

**Sweeney Lake Eurasian Watermilfoil Eradication Project
Hennepin County AIS Prevention Grant Application**

AIS prevention application (Attachment 2)

Project goals and summary description of project

Organization name:	Bassett Creek Watershed Management Commission
Project title:	Sweeney Lake EWM Eradication Project
Primary project category (select one):	<input type="checkbox"/> Early Detection <input type="checkbox"/> Pathway Analysis <input type="checkbox"/> Education <input type="checkbox"/> Decontamination <input type="checkbox"/> Access Re-design <input type="checkbox"/> Research <input checked="" type="checkbox"/> Management
Other project categories: (select all that apply)	<input checked="" type="checkbox"/> Early Detection <input type="checkbox"/> Pathway Analysis <input checked="" type="checkbox"/> Education <input type="checkbox"/> Decontamination <input type="checkbox"/> Access Re-design <input type="checkbox"/> Research <input type="checkbox"/> Management
Project location:	Sweeney Lake, Twin Lake, upstream ponds
Applicant name/organization:	Bassett Creek Watershed Management Commission
Phone number(s):	952-270-1990
Amount request:	\$13,680

Upon completion, how will your project prevent the introduction or limit the spread of aquatic invasive species? (1 or 2 sentences).

This project aims to eradicate a new infestation of Eurasian watermilfoil from Sweeney Lake to prevent it from damaging recreation and ecological function in Sweeney Lake and prevent it from spreading to other lakes, including Twin Lake. It builds on the rapid response activities implemented in the lake in 2023 and includes outreach and early detection training to lake residents.

ADDENDUM NO. 1 TO THE REQUEST FOR GRANT PROPOSALS was reviewed.

Executive summary: This project aims to eradicate a new infestation of Eurasian watermilfoil (EWM) from Sweeney Lake. In August 2023, a small patch of EWM was discovered in the southern end of Sweeney Lake during a routine plant survey. The BCWMC, DNR, Hennepin County, and lake homeowners implemented a rapid response; EWM was treated with herbicide 5 days after discovery. In October, another survey revealed a second patch of EWM, however, it was too late in the year for an herbicide treatment. Sweeney Lake is a high priority deep lake that outlets to Bassett Creek and is connected to Twin Lake. Twin Lake, lying half within Theodore Wirth Park, is also a high priority with the best water quality of all BCWMC lakes and a nearly completely undisturbed shoreline. Allowing EWM to become established in Twin Lake would destroy one of the highest quality natural resources in the area. This project will survey and treat EWM in Sweeney and will survey Twin Lake to ensure EWM is not present already. The project will also survey

ponds tributary to Sweeney Lake as a potential source of the EWM, and will engage with lake homeowners on the lake pledge and AIS early detection.

Project activities and outcomes

- **Project description:**

This project includes multiple activities with the goal of eradicating Eurasian watermilfoil (EWM) from Sweeney Lake in the City of Golden Valley and educating lake residents about the importance of personal responsibility, their role in preventing the spread of AIS, and the identification of new AIS infestations.

The good news is that Sweeney Lake is being delisted for a nutrient impairment this year due to significant, recent investments in projects to improve the lake's water quality. And – we have a good chance to eradicate the new EWM infestation due to early detection and rapid response in 2023. Overall, this project is a multi-pronged approach to ensure that Sweeney and Twin Lakes are protected from the harmful effects of a EWM infestation.

Background:

In late August 2023, an AIS Rapid Response was initiated after a small patch of EWM was discovered through a BCWMC routine plant survey. BCWMC coordinated with multiple partners including Hennepin County, the DNR, and the city of Golden Valley. The Sweeney Lake Association (SLA) successfully stopped all boating on the lake for the 5 days leading up to an herbicide treatment, which the SLA funded. Unfortunately, a post treatment survey in October found another small patch of EWM in a separate area of the lake but it was too late in the season to treat that area. This project continues to implement the rapid response and aims to eradicate EWM from the lake.

This project expands on the rapid response activities to include significant outreach to lakeshore residents. BCWMC staff and SLA volunteers will convey information about and gather responses to Hennepin County's lake pledge. Further, Bolton and Menk will be hired to provide in-person and on the water training on AIS detection and best practices for preventing the spread of AIS.

