

Lake George Watershed Coalition Project Proposal Submission (Completion) Instructions

Applications for review by the committee should contain the following information:

Project / Initiative Title

"Magic Salt" Regional Storage Shed and Program

- **Submitting Organization and Contact(s)**

Towns of Bolton, Hague, and Lake George
Ron Conover (Bolton), Dan Belden (Hague) and Frank McCoy (Lake George)

- **Lake George Watershed Conference priority**

Clarify the project's alignment with the *LGWC – Future Priorities* document; reference the priority advanced by the project.

High Priority: Stormwater Management – B1 (5) Implement Best Management Practices for Highway Deicing that minimize discharge of contaminants to the lake.

- **Project Summary (Benefits) Statement**

Include project concept, goals, objectives, deliverables, as well as expected outcomes; identify any critical environmental issues addressed.

Identify the project's environmental benefits as well as its educational and research benefits; include its impact to the watershed. Denote whether the project uses innovative technologies, if it can serve as a model for other projects and/or whether the project uses proven technologies and resources with previously demonstrated success in past practices.

The long-term water quality data for Lake George shows a steady and alarming increase in chlorides (salt) in the lake's overall water chemistry. According to the chart from Darrin Freshwater Institute (attached below), chlorides in Lake George have almost doubled in the past thirty years. At current rates of increase, Lake George as a drinking water supply could potentially be in jeopardy in the future, particularly for those on salt restricted diets.

Much of the chlorides which enter Lake George result from road salt applications for deicing. To help alleviate this, there is a relatively new product called "Magic Salt" which has lower application rates (30-50%) than traditional salt. The Village of Lake George in 2009-2010 used 50% less de-icing material than in previous years due to this change.

To follow up on this success, the Towns of Hague, Bolton, and Lake George are interested in trying this product in their municipalities. However, it cannot be stored with regular salt and needs a separate facility. This project calls for the construction of a new salt storage shed to hold a supply of this product, which will be located at the Town of Bolton Highway Garage. This salt shed will utilize the same design as the sheds constructed recently at the Town of Bolton and Hague DPW's. It is a Warren County DPW design, and is a very cost-effective design for the storage volume. The three municipalities will load their trucks out of this shed and begin a process of utilizing this new product in their de-icing management systems in 2010-2011.

- Project Description**

Describe the project, including deliverables, key resources (labor and non-labor), time line and evaluation measures (success criteria); demonstrate project readiness in terms of staff, resources, project schedule, permits and other funding.

The deliverable for this project is twofold. First, a new storage shed will be built which will house a supply of "Magic Salt" to be utilized by the Towns of Hague, Bolton, and Lake George. This shed has a capacity of approximately 400 cubic yards of material. The second deliverable is a program whereby the three towns involved in the program initiate efforts to integrate Magic Salt into their de-icing programs. This modification of de-icing methods would lessen the volume of chloride application within these towns by up to 1,000 tons per year, and perhaps more in the future.

The design of this storage structure is complete and stamped by a P.E. at the Warren County Department of Public Works. If funded, the Warren County Soil and Water Conservation District will manage this project, develop all bids and building permits, and oversee all construction activities. The District undertook these roles in the two prior storage facilities, both of which were completed on time and on budget.

The primary construction of this facility will be conducted by a private construction firm (low bidder), but ancillary work (site prep, paving, finishing work) will be conducted by the Town of Bolton and other municipalities as local match. Based upon past experience, construction is anticipated to take approximately two to three weeks time, and should be complete by November in preparation for the upcoming winter season.

- Project Budget**

Provide the project budget information, including major costs (labor and non-labor); identify multi-year funding requirements (e.g. long term O & M) and the potential for phased implementation. Include the % of total budget requested from LGWC and how the local match will be provided.

Item	LG Watershed Coalition	Local Match	Total
Supplies and Materials	\$3,000	\$5,000	\$8,000
Contractual (Construction)	\$102,000	\$8,000	\$110,000
Equipment	\$0	\$12,000	\$12,000
Program Implementation	\$0	\$25,000	\$25,000
Project Management	\$12,000	\$4,000	\$16,000
Total Cost	\$117,000	\$54,000	\$171,000

LGWC Grant represents 68% of the total proposed project cost (local match is 32%).

This project represents 13% of the total DOS grant amount

Local match will include force account labor, equipment, and supplies from all three municipalities and the Warren County SWCD.

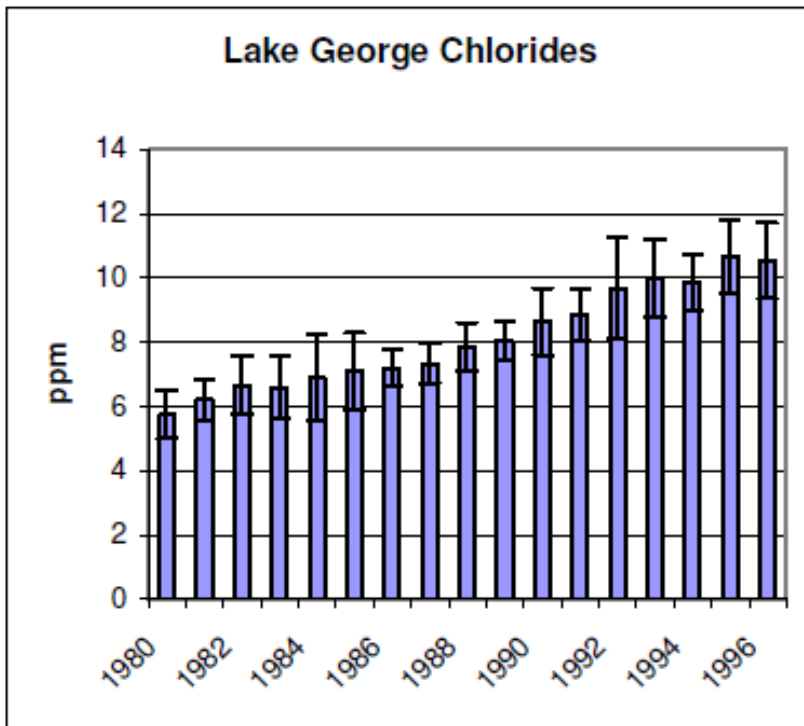


Chart at left is from the “Lake George Plan For the Future”

Page 13 and 14 of the Plan are devoted to chloride impacts to Lake George

This graph depicts the average measured concentration of Chlorides in all samples collected over the period shown as part of the annual water quality analysis program