



CITY OF NORTH OAKS

Regular Natural Resources Commission Meeting Thursday, November 18, 2021 7 PM, Community Meeting Room, 100 Village Center Drive <u>MEETING AGENDA</u>

Remote Access - Natural Resource Commission members will participate by telephone or other electronic means pursuant to Minn. Stat. §13D.021. Any person wishing to monitor the meeting electronically from a remote location may do so by calling the following Zoom meeting videoconference number: 1-312-626-6799, Webinar ID: 864 2724 6921 or by joining the meeting via the following link: https://us02web.zoom.us/j/86427246921. Due to the existing COVID-19 Health Pandemic, no more than five (5) members of the public may be in Council Chambers (Community Room, 100 Village Center Drive, MN) during the meeting. Once room capacity is met, anyone wishing to attend the meeting above the five (5) members of the public who may be present in the room during the meeting will be required to monitor the meeting remotely.

1. Call to Order

2. <u>Roll Call</u>

3. Approval of Agenda

4. <u>Citizen Comments</u> - Members of the public are invited to make comments to the Commission during the public comments section. Up to four minutes shall be allowed for each speaker. No action will be taken by the Commission on items raised during the public comment period unless the item appears as an agenda item for action.

5. Approval of Previous Month's Minutes

Approval of October 21, 2021 Meeting Minutes <u>10.21.21 NRC Meeting Minutes - Draft.pdf</u>

6. **Business Action Items**

- 6a.Discussion on deer management and aerial studies 2021.11.04_North Oaks Deer Management Packet.pdf
- 6b.Discussion on lakes in North Oaks <u>Copy of table north oaks surface water data 20211107.xlsx</u>
- 6c.Discussion on Wetland Ordinance

7. <u>Commissioner / Staff Reports</u> -

- Tick Task Force Report
- Community Outreach: Winsor Report
- NOHOA/ NEST Report
- City Forester Report
- VLAWMO Tech Report
- City Report
- 7a.Reports

Outreach report.pdf

- City Forester Report October 2021 In Review October 2021 in Review.pdf
- 8. <u>Next Meeting:</u>
- 9. Adjourn

North Oaks Natural Resources Commission NRC Meeting Minutes Virtual Meeting via Teleconference or Electronic Means Only October 21, 2021 at 7 p.m.

1. CALL TO ORDER

Chair Hawkins called the meeting of October 21, 2021 to order at 7:00 p.m.

2. <u>ROLL CALL</u>

NRC members participated **by telephone or other electronic means** pursuant to Minn. Stat. § 13D.021.

Present: Chair Andrew Hawkins, Commissioners Shannon Dunn, Penny Kianian, Bob Larson, Damien Lepoutre, David White, Kate Winsor, City Council Liaisons James Hara, Tom Watson, NOHOA Liaison Patricia Orud

Absent: None

Staff Present: City Administrator Kevin Kress, City Forester Mark Rehder

A quorum was declared present.

3. APPROVAL OF AGENDA

Chair Hawkins requested to add an update on the previous email communications on the feedback of the draft wetland ordinances as Business Action Item 6d.

MOTION by Dunn, seconded by Winsor, to approve the agenda as amended.

MOTION carried unanimously by roll call vote.

4. CITIZEN COMMENTS

None

5. APPROVAL OF PREVIOUS MONTH'S MINUTES

Commissioner Kianian asked that the notes be updated to clarify that the NOHOA tree policy applies to trees 6 inches in *diameter* or larger.

MOTION by White, seconded by Larson, to approve the September 16, 2021 minutes as corrected.

MOTION carried unanimously by roll call vote.

6. BUSINESS ACTION ITEMS

6a. Discussion on Deer Management and Aerial Studies

- Chair Hawkins asked Councilor Hara, the official Wildlife Manager for North Oaks, how things are going with the plan for an aerial count of deer, and is there anything NRC can do to help?
- Councilor Hara said that an aerial count has not yet been scheduled because snow needs to be present and the timing of that is hard to predict. He has been hearing anecdotally that people in the community have been seeing fewer deer this year than in prior years. This aligns with feedback from the Trapper from last winter who also noted that there was not much activity in the traps.
- Commissioner Lepoutre wondered if when an aerial deer survey is done this year, whether a photographic survey could also be completed of the area. This would be different from the deer survey because that is usually completed with a thermal camera. The benefit of a regular survey could be to create a base map of tree locations for both the City and NOHOA, among other things. He happened to speak to a company called Nearmap who does this kind of work. They already cover this area through work with Ramsey County, and they create images with 3-inch resolution. He is unsure if Ramsey County has a license to provide the images to cities, but this could also be a possible resource for this kind of survey.
- Commissioner Winsor asked if there is money in the city budgeted for an aerial survey. City Administrator Kress said NRC has budget available.
- Councilor Watson gave some history that the city used to pay \$550-600 per year for aerial deer surveys. There was always a photographer and an observer, and they always extended the images .25 miles outside of city limits as well. He handled the program for approximately 22 years starting in 1992. Trapping would take place in January after kids went back to school, regardless of whether there was snow on the ground. They would conduct the aerial count the first chance they had the opportunity to do so with snow in the background. In some years they did counts twice because of removal patterns they would see. The entire population of deer was always up in the NE corner of North Oaks. The 2000 period was the first time they showed up on the West side of Pleasant Lake Road. As development has occurred, they have started to roam.
- Councilor Hara asked if there is a consensus as a community that we need to remove deer? In previous years the number of deer may have been a problem, but perhaps not in the last 3-4 years.
- Chair Hawkins clarified that no, there is not a consensus that deer have to be removed. Rather, the NRC wants to make data- based decisions and there is no need to remove if the environment can support the numbers.
- Commissioner Dunn stated that Commissioner Lepoutre's proposal is worth looking into, and wondered if it could also record elevation which could be helpful as well. She suggested that the next step would be to contact Ramsey county to see if they have an aerial map we could get for free or at a cheaper cost.
- Commissioner Lepoutre clarified that elevation would be a different type of mapping and would not be able to be collected on the type of photographic mapping he was suggesting.
- Councilor Watson suggested that NRC suggest 3 action items to Council: A. Apply to the DNR for a permit, if needed, to remove deer; B. Vet potential contractors for

trapping and removing deer; and C. Conduct an aerial survey and make a sciencebased decision in consultation with the DNR on if and how many deer should be removed.

