LAKESHED
PLAN FOR

Steamboat Lake

LAKE PLAN
Steamboat Lake is an important fishery and recreation resource

LAKE ASSOC. APPROACHES
Leveraging partnerships and relationships to implement the plan

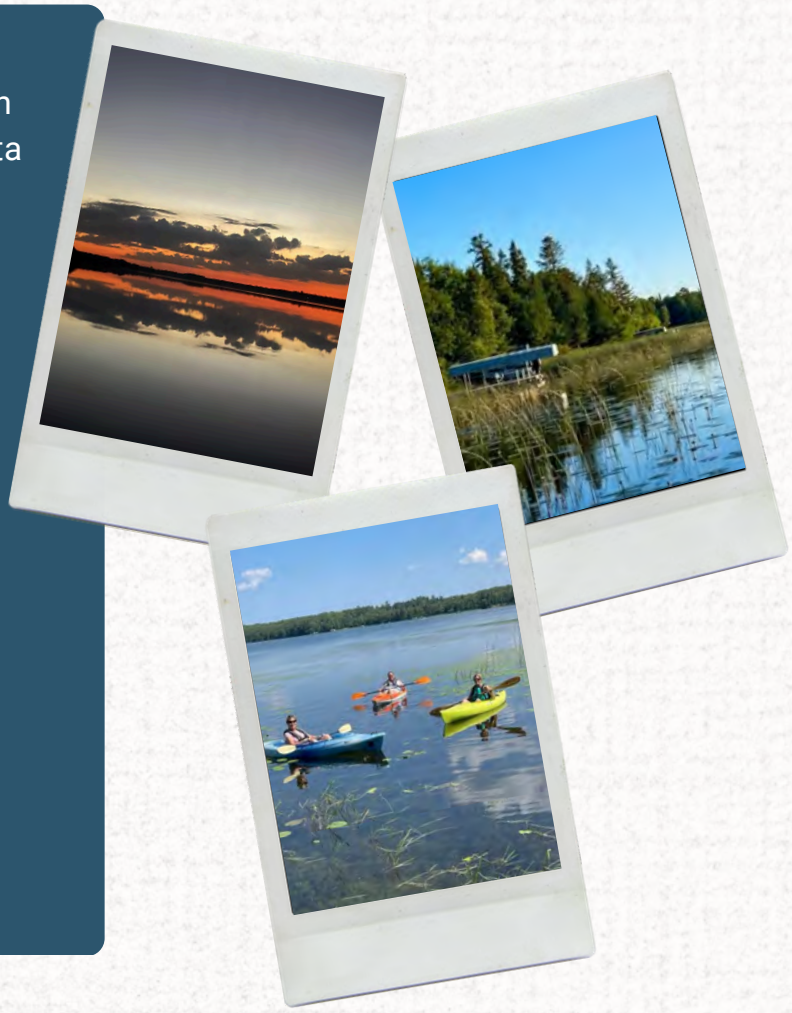
LANDOWNER POSSIBILITIES
Individual actions to protect what you love about your lake

www.hubbardswcd.org

Steamboat Lake Highlights

Steamboat Lake is located in both Cass and Hubbard Counties. It covers 1,755 acres, which places it in the upper 10% of lakes in Minnesota in terms of size.

The DNR has classified Minnesota's lakes into different classes based on physical, chemical, and other characteristics. Steamboat Lake is in Lake Class 22. Lakes in this class are generally clear, large, deep lakes with a low percentage of shallow water area and have very irregularly shaped shorelines with many bays or points. Other area lakes in this class include Little Boy, Ten Mile, and Wabedo.



There's a lot to protect!

1,755 acres

532 acres of littoral zone, or the shallow nearshore portion of the lake.

FISH

Mixed habitat lakes support warm and cold water species such as bluegill, bass, crappie and walleye.

TROPHIC INDEX

Mixed habitat lakes are often Mesotrophic. These lakes are characterized by clear water most of the summer and occasional algae blooms later in summer.

INLETS

Steamboat Lake has two inlets. The Steamboat River flows east through Steamboat Lake and eventually drains into Steamboat Bay of Leech Lake.

FISHERIES

Primarily managed for Walleye, Northern Pike and Largemouth Bass. Secondarily managed for Bluegill, Black Crappie and Yellow Perch.

Mesotrophic lakes have high biodiversity. They house cold and warm water species, a variety of macroinvertebrates and aquatic plants.

