

MN Lakes & Rivers Aquatic Plants Survey



Survey response dates: January 5 – 17, 2022
Report date: February 7, 2022

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Intent of Survey

Develop data on the size and scope of the Aquatic Plant Management activity in Minnesota today and over time.

Gain an understanding of how Minnesota Lake Associations view their relationship to the MN DNR

Better understand how lake associations and homeowners interact with the DNR in the process of controlling nuisance aquatic growth in Minnesota Lakes and their perceptions of the effectiveness of the support they get.

Executive Summary

Nearly 100 lake associations provided invaluable feedback on the state of their nuisance aquatic plants and how those plants are managed

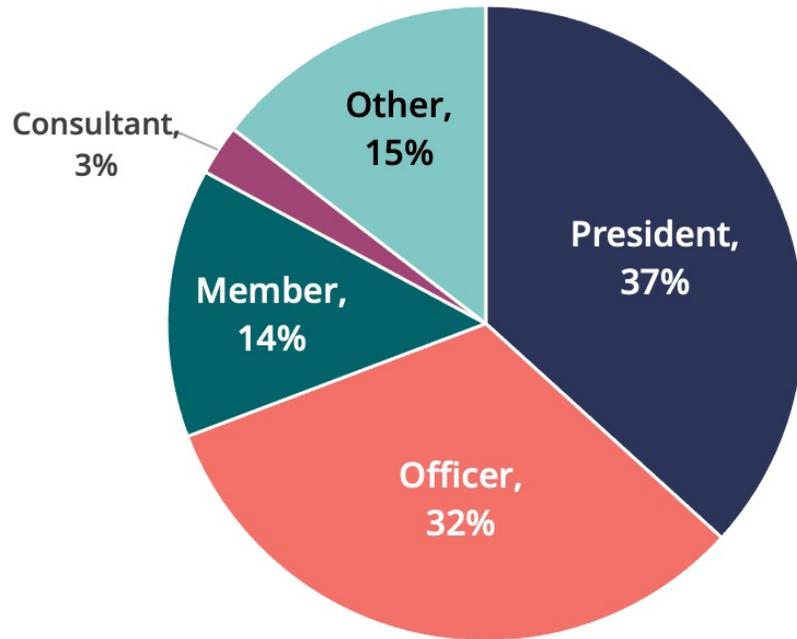
- **74%** of respondents reported current problems with aquatic plants on Minnesota Lakes.
- **77%** of those lakes report they are organizing to combat the problems within their lake communities.
- While **80+%** of lake associations feel that the city, county or state should be responsible for maintaining a healthy plant community in Minnesota lakes, **almost 90%** report that homeowners and lake associations have had to be responsible for it.
- Only **31%** of respondents feel the DNR is proactively working to solve nuisance plant issues.
- While **92%** have sought to gain permits for their own treatments, **less than 15%** of the total feel the DNR has organized itself efficiently to address their concerns.
- While not always supportive of local efforts, **50+%** view the DNR as partners of lake associations and available and prompt at ruling on requests. That number is significantly buoyed by lake associations receiving financial support from the DNR.

Strong (19%) response from Lake Associations

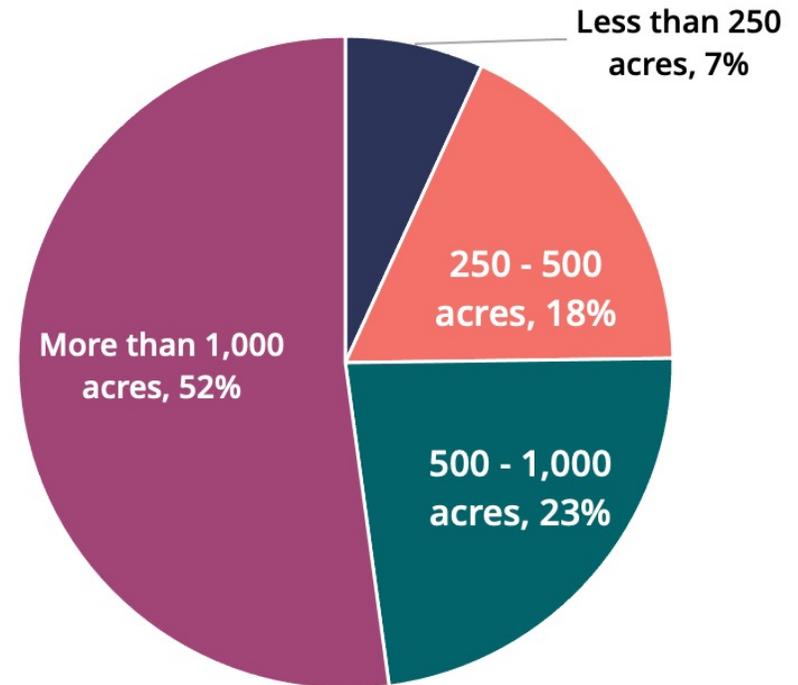
~ 500 lake associations surveyed

117 respondents from 94 unique lake associations in 27 MN counties

Please select your position or role within the Lake Association



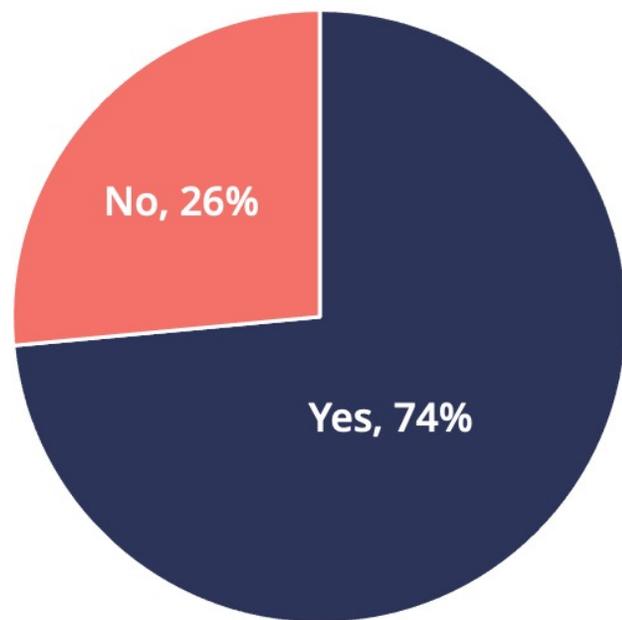
What is the size of the lake(s) served by your association?



Incidence and nature of aquatic plant problems

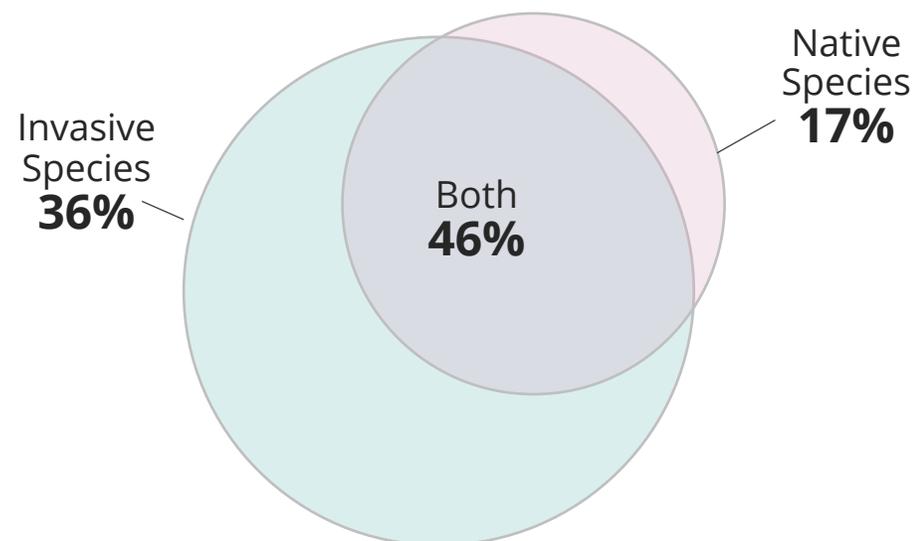
74% of respondents are experiencing problems with aquatic plants on their lake, most from both invasive and native species.