- Chair Hawkins noted that there is an ordinance on deer management and Council does not need permission from the NRC on deer management, but if they would like a recommendation from the NRC, the Commission could certainly make a motion and discuss it.
- Councilor Watson suggested that if a motion is made, that it be kept separate from the mapping question because one may take longer than the other, and it would not be helpful to have the deer count tied up in figuring out the mapping question if deer removal is necessary.

MOTION by Dunn, seconded by Kianian, to contact Ramsey County to see what they have for aerial mapping.

MOTION carried unanimously by roll call vote.

MOTION by Hawkins, seconded by White, to advise City Council that the City A. Apply to the DNR for deer removal tags if should they be needed; B. Vet qualified contractors for deer removal in North Oaks; and C. Conduct an appropriate count by a method of Council's choosing of the deer population in North Oaks.

• Discussion: NOHOA liaison Orud noted that the DNR determines both the biological carrying capacity as well as the social carrying capacity of deer in a particular area. The DNR specialist will offer guidance on how to determine that for North Oaks.

MOTION carried unanimously by roll call vote.

6b. Discussion on Internship Opportunities

- Commissioner Dunn introduced the topic. She had an idea that the NRC could host unpaid internships for high school students and college students. These internships would be for environmentally focused students. The student would be paired with an NRC Commissioner who would help guide the student in their work. The experience would consist of research, field work, and a written component that could include an article in newspaper, North Oaks Living or posts for Facebook. The experience would also include a presentation to the NRC. The student could pick a topic of their choice, but the NRC could also have a set list of topic ideas such as diseased plants, invasive species, pollinators, storm water, surface water, wildlife etc. The work that they do would be geared toward the level of the student high school versus college.
- Commissioner Dunn noted that the benefit of such a program to students would be the real-world STEM experience as well as the writing and public speaking experience. In addition, it would help the NRC train the next generation in environmental topics, and would help them accomplish some of projects they don't have time to do. It could also help with outreach about environmental topics in the community.

- Administrator Kress shared that he participated in a similar program in high school and found it to be a good experience. City Staff member Lauren Kavan also shared that she was the former Internship Program Director at Hamline University and would be happy to assist with questions about logistics such as hour requirements, recruiting, etc.
- NOHOA Liaison Orud noted that VLAWMO has student learning opportunities, and the NRC may be able to pair with them on such a project. She also asked if the program would be limited to North Oaks residents, or if students would be accompanied by a North Oaks resident, because there may be some privacy concerns on behalf of NOHOA. Commissioner Dunn said she was assuming it would be just North Oaks residents because of that issue. City Administrator Kress noted that the NRC could then recruit at White Bear schools, Mounds View Schools, and potentially some local colleges. Orud noted that the Ag Academy has North Oaks students and they also participate in these kinds of internships.
- Commissioner Kianian said that depending on the level of the student, they may need a lot more hands-on support. She wondered if the NRC is available to provide that support, or whether faculty would need to be involved. Kress said he believes the NRC would provide guidance. Commissioner Dunn also said she was thinking that commissioners would provide that role. She said that if the schools are involved, it could likely not be limited to North Oaks. She also noted that if only a couple students are interested at a time, it might not be too time consuming. Kress agreed that is should be limited, and suggested that it be labeled as a mentorship.
- Councilor Watson said he believed that "trespassing" would be a non-issue, that the student would be considered a guest of the member of the NRC who is their supervisor.
- Chair Hawkins said that until we know how much participation there will be, it doesn't make sense to limit it to residents versus non-residents. He said he likes the idea of having an NRC commissioner as a mentor, and that he would enjoy having a hands-on role with a student.
- Commissioner Dunn asked Administrator Kress if there are any city restrictions on a program such as this. Kress said that programs such as this are very common, and cities like Shoreview, Hugo, etc. all have internships. He suggested that the NRC reach out to local schools and limit the number of students to 2-3 a year, or 1 per academic term.
- Councilor White asked if moving forward would cause any issues with the NOHOA board, concerns about privacy. NOHOA liaison Orud noted that when other groups have come in, they have always required an escort. Chair Hawkins said he did not think that the issue would limit the opportunity. That there could be many ways to work with this and have an escort with needed. He believed the NRC could find a way to comply with NOHOA policies. Orud said that if there is a contract with the student, and NOHOA is a signatory, there may be a way to make it a joint effort and allow some autonomy for the student.

MOTION by Dunn, seconded by Hawkins to put together a written proposal on an internship program through the NRC for City Council review.

- Discussion: Commissioner Kianian offered to assist. She ran a program like this at the University of Minnesota for undergraduates in a research laboratory
- Councilor Watson and City Administrator Kress suggested calling the program a mentorship or fellowship. Kress offered to pull samples from other cities to help.

Motion carried unanimously by roll call.