Finally, this project will survey Twin Lake for EWM along with ponds that are tributary to Sweeney Lake. Twin Lake is a high quality lake connected to Sweeney via a navigable channel. If EWM has already reached Twin Lake, we need to take swift action there, too. And, upstream ponds will be surveyed to determine if they are the source of EWM to Sweeney.

Task A: Sweeney Lake plant surveys

Timeframe: April or May 2024 + 6 weeks post treatment

Responsible Party: BCWMC Engineers, Barr Engineering subcontracting with Matt Berg, Endangered Resource Services

This activity will identify all locations of EWM in Sweeney Lake prior to a planned herbicide treatment in the spring and again 6 weeks post treatment. This activity builds on plant surveys conducted in 2023 when the new infestation was first discovered and treated. The outcome will be a map(s) and GIS coordinates delineating the EWM beds for the herbicide treatment (pre-treatment), and a confirmation that all EWM was treated (post-treatment). If additional EWM is discovered post treatment, a second delineation map will be generated for use with a second herbicide treatment.

Task B: Herbicide Treatment in Sweeney Lake

Timeframe: May or June 2024 + late summer 2024 if warranted

Responsible Party: BCWMC staff contracting with certified herbicide contractor

This activity includes securing an herbicide application permit from the DNR and performing an herbicide treatment using ProcellaCor applied by a certified herbicide contractor. This activity assumes up to 2.0 acres of EWM will be treated initially (based on the fall 2023 survey). The budget also includes treating up to 1.0 acre later in the summer if additional EWM is discovered in a post treatment survey. BCWMC Engineers, Barr Engineering, will provide technical assistance and oversight. BCWMC Administrator will apply for DNR permit and will coordinate with lake homeowners and the City of Golden Valley.

Task C: Twin Lake and Tributary Ponds Plant Surveys

Timeframe: Summer 2024

Responsible Party: BCWMC Engineers, Barr Engineering subcontracting with Matt Berg, Endangered Resource Services

This activity includes performing a whole-lake plant survey of Twin Lake which is connected to Sweeney Lake through a navigable channel and is a high quality, deep lake lying half within Theodore Wirth Regional Park and with a nearly completely undisturbed shoreline. It is important to ensure EWM isn't already in the lake. Further, in an attempt to help identify the source of the EWM in Sweeney Lake, ponds that are tributary to Sweeney will be surveyed for possible EWM beds. Detailed survey results and EWM delineation maps, if needed, will be outcomes of this activity.

Task D: Sweeney Lake Homeowner Engagement

Timeframe: Spring – Summer 2024

Responsible Party: BCWMC staff with assistance from Sweeney Lake Association (SLA), Hennepin County staff, and Bolton and Menk

This activity will include significant engagement with homeowners around the lake. Because Sweeney Lake does not have public access (aside from carry-in access), lakeshore owners are the best and most important audience for targeting outreach and education. The Sweeney Lake Association (SLA) will assist with relaying the importance of taking Hennepin County's lake pledge, facilitating and gathering pledge responses, and recruiting participants for an AIS Early Detection Training workshop. The workshop will be hosted by BCWMC and SLA, and will be facilitated by staff at Bolton and Menk. In-person and on-water training, specifically for Sweeney Lake homeowners, is planned. The outcome of this activity is a community of better informed and watchful lakeshore homeowners who can detect new AIS before they become established and will understand their role in preventing the spread of AIS. Outcomes can be measured by the number of new lake pledge participants and workshop attendance.

Project staff, partners and volunteers

- **Project coordinator and organization information**

- Organization: Bassett Creek Watershed Management Commission
- Primary project coordinator (name, title, role): Laura Jester, BCWMC Administrator; project coordinator
- P.O. Box 250827, Golden Valley MN 55427; 952-270-1990; laura.jester@keystonewaters.com
- Organization website: www.bassettcreekwmo.org
- Describe the organization's mission and goals.

Mission: Stewardship of water resources to protect and enhance our communities.

This project aligns with multiple goals and policies within the 2015 Bassett Creek Watershed Management Plan including policy #79: *The BCWMC will support and collaborate with other entities to manage and prevent the spread of aquatic invasive*

species. Further, the BCWMC's [policies on AIS and aquatic plant management](#) includes activities related to education and outreach, early detection training, rapid response, and management of established AIS.