Are you currently experiencing problems with aquatic plants on your lake(s)?



Responses following this page are limited to respondents who answered "yes" to this question

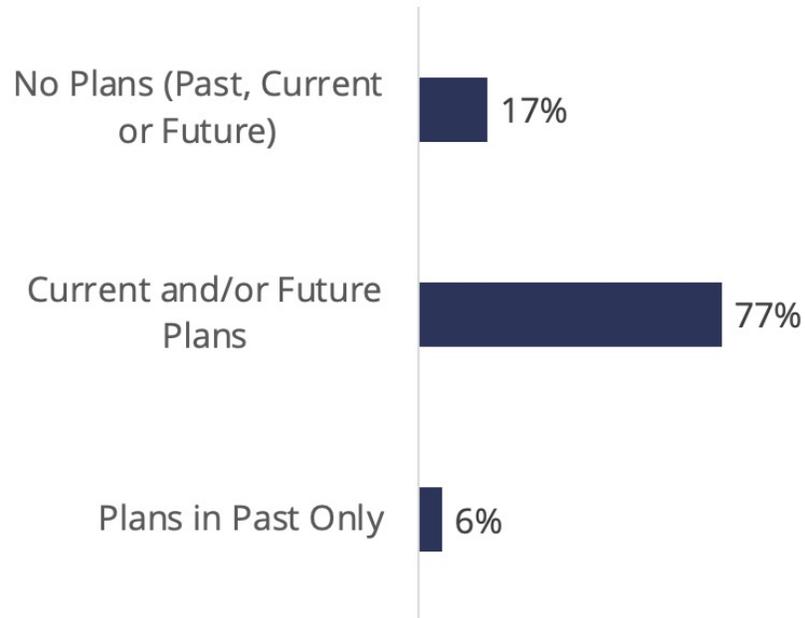
What is the nature of the problem aquatic plants in your lake(s)?



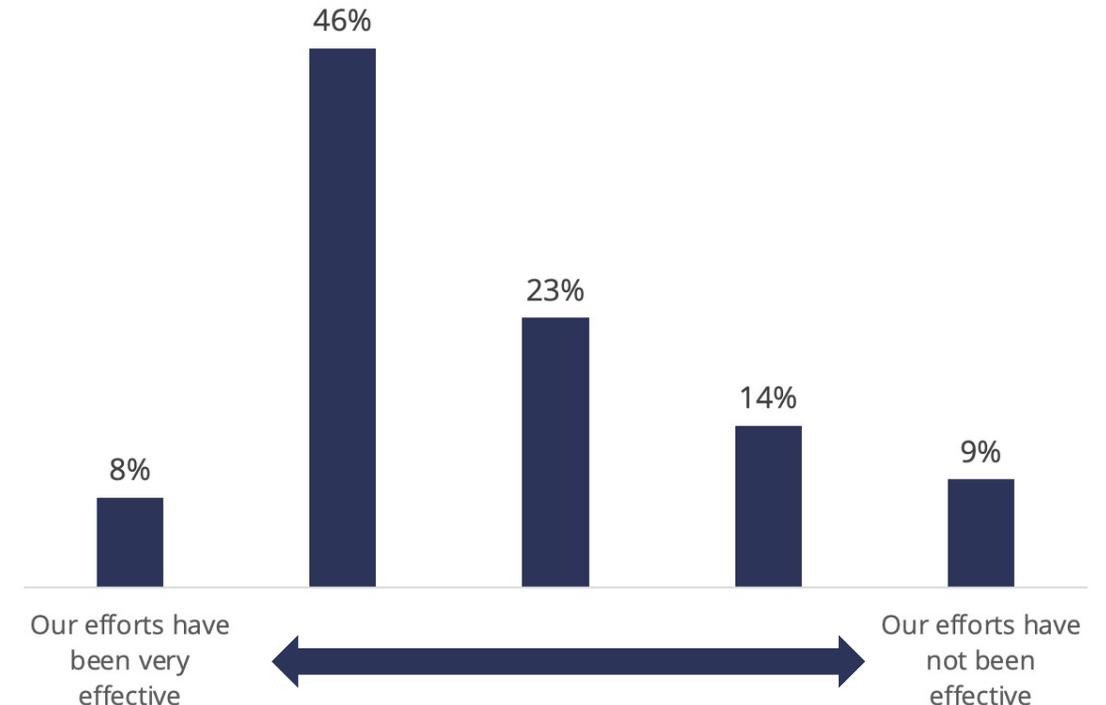
Organized plans and ability to manage

77% of respondents have a current or future plan to combat problems on their lake, and most feel that their efforts have been somewhat effective.

Does your lake association or homeowners engage in any organized effort to treat or combat problems with nuisance aquatic plants on your lake?



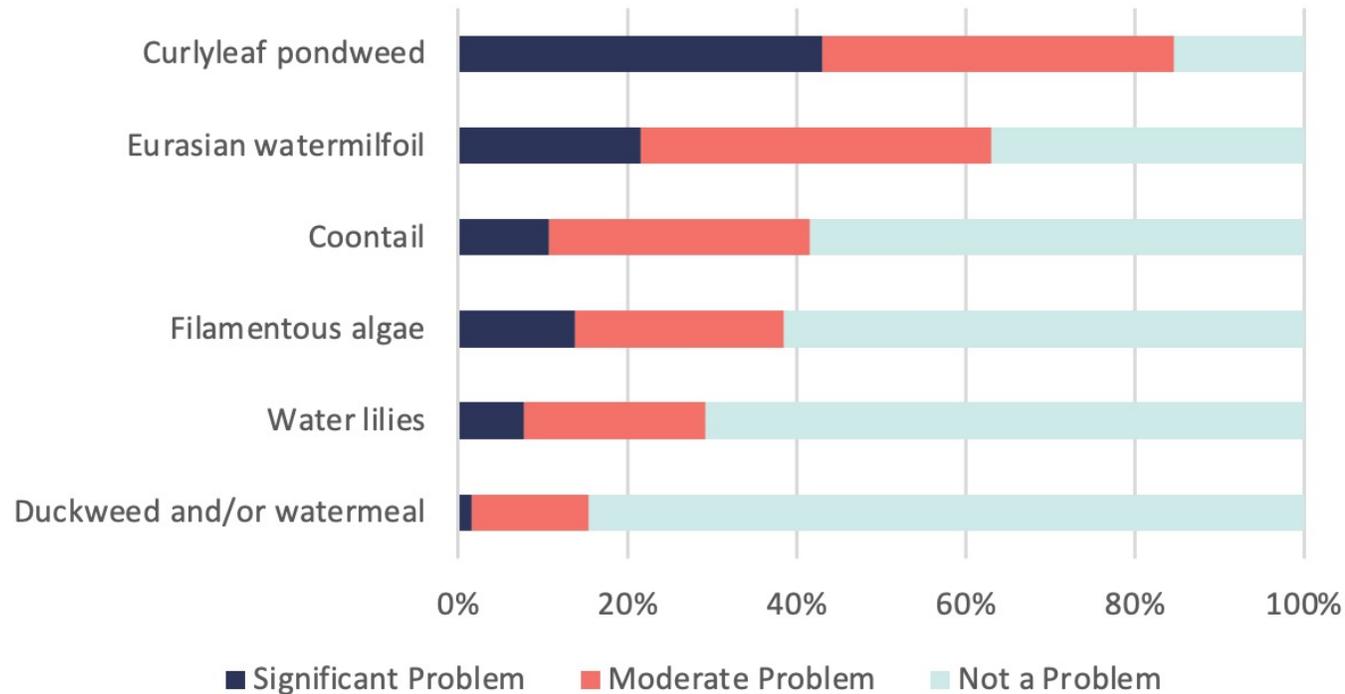
How would you characterize your ability to manage problems with nuisance aquatic plants?



