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 15.** 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 ( ) AIS

Section 2a: Application Type (select 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
AIS Planning Grants use Form 8700-284P

Section 2b: Applicant Information

Pre-application

Project Title

Silver Lake - Surface Water Quality Management Plan (WQMP)

Applicant Name (Organization)		Organization Type		
Silver Lake Management District (SLMD)				
Organization Address–Where to Send Check		**City**	**State**	**ZIP Code**
P.O. Box 294		Silver Lake	WI	53170
Authorized Representative (AR) Name		**AR Title**		
James H. Purinton		Chairman		
AR Phone Number (include area code)	**Ext.**	**AR E-mail Address**		
(312) 315-5031		jim.purinton@silverlakemgmtdist.org		
Contact Representative (CR) Name (if different from AR)		**CR Title**		
David J. Engels		Full-time Resident / SLMD Contact		
CR Phone Number (include area code)	**Ext.**	**CR E-mail Address**		
(908) 809-8200		bucky7980@gmail.com		

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

(●) Not applicable. *(eg., 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 Grant 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.

Section 3: Project Information

Pre-application

Project Location

Proposed Start Date		Proposed End Date	
March 15 (Start Date)	2026 (Year)	December 31 (End Date)	2027 (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
Silver Lake	747900	528.00	(●) Yes ( ) No	3	25

- [ ] 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)

Kenosha

State Senate District No.(s)	State Assembly District No.(s)
21	61

Management Plan(s)

Name of Plan	Publication Year
Silver Lake Aquatic Plant Management Plan	2024

Laboratory Analysis

Does this project include laboratory sample analysis? (●) Yes ( ) No

If yes, then complete Form 8700-360 and indicate the lab service provider:

(●) State Lab of Hygiene

( ) Other:

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

Pre-application Meeting

Wisconsin DNR Staff Name(s)	Date
Heidi Bunk	10/23/2025
Craig Helker	10/23/2025

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
Silver Lake Protection Association	Financial Support	$2,000.00

Please refer to the application instructions to ensure you are completing the application correctly.

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.	Septic and Stormwater Outflows	1.a1 - a3	Consultants/Contractual	cash	ea	1	$ 2,560.00	$ 2,560.00	☐
2.	Pollutant Loading - Sources & Loads	2.a1 - a3	Consultants/Contractual	cash	ea	1	$ 1,920.00	$ 1,920.00	☐
3.	Water Quality & Beach Closures	3.a1 - a3	Consultants/Contractual	cash	ea	1	$ 1,280.00	$ 1,280.00	☐
4.	Shoreline Conditions & Aquatic Habitat	4.a1 - a2	Consultants/Contractual	cash	ea	1	$ 1,200.00	$ 1,200.00	☐
5.	Communication & Study Publication	5.a1 - a3	Consultants/Contractual	cash	ea	1	$ 9,600.00	$ 9,600.00	☐
6.	Laboratory Tests and Analysis	6.a1	Supplies & Operating Expenses	cash	ea	1	$ 3,440.00	$ 3,440.00	☐
1.							$	$	☐
							Subtotal	$ 20,000.00	
							Total Project Cost Estimate	$ 20,000.00	
	State Share Requested cannot exceed Cash Cost Subtotal						Eligible State Share	$ 13,400.00	
							Grant Award Request	$ 13,400.00	

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

Cost Category	A. Cash Costs	B. Donated Value
1. Personnel	$	$
2. Employee Benefits	$	$
3. Travel	$	$
4. Equipment	$	$
5. Supplies/Operating Expenses	$ 3,440.00	$
6. Consultant/Contractual	$ 16,560.00	$
7. Construction	$	$
8. Other (ex. Acquisition)	$	$
Subtotals	$ 20,000.00	$
Total Project Cost Estimate	$ **20,000.00**	
Grant Award Request	$ **13,400.00**	
Grantee Share	$ **6,600.00**	

Grantee Share Percent: 33%

Please refer to the application instructions to ensure you are completing the application correctly.

