

Surface Water Grant Application

Form 8700-284 (R 07/17/2024)

Page 1 of 16

1. **IMPORTANT:** Please refer to the [application instructions](#) to ensure you are completing the application correctly.
2. Every applicant* must submit a project pre-application to DNRSurfaceWaterGrants@Wisconsin.gov by September 15. The pre-application is a draft of sections 1, 2, 3, 5 and 8 of the [surface water grant application \(Form 8700-284\) \[PDF\]](#). Submit the form to dnrsurfacewatergrants@wisconsin.gov. Your local biologist will then contact you to provide feedback as you work to prepare your final application.
3. A final application must be submitted by November 15, 2024 to dnrsurfacewatergrants@wisconsin.gov.
4. This is a reactive form. Complete Section 1 and Section 2 in order to access the rest of the form. Additional form sections may appear based on what you enter in earlier sections.

Surface Water Grant Application

Form 8700-284 (R 07/17/2024)

Page 2 of 16

State of Wisconsin
Department of Natural Resources
Bureau of Community Financial Assistance (CF/2)
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Notice: Use of this form is required by the Department of Natural Resources for any application filed pursuant to ch. NR 193, Wis. Adm. Code. Personal Information collected on this form, will be used for administrative purpose and may be provided to requesters to the extent required by Wisconsin's Public Records Laws [[ss. 19.31–19.39 Wis. Stats.](#)] **To be considered, applications must either be submitted electronically or postmarked by November 15th.** The preferred method of application submittal is via email to DNRSurfaceWaterGrants@wisconsin.gov, using the **Submit by Email** button on this form.

Section 1: Ecosystem Type

Pre-application

This project primarily focuses on (select one):

- ☐ Lakes ☐ Rivers ☐ Wetlands ☒ AIS

Section 2a: Application Type (check one)

Pre-application

Education and Planning Grants:

- ☐ Surface Water Education
☐ Surface Water Planning
☐ Comprehensive Planning for Lakes & Watersheds
☐ County Lake

Aquatic Invasive Species (AIS) Grants

- ☐ AIS Prevention
☒ AIS Population Management
 ☒ Large-scale ☐ Small-scale
☐ AIS Early Detection & Response

Surface Water Management Grants:

- ☐ Surface Water Restoration
☐ Management Plan Implementation
☐ Ordinance Development
☐ Fee Simple Land Easement & Acquisition
☐ Wetland Restoration Incentive

Note: For Clean Boats, Clean Waters Grants use [Form 8700-337](#)
Lake Monitoring and Protection Network use [Form 8700-284L](#)
Healthy Lakes and Rivers Grants use [Form 8700-035](#)

Section 2b: Applicant Information

Pre-application

Project Title

Cedar Lake - Whole-population EWM Control

Applicant Name (Organization)		Organization Type	
Town of Schleswig Sanitary District #1		Sanitary District	
Organization Address--Where to Send Check		City	State ZIP Code
18121 Klemme Rd		Kiel	WI 53042
Authorized Representative (AR) Name		AR Title	
Scott Otterson		Treasurer	
AR Phone Number (include area code)	Ext.	AR E-mail Address	
(262) 903-9269		scottsotter@aol.com	
Contact Representative (CR) Name (if different from AR)		CR Title	
CR Phone Number (include area code)	Ext.	CR E-mail Address	

Has your organization been approved as an eligible applicant within the past 10 years?

- ☒ Not applicable. (ex. Counties, Local Units of Government, Lake Districts, Town Sanitary Districts, Tribes, or Accredited universities.)
☐ No. Submit [Form 8700-380](#) and required supporting documentation to your [Environmental Grants Specialist](#) 6 months prior to the grant application deadline. Your organization must be deemed eligible prior to the grant application deadline.
☐ Yes

Please refer to the [application instructions](#) to ensure you are completing the application correctly.

Surface Water Grant Application

Form 8700-284 (R 07/17/2024)

Page 3 of 16

Section 3: Project Information

Pre-application

Project Location

			Proposed Start Date		Proposed End Date	
			March 15 2025		December 31 2026	
			(Start Date)	(Year)	(End Date)	(Year)
Waterbody Name(s)	Waterbody ID(s) Look it up here! (WBIC)	Lake Acreage (if applicable)	Is there public access?	No. of Public Access Sites Incl. Boat Launches & walk-ins	No. of Public Vehicle-Trailer Parking Spaces Available at Public Access Sites	
Cedar Lake	45100	155.00	☒ Yes ☐ No	1	15	

Do all of the above waterbodies meet the minimum public boating access standards provided in s. NR 1.91 (4), thus are eligible to receive funding for natural resource enhancement services.