- **Contracting organization information**

- Contracting organization (*if different than above*): Same
- Designated contract signatory: BCWMC Chairperson
- Address and phone number: P.O. Box 250827, Golden Valley MN 55427 current chair's phone: 571-275-7757
- Has the organization received funding from the county in the last three years?
Yes: The BCWMC received an AIS Prevention Grant in 2022 that was ultimately cancelled in order to more directly coordinate AIS signage development directly through the county. The BCWMC has also received two Opportunity Grants (2019 and 2023) for the Plymouth Creek Restoration Project (completed 2019) and Main Stem Lagoon Dredging Project (final report submitted Dec 2023).

- **Staff and volunteers:**

BCWMC Administrator, Laura Jester – Administrator with BCWMC for 11+ years. She will provide project management, reporting, and coordination. She is skilled in project management, budget and timeline tracking, grant reporting, coordinating with partners, and facilitating education and outreach programs.

BCWMC Engineers – Meg Rattei will be the primary Barr staff assisting with the technical aspects of the project including plant survey coordination, data QA, EWM management design, and herbicide treatment coordination. She has worked on water monitoring activities for the BCWMC for more than 50 years and was the architect of the BCWMC AIS Rapid Response Plan.

Endangered Resource Services, Matt Berg – Has been contracted by Barr Engineering for aquatic plant surveys throughout the Metro for many years. He has earned a reputation for performing thorough and accurate surveys and discovering new species and AIS in multiple lakes.

Certified Herbicide Contractors – We expect to use PLM Land and Lake Management for the herbicide treatments as they performed the EWM treatments in 2023. They are reputable and trusted herbicide applicator.

Sweeney Lake Association, President Jennell Bilek – Ms. Bilek worked quickly and tirelessly to communicate with lake residents, BCWMC staff, city of Golden Valley, and herbicide contractors in 2023 when EWM was first discovered. For this project she will be the liaison with the lake homeowners and will be a critical volunteer with outreach and engagement efforts.

Budget – see spreadsheet

Total project cost: \$20,780

Grant request: \$13,680

Local match; \$7,100: source is Bassett Creek Watershed Management Commission which may include contributions from the Sweeney Lake Association or the City of Golden Valley

Note: Please feel free to edit to work best for your specific application.

<u>Expense Category</u>	<u>Description/ Role</u>	<u>Hourly Rate/ Cost per Item</u>	<u>Number Hours/Items</u>	<u>Funds Requested</u>	<u>In-kind/ Matching*</u>	<u>Total Project Costs</u>
(A) Staff and Personnel					(*if any)	
Administrative staff				\$0.00		\$0.00
Project management staff	Project coordination, reporting, outreach assistance	\$75.00	16	\$0.00	\$1,200.00	\$1,200.00
Community Volunteers				\$0.00		\$0.00
Outside consultants	Barr Engineering technical services	varies		\$0.00	\$5,900.00	\$5,900.00
Other				\$0.00		\$0.00
			SUBTOTAL =	\$0.00	\$7,100.00	\$7,100.00
(B) Reimbursable Expenses						
1. Project Supplies/Materials -- List all of the supplies/materials needed for your project (add rows below as needed)						
				\$0.00		\$0.00
				\$0.00		\$0.00
2. Professional Services						
Certified herbicide contractor; herbicide treatment(s)				\$7,500.00		\$7,500.00
Endangered Resource Services; Sweeney Lake plant surveys				\$1,800.00		\$1,800.00
Endangered Resource Services; Twin Lake and pond plant surveys				\$2,230.00		\$2,230.00
3. Incentives -- Must be tied directly to an action or activity that motivates environmentally-responsible behavior (add rows below as needed)						
				\$0.00		\$0.00
4. Marketing and Communications						
Printing				\$0.00		\$0.00
Mailing				\$0.00		\$0.00
Distribution				\$0.00		\$0.00
5. Other Expenses (add rows below as needed)						
AIS Early Detection Training by Bolton & Menk				\$2,150.00		\$2,150.00
				\$0.00		\$0.00
			SUBTOTAL =	\$13,680.00	\$0.00	\$13,680.00
			TOTAL =	\$13,680.00	\$7,100.00	\$20,780.00