Curlyleaf Pondweed is the plant causing the most problems in MN lakes.



Please tell us about the plants that represent a problem in your lake(s)

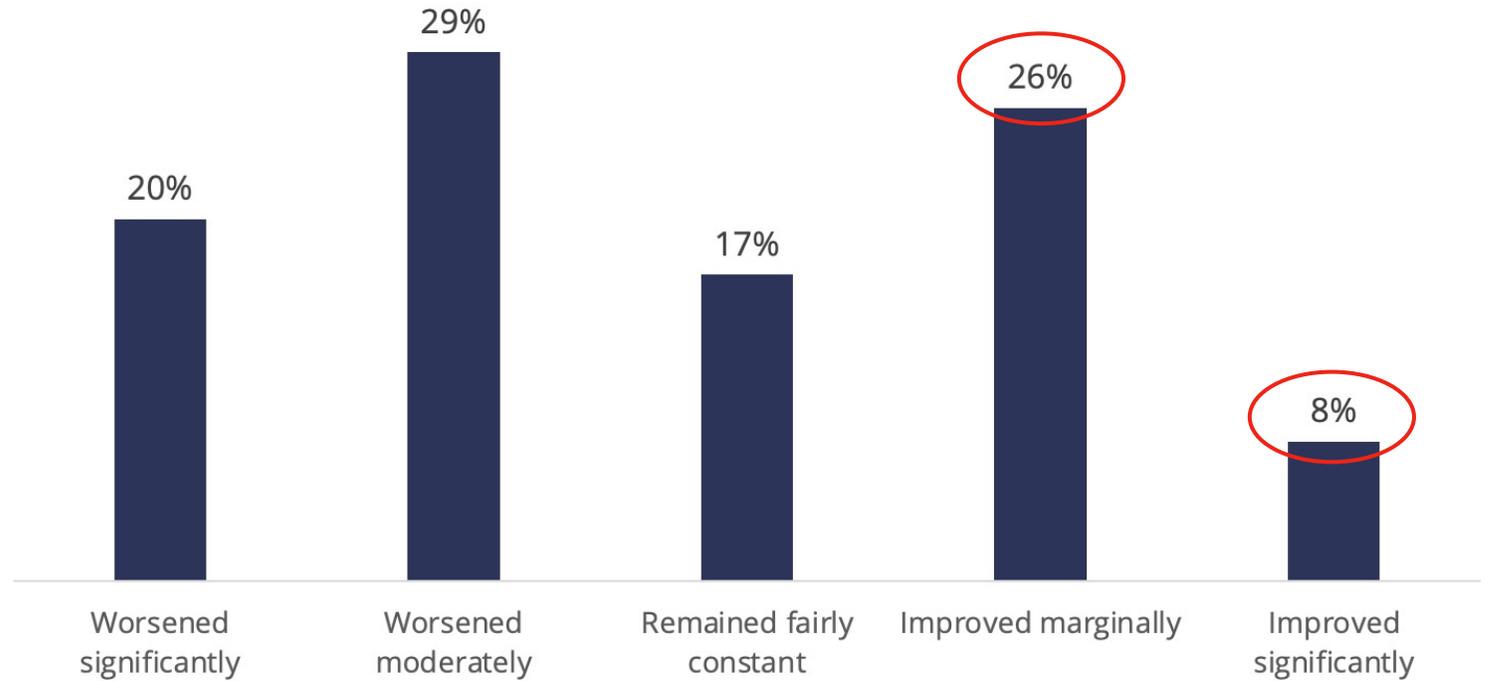


“Other” nuisance plants cited:

- *Chara*
- *Elodea*
- *Flowering Rush*
- *Native plant coverage and density is increasing, interfering with recreation*
- *Non AIS Milfoil matting*
- *nonnative phragmites, purple loosestrife*
- *Pond Shield, water reeds*
- *Purple Loosestrife, Population expanding throughout the lake*
- *Purple Loosstrife minor problem*
- *Starry Stonewort (x3)*
- *Water celery is getting to be a significant problem.*
- *Wild Celery*
- *Wild celery grass becoming very problematic*
- *Zebra Mussels*

Only **34%** of respondents indicate that the state of their aquatic plant environment has improved

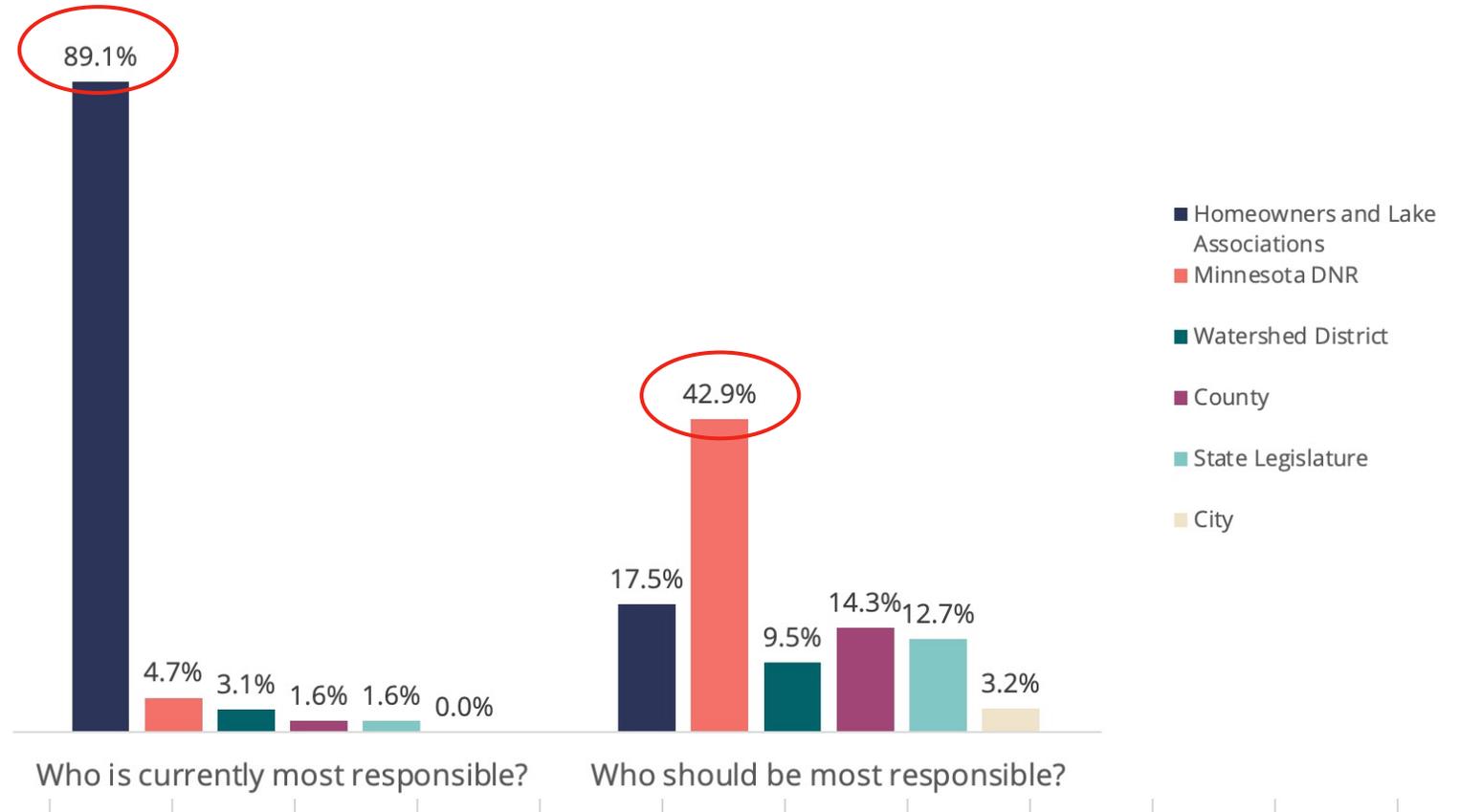
**Over the past 5 years,
how would you
describe the state of
your aquatic plant
environment?**



Primary responsibility for maintaining a healthy plant community

A strong plurality of respondents feel that **the DNR should be responsible** for treating problem aquatic growth. Overwhelmingly, though, they say that **the burden currently falls on homeowners**.