☒ Yes ☐ No

- ☐ Project to be implemented on state land
- ☐ Project to be implemented on land not owned by the applicant
- ☐ Regional project serving multiple waterbodies

County(ies)

Manitowoc

State Senate District No.(s)	State Assembly District No.(s)
9	27

Laboratory Analysis

Does this project include Laboratory sample analysis (if applicable)? ☐ Yes ☐ No

If yes, then complete [Form 8700-360](#) and indicate the lab service provider:

- ☐ State Lab of Hygiene
- ☒ Other: EPL Bio Analytical Services

Permitting

Are state, local and/or federal permits required for this project? ☒ Yes ☐ No ☐ Unknown

Permit Name	Agency	Status (i.e., to be submitted, submitted, approved)	Agency Contact
Chemical Aquatic Plant Control (3200-004)	WDNR	to be submitted	Claire Hetzel
Worksheet for large-scale chemical control	WDNR	to be submitted	Claire Hetzel

Pre-application Scoping Meeting

Wisconsin DNR Staff Name(s)	Date

Please refer to the [application instructions](#) to ensure you are completing the application correctly.

Surface Water Grant Application

Form 8700-284 (R 07/17/2024)

Page 4 of 16

Section 3a: Determination of Eligibility

Pre-application

Have you requested a Determination of Eligibility from the regional DNR Biologist for the activity you are seeking grant funding for?

☒ Yes ☐ No

If yes, provide the request and the eligibility determination documentation from the DNR Biologist, if available, **with the pre-application**.

If no, provide the request **with the pre-application**; [see memo](#) template for example.

Management Plan(s)

Name of Plan	Publication Year
Cedar Lake - Aquatic Plant Management Plan	2024

Projects must implement a management plan recommendation.

Determination of Eligibility Information

Exception: Purple loosestrife biocontrol projects do not need to be recommended in a management plan or determined to be eligible by the department.

Date of Eligibility Determination	WDNR Staff
09/04/2024	Claire Hetzel

Projects must be determined to be eligible by department staff.

Federal Nonpoint Source Program Eligibility

Are there federal dollars in this project? ☐ Yes, Source _____

☒ No

If no other federal funds are being applied to the project, Federal Nonpoint Source Program (Clean Water Act Section 319) funding may be used for these projects. Applicants must be able to specifically describe and reference the recommendation from the 9 Key Element Plan in Section 8, Complementary Management box.

- ☐ 1. The project focuses on reducing nonpoint source pollution by implementing at least one of the best management practices mentioned in [NR 154.04](#).
- ☐ 2. The project implements the goals and recommendations of an EPA-approved watershed-based plan that meets EPA's "9 key elements". (Link to map and plans at: <https://dnr.wi.gov/topic/Nonpoint/9keyElement/planMap.html>)

Provide the title of the EPA-approved 9-key-element plan this project implements	Plan Expiration Year

Section 4: External Financial Support

List organizations (e.g., school, town, county, nonprofit organization, etc.) other than the applicant and their subcontractors that are providing financial support in the project. Identify the type of financial support (cash, volunteer hours, equipment, etc) and attach a copy of the organizations letter of financial commitment. Do not list Wisconsin Department of Natural Resources funds or resources.

Organization Name	Type of Support	Amount of Support
Cedar Lake Improvement Association	cash	

Surface Water Grant Application

Form 8700-284 (R 07/17/2024)

Section 5. Project Budget

Pre-application

Part A. Provide a detailed budget of eligible costs including all wages, services, supplies and equipment necessary to accomplish the project. List each item, the activities it is related to in Section 8 of the application, the budget category it best fits, number of units (e.g. hours, plants, square feet, days, miles) and unit cost. Note whether the item is related to administration of the project. See guidance for more information.