6c. Discussion on Infected and Diseased Trees

- City Forester Mark Rehder gave an overview on infected and diseased trees. He noted that it has been a busy season with more oak wilt than in the past. There is no clear explanation for it. It is most likely spring storm related even small storms can break branches. This is true throughout the Twin Cities.
- Regarding Dutch Elm disease, there are not many elms left in North Oaks, at least not many of significant size.
- Rehder is noticing an uptick in Emerald Ash Borer. Inspections are just starting at this time of year. When leaves come off, you can see the woodpecker damage, which is the best diagnostic tool and allows you to look for more signs and symptoms. He estimates that there are 35-50,000 Ash trees in North Oaks. He is not sure how it will all play out cold winters helps knock back the ash borer, but mild winters allow them to survive. Each lot is dramatically different. He will keep up on educating, informing, and giving options to residents with diseased trees as far as ordinance suggests.
- Commissioner White asked if trees are dead or dying, do they provide a habitat for birds that are going extinct? Woodpeckers, etc. City Forester Rehder said yes, and that there are more trees dying of other things than shade tree diseases. There are plenty of other types of dead or dying trees providing habitat for birds.
- Chair Hawkins said he had been made aware of Oak Mites in states more to the south and he wondered if they are an issue. City Forester Rehder said he is not aware of any Oak Mite issues in MN
- Commissioner Lepoutre said he noticed more diseased and dead trees in his area, with lots of markings on the trees. He asked what they meant, noting that some of them seem to be from NOHOA, some from the City and some from the North Oaks Company. He said standardized marking would be helpful. Commissioner White seconded Damien's request. City Forester Rehder confirmed that each company has their own system. He prefers to put a mark of paint on diseased trees. Sometimes he will hang a ribbon to identify the best spot to enter into the conservation area for any tree work that needs to be done. NOHOA liaison Orud clarified that the only NOHOA markings to date have been on Pheasant Lane and North Oaks Road. They try to coordinate with Rehder to use the same colors for same reasons. Orange for removal, green for pruning, both colors together mean the homeowner can decide. However, there are some marking that are a little bit of a mystery sometimes they are by the homeowner or a tree company.
- Chair Hawkins said that maybe it would be useful for the NRC to reiterate what NOHOA is doing with educating residents about tree markings, and to encourage residents to contact the NRC with questions about ribbon colors, other markings, etc.

6d. Background on NRC Feedback on the Draft Wetland Ordinances

• Chair Hawkins said he was approached by City Council to ask the NRC for feedback on a proposed wetland ordinance. He sent the ordinance out by email, but wanted to make sure all commissioners knew about the ordinance and the

opportunity to provide feedback. He encouraged commissioners to look at he document and send any feedback if they have not done so already.

- Chair Hawkins opened the conversation up to questions and discussion on whether there is anything the NRC would recommend that Council consider doing with the ordinance, what does the Commission think is most important, and what are the priorities?
- Commissioner White asked whether the City has exclusive jurisdiction on wetlands, or what other entities are involved. Commissioner Dunn confirmed that there are a lot of entities involved. She noted that a lower government entity such as the city can enact something that is either as protective or more protective or as upper entities. The US Army Corp of Engineers, the State and the DNR are all involved.
- Councilor Hara explained that this all started with a recommendation from the DNR. They suggested that having a city level ordinance is easier to monitor and reinforce rather than doing so at the DNR level. The City of Minnetonka is an example that has an ordinance such as this. The North Oaks ordinance basically follows state-level guidance.
- City Administrator Kress noted that the ordinance classifies wetlands on different scales: types 1-6 other than just public water wetlands.
- Commissioner Lepoutre asked if we just follow state guidelines, why do we need a city ordinance? Maybe to make it better known to the community? What additional do we want? What is the problem we are trying to solve? Commissioner Lepoutre agreed and suggested the city should be careful not to overregulate. If the rules already exist at a state level, what would be the benefit of having the at a city level? How will definitions change from year to year with the impact of climate change?
- NOHOA Liaison Orud said she recently attended the VLAWMO Tech meeting. VLAWMO also gave feedback on the proposed ordinance. They do not have a regulatory program, the Wetland Conservation Act regulates, and VLAWMO administers that act. Their jurisdiction is below the wetland line. Cities tend to focus on a buffer zone which is above the wetland line. Their caveat is that if you go into the buffer zone, the wetland line can change. If you go to far, it is the illegal taking of a property owner's property.
- Councilor Watson clarified that the Wetland Conservation act was enacted in 1991. This changed how wetlands are handled in Minnesota. Circular 39 from the US Department of the Interior is the base document upon all of these classifications are done. The goal of the city wetland ordinance is to codify only that which is existing law in order to make the regulations clearer and easier to navigate. He explained that it is not easy to look up wetland-related ordinances because they are currently spread throughout other ordinances. The ordinance will include reference to the DNR, state laws, etc. so that as standards and laws change, the city ordinance will automatically change as well. These laws will all apply to NOHOA, new developments, etc. He believes we also need to take a look at enforcement of these matters. For example, there are some situations where property owners may be encroaching on setbacks.

- Commissioner Kianian asked if the proposed ordinance is going to replace all other ordinances? Councilor Watson said he was not sure if they will replace other ordinances, but will help bring them all together.
- Chair Hawkins asked that Commissioners send any other questions or feedback to Kevin and copy him as well.

7. <u>COMMISSIONER / STAFF REPORTS</u>

7a. Tick Task Force Reports

• Chair Hawkins said they are moving to a less frequent meeting schedule now that tick season is winding down. He submitted an article on the Tick Task Force survey to the North Oaks News. They are currently up to 30 respondents.

7b. Community Outreach

• Commissioner Winsor shared that Chair Hawkins wrote an article on Operation Clearview for the North Oaks News. She also announced that her term will be ending at the end of December and due to other involvements she will not be seeking renewal. She is still interested in serving on the Pesticide Committee and possibly chairing it. She also expressed interested in being involved in the internship/mentorship/fellowship program.

7c. NOHOA Nest Report

- NOHOA liaison Orud shared that they planted a Princeton Elm tree at the East Rec center. It is disease tolerant, not disease resistant. The preschool is going to name the tree.
- The NOHOA Road study sets out a plan for which roads will be repaired, restored and in which year. The front entrance is slated for next year. They are doing an engineering study. They are hoping to include the two ponds on either side, and are working with VLAWMO on how that would work from an engineering perspective. After that they will work with an eco-planner on what the appropriate vegetation is for that area. The road study is on the NOHOA website.
- They are starting a Deep Lake study. Through a clean water legacy grant there is a comprehensive Pleasant Lake study that has directed the efforts of NOHOA to work their way around the lake to stop erosion, address buckthorn, restore some areas etc. Using that model, they are starting next on Deep Lake.
- They are still waiting to harvest. It is currently too warm. It will happen as soon as there is ice. It needs to be cold enough for them to congregate and it has to be the right time of year to sell the fish in Chicago and New York.