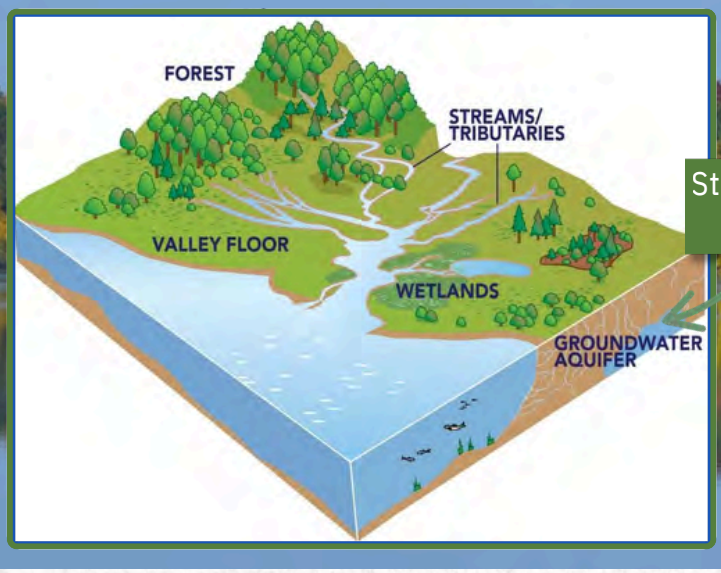
Conservation of Mixed Habitat Lakes

On mixed habitat lakes, the water is clear enough to see bottom in some places. But not so crystal-clear that it lacks life, nurturing a “just-right” amount of underwater plants. These balanced plant communities are essential; they provide homes and food for fish without getting so thick that they impact our ability to swim, wakeboard, kayak, and paddleboard. Because of this perfect middle ground, the lake can support warm-water fish like Bass and Panfish while also supporting a natural Walleye population. Mixed habitat lakes are the most common lake type in Minnesota, thanks to their moderate nutrient levels, and they support great fisheries while offering many recreational opportunities.

Everyone in Minnesota has a shared interest in keeping our mixed habitat lakes clean well into the future, with a main focus on protecting the natural edges of the lakes. These areas, called vegetative buffers, act like giant natural sponges and filters, catching dirt and extra nutrients before they wash into the water. We must also pay close attention to anything that adds extra nutrients from nearby lawns, gardens, or farms, since too much “food” can throw off the lake’s balance and cause excessive growth.

What is a Lakeshed?

A lakeshed is the land area that drains into a specific lake, either directly as runoff or through streams, and rivers. There are three lakeshed types depending on the size and complexity as shown below.



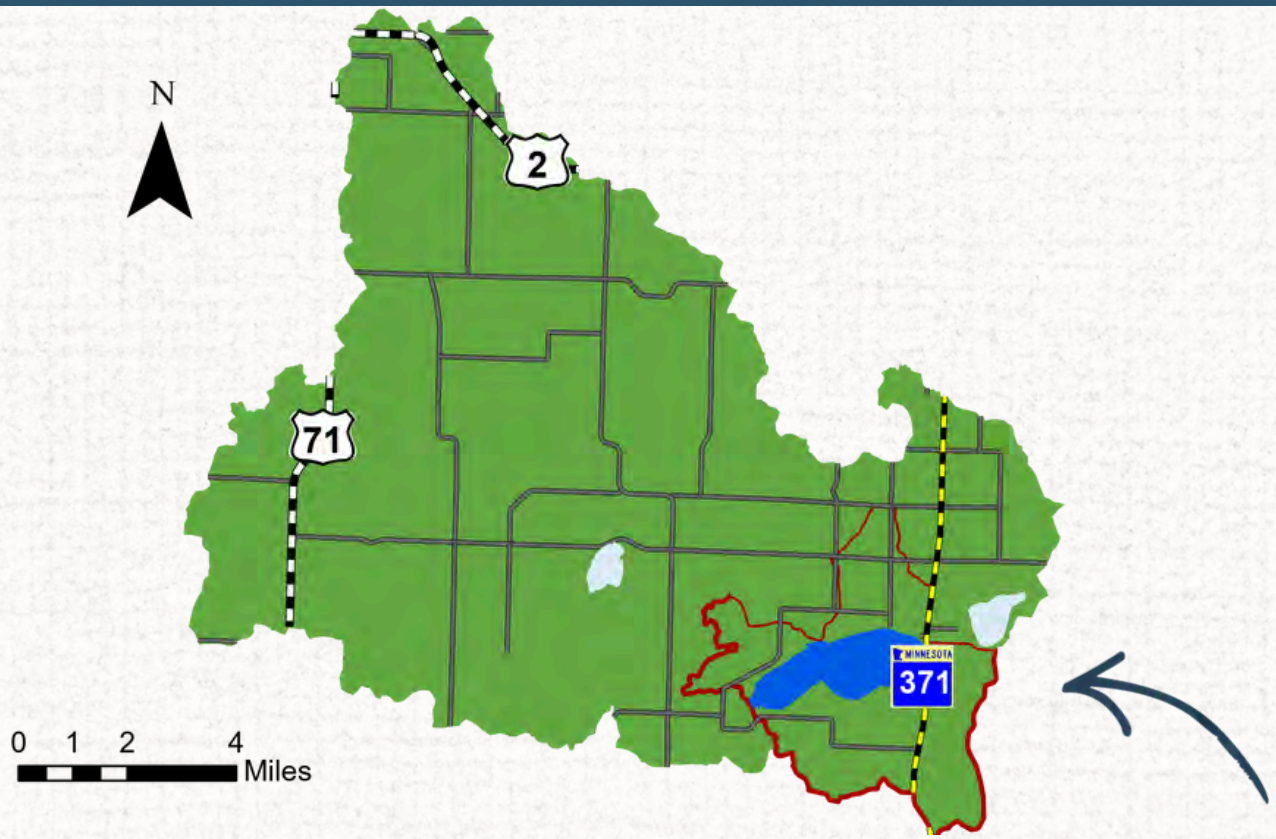
1 Lakeshed Type 1—Simple
There are no upstream lakes and dozens to hundreds of landowners.