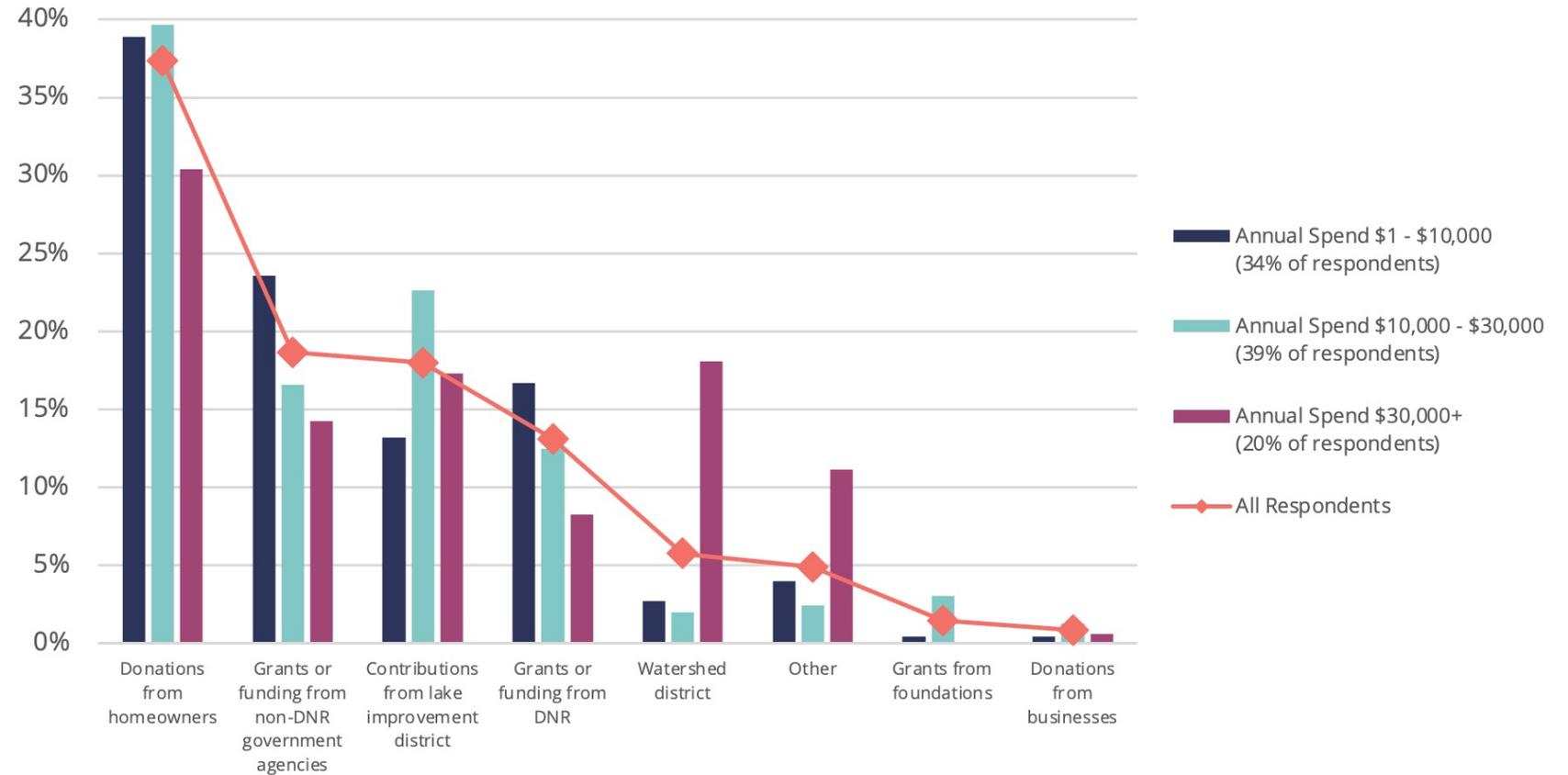
Thinking about the entities that typically take some responsibility for maintaining a healthy plant community in your lake(s), please indicate who, in your opinion, is **currently** most responsible... and who **should be** most responsible?



Funding and Funding Sources

Homeowners fund the majority of nuisance plant management efforts. For lake associations with large budgets, funding shifts from homeowners and grants to watershed districts and other sources.

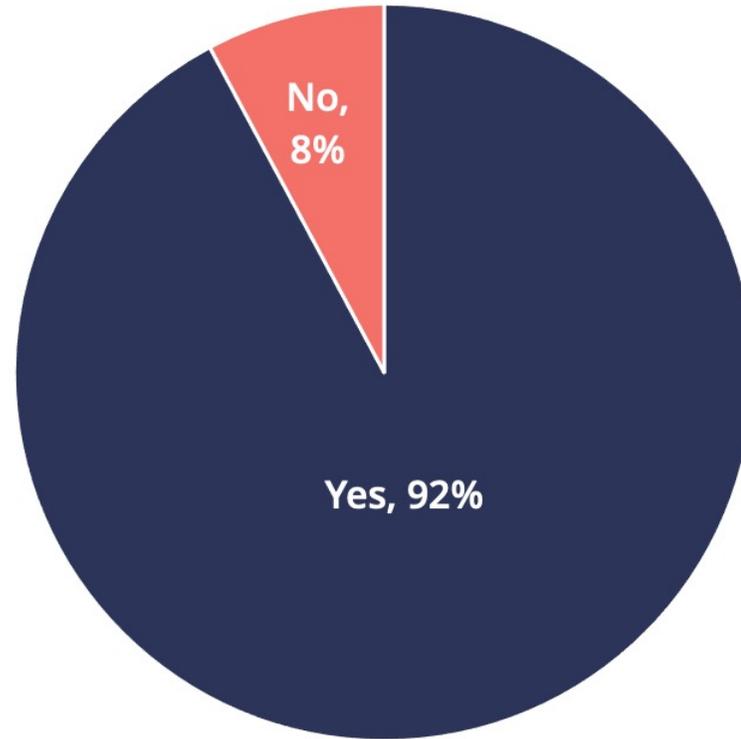
How do you fund your activities related to the management of your nuisance plants?