7d. City Forester Report:

• See updates in 6c. They are gearing up for the Ash season. City Forester Report was included in the October City Council meeting packet.

7e. VLAWMO Tech Committee Report:

• NOHOA Liaison Orud shared that VLAWMO Tech has put together some proposals for Deep Lake for aquatic invasive species removal.

- They talked about 319 project which is Wilkinson, Birch and Tamarack lakes. It is still in engineering and planning studies but is supposed to happen in 2022.
- There was some discussion about terrestrial invasive species Japanese Barberry and Oriental Bittersweet. These are going to be a focus in the spring.

7f. City Report:

- Councilor Watson gave a couple updates on items from last month: On the Wilkinson meandering project, a grant has been approved. The amount is in excess of 600,000.
 60% is to be paid by the federal government, 40% has to be a local match. \$124,000 of this will be covered by the North Oaks Company and the other \$124,000 will be paid by VLAWMO unless someone else can make a contribution. VLAWMO is soliciting funds for their share. Engineering is working with them on details of the plan. Actual activity could start toward end of next summer, but it is a 3-year grant. It focuses on a canal that goes from the Pines to Wilkinson. This will also be significant to Lino Lakes and White Bear Township.
- City Council needs to approve a budget over the next couple of months. They set an initial levy in September and they need to approve or reduce the initial levy in December.
- City Council meets on Wednesday, November 10th due to Veteran's Day on Thursday, November 11th.

Chair Hawkins added that he just received a report of activities from the Metropolitan Mosquito Control. They do not do any spraying of adults, all of their control is by larval treatments. They had 691 sites inspected and they treated almost 900 acres. For disease prevention, they treated 944 catch basins, did 5 disease prevention property inspections, and they removed 3 tires. City staff will send this information out to Commissioners.

8. <u>NEXT MEETING:</u> Thursday, November 18, 2021 at 7 p.m.

MEETING ADJOURNED:

MOTION by White, seconded by Dunn, to adjourn the meeting at 9:19 p.m.

MOTION carried unanimously by roll call.

Kevin Kress, City Administrator

Chair, Andrew Hawkins

Date approved: _____

Deer Management in North Oaks

History:

We have population and removal data for the City of North Oaks (City) dating back to 1976. See Exhibit 1. Based on aerial counts the deer herd in 1976 was about 225 deer. Between 1976 and 1983 we removed an estimated 75 deer.

We removed no deer between 1984 and 1990. With no hunting, little natural predation, and abundant food and habitat the herd grew to over 700 deer.

In 1993 Tom Watson formalized a science-based deer management program in North Oaks. Tom enlisted the help and guidance of the University of Minnesota and the DNR to develop and monitor the program.

In simplistic terms the program consisted of the following components:

- Annual aerial census to determine herd size and approximate location within the City.
- Obtain required permits to remove deer.
- Hire a company to remove deer.
- Study the data of removed deer to check the health, sex, and number of fetuses in female deer.

The above information was studied and utilized for future herd management decisions.

The Watson program was discontinued in 2014 by the City.

The annual removal of deer continued but the use of aerial census data to manage the herd was discontinued.

In the last few years we have averaged removing 35 deer per year. In early 2021 the City terminated its 2020/2021 removal contract for two reasons. Primarily, it was the vendors opinion that our deer population was quite low as he was trapping very few deer. Secondly, it was a significant expense to the City to check empty traps.

What should the North Oaks Deer Population Be?

A core questions is who should determine the size of the North Oaks deer herd.

This is a hot topic in North Oaks. There are some that feel we should not have deer in North Oaks. Others place a high value on living in a naturally occurring environment where humans can share our forests and wetlands with other creatures that also call this their home.

The Tick Task Force's goal is 8 - 10 deer per square mile. The thought here is less deer less Lyme Disease. The Minnesota DNR targets a statewide deer density of 18-22 per square mile. Establishing a deer density is just one component in the overall management of an ecosystem. Too many deer can lead to over-browsing which negatively impacts our woodlands and the habitat required by birds and other animals. Too few deer can result in the opposite occurring. A target density is an attempt to balance the ecosystem.

The Metro deer herd has grown considerably in recent years with some areas having over 50 deer per square mile. Abundant food, lack of predators and limited or no hunting are the primary reasons for this. Cities across the Metro have been tasked with determining what an appropriate deer population is and how to manage the herd size.

The responsibility for determining the size of the North Oaks deer herd appears to annually fall to the current sitting City Council.

As a resident I would question if the City is best served by having the current City Council determine how many deer we should kill.

A long-term density goal developed without the bias of whomever is currently serving as City Council would be better for the community.

Lyme Disease and Deer

Lyme Disease is caused by the bacterium Borrelia transmitted to humans through the bite of infected blacklegged ticks. Depending on location anywhere from 1% - 50% of ticks can be infected with Lyme Disease.

Blacklegged ticks in the larvae and nymph state feed on small to medium size animals such as mice, chipmunks, shrews, and birds. These animals, especially mice are where the ticks pick up the bacterium Borrelia. Deer do not infect ticks with the bacterium that causes Lyme Disease.

Adult ticks can "hitch a ride" on deer resulting in movement within an area. There is evidence that reducing the deer population can lead to a reduced risk of Lyme Disease. There have also been peer reviewed reports that deer level reduction has not been proven to reduce Lyme Disease in humans. (1)

(1) Journal of Integrated Pest Management, Oxford Academic, Jan 2017

Developing an Integrated Management Strategy

1. ESTABLISH THE CURRENT DEER POPULATION

The methods to achieve this potentially include:

- Aerial Infrared NEARMAP is working on this technology, but it is not available yet.
- Pellet Count Basically counting deer poop.
- Aerial Surveys with helicopters:

Minnesota Helicopters: Cost varies based on size of helicopter used which is a function of the weight of passengers. Chris thought their R22 helicopter would suffice and the rate is \$375 / hour. Estimated 3 hours to do this for \$1100 to \$1200.