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
Septic and Stormwater Outflow study	Flat Rate	SEWRPC contract with some volunteer services
Communication and Study Publication	Flat Rate	SEWRPC contract with some volunteer services
Laboratory Tests and Analysis	Flat Rate	Using State designated "State Lab of Hygiene"

Section 6: Attachments (check all that are included)

- ☒ Authorizing resolution (required).
- ☒ Documentation of external financial support and/or letters of support.
- ☒ Map of project location, public access, public land and other use and access features (required).
- ☒ Surface Water Grant Project Lab Costs, Form 8700-360 (required).

Section 7: Certification

James H. Purinton

Signature: James H. Purinton

Nov 13, 2025

Date Signed

Please refer to the application instructions to ensure you are completing the application correctly.

Section 8: Project Description

Pre-application

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

Enter text below using the following sentence structure: *The [applicant] is sponsoring a project to conduct AIS Planning activities on [waterbody]. 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)], ...*

Note, this text will be used as a standalone scope statement in program and promotional materials, the SWIMS database, and on DNR Lakes webpages if the grant is awarded.

Silver Lake (528-acre drainage lake in Kenosha Co.) and its 2,780-acre watershed face storm-driven nutrient, sediment, bacteria, and chloride pulses that cause episodic beach advisories, surface water quality degradation & stress near-shore habitat. The SLMD, with SEWRPC and local Municipal Separate Storm Sewer System (MS4) partners, will complete a one-season planning study to quantify sources and prioritize fixes if there is presence of human coliforms &/or significant sediment. 2026 tasks include: map and sample all stormwater outfalls and verify riparian and nearby wastewater service; lake/tributary/beach Microbial Source Tracking(MST) under a WDNR-approved Quality Assurance Project Plan (QAPP); watershed loading estimates and scenario testing; and a shoreline, boat and aquatic-habitat inventory. The WQMP report is to be completed by Dec. 2026 followed by agency and public review process. WDNR and SLMD report approval in spring 2027 and presentation to 2027 SLMD annual meeting.

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.

Silver Lake is the largest lake entirely within Kenosha County and the Village of Salem Lakes.
It receives most water from surface runoff and discharges via a small dam at the south end to the Fox River, with additional input from groundwater and small tributaries that drain wetlands north of the lake. The contributing watershed is about 2,780 acres, modest for a lake this size, and lies primarily to the north and northeast. Land use remains a mix of residential, agriculture, wetlands and woodlands; forecasts indicate continued conversion of cropland to urban uses. Primary environmental corridors occur near the lake, including the 100-acre Silver Lake Wetlands tract on the north shore. Silver Lake supports sensitive fish and wildlife; WDNR/SEWRPC identify Pugnose shiner (threatened) and several special-concern species.

Public Access & Use: The lake access and use is robust with, counties of Racine & Kenosha having populations at 365,000, along with NE Illinois at ~8.2M. Two public boat launches serve the lake, one on the northwestern shore managed by the Village, and one on the north shore managed by WDNR. A private marina on the south shore also operates a public launch. In addition, DNR and County ownership along much of the north shore provides continuous walk-in access. DeWitt Park on the west shore provides a designated public beach; Kenosha County park lands on the north shore offer shore fishing and wildlife viewing. Recreation is diverse and year-round: summer activities include high-speed cruising, a large and very popular public beach, water-skiing/tubing, angling, canoeing/kayaking and swimming; winter activities include ice fishing and snowmobiling. Given the lake's proximity to southeastern Wisconsin and northern Illinois population centers, demand for boating and fishing is consistently high, underscoring the need to manage water quality, protect shoreline buffers, and maintain safe, equitable access for residents and visitors.

