to work closely with other non-profits who work on water protection and restoration within in the town of Windham to build partnership with such groups as Cumberland County Soil and Water District, Little Sebago Lake Association, Highland Lake Association, Portland Water District, and Trout Unlimited, along with the town of Windham. We recognize that water protection and restoration is most effective when working in partnership.

**BUDGET: Protecting Windham's Rivers and Streams: Water Quality Monitoring Project**

EXPENSES	\$	Details
Project Management	\$2,500	125 hours of staff expenses specifically for Windham water quality monitoring and partnership building in Windham
Intern	\$1,500	A USM student intern from the Environmental Science and Policy Department that will help with the project
Equipment	\$3,500	4 YSI Dissolved Oxygen and Temperature meters (\$750 each), Bacteria sampling supplies to cover 60 samples (\$500)
Training	\$500	Provided by Maine Department of Environmental Protection - Volunteer River Monitoring Program
Final Report	\$500	Design, printing, postage and outreach
Citizen Scientists	\$4,000	9 volunteers in Windham each donating about 30 hours = 270 hours of volunteers at the standard volunteer calculation of \$15/hour
Indirect costs: Insurance	\$500	To cover staff and volunteer insurance
<b>TOTAL</b>	<b>\$13,000</b>	
INCOME	\$	Details
Casco Bay Estuary Partnership Grant	\$3,000	Secured
University of Southern Maine	\$1,500	Secured: Funding to help provide one intern and lab space to help coordinate the project
Maine Department of Environmental Protection Training	\$500	Secured: Provided in-kind
Citizen Scientists	\$4,000	In-kind: Recruitment will begin in the spring
Windham Watershed Protection Grant	\$4,000	Request: \$2,000 equipment (2 meters, Bacteria sampling supplies), \$1,500 for project management , \$500 for the Windham final report
<b>TOTAL</b>	<b>\$13,000</b>	

\*All expenses and income in this budget are specifically for project work in Windham.



## **Proposed Project Water Quality Monitoring Sites in 2017**

The map below shows sites primarily in Windham.