Contact Information: Minnesota Helicopters: 763-784-4354 Blaine Airport

Mike Goodnature, Natural Resource Manager for Ramsey County is experienced in aerial counts. He does all of the communities and parks in Ramsey County, including all communities adjacent to North Oaks. He is also an independent party which is important. To get an accurate aerial count Goodnature recommends at least 10"-12" of snow, less than this makes it difficult to see the deer in swamps.

Contact Information: Phone: 651-266-0373 Email: <u>mike.goodnature@co.ramsey.mn.us</u> Mike Goodnature c/o Parks & Recreation 2015 Van Dyke Street Maplewood, MN 55109

2. SELECTING A HERD MANAGEMENT OPTION:

Sharp Shooting over Bait Piles

This method has previously been successfully used in the agricultural area of Hill Family Farm. They do not currently allow this.

The USDA quote for 10 shooting events:	\$ 22,846.86
Alternate Vendor: White Buffalo:	Cost \$275-575 per Deer
Most Humane Method of Killing Deer	
Bait, Live Trap & Kill Historically most common method used in North Oaks. Deer are dispatched the following day.	trapped in baited nets and
The USDA quote for 12 nights of trapping:	\$ 19.706.47
Inhumane – Trapped deer are extremely stressed before bei	ng shot
<u>Fertility Control</u> Highly regulated by EPA and must be repeated annually. This is a very expensive technique that would be impractical for o	our community.
Vendor White Buffalo Inc. 860-385-4725 Cost	\$500 - \$1500 per Doe Treated
<u>Managed Supervised Archery Hunt</u> Most common deer management method in Metro Area, Common Proven to be ecologically sound and fiscally responsible. Would have to be limited to North Oaks residents and a specified DNR Contact Scott Noland 651-539-3324	
Cost: Possibly some administrative costs which could be offset by a Hunters would be required to pass a proficiency test to partie	

Cost Comparison with Prior Years

Years	Deer Kill	Cost per Deer	Total Cost
2020/2021	28	\$ 584.00	\$ 16,356.33
2019/2020	37	\$ 680.00	\$ 25,170.93
2018/2019	34	\$ 414.00	\$ 9,935.43
2017/2018	41	\$ 368.00	\$ 15,099.25
2016/2017	133	\$ 268.00	\$ 35,663.68
Total	273	\$ 414.00	\$102,225.62
Average 5 yea	rs		\$ 20,445.12

(1) 2020 Deer removal contract was cancelled in early 2021 due to lack of deer being trapped. The \$16,356.33 is residual from 2020 contract.

3. DATA COLLECTION

Tabulate results and compare actual deer culled with management objectives. In some cases it may warrant doing an additional aerial survey to confirm effectiveness of the strategy.

The Watson program had very detailed data on every deer culled. See Exhibit 2. This Level of detail was very valuable in assessing the health of the herd, reproductive data and where in the community they were harvested. This data is extremely beneficial in determining future harvests and density goals.

Summary

Norths Oaks is blessed with abundant forests, wetlands, and open spaces. Our community places a high value on conserving and protecting these resources. A deer management program is one of many components in achieving this. Establishing a long-term target density for our deer population is the starting point. Annual aerial surveys should be conducted to determine the current status of the herd. The surveyed population should be compared to our target density, and then an annual management strategy would be implemented to align our herd with our target density. Maintaining a healthy herd is good for our environment and good for the deer.

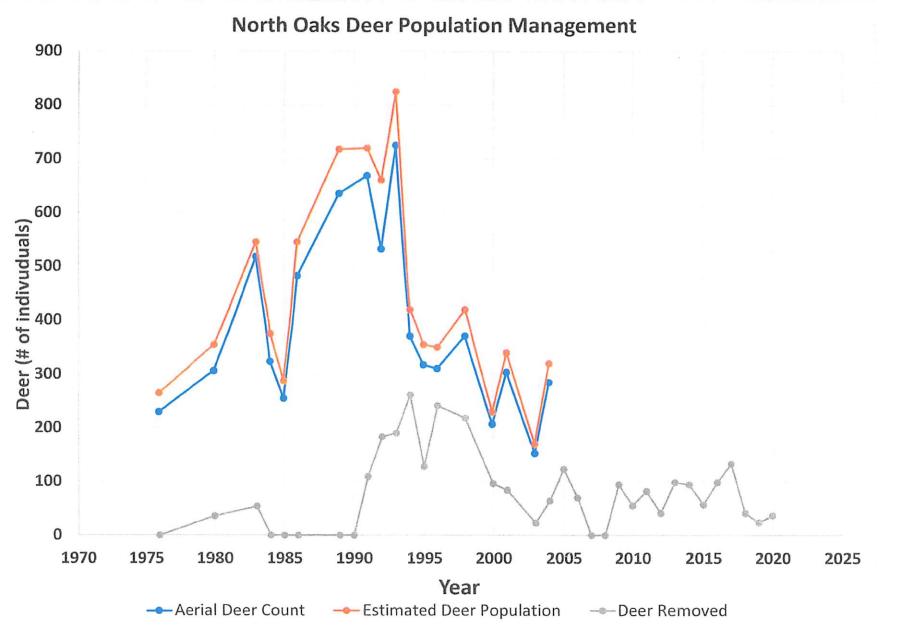
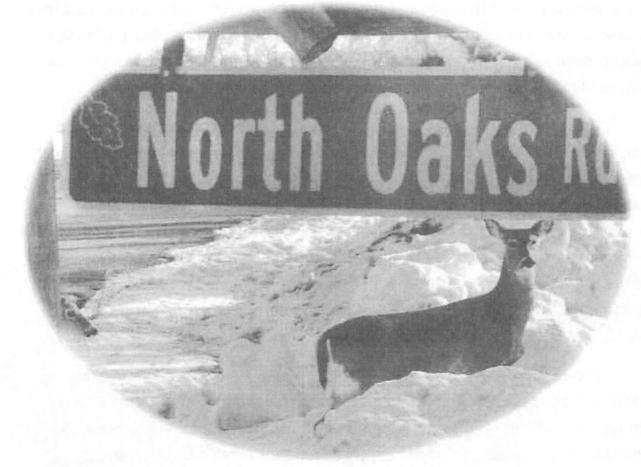