2 Lakeshed Type 2 - Medium
There are 1-5 upstream lakes and has hundreds of landowners.

3 Lakeshed Type 3—Complex
There are 6 or more upstream lakes with thousands of landowners.

Where is Steamboat Lake in the Lakeshed?

All the land area shown in the map below drains to Steamboat Lake, mostly through the Necktie River, Bungoshine Creek, and Pokety Creek. Steamboat Lake's Lakeshed is Type 2. There is one upstream lake (Hart Lake) and hundreds of landowners. The tax value of the land and property around the lake is $576 million.



The Lakeshed Plan

What happens on the land in a lakeshed directly affects the **water quality** and **health of the lake.** This is Steamboat Lake's implementation plan. Steamboat Lake was categorized as a "Protect" lake during the watershed planning process.

Managment Focus

RESTORE

This resource is on the impaired waters list for excess nutrients, E. coli, or sediment.

ENHANCE

This resource is at risk. It has a declining water quality trend, and/or significant risk of land conversion.

PROTECT

The lake has good water quality. Protect current water quality by protecting lands in the lakeshed and implementing protective shoreline practices.

VIGILANCE

This lake is sufficiently protected (>75% of the lakeshed). Work on opportunity land and shoreline projects.

Why Does it Matter?

Property Values

What is your home worth?

Studies of Minnesota lakes show that lake property values can be directly tied to water quality. For a three-foot decrease in water clarity, prices fell $594 per shoreline foot. For a three-foot increase in clarity, prices increased $423 per shoreline foot.

Fishing & Recreation

Do you enjoy fishing and swimming?

Minnesota's native gamefish, such as walleye, need clear water to see their prey, aquatic plants to hide and spawn in, and shade to keep cool. Keeping native plants in the lake and trees along the shoreline provide shade, spawning habitat, and protection for the gamefish we love to catch. These plants and trees also help stop runoff and keep the lake clear for swimming and recreational activities.

Habitat

Do you enjoy watching loons, eagles, butterflies and other wildlife at the lake?

These critters depend on shoreline plants for nesting and cover, trees and forests for their homes, and native plants and flowers for pollinating. Keeping some of your yard natural enhances the habitat, ensuring their survival.

Lake Association Options

Lake Associations Can Choose!

Lake Associations have more power and influence than a single person. Even though they are made up of volunteers, they can have a huge impact on the lake and maintaining it's water quality into the future. Lake Associations can engage residents in water quality practices, connect them with cost-share and technical advice, and advocate for local and regional lake issues.

1

Educate Members

Lake associations play a vital role in helping members understand how our collective actions protect the lake's health and natural beauty. Connecting with members and nonmembers is critical to getting this message across to property owners.

Action Steps:

Host workshops, host tours, manage newsletters and social media posts with tips, success stories, and local conservation news.

2

Connect Members

Lake associations bring members together through events, newsletters, and committees that celebrate their shared love of the lake. Stronger connections build a community committed to protecting the lake's wellbeing.

Action Steps:

Work to increase membership, host social events, and manage media to encourage involvement.

3

Develop Partnerships

Lake associations can serve as a bridge between members and other partners working to protect water quality and habitat. By fostering these connections, they help ensure that members have access to the latest resources, expertise, and programs that support a healthy lake ecosystem.

Action Steps:

Maintain relationships with MN DNR, MN pollution control, and the local SWCD.

4

Advocate

Lake associations can advocate for their priorities by promoting policies that protect the lake. Associations can work to raise awareness among members and decision-makers about issues that impact water quality and lake health.

Action Steps:

Protect funding sources that benefit your lake, develop relationships with decision makers, advocate for lake priorities.