C. Problem Statement

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

Silver Lake's beneficial uses - swimming, boating, and a valued fishery - are threatened by storm-driven pollutants and shoreline degradation. Episodic beach advisories at DeWitt Park and Silver Lake County Park point to bacteria loading that varies with rainfall, runoff pathways, and near-shore conditions. Observed increases in specific conductance and chloride in regional lakes, coupled with winter maintenance practices and roadway density in the local MS4 partners, suggest a growing salinity risk to aquatic life. Development pressure around remaining riparian parcels continues to replace vegetated buffers with turf and hardened shorelines, amplifying wave-driven erosion and reducing habitat complexity. Within the watershed, conversion of agricultural lands to residential neighborhoods will increase impervious cover and alter drainage patterns unless retrofits and infiltration are planned. At the same time, the Village map has 3 major stormwater outfalls and 11 subbasins for Silver Lake that convey untreated runoff to the lake; the relative contributions of these sources versus diffuse shoreline inputs remain unquantified. Historic monitoring and the 2017 use report provide context, but data are dispersed, and offered no lake management plan that sets numeric load reduction targets, implementation priorities, or MST beach determination. Critical gaps include: (1) a full inventory and sampling of outfalls tied to sub-basin source areas; (2) calibrated watershed loading estimates with cost-effective reduction scenarios; (3) an updated shoreline and near-shore habitat inventory with grant-ready concept designs; and (4) a communications framework that translates findings into timely advisories and community actions. This project addresses those gaps in a single field season, producing an NR 193-compliant plan (early 2027) with open data, prioritized projects, and a five-year implementation roadmap aligned with Village and County programs and feasible funding sources.

D. Phased Projects:

Is this project being completed in Phases? ◯ Yes ◉ No

E. Project Description and Timeline

1. Goals and Objectives

Assessing Septic Systems & Stormwater Outfalls -- Goal: By Nov 30, 2026, locate and assess 100% of stormwater outfalls discharging to Silver Lake/tributaries and confirm 100% of riparian and near-parcel wastewater service through utility records and field verification to ensure no illicit connections or malfunctioning systems remain (avaiable records indicate riparian properties are served by sanitary sewer, but verification is required to confirm connection integrity). Develop a prioritized corrective action list for ≥5 sites with concept costs and expected load/ pathogen reductions. These actions are NOT currently done by MS-4 partners, thus no overlap in activity.

1.a. Activity

Riparian and near parcel Wastewater Status & Risk Screening. Overlay Silver Lake Watershed with Kenosha Co. septic /holding tank parcels; that might feed into the storm water outfalls. Use microbial source tracking (MST) to identify the source(s) of E. coli, ensuring there are no remaining or leaking septic/holding tank systems contributing to the storm sewer system. NOTE: All riparian properties are on sanitary sewer.

Method and Data Collected

Compile parcel/sanitary utility records for all riparian parcels; verify service (public sewer vs. onsite) and inspection cadence; map parcels within 1000 ft of shore and near tributaries &/or septic system parcels that might feed into the watershed/ storm sewer system; apply a desktop risk screen (age, proximity to water, soils/groundwater). Work jointly with the Village of Salem Lakes sewer utilities and Kenosha County sanitarian.

Deliverable and Outcomes

Deliverables: GIS layer and table of all riparian parcels (100%) with wastewater status; risk screen memo; list of parcels recommended for inspection or maintenance.
Outcomes: Prepare the wastewater status map and a list of any and all parcels with any recommended actions.

1.b. Activity

Outfall Inventory, Dry Weather Screening & Wet Weather Sampling

Method and Data Collected

Joint effort with SEWRPC to field locate and GPS all mapped major /priority outfalls (at least six (6) identified by the District). Conduct dry weather screening at two different dates per outfall (presence of flow, pathogens, TP (Total Phosphorus), turbidity tube test, temperature - if water is detected). Conduct wet weather sampling on major /priority outfalls (#6) during 3 qualifying storms (≥0.25" in/24 hr) for E. coli concentration and MST, TP and turbidity(via transparency tube).

Deliverable and Outcomes

Deliverables: Geodatabase with points/photos/attributes; screening dataset; lab results; hotspot map.
Outcomes: Complete mapping and dry weather screening (2 events) for 100% of outfalls; and complete storm sampling at 3 events periods for each major/ priority outfall with recommended priorities and sequencing.

1.c. Activity

Tabulate Corrective Action Concepts & Costing for potential remediation sites (See below for specific goal). Collaborating with Village and County based on findings.