EXHIBIT 1

FINAL REPORT OF MNDNR PERMIT # 18133

MAY 30, 2014

NORTH OAKS



REMOVAL CONDUCTED BY : FIRST CHOICE WILDLIFE CONTROL LLC MERCER ENGLUND OWNER/CHIEF OPERATOR

Introduction

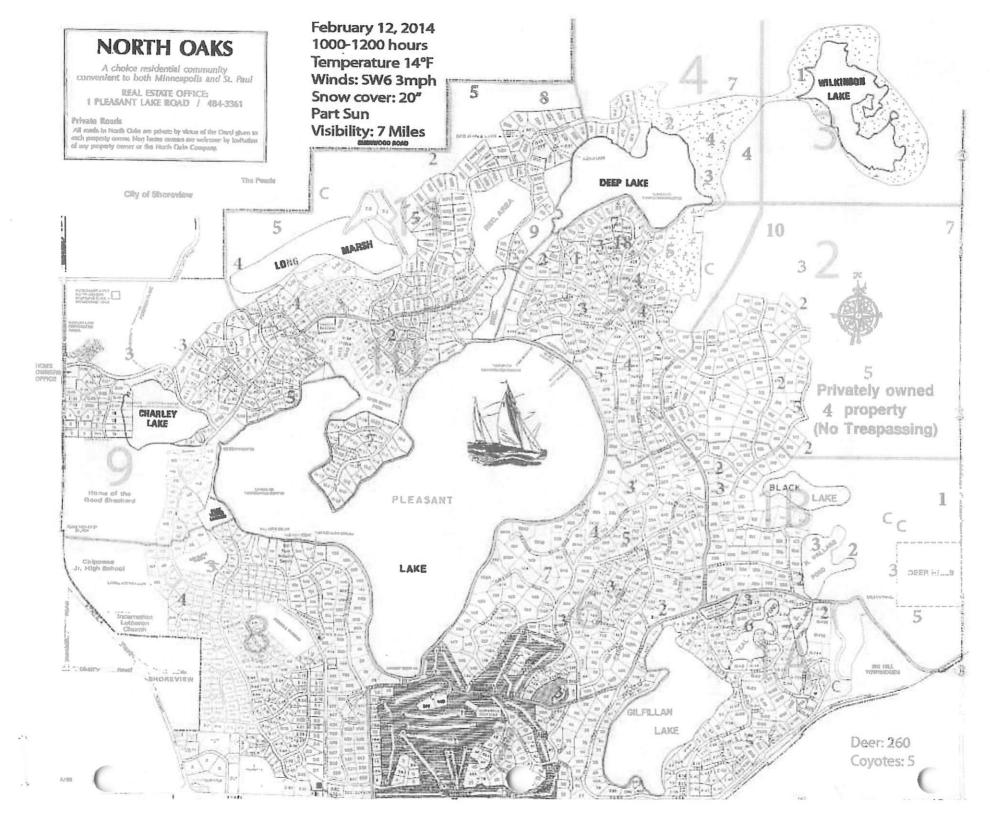
Once again this year's removal was conducted under the direction of Mr. Tom Watson and first removal took place on January 22, 2014 and the last was on April 9, 2014. Due to our experiencing an "old fashioned" Minnesota winter, with snow depths of over two feet and sub-zero temperatures, many former used trap locations were not used. That combined with the loss of other sites and limited deer movement due to the winter conditions, trap removal of animals was less successful than last year but still quite productive for the sites we had.

Due to the heavy show conditions, deer gathered in areas where a food source was available, by it bird feeders or simply people feeding them. The result was that many their could be seen in given small areas, such as on South Deep, Lake Road where I counted up to 32 deer being hosted on several adjoining properties throughout the removal season. A removal site in this area would have brought some relief for those residents who didn't care for such a heavy presence of these animals. When a winter such as this is experienced we need removal sites available, throughout the city, not just the normal heavy use areas of past years.

The condition of the animals removed showed the effects of the winter as the months progressed and the animals showed loss of body fat, many with no kidney fat at all but (<u>found no deer sar villa animals</u>, a heat in many years. All animals removed were delivered to Mr. Lim Marion, Area Wildlife Manager located at Carlos Avery game farm, for CMD testing. This being the same as fast year, and disposal of all animals was conducted by the MNDNR.

I enjoyed speaking with a number of residents that approached me while conducting removal, and the very positive attitude displayed by all. Some were from trap site locations, and many were from people just out for exercise in the early morning hours. All were quite positive about the work being performed.

. **P**. -



	Zone C	Count	
	<u>201</u>	<u>14</u>	
Zone: (1A)	Zone: (18)	Zone: (2)	Zone: (3)
23	12 2	40	1
Zone: (4)	Zone: (5)	Zone: (6)	Zone: (7)
20	56 🌡	30	0
	Zone: (9)	Zone: (10)	Zone: (11)
Zone: (8)		9	42 🏨
Zone: (8) 7	11		
	11		