Item Description	Activity in Section 8 (ex. 1.a.)	Budget Category	Cash or Donation/ Match	Unit	# of Units	Unit Cost	Subtotal	Admin. Cost?
1. Permit fee - 2025	1.a	Other	cash	ea	1	\$ 533,000	\$ 533.00	☐
2. WDNR permit educational mailing & legal publication - 2025	1.a	Supplies & Operating Expenses	cash	ea	1	\$ 750,000	\$ 750.00	☐
3. Targeted herbicide application - EWM - 2025	1.b	Consultants/Contractual	cash	ea	1	\$ 38,700,000	\$ 38,700.00	☐
4. Herbicide residual monitoring - lab - 2025	1.c	Other	cash	ea	26	\$ 180,000	\$ 4,680.00	☐
5. Herbicide residual monitoring - sampling - 2025	1.c	Personnel	donation	hrs	24	\$ 15,000	\$ 360.00	☐
6. Herbicide residual monitoring - boat - 2025	1.c	Equipment	donation	ea	8	\$ 80,000	\$ 640.00	☐
7. Pre & Post-treatment PI & sub-PI EWM surveys - 2025	2.a	Consultants/Contractual	cash	ea	2	\$ 1,000,000	\$ 2,000.00	☐
8. AIS mapping & planning - 2025	2.b	Consultants/Contractual	cash	ea	1	\$ 1,750,000	\$ 1,750.00	☐
9. AIS mapping & planning - 2025	2.b	Personnel	donation	hrs	12	\$ 15,000	\$ 180.00	☐
10. AIS mapping & planning - 2025 - boat	2.b	Equipment	donation	ea	1	\$ 80,000	\$ 80.00	☐
11. WDNR Permit fee - 2026	3.a	Other	cash	ea	1	\$ 98,000	\$ 98.00	☐
12. Targeted herbicide application - 2026 (if necessary)	3.b	Consultants/Contractual	cash	ea	1	\$ 8,500,000	\$ 8,500.00	☐
13. Herbicide Residual Monitoring - lab - 2026 (if necessary)	3.c	Other	cash	ea	14	\$ 190,000	\$ 2,660.00	☐
14. Herbicide Residual Monitoring - sampling - 2026 (if necessary)	3.c	Personnel	donation	hrs	12	\$ 15,000	\$ 180.00	☐
15. Herbicide Residual Monitoring - boat - 2026 (if necessary)	3.c	Equipment	donation	ea	4	\$ 80,000	\$ 320.00	☐
16. Pre & post-treatment PI & sub-PI EWM surveys - 2026 (if necessary)	3.d	Consultants/Contractual	cash	ea	2	\$ 1,250,000	\$ 2,500.00	☐
17. Late-season AIS survey - 2026	3.e	Consultants/Contractual	cash	ea	1	\$ 2,000,000	\$ 2,000.00	☐
18. Targeted EWM hand pulling - 2026	3.f	Personnel	donation	hrs	40	\$ 15,000	\$ 600.00	☐
19. Comprehensive project summary report - 2026	3.6	Consultants/Contractual	cash	ea	1	\$ 2,000,000	\$ 2,000.00	☐
1.		Healthy Lakes Practices				\$	\$	☐
							Subtotal \$	68,531.00
							Total Project Cost Estimate \$	68,531.00
State Share Requested cannot exceed Cash Cost Subtotal							Eligible State Share \$	51,398.25
							Grant Award Request \$	41,118.60

Please refer to the [application instructions](#) to ensure you are completing the application correctly.

Part B – Cost Estimate Summary. Summary of all costs from Part A.

Cost Category	A. Cash Costs	B. Donated Value
1. Personnel	\$	1,320.00
2. Employee Benefits	\$	
3. Travel	\$	
4. Equipment	\$	1,040.00
5. Supplies/Operating Expenses	\$ 750.00	
6. Consultant/Contractual	\$ 57,450.00	
7. Construction	\$	
8. Other (ex. Acquisition)	\$ 7,971.00	
Subtotals	\$ 66,171.00	\$ 2,360.00
Total Project Cost Estimate	\$ 68,531.00	
Grant Award Request	\$ 41,118.60	
Grantee Share	\$ 27,412.40	

Grantee Share Percent: 40%

Part C – Cost Containment and Professional Service Agreements.

- ☒ I acknowledge that a professional service agreement is required if the grantee subcontracts or hires an agent to undertake any portion of this project requiring more than \$5000 of grant funding prior to the commencement of any contracted work. (Does not apply to counties, cities, towns, villages or Wisconsin tribes).
- ☒ I acknowledge that cost containment measures must be implemented per NR 193.08 for all capital assets and any supply, service or equipment item purchased by the grantee if the cost exceeds \$2,500.