Method and Data Collected

For ≥5 highest priority sites, develop best management practices (BMP) concepts (e.g., remediation, biofilters/rain gardens, infiltration retrofits, separators, shoreline buffers) with planning level costs and modeled reductions of Total Phosphorus(TP) and changes to transparency with turbidity tube test, as applicable).

Deliverable and Outcomes

Deliverables: Prioritized project list with concept sketches, costs, feasibility/readiness, permitting notes. Outcomes: Apply 5 year targets (e.g., 10 –20% TP and 20% turbidity tube test reduction from 2026 baseline in top priority subbasins) and prepare a sequenced action list with responsible parties. Prepare a grant ready pipeline including ≥5 concept sheets; and include final selection and sequencing in the adopted plan with recommended priorities and sequencing.

2. Goals and Objectives

Pollutant loading sources & loads – Goals: Quantify annual phosphorus, sediment, and nitrogen loads by subbasin determine major sources based on land use, stormwater, and septic information. Set numeric five-year reduction targets and recommend cost effective actions to achieve them.
NOTE: in 2027 a comprehensive spring and fall nitrogen, cations, chloride, etc, sampling in the deep hole will be done separate from this grant, along with ongoing Citizens Lake Monitoring Network's usual testing.

2.a. Activity
Update watershed delineation, including subbasins, and map watershed characteristics (soils, topography, land use, and best management practices).

Method and Data Collected

The watershed delineation will be updated based on recent (2024) topographical and stormwater information. Major subbasins in watershed will also be individually delineated to provide more information for pollutant load modeling. SEWRPC staff will characterize and map information regarding soils (hydrologic soil types, soil associations), topography, 2020 SEWRPC land use, and pollutant reduction best management practices (as provided by Kenosha County and Village of Salem Lakes) across the Lake watershed. This effort would refine the WEx-modeled watershed by integrating infrastructure like known culverts, pipes, drains, and other features that WEx does not account for into the watershed delineation.

Deliverable and Outcomes

An updated watershed delineation based on high-resolution topographical data as well as recent stormwater infrastructure information. Maps illustrating the soil, land use, and best management practice information across the Silver Lake watershed. Digital spatial files (i.e., shapefiles or a geodatabase) can be provided upon request.

2.b. Activity
Estimate annual pollutant loads for phosphorus, sediment, and nitrogen to Silver Lake and provide information regarding major pollutant sources.

Method and Data Collected

SEWRPC staff will utilize WDNR-approved pollutant loading models (e.g., Pollutant Load Estimation Tool, WiLMS) to model phosphorus, sediment, and nitrogen loads to Silver Lake using the updated watershed, land use, soils, topography, and best management practice information. This effort would be an enhancement over the WEx-modeled loads in that it would model sediment and nitrogen in addition to phosphorus and pollutant reductions from already implemented management practices would be accounted for in the modeling effort. Pollutant loads will be characterized by subbasin and primary land use sources to help focus pollutant reduction efforts. Incoming pollutant loads will be used to inform a WiLMS model of the Lake. Modeled loads will be checked and calibrated using the phosphorus

concentrations measured in Goal 1 as well as in-lake measurements collected via the Citizen Lake Monitoring Program.

Deliverable and Outcomes

Tables and maps of annual pollutant loads by land use sector (i.e., residential, agricultural, roads and parking lots, etc.) and subbasin. Identify a suitable pollutant load reduction goal to attain desired water quality standards. This effort would also provide an estimate of how much already implemented practices are reducing pollutant loads to the Lake and consequently which practices may be most cost-effective for further reductions.

2.c. Activity

Develop model scenarios of pollutant load reduction using best management practices in the watershed to attain the pollutant load reduction goal. Identify areas suitable for and approximate cost estimates for implementing these practices.

Method and Data Collected

Using baseline models of the watershed and lake developed Activity 2.b, SEWRPC staff will develop model scenarios that attain the pollutant load reduction goals using additional best management practices in the watershed. Areas suitable for specific practices (e.g., grassed waterways, stormwater detention basins, water and sediment control basins, cover crops, nutrient management planning) will be identified in the watershed.