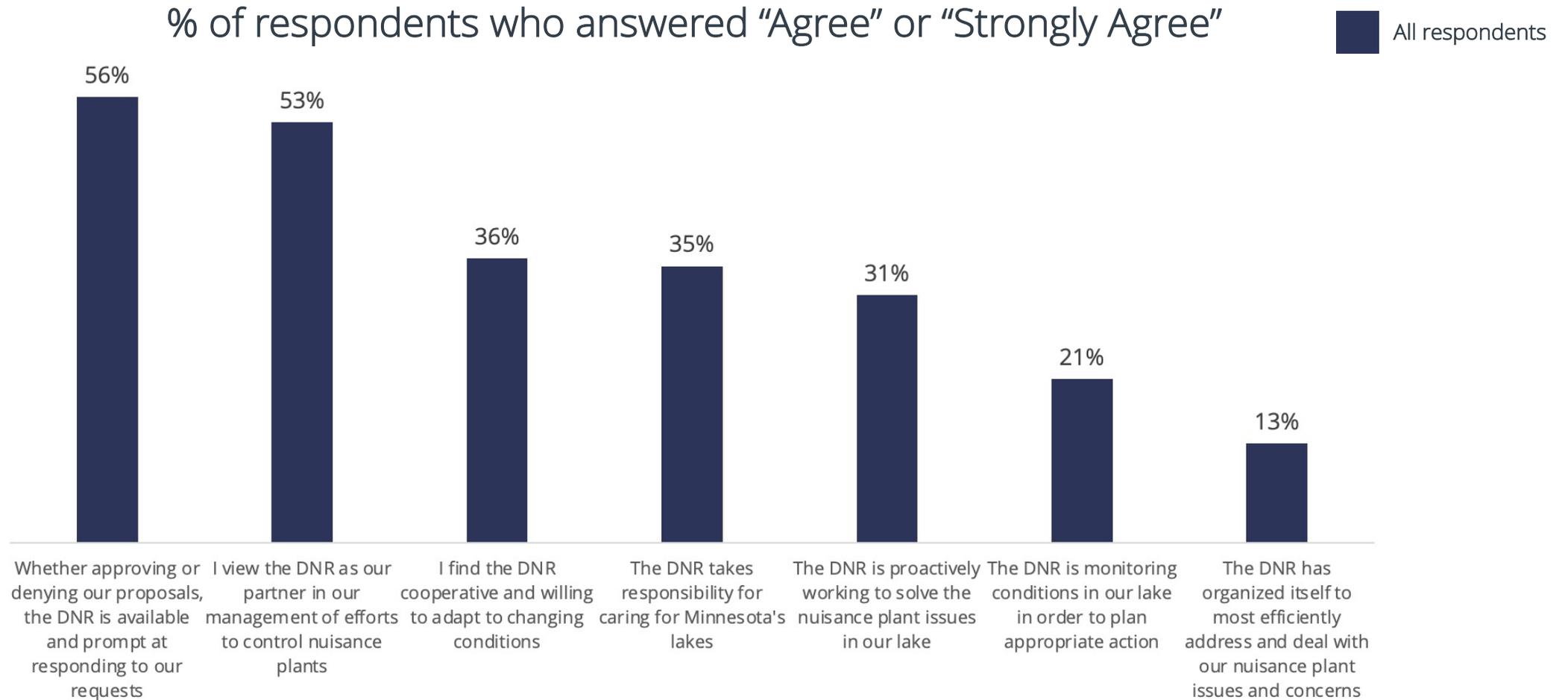
Seeking permission or permits from the DNR

The vast majority (92%) of Lake Associations have sought permission or permits from the DNR in the last 2 years.

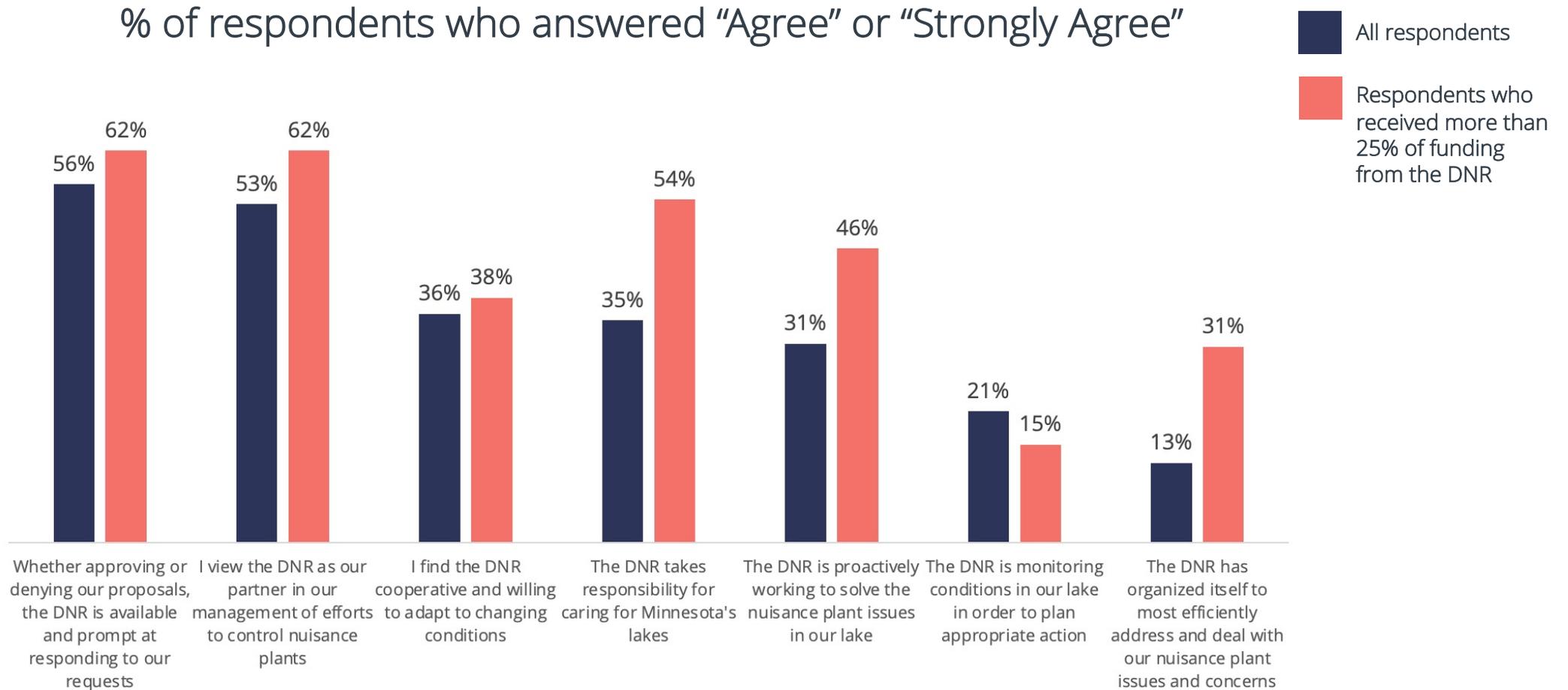
Within the past 2 years,
have you sought to gain
permission or permits from
the DNR for your Aquatic
Plant Management
treatments?



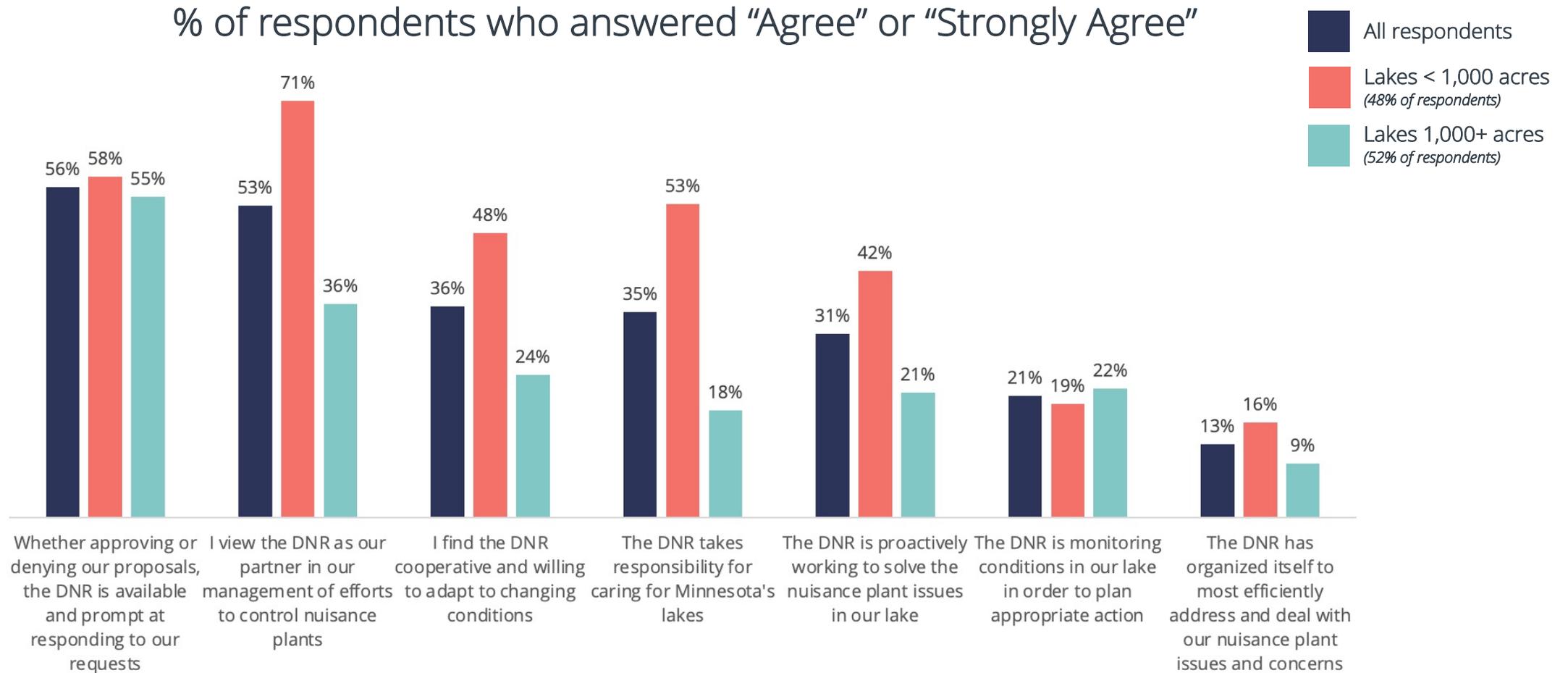
Respondents are favorable about the DNR's partnership and availability, but see opportunities with monitoring and efficiency.