Budget Items > \$2,500	Cost-Containment Methods	Description of Method
Consultant contract - for entire project outside of volunteer costs	Competitive Bidding	Solicited bids to be completed for EWM control, AIS monitoring, and project management pending grant approval

Surface Water Grant Application

Form 8700-284 (R 07/17/2024)

Page 7 of 16

Section 6: Attachments (check all that are included)

- ☒ Authorizing resolution (required).
- ☒ Current [W-9](#) (required).
- ☐ Letters of financial support specifying cash or donated value.
- ☒ Map of project location, public access, public land and other use and access features (required).
- ☒ Request for Determination of Eligibility (required with pre-application).
- ☒ Eligibility Determination from DNR Biologist (required with final application).

Section 7: Certification

Signature: Scott Otterson

Date Signed

Surface Water Grant Application

Form 8700-284 (R 07/17/2024)

Page 8 of 16

NOTE: Section 8 has an 8 page limit. Additional pages will not be considered.

Section 8: Project Description

Pre-application

Are you applying for funding to control an aquatic invasive species?

☒ Yes ☐ No

Description of Extent of Aquatic Invasive Species and Strategy for Control

Name of Aquatic Invasive Species (AIS) Proposed to Control

Eurasian water-milfoil

Year AIS First Verified in waterbody: 2009

Name of Waterbody to be Managed (if your grant application contains multiple waterbodies)

Cedar Lake

The following information will be used to rank your grant. Fill out as many questions as possible for the first year of proposed control. A separate worksheet should be filled out for each species and lake that will be controlled as part of this grant proposal. **Use the Add Species button below to begin a new worksheet if you are including multiple species or lakes as part of your grant application.**

Approximate number of years this species has been actively managed: 3

Have you or the waterbody received an Early Detection and Response (AIRR) or an AIS Population Management (ACEI) grant to manage this species?

Grant Number	Status

Information on the proposed project:

Expected first year of management under the proposed project: 2025

Number of acres of AIS to be controlled (as part of the proposed project) : 20.00 % of population managed: 100 %

Total number of waterbody acres to be managed: 20.00

Population status:

Number of acres of this AIS from most recent bed mapping survey: 20.00 Survey Date: 09/22/2023

Littoral % frequency of occurrence of this AIS from most recent point-intercept (PI) survey: 19.2 Survey Date: 08/25/2021

Control Technique: Chemical

Season(s) and Year(s): 2025 Acres Targeted: 20.00

Herbicide: Florpyrauxifen-benzyl Herbicide Formulation: Liquid

Target Herbicide Concentration: 0.009PPM (The target concentration should be for the entire lake if the project proposes a whole-lake treatment or if treating more than 10% of lake area. If the treatment is not planned as a whole-lake treatment, then provide target concentration (parts per million) for the AIS bed being treated)

Control Technique: Manual (hand pulling)

Season(s) and Year(s): 2026 Acres Targeted: 1.00

Number of Hours Allocated for Control: 40

A. Brief Project Summary (1000-characters, with spaces maximum)

Provide a concise description of the project activities and deliverables. This text will be used as a stand alone scope statement in program promotional materials, the SWIMS database, and on DNR Lakes webpages if the grant is awarded. **Example:** *The [applicant] is sponsoring a project to [description of project] in/on [location/waterbody/watershed]. Activities and deliverables include 1) [Concise description of activity and deliverable(s)] 2) [Concise description of activity and deliverable(s)] 3) [Concise description of activity and deliverable(s)]...*

The Town of Schleswig Sanitary District #1 will begin whole-population EWM control on Cedar Lake. Targeted surveys will be completed to assess results of the proposed ProcellaCOR EC application. Direct EWM control measures using IPM will be continue on the lake in 2025 and beyond to target remaining EWM. Herbicide residual monitoring will be conducted along with follow-up aquatic plant surveys in 2025-26. A comprehensive report will summarize project work and assist in future management

B. Project Area and Public Access/Use

Describe where the project is located, including information on the waterbody or community served. For projects addressing waterbodies or watersheds, include physical characteristics like size, depth, hydrological type and land use. Describe public use and access features.

Cedar Lake is a natural seepage lake located in the Town of Schleswig in the south western portion of Manitowoc County, and at 154.5-acres is the largest lake in the County (maps are provided in the attachments). Cedar Lake has a maximum depth of 27 feet and mean depth of 9 feet with 3.57 miles of shoreline. The Lake is mesotrophic and mildly productive with excellent water quality and provides numerous recreational opportunities for a wide spectrum of users including fishing, camping, boating, and leisure activities.