					PERMIT #	18133		
			Ar	nimal I	Removal Log	3		
Deer#	Date	Site	Sex	Age	Fetus Male	Fetus Female	Condition	DNR Tag #
1	1/22/2014	SS4	*M	2.5	0	0	Fair	422001
2	1/22/2014	SS4	F	3.5	0	2	Good	422002
3	1/22/2014	SS4	F	1.5	1	1	Good	422003
4	1/22/2014	SS4	F	1.5	2	0	Good	422004
5	1/22/2014	SS4	F	3.5	1	2	Good	422005
6	1/22/2014	SS4	M	F	0	0	Good	422006
7	1/22/2014	SS4	F	3.5	1	1	Good	422007
8	1/22/2014	SS4	*M	1.5	0	0	Good	422008
9	1/22/2014	SS4	M	3.5	Ō	Ō	Fair	422009
10	1/22/2014	SS5	M	4.5	0	0	Fair	422010
11	1/22/2014	SS5	F	2.5	1	1	Good	422011
12	1/22/2014	SS5	F	3.5	2	0	Good	422012
13	2/3/2014	SS4	F	2.5	2	0	Good	422013
14	2/3/2014	SS4	F	4.5	1	1	Good	422014
15	2/3/2014	SS4	F	F	0	0	Good	422015
16	2/13/2014	SS4	M	1.5	0	0	Fair	422016
17	2/13/2014	SS4	M	2.5	0	0	Fair	422017
18	2/14/2014	44	M	F	0	0	Fair	422018
1 9	2/19/2014	44	F	5.5	1	0	Good	422019
20	2/19/2014	44	F	F	0	0	Fair	422020
21	2/19/2014	29	F	F	0	0	Fair	422021
22	2/19/2014	SS5	*M	2.5	0	0	Fair	422022
23	2/19/2014	SS4	M	5.5	0	0	Fair	422023
24	2/19/2014	SS4	M	2.5	0	0	Good	422024
25	2/19/2014	SS4	M	3.5	0	0	Fair	422025
26	2/20/2014	44	F	4.5	0	2	Good	422026
27	2/24/2014	44	F	3.5	0	1	Fair	422027
28	2/24/2014	79EP	F	3.5	0	2	Fair *	422028
29	2/24/2014	29	M	F	0	0	Fair	422039
30	2/24/2014	SS4	M	F	0	0	Fair	422030
31	2/24/2014	SS4	F	4.5	1		Good	422031
32	2/26/2014	SS5	M	3.5	0	0	Fair	422032
33	2/26/2014	SS5	M	F	0	0	Fair *	422033
34	3/5/2014	44	F	1.5	0	2	Fair	422034
35	3/5/2014	29	F	2.5	1	0	Fair	422035
36	3/5/2014	79EP	M	F	0	0	Fair	422036
37	3/5/2014	12	M	3.5	0	0	Fair	422037
38	3/6/2014	44	F	2.5	0	2	Fair	422038
39	3/6/2014	79EP	F	F	0	0	Fair	422030
40	3/6/2014	29	F	1.5	Ō	2	Fair	422040
11	3/6/2014	68	M	4.5	Ő	0	Fair	422040

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422078 422078 422080 422081	Good	0	0	1.5	3	8SS	4/8/2014	81
422078 422079 422080	Good				-)))) -	トン シントトー):
422078 422079)	0	0	2,5	3	8SS	4/8/2014	88
422078	*Poor	0	0	Π	П	SS4	4/1/2014	79
110774	Good	ω	0	2.5	П	12	4/1/2014	78
A00077	Fair ·	2	0	3.5	m	79EP	4/1/2014	77
422076	Fair		_	1.5	Π	29	4/1/2014	76
422075	Poor	0	0	71	M	4	4/1/2014	75
422074	Good	-		1.5	וד	14LB	3/29/2014	74
422073	Good		0	1.5	Π	29	3/29/2014	73
422072	Fair	2	0	2.5	Π	14LB	3/26/2014	72
422071	*Poor	0	0	1.5	Z	14LB	3/26/2014	71
422070	*Fair	0	0	3.5	z	SS4	3/25/2014	6
422069	Good	0	2	3.5	т	SS5	3/25/2014	69
422068	Good	0	0	4.5	Z	SS5	3/25/2014	88
422067	Fair	0	0	Π	TI	44	3/25/2014	67
422066	Fair	o	0	Π	Z	43	3/25/2014	6 6
422065	Fair	2	0	4.5	Π	29	3/25/2014	6 5
422064	Good		1	2.5	П	79EP	3/25/2014	64
422063	Fair	0	0	5.5	M	12	3/22/2014	63
422082	Fair	2	0	4.5	T	SS4	3/22/2014	6 2
422061	* Good	0	0	7.5	Z	79EP	3/22/2014	61
422060	Fair	2		3.5	וד	43	3/22/2014	60
422059	Fair	Ò	0	1.5	TI	29	3/22/2014	59
422058	Good	-	0	4.5	П	4	3/22/2014	58
422057	Fair		0	1.5	ת	SS5	3/18/2014	57
422056	Fair			2.5	п	SS5	3/18/2014	56
422055	* Fair	2	0	3.5	Π	SS4	3/18/2014	55
422054	Fair	0	0	т	זד	SS4	3/18/2014	\$
422053	Fair	0	0	π	71	43	3/18/2014	53
422052	Fair			4.5	Π	79EP	3/18/2014	52
422051	Fair	0	0	2.5	Т	12	3/18/2014	51
422050	Fair	2	0	2.5	71	29	3/18/2014	50
422049	* Fair	0	ω	4.5	Π	4	3/18/2014	49
422048	Fair	0	0	Π	Π	4	3/18/20014	48
422047	Fair	0	0	חר	Z	68	3/18/2014	47
422048	Fair	2	0	3.5	71	SS4	3/12/2014	46
422045	Fair			1.5	Т	SS4	3/12/2014	4 5
422044	Good	2	0	2.5	Π	SS4	3/12/2014	44
422043	Fair	0	0	וד	חר	SS5	3/11/2014	₽
422042	Fair	0	2	4.5	וד	SS5	3/11/2014	42
DNR Tag #	Condition	Fetus Female	Fetus Male	Age	Sex	Site	Date	Deer #
		Ŏ	Removal Log	Animal	Ą			
		10100						