Deliverable and Outcomes

A table indicating the amount, benefits, cost, and feasibility of the recommended best management practices to attain pollutant load reduction and water quality goals. A map illustrating suitable priority sites for the recommended practices. Set five-year targets for practice implementation and identify recommended parties to implement practices.
Develop a plan with SLMD, Salem Lakes Township and Kenosha County regarding wetlands protection as surrounding land gets further developed.

3. Goals and Objectives

Water Quality & Beach Closures -- Goal: Generate a defensible 2026 monitoring dataset and a risk based beach management framework so the WQMP includes forecasted advisory triggers and practices predicted to reduce advisory days in 2027 by ≥10% versus the 2024-2025 average (contingent on implementing priority actions and communications). Identify during Silver Lake &/or DeWitt Beach closings the source of E. coli (coliform) positive test

3.a. Activity

Collaborate with Kenosha Co summertime beach field sampling (May–Oct 2026) work by conducting two separate MST (microbial source tracking) tests during positive E. coli tests beach closings. These tests are specific to separate times at Silver Lake County and DeWitt beaches, when under closings.

Method and Data Collected

WDNR approved Quality Assurance Project Plan(QAPP); weekly coliform testing is done at DeWitt and Silver Lake County Park beaches Memorial Day–Labor Day. Efforts once a high count is identified to then run a MST to determine source of coliforms.

Deliverable and Outcomes

Deliverables: Station map; QAPP; field/lab results; photo log.
Outcomes: Submit all datasets to WDNR SWIMS and include a 2026 seasonal summary.

3.b. Activity

Trends & Beach Risk Analysis with management recommendations

Method and Data Collected

Time series/percentile analysis; correlations with rainfall and antecedent dry days; regression/threshold analysis for E. coli triggers; comparison to WisCALM (Wisconsin Consolidated Assessment and Listing Plan) and historical context. Integrate sources/loads with beach risk; identify near term measures and monitoring to verify benefits.

Deliverable and Outcomes

Deliverables: Technical memo with graphics for public use; identify from a list of likely sources/triggers and targeted fixes (e.g., pet waste stations, outfall retrofits, buffers).
Outcomes: Identify risk thresholds (e.g., rainfall, wind speed or wave height, waterfowl presence) and recommended advisory protocol and signage.
Action list with lead entity, schedule, monitoring metric and estimated costs.
Identify a beach management framework and tracking dashboard for the 2027 season.

4. Goals and Objectives

Shoreline Conditions & Aquatic Habitat -- Goal: complete a graded, shoreline condition inventory for 100% of the perimeter using WDNR protocol (Shoreline Habitat Monitoring Field Protocol (EGAD #3400-2020-19)); identify ≥5 restoration reaches and ≥3 feasible aquatic habitat enhancements (e.g., CWH/Fish Sticks), with concept designs and costs for grant ready implementation.

4.a. Activity

Complete a Shoreline Condition Survey; a total boat load, by count(including horsepower on motors), per parcel and an Aquatic Habitat Inventory Assessment. Plan remediations projects based upon findings.

Method and Data Collected

Boat-based shore survey per WDNR protocol (Shoreline Habitat Monitoring Field Protocol (EGAD #3400-2020-19)) with GPS/photo points noting erosion, protection type, buffer width, imperviousness, structures, springs/tributaries/outfalls.
Count the number of boats, slips, lifts and moored boats in Silver Lake during peak summertime use (e.g. Fourth of July). Research ability to capture horsepower size of outboard/inboard motor
Map current coarse woody habitat (CWH), substrate types, and potential spawning areas in protected reaches; consult WDNR fisheries staff. Gain input where to place CWH's would making the most sense.