5

Implement Your Lake Plan

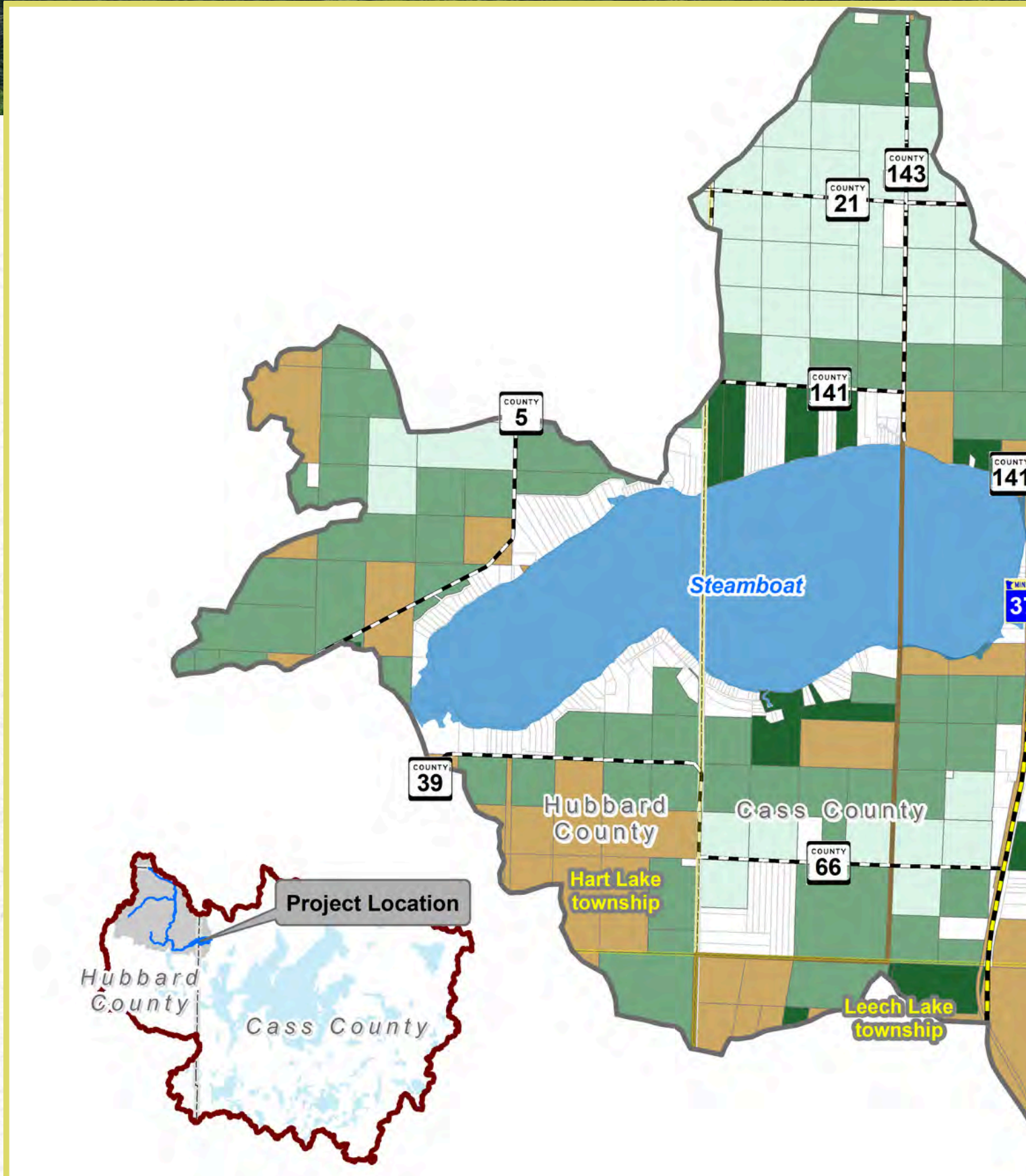
Goal	Steamboat Lake Implementation Plan	Minimum 10-yr Goal
Phosphorus Reduction	Install rain gardens & implement storm water management practices to capture rainwater and let it infiltrate instead of running into the lake.	Reduce phosphorus input by 5%. (310 lb / yr)
Shoreline Protection	Install shoreline buffers of native plants to protect the shoreline from erosion and provide habitat for fish and wildlife. 	Work to develop 75% shoreline protection by developing 25ft buffers along lake.
	Plant trees along the shoreline and upland zone.	Plant 1,500 trees
Shoreline & Land Protection	Develop a Forest Stewardship Plan (min. 20 acres) 	Work to protect 2,450 acres.
	Sign up for Sustainable Forest Incentive Act (SFIA) to receive payments to keep wooded areas undeveloped. (min. 20 acres) $	Work to protect 2,450 acres.
	Permanently protect undeveloped land and shoreline with conservation easements. $	Work to protect 2,450 acres.
Monitoring	Continue to implement county AIS plan.	Continue data collection to monitor lake and groundwater trends.
	Continue to collect and process water samples & monitor Secchi depth. Continue to sample well water.	
Groundwater	Have subsurface sewage treatment systems maintained / pumped every 3 years	Develop septic system monitoring schedule. Pump every 3 years.
	Seal unused wells in the shoreland zone. 	Seal 2 wells per year or as needed.
	Minimize chloride use on driveway & sidewalks. Install and use only high efficiency water softeners.	Education & outreach to lake associations once every 3 years.
Education	Partner with Lake Association and partners to deliver sustained, consistent messaging about protecting and restoring natural shorelines.	Offer guidance, tools, and support to those who value clean water.