Public boating access exceeds the minimum as defined in NR 1.91(F). At Cedar Lake there is one public boat landing with two paved lanes, parking for up to 15 vehicles with trailers, fishing pier, and a restroom. Additional lake access is provided by private propertie. Boy Scouts of American operates a Cub Scout camp, Camp Rokilio, the largest in the Midwest, on Cedar Lake. The camp is on 213 acres of land adjacent to the lake and serves numerous Scouts annually with various activates relating directly to the Lake.

Being the largest inland lake in Manitowoc County and near the cities of Manitowoc and Sheboygan, Cedar Lake sees the highest use of all lakes in Manitowoc County for both total number of boats and people, according to Clean Boats / Clean Water (CB/CW) data.

To help alleviate issues high usage may cause, several boating ordinances enacting periods of slow-no-wake speeds only are in place for Cedar Lake, including:

- * Between the hours of 6:00 PM - 11:00 AM
- * Sundays except from 11:00 AM - 2:00 PM
- * During periods of high water to limit shoreline erosion from waves

C. Problem Statement

Provide a clear and concise description of the problem that this project will address. What is the purpose of the project?

Cedar Lake contains Eurasian water-milfoil (EWM), a fast-growing non-native invasive species. EWM has been potentially present since 1993, but first noted by WDNR in 2009. Initial management since 2010 kept it largely in check and included hand pulling, mechanical harvesting, herbicide treatment, and DASH. Recently, however, populations have expanded and currently grows to dense, nuisance levels.

Recent management originally focused on using the active ingredient diquat to primarily very small spot applications and targeted harvesting through DASH systems. Success has been minimal, requiring the District to look at management alternatives.

Knowing the importance of integrated pest management (IPM), the District has consistently explored new technologies and methods for EWM control. In 2021 they completed a larger, 5+ acre application for EWM control with ProcellaCOR EC (a.i. florypyrauxifen-benzyl) and a 7.0 acre control in 2022; a great expense covered out of pocket that included direct pre and post-treatment monitoring in application areas. No active EWM management was done in 2023-24 to gauge long-term results and update the lake's aquatic plant management plan.

Current populations of EWM are over 19-acres (see attached map) and found at 19% frequency of occurrence during a the most recent whole-lake point intercept survey (see attached data). To better plan for future management the District updated the lake's aquatic plant management plan in 2023-24. Whole-population control of EWM is an approved and recommended task in their current aquatic plant management plan. This project will evaluate past management efforts, control existing stands of EWM, and plan for future, integrated management to protect and enhance the lake.

D. Project Description and Timeline

Please refer to the [application instructions](#) to ensure you are completing the application correctly.

1. Goals and Objectives

1. Manage AIS to improve recreation, increase use opportunities, and maintain native plants by reducing AIS abundance and frequency of the littoral zone. A large-scale approach is recommended when the target AIS (Eurasian water-milfoil) exceeds 15% or more of the littoral zone (Page 7.27).

A September, 2023 survey identified EWM covering 19.8 acres of the 133.8-acre littoral zone, or 14.8% of the littoral zone. This is right at the tipping point and expected to increase, pending results of the 2024 late-season survey.

Large-scale control actions recommended by the plan and chosen for the grant may include the use of the active ingredients fluroxypyr and glyphosate as described in pages 7.28-7.29 of the plan. Use of IPM will be done throughout the project, with complete pre and post-treatment monitoring, residual monitoring, and alternative management methods, including hand pulling, will be in conjunction with the large-scale control effort. All of these actions are recommended in the approved APM plan on page 7.29.

1.a. Activity

Prepare and submit WDNR Permit application - 2025

Method and Data Collected

A permit application for chemical aquatic plant control and all required materials will be gathered, completed, and submitted to the WDNR for review and approval in early 2024. As part of the permit process, an educational mailing with a copy of the permit, treatment map, and informational letter will be mailed to each riparian landowner. In addition, a required legal publication outlining the potential application will be completed and published in the local newspaper with proof of publication submitted with the permit application.

Deliverable and Outcomes

Approved WDNR chemical aquatic plant control permit (3200-004) and associated large-scale worksheet.