Unsurprisingly, lake associations who have received financial support from the DNR score higher on key sentiment statements



Smaller lakes (under 1,000 acres) generally have more positive sentiment about the DNR



In a short sentence can you tell us, in your opinion, what the DNR could do to more effectively contribute to healthier Minnesota lakes and assist in efforts to improve them?

Respondents are seeking support from the MN DNR in the identification, communications, funding and solutions related to the management of nuisance aquatic plants.

ISSUE TYPE

- FUNDING
- SOLUTIONS
- COMMUNICATIONS
- IDENTIFICATION

"It feels to me like our lake is under siege and the only entities willing to take action are our lake association and the County AIS Program. The County AIS Program is radically underfunded. There are 1000 lakes in Itasca County alone." (Itasca)

"We need aquatic plant surveys in our lakes similar to the fisheries surveys on our lakes. These should be in partnership with a local lake association where possible." (Otter Tail)

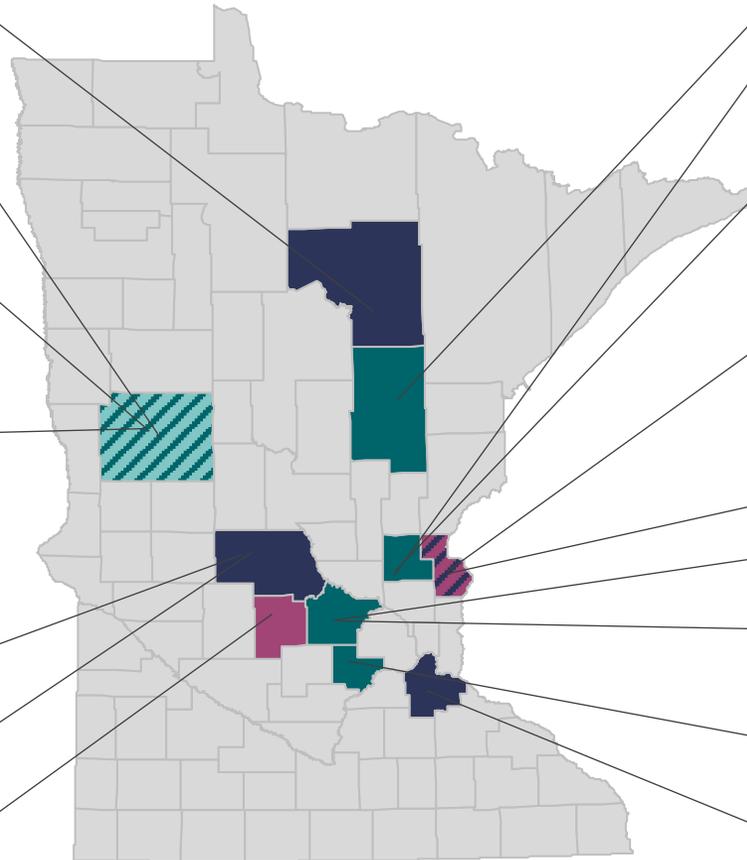
"Our response in regard to the weeds has been "they are good for the fish". You can have a path for your boat and you can go somewhere else for water activities. They can suggest opportunities for weed control and not put so many road blocks up for us." (Otter Tail)

"Currently MN DNR has no criteria for nuisance native plant growth. The shift from short scattered plants with open sand bottom to a dense stand of plants that occupy the entire water column and matte on the surface is considered 'no change' or even beneficial. State Statue defines degradation as "a material increase in weeds or slime" so I feel homeowners are correct when they call a material increase in weeds and slime a declining condition. DNR seems to push the opposite way or at a minimum dismiss landowners concerns." (Otter Tail)

"The DNR should depend less on lakeshore owners and lake Association to provide funding for survey's and treatment of AIS especially when there are no lake Association funds available." (Stearns)

"Stop catering to special interest groups" (Stearns)

"Improve communications with Lake Associations regarding invasive species identification, control/prevention strategies, coordination with county organizations that control the monies for treatment and inspections." (Meeker)



"Be more open to chemical treatment of infestation" (Aitkin)

"DNR could increase the percentage from 15% littoral limitations to treat CPL in lake. DNR needs to understand when a lake becomes a nonusable lake, it does not serve the community of lake owners "" (Isanti)

"Allow Skogman Lake to use less expensive products to control AIS. Some products are 25% the cost but supposedly affect the walleye fish. Our AIS budget is limited, thus we could only treat 4 acres vs 20 acres with the cheaper product." (Isanti)

"The DNR makes rules, provides almost no treatment funding and is largely absent/unavailable except to throw up road blocks to permits and treatment plans. Providing grant money but requiring third-party delineations is not helping, it just takes up more volunteer time (volunteers that are trained AIS inspectors and have experience doing delineations) and puts tax payer money in the pockets of private companies." (Chisago)

"Make the MNDNR more customer friendly." (Chisago)

"Stop putting up road blocks such as areas of treatment" (Wright)

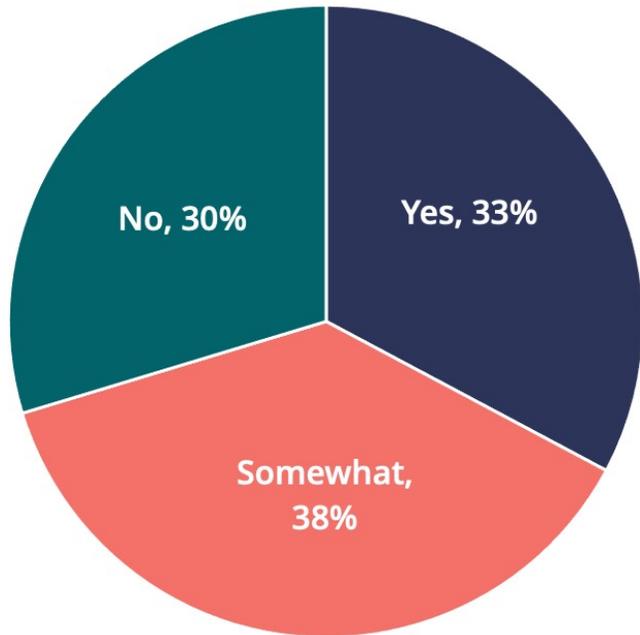
"It's very difficult (we have not yet succeeded) in getting DNR to visit, review our plant surveys to understand why treating more than 15% of the lake is necessary in order to make some progress" (Wright)

"If the DNR won't assist us in management, then they should help us find an entity that will." (Carver)

