

Apple River Flowage Aquatic Plant Management Plan

Apple River Protection and Rehabilitation District

SUMMARY August 2023

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The Aquatic Plant Management Plan for the Apple River Flowage reviews and updates a strategy for managing aquatic plants by improving navigation while protecting native plant populations, managing Curly-leaf pondweed, and preventing establishment of invasive species. It will guide aquatic plant management from 2024 through 2028. The 2017 Aquatic Plant Management Plan included data about the plant community, watershed, and water quality of the flowage. It also reviewed a history of aquatic plant management on the flowage.

The plan and background documents are available at <https://arprd.org/management-plan/>

The aquatic plant management plan, developed with input from an advisory committee including flowage property owners, will help the Apple River Protection and Rehabilitation District meet aquatic plant management goals. The implementation plan describes the actions that will be taken toward achieving these goals.



Lake Management Goals, Objectives, and Actions

The Apple River Protection and Rehabilitation District (ARPRD) board will track implementation of plan actions and evaluate progress toward reaching plan goals and objectives. The ARPRD will seek financial and technical support from partner organizations.

Goal 1. Improve water quality on the Apple River Flowage and downstream on the Apple River.

The nutrient phosphorus leads to algae growth in the Flowage. While there are many other sources of nutrients from the watershed, the focus of the aquatic plant management plan is harvesting to remove curly leaf pondweed early in the season. Removing this plant removes some of the phosphorus which allows algae to grow.

Actions to improve water quality

- Harvest Curly leaf pondweed and track amounts removed.



Curly Leaf Pondweed

Goal 2. Prevent the introduction and spread of aquatic invasive species.

The aquatic invasive species (AIS) Purple loosestrife, Common forget-me-not, Reed canary grass, Bittersweet nightshade, Narrow-leaved cattail, and Curly-leaf pondweed were observed on the Apple River Flowage during the 2022 plant survey. Additional AIS threaten the Flowage. For example, Zebra Mussels are found in nearby lakes including Balsam Lake, Lake Wapogasset and Deer Lake. Eurasian Water Milfoil is found in the Amery Lakes.

Actions to prevent AIS introduction and spread

- Staff at the landing will deliver AIS prevention messages and gather data through the Clean Boats, Clean Waters Program.



Zebra Mussels



**PREVENT THE SPREAD OF
INVASIVE SPECIES
IT'S THE LAW**

PENALTIES MAY EXCEED \$2000

Before launching and before leaving *YOU MUST:*

- ✓ **INSPECT** boats, trailers, and equipment.
- ✓ **REMOVE** all attached aquatic plants and animals.
- ✓ **DRAIN** all water from boats, vehicles, and equipment.
- ✓ **NEVER MOVE** plants or live fish away from a waterbody.*

STOP AQUATIC HITCHHIKERS!
Prevent the spread of invasive species, it's the law

*Limited exceptions apply. Visit WWW.DNR.WI.GOV and search for "BAIT LAWS."

Actions to prevent AIS introduction and spread

- Volunteers and professionals will monitor likely areas of AIS introduction. An AIS Rapid Response Plan is established should new AIS be discovered.
- The ARPRD will investigate installation of signage with AIS prevention messages and a camera to monitor compliance at the Lincoln and Birch Street Landings.
- Owners are encouraged to remove purple loosestrife, common forget-me-not and nightshade on their properties.



Purple loosestrife



Common forget-me-not



Bittersweet Nightshade

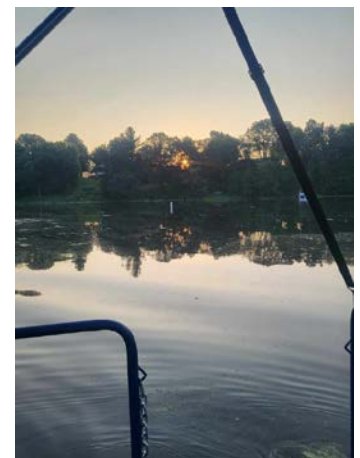
Goal 3. Maintain navigation for fishing, boating, and access to lake residences.

Aquatic plants cover nearly the entire bottom of the Apple River Flowage, and navigation can be impaired when they grow to the surface. The ARPRD harvesting efforts maintain designated common navigation channels and secondary channels that provide access to multiple residences. A harvester with a 10-foot cutter blade operates south of the Highway 46 Bridge, and another with a 7-foot cutter blade operates north of the bridge. Harvesting procedures are well-established by the 2012 and 2017 plans. This plan stresses the importance of maintaining a capital fund for equipment maintenance and replacement and recognizes that volunteer labor which supports harvesting may not always be available.



Actions to maintain navigation

- Continue the harvesting program in designated areas on the flowage.
- Allow for maintenance of access corridors around docks by individual owners with guidance from the ARPRD.
- Maintain and replace harvesting equipment as needed.
- Monitor and record harvesting results.



Goal 4. Maintain native aquatic plant functions.

Whole lake plant surveys to evaluate the native plant community are planned every 5 years.

Program Guidance to protect native plants

- Harvest at depths of at least 3 feet to minimize bottom disturbance.
- When wild rice is nearby, harvest depths are at least 5 feet.



Photo by Ed Ronkowski

Goal 5. Minimize environmental impacts of aquatic plant management.

Harvesting is chosen over chemical measures for aquatic plant control to minimize environmental impacts.

Lake residents and visitors play an important role in achieving plan goals. The plan identifies ways of reaching the flowage community include:

Actions for education and involvement

- Website (include pictures)
- Newsletter, newspaper articles
- Signs at landings
- Clean Boats, Clean Waters inspectors
- Lake District meetings: annual meeting, special meetings
- Maps and flyers at landings