1.b. Activity

Targeted aquatic herbicide application by a certified applicator to the densest areas of EWM in Cedar Lake using ProcellaCOR EC - 2025

Method and Data Collected

Total application areas, amount of product required, and 2025 product pricing is estimated at this time for total application areas of 20-acres. Final target areas and dosing will be completed prior to application and with assistance from the product manufacturer to ensure results.

Deliverable and Outcomes

EWM control through a selective and targeted whole-population application of ProcellaCOR EC.

1.c. Activity

Herbicide residual monitoring - 2025

Method and Data Collected

Collect water samples at set intervals (described below) to test for residual concentration over time for up to 4 sample sites totaling 26 samples. All sample collection will be done by District volunteers. Samples will be lab tested by EPL Bio Analytical Services.

Deliverable and Outcomes

Residual samples will be taken from 3 sites: 2 within treatment areas and 1 in non-treatment areas. All sites will be sampled at the following intervals: 3 hours after treatment and 1, 3, 5, 7, 14, 28, 42, and 56 days after treatment. A total of 25 samples will be collected and includes 1 pre-treatment blank. Two District volunteers will collect the samples with total project donation of 24-hrs of time and 8 days of boat/equipment use. All sample sites are yet to be determined and will be placed with assistance of WDNR staff prior to 2025 treatment.

2. Goals and Objectives

Evaluate results of the 2025-26 EWM management in Cedar Lake and continue to monitor the overall health of the water.

2.a. Activity

Pre & post-treatment sub-set Point Intercept (PI) aquatic plant surveys in select EWM target areas. - 2025

Method and Data Collected

These surveys will be completed as targeted, sub-set point intercept surveys within EWM control areas. Established WDNR protocols will be followed. The surveys will be scheduled prior to application to ensure any aquatic plants present can be collected and identified. Data collected at each sample point will include species present, density, depth, GPS location, and bottom substrate and will be compiled in the WDNR provided spreadsheet. The same points established in this activity will be sampled both pre-treatment and 6 or more weeks post-treatment.

Deliverable and Outcomes

Establishment of pre-set point-intercept and sub-set point intercept survey locations within EWM control areas (to be determined). Pre & post treatment data collection and EWM mapping to be used for post-treatment data comparison and project results.

2.b. Activity

Late-season AIS survey - 2025

Method and Data Collected

This survey will be completed throughout the entire lake with a modified meander survey to delineate areas of AIS growth outside of those targeted in 2024. Visual and electronic aids will be used with periodic rake samples to delineate beds of AIS growth. In conjunction, District volunteers will monitor the lake for EWM after treatment and prior to this survey. Locations will be collected on GPS and forwarded to the consultant performing the formal survey and assist in planning and mapping.

Deliverable and Outcomes

Post-treatment data collection and EWM mapping to be used for 2025 management planning, data comparison and project results. Two volunteers will donate 12 hours and 6 days of personal boat/equipment use in monitoring EWM locations throughout the lake.

3. Goals and Objectives

Continue EWM management to keep populations below management thresholds of less than 2.5% of the littoral zone or 3.3 acres. Continue monitoring of EWM populations and results of 2025-2026 control.

3.a. Activity

Prepare and submit WDNR Permit application - if necessary - 2026

Method and Data Collected

A permit application for chemical aquatic plant control and all required materials will be gathered, completed, and submitted to the WDNR for review and approval in early 2026. As part of the permit process, an educational mailing with a copy of the permit, treatment map, and informational letter will be mailed to each riparian landowner.

Deliverable and Outcomes

Approved WDNR chemical aquatic plant control permit (3200-004)

3.b. Activity

Targeted aquatic herbicide application by a certified applicator to areas of EWM in Cedar Lake using ProcellaCOR EC - 2026 - if necessary

Method and Data Collected

ProcellaCOR EC (a.i. florasulam-benzyl) may be applied at varying rates (to be determined) to areas of EWM growth. Estimated at 3.0 acres for 2026

Deliverable and Outcomes

Total application areas and product required to be determined at this time and will be based on the results of 2024 EWM monitoring under associated above listed activities. Estimated application area approximately 3.0 acres

3.c. Activity

Herbicide residual monitoring - 2026 - if necessary

Method and Data Collected

Collect water samples at set intervals (described below) to test for residual concentration over time for up to 2 sample sites totaling 14 samples. All sample collection will be done by District volunteers. Samples will be lab tested by EPL Bio Analytical Services.