Deliverable and Outcomes

Deliverables: Shoreline condition map and database; ranked list of priority restoration reaches with concept treatments. Habitat inventory map; feasibility notes and layouts for > 5 restoration reaches, ≥3 CWH placements/enhancements.
Outcomes: 1) Prepare the graded map/database; and deliver concept sheets with costs.
2) Prepare concept designs and setting, with permitting/ownership notes and candidate funding programs via SLMD's led Healthy Lakes & Rivers grant program. Focus on at least 3 -5 projects
3) Work with public lands (WDNR/ Kenosha Co.) and other unique, privately owned parcels (railroad embankment, co-op areas) for restoration and course woody habitat reaches. Complete at least 3 separate projects.
4) Understand the volume and horsepower size of various watercraft on the lake.

5. Goals and Objectives

Prepare, communicate and publish a WQMP Implementation Plan -- Goal: Engage residents and partners by publishing an accessible plan that meets NR 193 standards. Identify a plan and provide open data/maps to the public.

5.a. Activity
Initiate Engagement & Meetings

Method and Data Collected

Host 3 public meetings (kickoff May 2026, mid project Sept. 2026, draft plan Q1, 2027) which coincide with SLMD Annual/Board Meetings; convene advisory check-ins quarterly; maintain comment log.

Deliverable and Outcomes

Deliverables: Prepare agendas, slide decks, attendance summaries; Maintain comment/response log.
Outcomes: Reach ≥200 stakeholders via email/web and ≥75 total in-person meeting attendees across events.

5.b. Activity
Prepare a WQMP Implementation Plan

Method and Data Collected

Compile a comprehensive implementation plan with executive summary, baseline conditions, sources/ loads, monitoring results, prioritized projects with costs/timelines, and an implementation matrix; 30 day public comment period hosted on Commission website; incorporate WDNR/District comments.

Deliverable and Outcomes

Deliverables: Digital plan (free download) plus ≤20 printed copies; SWIMS confirmation; GIS package (FGDB/GeoPackage); public presentation.
Outcomes: Draft to WDNR/SLMD by Dec 2026; launch the agency and public review process Q1 2027 with late spring adoption.

5.c. Activity
Publish WQMP Implementation Plan by way of Web & Print Communications

Method and Data Collected

Create project webpage on SLMD site; quarterly one page updates; include published comments and response log; FAQs; and optional interactive web map/dashboard (ArcGIS Online) showing monitoring and candidate projects.

Deliverable and Outcomes

Deliverables: Live webpage; 4 one pagers; dashboard link; graphics.
Outcomes: Post the first update and maintain quarterly cadence.

F. 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 how the project is connected to and/or complements other management and/or planning efforts (e.g., County Land & Water Plans, 9 Key Element plans, TMDL implementation plans, protection plans, etc.).

Why this project, why now? Silver Lake/watershed experiences storm driven pollutant pulses, episodic beach advisories, shoreline stress, and emerging chloride concerns. Existing information (historic monitoring, 2017 use report, and local observations) is not yet integrated into a grant ready implementation roadmap. The proposed planning effort is appropriate because it: (1) focuses on pollutant pathways most likely to affect recreation and habitat

(stormwater outfalls, near shore bacteria dynamics, shoreline condition), (2) uses WDNR accepted tools and protocols to produce defensible loads, targets, and projects, and (3) directly aligns with NR 193 planning outcomes (adopted plan, open data, prioritized projects).
The scope is scaled to one field season and a finite set of decisions: map/screen 100% of outfalls, verify riparian wastewater service, produce baseline loads and top contributor subbasins, complete a shoreline/habitat inventory, and deliver concept level designs/costs for a first tranche of projects (≥5 water quality BMPs; ≥3 habitat projects). Modeling emphasizes actionable screening (WiLMS/SLAMM/simple export) sufficient for prioritization.
The project integrates beach risk analytics (linking rainfall/antecedent conditions to advisories) with classic sources and loads and shoreline/habitat assessments-yielding a single implementation pipeline that serves public health, recreation, and habitat goals. Results will be published with open data/GIS and a concise one page summary.
The plan is designed to:
* Complement the County Land & Water Resource Management Plan (runoff/shoreland priorities and citizen engagement).
* Support municipal MS4 goals for Village of Salem Lakes and Kenosha County (illicit discharge screening, chloride awareness, and retrofit concepts).
* Align with SEWRPC regional water quality management planning and lake/stream inventories.
* Be compatible with future or existing 9 Key Element or TMDL implementation frameworks

G. Connection to Implementation

Detail commitment and capacity to implement. Include description of how critical implementation partners will support efforts. Discuss projected costs, timelines, and technical needs prior to implementation.