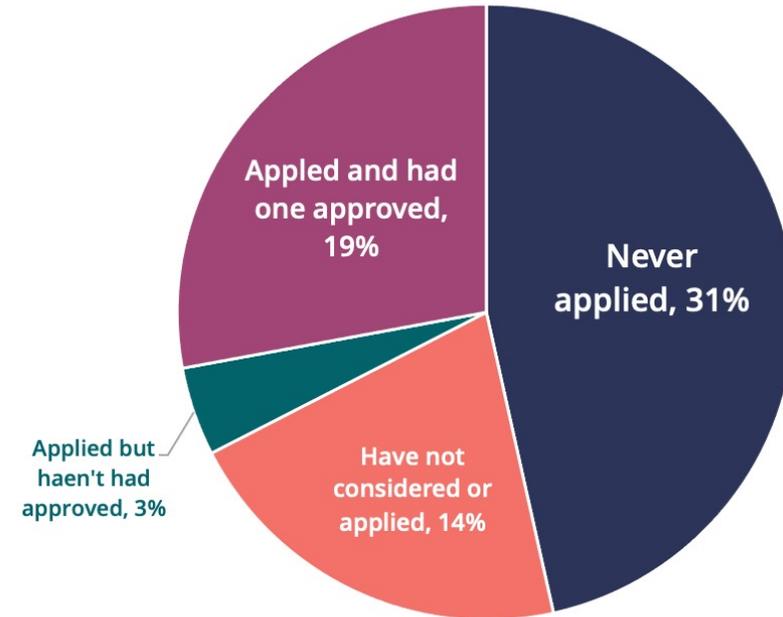
"DNR needs to be much more proactive at funding Lake Associations' efforts to control invasive weed species. Their contribution to our efforts in 2021, though appreciated, was paltry compared to the magnitude of the problem." (Dakota)

Lake association experience with LVMPs

Are you familiar with Lake Vegetation Management Plans (LVMPs)?



Has your lake ever had one approved or applied for one?
("yes" or "somewhat" answers to previous question only)





Appendix

What the DNR can do: Verbatim Responses by County (page 1)

- Highlighted responses are featured on page 15
- Responses have been lightly edited for clarity

- Aitkin
 - Be more open to chemical treatment of infestation
- Becker
 - A better program in place to disperse funds to lakes that do not have the financial resources to actively manage AIS
- Carver
 - If the DNR won't assist us in management, then they should help us find an entity that will.
- Cass
 - Increase the # of boat landing inspectors
- Chisago
 - The DNR makes rules, provides almost no treatment funding and is largely absent/unavailable except to throw up road blocks to permits and treatment plans. Providing grant money but requiring third-party delineations is not helping, it just takes up more volunteer time (volunteers that are trained AIS inspectors and have experience doing delineations) and puts tax payer money in the pockets of private companies.
 - Regarding grants, instead of a lottery system every year, it would be great if they could be on a need basis. Some of the smaller lake associations don't have the member dues to be able to pay the increased costs of AIS management. Our lake had no EWM until the DNR put in a boat launch, and now just a few years later EWM is prominent in the whole littoral area. This is something our homeowners talk to us about on a regular basis.
 - Make the MNDNR more customer friendly.
- Crow Wing
 - Lobby for more money so they can do everything they would like to do to prevent further spread of invasive aquatic species in all MN lakes.
 - Landing enforcement
 - Improve signage, landing monitoring and allow more flexibility for treatment before the invasive plants take over the area completely.
 - Given the tourism value to the state in preserving the quality of MN waters, more emphasis needs to be to provide larger grants to lakes dealing with multiple invasive species.
- Dakota
 - DNR needs to be much more proactive at funding Lake Associations' efforts to control invasive weed species. Their contribution to our efforts in 2021, though appreciated, was paltry compared to the magnitude of the problem.
- Douglas
 - Since the excessive plant growth is a wide spread problem. the DNR should develop more reasonable treatment guidelines.
 - Move from a reactive approach to a proactive approach.
- Hennepin
 - Take input from lake associations and lakeshore owners more seriously.
 - Provide additional funding to assist Lake Associations to manage non-native, invasive plants, allow large scale treatment of native weeds that are threatening the health of lakes, make it easier to form Lake Improvement Districts, and officially designate Lake Associations as "Lake Managers" and point of contact for issues related to lake management.
 - Our lake is a private access lake and the DNR plays a minor role in helping us control AIS plants. We do have the ability to conduct periodic drawdowns to help knock down CLP and EWM growth with the help of a DNR permit through our local City (Maple Grove). Even though our lake is private access, it would be nice if the DNR took more of an interest in helping us manage our plant and fish environments.
 - An effective partner.

What the DNR can do: Verbatim Responses by County (page 2)

- Highlighted responses are featured on page 15
- Responses have been lightly edited for clarity

- Isanti**
 - DNR could increase the percentage from 15% littoral limitations to treat CLP in lake. DNR needs to understand when a lake becomes a nonusable lake, it does not serve the community of lake owners
 - Allow to treat more areas and more types of aquatic plants, use of other chemicals, more grant money, listen to lake owners what needs to be done
 - Allow Skogman Lake to use less expensive products to control AIS. Some products are 25% the cost but supposedly affect the walleye fish. Our AIS budget is limited, thus we could only treat 4 acres vs 20 acres with the cheaper product.
- Itasca**
 - Promote Invasive Species control & monitoring programs throughout the state that are operated through local units of govt. (SWCD's or county programs) that resemble the program here in Itasca County.
 - It feels to me like our lake is under siege and the only entities willing to take action are our lake association and the County AIS Program. The County AIS Program is radically underfunded. There are 1000 lakes in Itasca County alone.
 - Because the county AIS program includes monitoring and control of 10 priority lakes including Deer, the DNR does no more than verify a new invasive. Other county lakes are on their own regarding control. DNR should revive its shoreland programs.
- Le Sueur**
 - They could provide more information to lake associations regarding experiences and best practices from lakes in MN and perhaps WI.
 - Provide more funding.
- Meeker**
 - The DNR helps when asked, but the lake association is the backbone of the health of the lake. That is why I don't think they are proactive. For plant control, Our lake association does all the planning, execution and followup to the health of the lake.
 - Listen, respond in a reasonable time, and be more proactive, not reactive.
 - Improve communications with Lake Associations regarding invasive species identification, control/prevention strategies, coordination with county organizations that control the monies for treatment and inspections.
 - If we apply for DNR Grants and County Grants to help with costs, then ONLY ONE pays what the other does not pay; why can't they both pay grant monies when the costs are high?
- Otter Tail**
 - We need aquatic plant surveys in our lakes similar to the fisheries surveys on our lakes. These should be in partnership with a local lake association where possible.
 - Our response in regard to the weeds has been "they are good for the fish". You can have a path for your boat and you can go somewhere else for water activities. They can suggest opportunities for weed control and not put so many road blocks up for us.
 - DNR should work to obtain more funding available for citizen groups to apply and receive grants in a fair application process, not a lottery or who is quickest at sending app.
 - Currently MN DNR has no criteria for nuisance native plant growth. The shift from short scattered plants with open sand bottom to a dense stand of plants that occupy the entire water column and matte on the surface is considered 'no change' or even beneficial. State Statue defines degradation as "a material increase in weeds or slime" so I feel homeowners are correct when they call a material increase in weeds and slime a declining condition. DNR seems to push the opposite way or at a minimum dismiss landowners concerns.