Deliverable and Outcomes

Residual samples will be taken from 2 sites: 1 within a treatment area and 1 in a non-treatment areas. All sites will be sampled at yet to be determined intervals. Potential sampling intervals may include sampling at 3, 6, 9, 24, 48, and 168 hours after treatment. A total of 14 samples may be collected and includes 2 pre-treatment blanks. Two District volunteers will collect the samples with total project donation of 12-hrs of time and 4 days of boat/equipment use. All sample sites are yet to be determined and will be placed with assistance of WDNR staff prior to 2024 treatment.

3.d. Activity

Pre & post-treatment point-intercept (PI) and sub-PI aquatic plant surveys in EWM target areas - 2026 - if necessary

Method and Data Collected

For any areas of EWM control in 2026, sub-set grids will be used. Established WDNR protocols will be followed. The surveys will be scheduled prior to application to ensure any aquatic plants present can be collected and identified. Data collected at each sample point will include species present, density, depth, GPS location, and bottom substrate and will be compiled in the WDNR provided spreadsheet. The sub-set points established in this activity will be sampled both pre-treatment and 6 or more weeks post-treatment.

Deliverable and Outcomes

Pre & post treatment data collection and EWM mapping to be used for post-treatment data comparison and project results.

3.e. Activity

Late-season AIS survey - 2026

Method and Data Collected

This survey will be completed throughout the entire lake with a modified meander survey to delineate areas of AIS growth throughout the entire lake. Visual and electronic aids will be used with periodic rake samples to delineate beds of AIS growth. Locations will be collected on GPS and forwarded to the consultant performing the formal survey and assist in planning and mapping.

Deliverable and Outcomes

Post-treatment data collection and whole-lake AIS mapping to be used for 2026 management planning, data comparison and project results.

3.f. Activity

Targeted shoreline EWM monitoring and hand pulling - 2026

Method and Data Collected

Cedar Lake volunteers will perform periodic, meander surveys in shallow, near-shore areas around the lake to document EWM locations. Locations will be noted on a map and/or have GPS coordinates logged. Any locations of EWM noted will be hand pulled and removed from the lake with care to capture the roots and any fragments.

Deliverable and Outcomes

Cedar Lake volunteers will donate 40 hours towards monitoring shallow, near-shore areas for EWM growth. Any growth noted will be have its location logged with maps created. Areas of EWM growth will be hand pulled, removed from the lake, and properly disposed.

3.g. Activity

Comprehensive project summary report - 2026

Method and Data Collected

All previously collected data and associated maps, reports, and assessments will be assembled and reviewed. Direct statistical comparison will be used to evaluate management effectiveness against target and non-target species.

Deliverable and Outcomes

All above data will be used to prepare an updated aquatic plant community report for Cedar Lake, including:

- Data analysis of aquatic plant surveys

Results of all aquatic plant surveys as well as changes in the lake's aquatic plant community will be analyzed. Data included is necessary to obtain management permits, if necessary, for future control actions.

- Aquatic plant mapping

Maps documenting locations and densities of the most common aquatic plant species found will be created. Additional deliverables include updated maps of invasive species to be used for targeted management. These will show location, length, width, and acres for each proposed species.

- Aquatic plant survey report preparation

Specific management recommendations based on the results of the above items will be created to lay the groundwork for future management. All information will be provided in digital copies of all data.

E Complementary Management

Describe how the project complements other management efforts. Is the project actively engaged with efforts connected to but different from the grantees own? Consider connections to County Land and Water Resources Management Plans, Total Maximum Daily Load (TMDL) implementation plans, 9 key element plans or other prevention or implementation efforts.

The actions within this grant continue the long-standing lake protection and enhancement activities and builds off previous work completed by the District. The District has been annually involved in integrated lake management with a focus on controlling an aggressive strain of EWM. Projects directly related to aquatic plant management within the last five years include:

2019: Small-scale EWM control

2020: Small-scale EWM control, late-season AIS mapping, sub-set PI surveys

2022: Small-scale EWM control, late-season AIS mapping, sub-set PI surveys

2023-24: Updated Cedar Lake APM plan, late-season AIS bed mapping

2024: 200+ volunteer hrs of CB/CW boat access monitoring

The District and Cedar Lake residents have been extremely involved in lake protection and enhancement. Since 2020 shoreline restoration to reduce erosion and nutrient runoff within the watershed has been completed on 720 linear feet among 9 properties. Work included erosion protection, rain garden installation, restoration of up-slope vegetated areas, and removal of up-slope impervious surfaces and poured concrete seawalls. Work within the direct Cedar Lake watershed has also been completed and is a continuing process. The District is currently working with Manitowoc Co. Soil & Water to improve runoff and landuse conditions for agricultural land directly draining to the Lake to reduce nutrient and sediment loading through improved land use.