$ = money available

 = Hubbard SWCD cost share available

Lake Associations:

Large Scale Water Quality Protection Targets

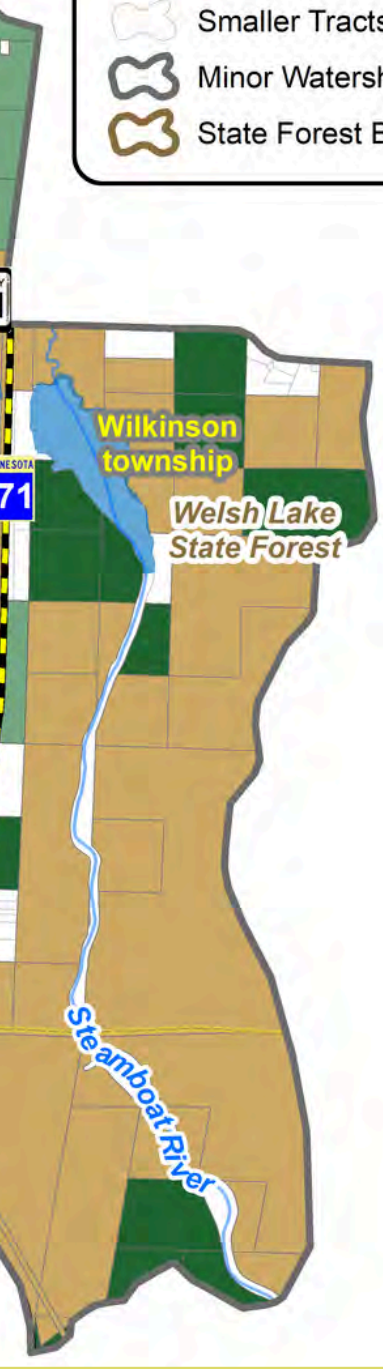


To protect the water you love, we must think beyond the lakeshore. A healthy, managed forest is the best land use we have for clean water because forests are nature's filter, preventing runoff and pollution. We encourage you to support the 75% land-protection target by promoting programs like the Sustainable Forest Incentive Act (SFIA) and RIM Conservation Easements with your members.

Total RAQ Score (by Parcel)

RAQ = Riparian, Adjacency, Quality

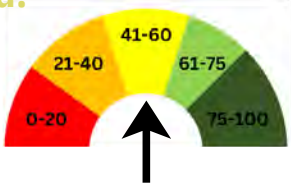
- High Priority
- Medium Priority
- Low Priority
- Public/Tribal Lands
- Smaller Tracts/Other Parcels
- Minor Watershed Boundary
- State Forest Boundaries



The current status of Steamboat Lake is

51.8%

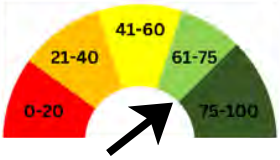
of the land area is protected.



Our Goal is

75%

of land area protected.



Ready to make a difference?

Short-term Acre Goal:

25 acres

needed for each 1% progress towards the 75% goal.

Option

1 — 2 — 3

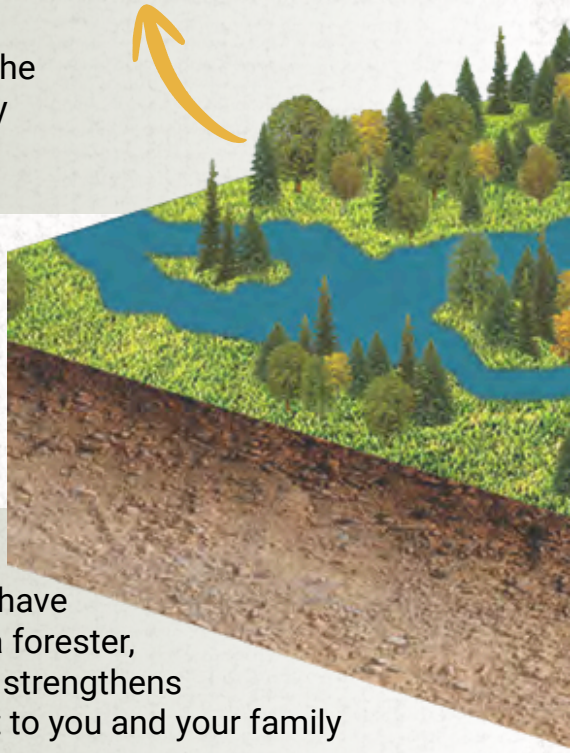
Landowner P

Care for Large, Forested Lands

Forests have economic value

Woods have obvious value as timber, but they can also garner income through maple syrup, balsam boughs and the season decor industry, or other non-wood products

Private forested lands are part of a larger landscape called a watershed. The choices woodland owners make has an impact on the health of the region. Woodland owners have the ability to help restore natural balance to their community by properly managing their woods.