SLMD is committed to advocating implementation of recommended practices with lake property owners, lake users Kenosha Co. and Village of Salem Lakes. (MS-4 & Parks & Recreation)
Near term implementation pathway (post adoption).
* 0-3 months post adoption: Propose 2-3 highest ranked BMP/habitat concepts; initiate site access discussions; prepare possible implementation grant preps (e.g., NR 193 design/implementation, Healthy Lakes & Rivers, county cost share).
* 3-12 months: Complete survey/soil infiltration testing as needed; advance design & permitting (NRCS/ATCP 50 standards where applicable); finalize maintenance agreements; secure match commitments.
* 12-24 months: Construct at least three retrofit/habitat project; launch monitoring to verify performance.

Projected costs & prerequisites. Concept sheets will provide planning level cost ranges and expected load/pathogen reductions for each site. Pre-implementation needs include: site control/permissions, topographic survey, utility locates, soil borings/infiltration tests (where infiltration is proposed), and regulatory review (WDNR waterway/ erosion control, county shoreland zoning, MS4 permits). Typical design/permitting takes 6-12 months, with construction feasible in a single dry season once permits and easements are in hand.
Technical needs to include: hydrologic sizing for small catchment retrofits, IDDE follow up at suspect outfalls and habitat siting consistent with fisheries guidance. Where modeling indicates concentrated benefits, the District will pursue bundled actions (coordinate street sweeping/infiltration retrofits with shoreline buffer restorations) to maximize cost effectiveness.

H. 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 SLMD has secured a $2,000 donation from the SLPA. Then SLMD and contractor SEWRPC will seek the support and participation of relevant state and local authorities in the preparation and implementation of the WQMP, including the following: :
* Village of Salem Lakes (MS4): access to outfalls and support for screening/retrofit evaluation; coordination on possible ordinance and operations and maintenance commitments.
* Kenosha County (Parks/MS4): beach operations data and participation in beach risk protocol; possible coordination on shoreline restoration opportunities at public frontage.
* SEWRPC: technical execution and publication/hosting of draft/final materials.
* WDNR (Lakes/Fisheries/Stormwater): technical input, QAPP review, and guidance on habitat placements and permits.
* SLMD will also work with lakefront property owners, lake users, citizen groups in the preparation, review and implementation of the WQMP
Benefits of collaboration. These partners provide key data (sanitary records, MS4 maps, beach logs), technical review,

implementation authority (permits/ordinances), and maintenance capacity-directly increasing the likelihood of timely construction and sustained performance.

I. Other

The preparation of the WQMP represents a second multi-year study undertaken by the Silver Lake Management District in its mission to maintain the significant environmental and recreational resources of Silver Lake. The WQMP will provide a focused, data-driven analysis of Silver Lake's major surface water quality issues and will identify suggested solutions and implementation strategies to address the problems to both prevent further degradation and improve the water quality in Silver Lake.

In 2022, at its first Annual Meeting, the SLMD electors authorized the preparation of and updated Aquatic Plant Management Plan (APMP), the cost of which was supported by a WDNR surface water grant and a donation from the Silver Lake Protection Association. The APMP was approved by the WDNR and the SLMD in early 2024 and serves as the basis for the district's management of invasive species, particularly hybrid water milfoil for the near-term future.

The SLMD was formed in 2021 as a successor to the Silver Lake Protection Association to provide consistent funding and continuity of leadership to address and treat the lake's invasive species, particularly hybrid water milfoil. Since its formation, SLMD has taken on additional efforts including sponsoring water safety patrols, lake level measurements and outlet dam studies, and water quality baseline studies designed to enhance the lake's resources and safe recreational pursuits.