This project will build on past actions and continue management. Integrated pest management will be continued by and directly used under this project to ensure success. All actions listed in the project invest the knowledge of associated parties, build on past successes, and provide an outline for future management success.

The District has had strong partnerships with the County and other groups during past management actions, which included substantial out-of-pocket expenses. These partnerships form a strong base for success and will continue.

F External Support

Describe collaboration with other organizations that will be providing financial or other support along with the expected benefits of collaboration. Document support with letters and submit with this application. Be sure to highlight support from partners that are critical to implementation.

The District is proposing a partnership with the WDNR to complete this project and with their consultant to complete technical components of the project. In addition, it is anticipated that SePro, manufacturer of ProcellaCOR EC, will support the project through technical assistance.

The District has routinely combined AIS and lake management efforts with input and strong citizen involvement of lakeshore property owners. All entities have recently collaborated in creating an updated lake management plan (currently ongoing), and self-funded past EWM control from monitoring, mapping, spot-treatments, and DASH. The District recognizes the importance this project plays in protecting and enhancing Cedar Lake and has pledged to support this project, both financially and through volunteer efforts.

In the past, Cedar Lake property owners and District members have routinely provided strong citizen involvement in a suite of lake management efforts. All parties recognize the importance this project plays in protecting and enhancing Cedar Lake and have pledged to support this project.

These partnerships form a strong basis for success and will continue over this project period. The District will complete specific action items listed in this grant and the forthcoming plan to improve the ecology and recreational opportunities of Cedar Lake.

G Appropriateness and Need

Provide reasoning for why the project is appropriate and necessary. Include information on how the project was scaled and scoped to effectively address the management challenge. Make a case for why the work is unique and necessary, especially when there is any duplication of work occurring less than 5 years ago.

Being the largest and most used lake in Manitowoc County, AIS are an ever-present threat for Cedar Lake. The Town of Schleswig Sanitary District #1 has regularly self-funded lake management planning and EWM control projects throughout its history, which has been a financial burden. Outside financial assistance, like this grant, is necessary to further their lake management and AIS control efforts.

Current populations of EWM have expanded throughout the lake, impacting the health of the lake, recreation and

Please refer to the [application instructions](#) to ensure you are completing the application correctly.

safety of its users. Dense areas of EWM have caused fast boating recreation to avoid these area, sometimes doing sharp turns and unsafe maneuvers to do so. The District understands that aquatic plants are crucial to the health of the lake and proper care must be taken in planning large-scale management to protect the Lake. ProcellaCOR EC is a newly created systemic product developed specifically for invasive milfoil control. Field use has shown excellent reduction of EWM while limiting impact to non-target native species.

ProcellaCOR EC is not an inexpensive application and is most appropriate product available to offer meaningful, long-term control of EWM within the Lake. The District has determined that this is a high priority project to improve the safety and health of the lake and recreational resource. Therefore, the District is willing to accept a 60% grant rather than the typical 75% to show its commitment towards a successful project.

H Likelihood of Success

Describe a history of meeting or exceeding past grant or contract performance and accountability standards. For organizations that lack a performance history, provide evidence of organization capacity, volunteer commitment or other attribute that demonstrates an ability to successfully complete projects.

The Town of Schleswig Sanitary District #1 has shown a long history of project success. Their past management activities have followed integrated pest management with varied techniques, significant volunteer input, and actively sought for the best tools available. They have successfully been awarded and successfully completed past WDNR recommended projects, self-funded varying scales of EWM management and AIS monitoring, recently updated their aquatic plant management plan, and continually worked on improving and protecting the lake for all users.

I Other

The District has been timely and progressive in managing Cedar Lake and will continue to do so, being at the forefront of integrated pest management practices. To strengthen management activities and further protect Cedar Lake, they have proactively updated their management plan to better reflect current conditions and technologies for AIS management. This was an important and difficult step to further lake management.

These actions from the District will be important in protecting the Lake and they show a dedication to preserving the values and condition of the lake. Lake management is a continuing battle and the District is committed to taking the next step to ensure protection of Cedar Lake and continued enjoyment of its use for future generations.