A Roadmap for your Woods

A forest stewardship plan turns your goals for the land into clear, on-the-ground guidance—helping you understand your woods and apply management practices that support long-term economic, ecological, and recreational benefits.

You can make a lasting difference on your land by taking the next step. Contact Hubbard Soil and Water Conservation District to have a forest stewardship plan written for your property. With help from a forester, you will receive clear, practical guidance that protects water quality, strengthens your woods, and reflects what matters most to you and your family for years to come.

Choose to protect your woods and your water - let's secure the future of Steamboat Lake, together.

VISIT

A professional can visit your property to discuss your goals and the programs available to help you manage your shoreline or woods.

PLAN

A customized management plan gives you a roadmap to care for your woods or shoreline and reach the long-term goals you have for your land.

PLANT

Plant trees or a shoreline buffer to help protect water quality while providing habitat for pollinators, birds, and other critters.

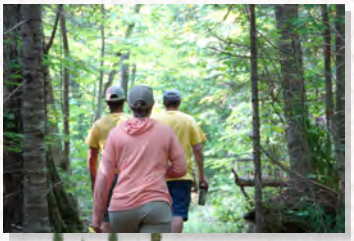
PLAN

IMPROVE &

ossibilities

The time to act is NOW!

Take care of your woods. Contact Hubbard SWCD at www.hubbardswcd.org to get started on a forest management plan. Cost-share assistance may be available.



Forests have recreation value

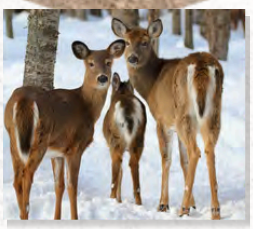
Bird-watching, hunting, and hiking are few examples of the way we use woods. Woods allow us to decompress, relax, and reflect on all that is important.

Forests are the filter

Forests keep lakes clean. Less runoff means fewer algae blooms, more oxygen, and stronger fisheries for all Minnesotans.

Forests support our fishery

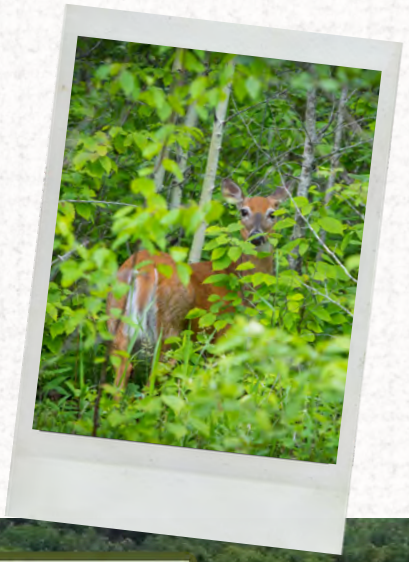
Our lakes are full of fish, thanks in part to our forests full of trees. Healthy forests keep our waters clean and provide the habitat fish need, making a strong Minnesota fishery as expected as the state fair in August.



Forests have natural value

Managing woods properly provides humankind with natural benefits. A well managed forest creates habitat for animals while ensuring clean water in our streams and lakes.

Which option is right for you?



MANAGE

Manage the woods or shoreline on your property according to the plan that was written.

PAYMENT

Landowners sign a covenant with the state for 8, 20, or 50 years to keep the forested land forested. In turn, you will get an annual payment.

EASEMENT

A conservation easement is a legally binding agreement to protect & ensure the land remains in its natural state.

SELL

The land can be sold to a public entity through a fee title acquisition.

MANAGE → PROTECT

Option 1–2–3

Caring for Trees Around Your Home

While an individual cabin owner's shoreland parcel may seem insignificant in the context of an entire lake, the collective management of these small tracts is essential for creating large, contiguous habitat complexes that benefit the entire watershed.