What the DNR can do: Verbatim Responses by County (page 3)

- Highlighted responses are featured on page 15
- Responses have been lightly edited for clarity

- Saint Louis
- Our lake association {Burntside Lake Association} is working hard with AIS Grant funding through St. Louis County and with North St. Louis Soil and Water District by inspecting and decontaminating watercraft entering and departing the lake, educating the boaters in the process, plus we are working with Vermilion Community College and Ely Community Resource Center to inspect, test and perform trapping rusty Crayfish as well as be Lake Sentries for early detection of new AIS on the lake. We are also training our volunteer members on the lake to be lake sentries as well. The big thing we are doing is educating members and students so they become familiar with Aquatic Invasive Species rather than just talking about AIS but hoping someone else will do something. We are finally gaining momentum with our fight and plan.
- Stearns
- The DNR should depend less on lakeshore owners and Lake Associations to provide funding for survey's and treatment of AIS especially when there are no lake Association funds available.
 - The DNR has two public access points to Rice Lake. Rice Lake AIS issues are introduced through the DNR public access. The RLA has invested thousands upon thousands to fund and operate a public access AIS inspection program. The DNR has not only not participated in funding, the few times we have requested assistance, we have received none. The DNR has rejected every request for inspection funding, the DNR would not even cooperate to allow a port-a-potty or an inspector's shelter on DNR access property. For all of the DNR happy talk and sponsored conferences on the subject of AIS, the DNR has been shamefully negligent on AIS management issues!!
 - Stop catering to special interest groups.
 - Enact stricter penalties for violations. Discontinue the stocking of non-native trout in order to decrease the number of transient fishermen coming to lakes from infested waters. Monitor and limit boat movement from infested waters.
- Todd
- Grants available related to the size of the Lake and size of the project.
- Washington
- There needs to be a more active involvement. No one is ever in the office due to the covid.
 - Provide more grant funding and take charge of boat launch with strong enforcement of the regulations. Change numerous regulations regarding lake access. We wear masks and quarantine for COVID. We need the same protection for lakes.
- Wright
- Stop putting up road blocks such as areas of treatment
 - It's very difficult (we have not yet succeeded) in getting DNR to visit, review our plant surveys to understand why treating more than 15% of the lake is necessary in order to make some progress

Any further thoughts - verbatim

- Becker • We do a plant survey every few years but it is too costly to continue we do not raise enough funds from homeowners to get a handle on treating the CLPW on our lake
- Carver • I believe that the DNR, MCWD, and Carver County can't come together and work out which one should have full governing authority?
- Chisago • The percentage question of funds is somewhat ambiguous. In Chisago County the LID will pay up to 90% of what the MNDNR grant pays. For invasives only. The lake Association pays in full of any native controlled vegetation. MNDNR does not fund any native vegetation nor does the LID. Plus, the MNDNR grant is inconsistent some years you may get it and other year you may not. Very hard to plan a budget. The MNDNR grant process has too many hoops to jump. Need to make it more user friendly on both ends.
- Crow Wing • Was difficult to respond to WHO should be the most responsible because it clearly must be a shared responsibility - county, state, etc. all stand to benefit from tourism dollars.
- Dakota • Nuisance aquatic vegetation has exploded in recent years, primarily due to invasive species and nutrient runoff from primarily agricultural sources. DNR needs to impose stricter rules on currently uncontrolled farm tiling systems which are the key point sources of excessive nutrient-rich runoff.
- Hennepin • I would like to see the DNR more forward looking concerning AIS. ref Starrystonewort. Terry
- Bays that have enrolled in our bay treatment program are doing remarkably well - EWM and CLP are under control. But it's difficult to expand our program lakewide because many lake property owners feel (1) the DNR or watershed should take care of the lake, (2) they don't have a problem with weeds in front of their property, or (3) they don't have the time or interest to raise funds for weed treatments.
- Most of our homeowners enjoy the lake as their primary lake property. Access to the lake is limited to those who live on it. The DNR has been reluctant in the past to assist with any plans regarding our fish population, yet they require us to aerate in the winter to keep the fish we do have. With a large watershed (Elm Creek - 100+ square miles), we receive large amounts of nutrients, creating heavy algae levels. The local watershed TMDL is slowly addressing some of these concerns, but it would be nice if the DNR took more of a role. Our long-term goal is to replace the little native vegetation we have with a healthy level, once we can reduce the Invasive AIS.
- Isanti • DNRs public landings management is not in sync with AIS prevention efforts delaying use of CLEAN-IN & CLEAN-OUT stencils that brings awareness to clean boat policy and to aid boat inspectors.
- Itasca • This survey has a bias toward treating invasives and other undesirable plants following infestation. It would be cheaper if we'd instead fund prevention. Inspection and angler, recreational boater, and property owner education.
- Meeker • The application for county and DNR grant monies is getting more and more complex and with a mountain of paperwork required for the application and documentation of the process. This process is different from county to county. The rules, requirements, who determines what can monies an organization gets varies widely. Should be some standardized state rules, for all counties, that do not take upwards of 60-80 hours per year for one person to apply and document.
- I do feel DNR has been trying to help lake associations in the past couple of years, but County and DNR seem to limit the Lake Associations when it comes to help or funding. Some counties have more lakes than others, and the counties with fewer lakes seem to get more immediate attention and more funding. Perhaps aid counties with more lakes more options for a greater amount of funding for expenses. Perhaps work with the County in helping Associations, and to not make the County grant paperwork so difficult to work with? Lake Associations are shying away from doing the grants due to the application involvement for grants. Why can't the DNR and County both give grant money for the same problems vs what one pays the other won't for expenses? Why can't the DNR or County do the grants for/with the Lake Associations? Why does a Lake Association have to get an approved inspection for treatment (which is a certified company), but must hire a different certified company to do the actual treatment? How can the DNR keep the inspection, treatment, grant money all more simplified? We, the lake owners, are just normal people doing our own jobs or retired, not fully educated in AIS and trying to keep our lakes in a safe condition. When we ask for help... monetary or other, we would like to have a better response than "this is the way it is" or "we can't do anything about the situation".
- Otter Tail • I work with numerous lakes across multiple Counties and there has been a general increase in weeds and slime. Especially in ZM infested waters, even those waters that have not had an increase in water clarity. Everyone can agree that the aquatics have expanded dramatically. However the discussion diverges over if this constitutes lake degradation or not. Some lakes I work with are applying for VMP to expand their treatment areas due to the severe filamentous algae blooms and nuisance conditions they have experienced in the past several years. The local SWCD and MN DNR are planning an educational effort focused on the benefits of plants, they are concerned excessive plant removal is occurring given the complaints and increase in shoreline fouling due to natural shedding cycles. Those local groups attribute the shoreline fouling to landowner activities, despite the fact that the majority of the shoreline fouling is observed in September and October when plant management is NOT actively occurring. One lake in my area is planning to dredge the shoreline to remove the muck deposited when tremendous mats of plants washed up and decomposed on the shoreline, it is partially funded by Sauk River Watershed District. Google Mystery Sludge In Miller Bay on Lake Osakis, yes they blame the watershed district.
- Saint Louis • Burntside Lake has only native aquatic plants and only one Aquatic Invasive Species {the spiny water flea}. We are trying to be very proactive with our Lake Sentry programs, testing and inspections. So far so good but it never ends.
- Stearns • The DNR needs to develop comprehensive plans together with Counties, Watershed Districts, COLA's and Lake Associations to pool the necessary resources to catalog AIS issues and develop comprehensive plans to address those issues and provide funding participation from all concerned.
- I feel that the state legislators are the most responsible for the state, using DNR, however they won't fix DNR. They need to rewrite the DNR mission to turn this around. Question 18 seems like is different for field workers and St. Paul staff.
- Didn't know we could apply for a vegetation management plan. And wondering how that would benefit us. The DNR discovered curlyleaf pondweed in our lake in 2016 and never notified us! We discovered the infestation when we hired an aquatic ecologist to do a vegetation survey in 2017 and we have actively monitored and treated it for 4 years with good results. Then in 2020 we discovered zebra mussels. Education and watercraft inspections are the only tools we currently have and are necessary to stop further spread of invasive species. But inspections are very expensive and boaters know that they are able to launch their boat regardless of the violation!
- Todd • Lake Osakis is 6400 acres with 367 acres identified with CLP. We plan to intensive survey the southern part of the Lake which we are convinced this number will grow to 550+ acres. We need financial assistance!
- Washington • My neutral rating of the DNR would likely be higher if they had the staff and other resources needed for them to truly advance the science and enforcement of regulations. It would also likely be higher if there was a higher level invasive species director in the DNR. Check out the mgmt pyramid. It's part of Ecological Services. Enforcement is in another division. Compare to Fisheries and Forest Mgmt.
- Wright • The costs to do plant surveys and build up the data needed in order to put the plans in motion prohibit our LID from retaining the necessary funds to address the issues long term.