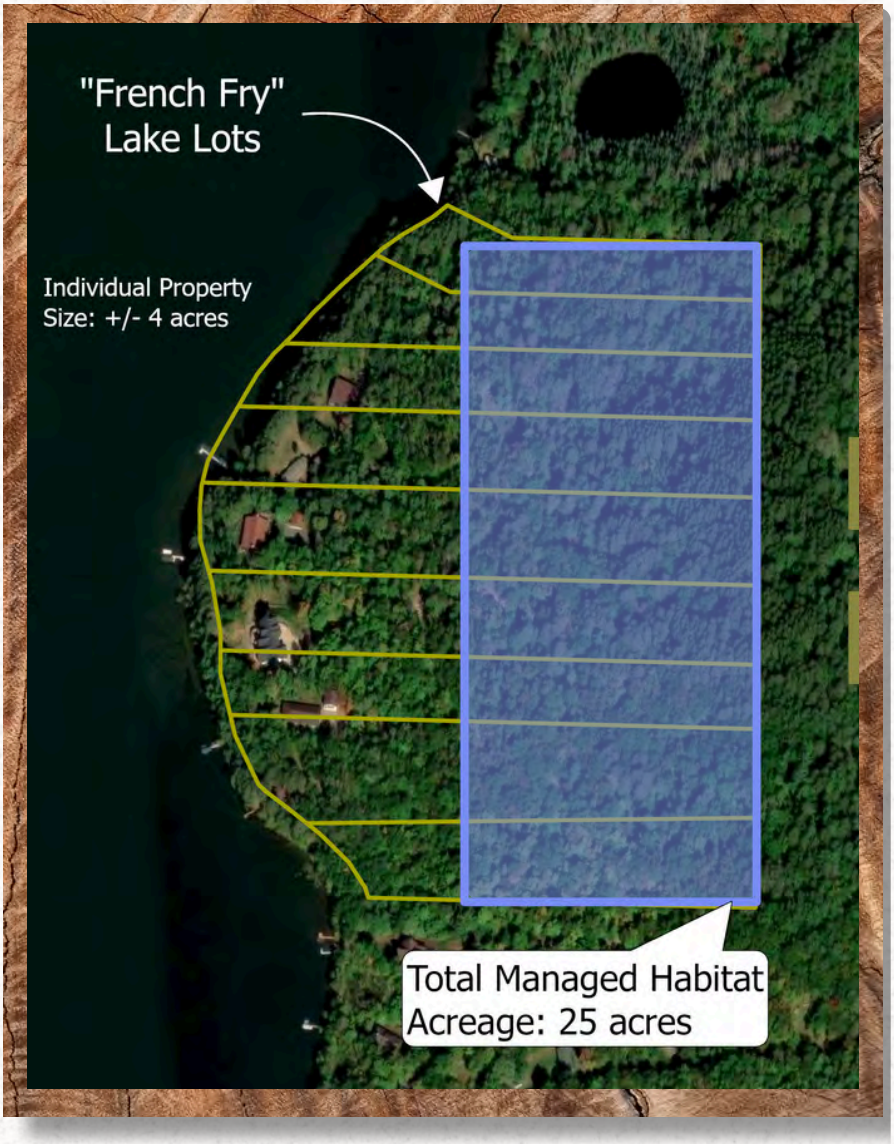
You may not notice when you drive north every weekend, but bit-by-bit, the cumulative effects of land conversion is leading to drastic habitat decline. Reversing this trend requires a coordinated, parcel-by-parcel effort. When managed properly, these “French fry lots” can be combined, 3 acres at a time, to create a robust landscape habitat that benefits both aquatic and terrestrial species.

Landowners can make meaningful, impactful changes to their small, 1 to 3 acres of woods through straightforward forest management practices that benefit water quality and wildlife habitat.

Simple actions on your land can protect water, improve habitat, and strengthen your forest, including:

- **controlling invasive species** that can outcompete native plants.
- enhancing forest diversity by **strategically thinning less desirable trees** to promote the growth of high-quality, native species.
- **planting native fruit bearing hardwood and softwood trees/shrubs** in suitable areas.
- **creating snags and woody debris piles** can provide habitat for smalll mammals.
- **maintaining gaps** that allow for regeneration and habitat diversity.

If you'd like technical assistance to take a look at your woods, contact Hubbard SWCD to schedule a site visit.



"French fry lots" when combined, 3 acres at a time, can create robust landscape habitats.

Property owner Checklist!
Grab a pen (yes, from that junk drawer!) and take a moment to check off how your lot and habits measure up. Small steps make a big impact—let's see where you stand!

Option 1 — 2 — 3 Caring for your Lake

- [ ] Aim to maintain at least 75% forest cover in the Heart of Minnesota's Lake Country — it's key to protecting clean water and wildlife.
- [ ] Plant trees along your shoreline
- [ ] Maintain an unmowed shoreline protection zone outside of where your family accesses the dock
- [ ] Maintain Septic System by pumping every 3 yrs
- [ ] Discontinue fertilizer use near lakes
- [ ] Minimize outdoor salt & water softener salt use
- [ ] Use a lined fire pit and dispose of ash away from the lake
- [ ] Properly dispose of pet waste
- [ ] Maintain and increase native plants to keep shoreline stable
- [ ] Install a rain garden to prevent dirty stormwater from getting into the lake

A NATURAL SHORELINE BUFFER, LIKE THIS LAKESIDE FLOWER GARDEN, HELPS STOP EXCESS NUTRIENTS BEFORE THEY REACH THE WATER.

MORE AND MORE LAKE RESIDENTS ARE REIMAGINING THEIR CABIN VIEWS TO BETTER PROTECT THE LAKES THEY CHERISH.

BE A LAKE STEWARD: NATURAL SHORELINES PROTECT MINNESOTA'S LAKES.

INSTALLING A SHORELINE BUFFER CAN HELP TRAP NUTRIENTS & REDUCE EROSION ON THE LAND.

How can you make a difference?

HABITS

- Minimize fertilizer use
- Pick up & dispose of pet waste properly
- Clean up & spread out campfire ash
- Use less salt & de-icers
- Stop mowing near the shore
- Let unused areas grow naturally
- Embrace your ice ridge (don't flatten it)
- Stagger your water use
- Leave aquatic plants in place
- Spread out water use

Lower Costs, Less Effort

Why Does it Matter?

Because your family matters!

What happens in your "Runoff Zone" (the area of your property sloping toward the water) directly determines the future of our legendary Minnesota lakes. When rain flows over manicured lawns and impervious surfaces, it carries phosphorus into the water, where a single pound can generate up to 500 pounds of thick, green algae. By simply maintaining a shoreline buffer of deep-rooted native plants and trees, your land acts as a sponge, filtering pollutants and "slowing the flow" before it reaches the lake. This small change does more than just ensure crystal-clear water for swimming and sunset boat rides; it safeguards the cold-water habitat essential for Cisco (Tullibee), the primary food source for the trophy Walleye that anglers prize. Your voluntary conservation efforts are the key to preserving our fishing and recreation traditions for the next generation.

ENHANCEMENT

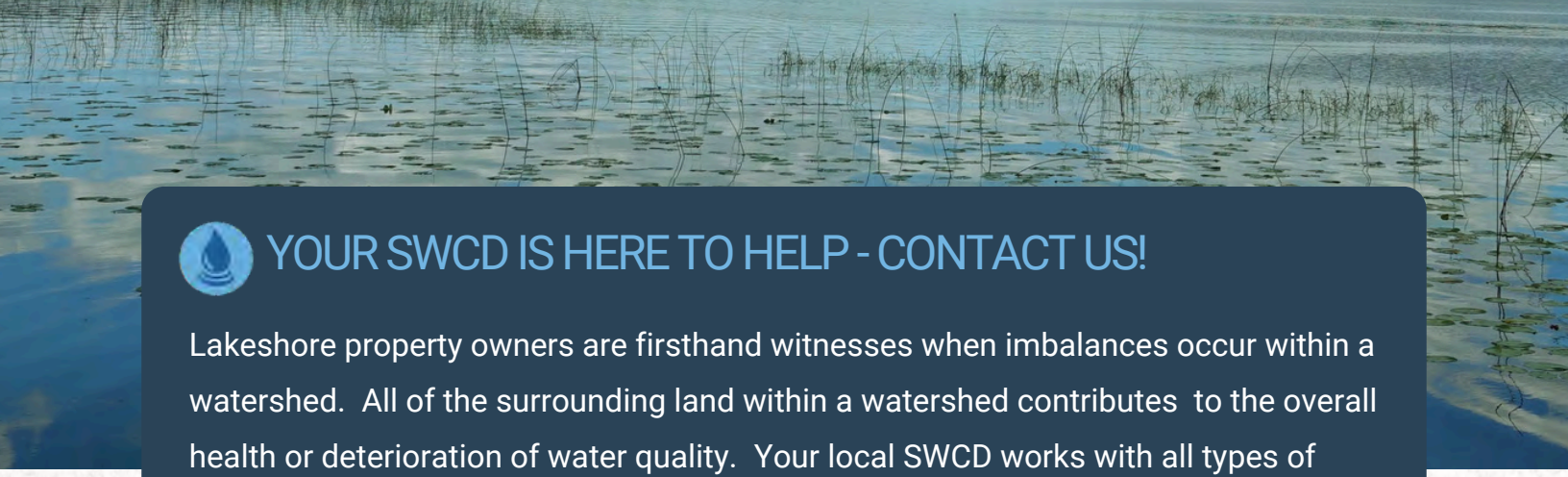
- Remove invasive plants
- Add native plants to no-mow areas
- Redirect runoff away from the lake
- Plant native trees & shrubs
- Pump your septic every 3 years
- Leave woody habitat in the water

UPGRADES

- Use efficient 2-tank water softener
- Use a raised fire pit
- Use a rain barrel system to trap runoff to the lake
- Inspect septic system

FIX

- Restore a degraded shoreline using bioengineering techniques
- Install raingardens / diversions to capture or direct runoff



YOUR SWCD IS HERE TO HELP - CONTACT US!

Lakeshore property owners are firsthand witnesses when imbalances occur within a watershed. All of the surrounding land within a watershed contributes to the overall health or deterioration of water quality. Your local SWCD works with all types of landowners and lake associations to protect the natural resources and water quality in and around your lake.

Steps I can take:

STEAMBOAT LAKE ASSOCIATION

HUBBARD COUNTY Soil & Water Conservation District

Phone: 218-732-0121 ext.4

Website: www.hubbardswcd.org

Email: jake@hubbardswcd.org