Animal Removal Log Deer # Date Site Act Fetta Male Fetta Female Condition DIR Tag. # Bit 482/014 19 E F 0 0 0 Fetta Female Condition DIR Tag. # Bit 482/014 19 E F 0 0 0 Fetta Female Condition DIR Tag. # Bit 482/014 14 E F 5 0 0 Feta 422/08 Bit 482/014 14 E F 5 0 0 Feta 422/08 Bit 482/014 14 E F 5 0 0 Feta 422/08 Bit 482/014 12 F F 0 0 Feta 422/08 Bit 482/014 12 F F 0 0 2 Feta 422/08 Bit 482/014 S5 0 0 2 Feta 422/08 Bit 492					· ·	PERMIT #	18133		
# Date Site Ser Ace Fetus Mate Fetus Female Condition DNR Tag 4/8/2014 73E/F F 0 0 2 God 42/2014 4/8/2014 34 F F 0 0 F 42/204 4/8/2014 14B F 2.5 1 1 1 F 42/208 4/8/2014 14B F 1 1 1 1 F 2.006 4/8/2014 14B F 1 0 0 0 Fair 422060 4/8/2014 12 F F 0 0 2 Fair 422060 4/8/2014 75 0 0 2 Fair 422060 422060 4/8/2014 75 0 0 2 Fair 422060 422060 422060 422060 422060 422060 422060 422060 422060 422060 422060 422060)			ş	limal I	Removal Lo			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Deer #	Date	Site	Sex	Age	Fetus Male	Fetus Female	Condition	NR Tag
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	83	4/8/2014	79EP	Π	П	0	0	Fair	422083
4/8/2014 34 F F 0 0 Fair Fair 4/9/2014 4/9/2014 79EP M 1.5 0 0 Fair Fair 4/9/2014 7 F 0 0 Fair Fair 4/9/2014 7 F 0 0 Fair Fair Fair Fair 7 7 Fair Fair Fair Fair 7 7 Fair Fair Fair 7 7 Fair Fair Fair 7 7 Fair Fair 7 7 7 Fair Fair 7 7 Fair Fair 7	%	4/8/2014	14LB	Π	1.5	0	2	Good	422084
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	85	4/8/2014	34	┓	П	0	0	Fair	422085
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	86	4/8/2014	SS5	וד	Π	0	0	Fair	422086
492014 14LB F 2.5 1 1 Period 492014 14LB F 2.5 1 0 Poor 492014 14 F 4.5 1 0 Poor 492014 12 F 4.5 0 0 Poor 492014 12 F 4.5 0 0 Period 492014 12 F 4.5 0 0 Period 492014 14 F 4.5 0 0 Period 14 14 F 4.5 0 0 Period Period 14 14 14 14 14 14 Period Period Period Period 15 15 14 14 14 14 Period <td< td=""><td>87</td><td>4/9/2014</td><td>79EP</td><td>Z</td><td>-1 :5</td><td>0</td><td>0</td><td>Fair</td><td>422087</td></td<>	87	4/9/2014	79EP	Z	-1 :5	0	0	Fair	422087
492014 14LB F 0 0 Poor 4992014 34 M 5.5 1 0 Good Agood Agood <td>88</td> <td>4/9/2014</td> <td>14LB</td> <td>Π</td> <td>2.5</td> <td>د.</td> <td></td> <td>Fair</td> <td>422088</td>	88	4/9/2014	14LB	Π	2.5	د.		Fair	422088
492014 34 M 5.5 0 0 Good 492014 12 F 4.5 1 0 1 Fair 492014 78EP F 1.5 0 2 Fair 492014 492014 S85 M 6.5 0 0 0 Fair 492014 S85 M 6.5 0 0 0 Fair 492014 S85 M 6.5 0 0 7 Fair 492014 S85 M 6.5 0 0 7 Fair 0 0 7 7 7 7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </td <td>89</td> <td>4/9/2014</td> <td>14LB</td> <td>Π</td> <td>-71</td> <td>0</td> <td>0</td> <td>Poor</td> <td>422089</td>	89	4/9/2014	14LB	Π	-71	0	0	Poor	422089
4922014 44 F 4.5 1 0 Fair 4922014 78 F 7 0 2 F F 4922014 78 F 7 0 2 F F 4922014 78 F 7 0 2 F Fair 4922014 78 M 8.5 0 0 2 F Fair 4922014 78 M 8.5 0 0 2 Fair 4922014 78 M 8.5 0 0 2 Fair 4922014 78 1	80	4/9/2014	34	Z	5.5	0	0	Good	422090
4992014 12 F 0 1 Fair 4992014 78EP F 1.5 0 2 Fair 4992014 SS M 6.5 0 0 7 Fair 4992014 SS M 6.5 0 0 1	91	4/9/2014	44	רר	4.5	-	0	Fair	422091
499/2014 79EP F 1.5 0 2 Fair 499/2014 SS5 M 6.5 0 0 6 6 7 499/2014 SS5 M 6.5 0 0 6 7 Fair 499/2014 SS5 M 6.5 0 0 7 Fair 499/2014 SS5 M 6.5 0 0 7 Fair 499/2014 SS5 M 6.5 0 0 1	92	4/9/2014	12	П	TI	0	4	Fair	422092
	83	4/9/2014	79EP	П	1.5	0	2	Fair	422093
	94	4/9/2014	SS5	M	6.5	0	0	Fair	422094
	95								
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DEER REMOVAL DATA

DEER REMOVED:

ADULT FEMALES: 46 JUVINILE FEMALES: 16 JUVINILE MALE: 8

FETUS COUNT: *85

 FETUSES FEMALE:
 55
 FETUSES MALE:
 30

 FETUS SEX UNKNOWN:
 0

 FEMALE DEER WITH NO FETUS:
 2

 FEMALE DEER WITH SINGLE FETUS:
 9

 FEMALE DEER WITH TWO FETUSES:
 32

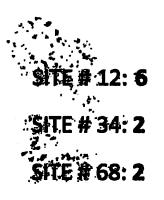
 FEMALE DEER WITH THREE FETUSES:
 4

ondition Repo

Permit # j 8

MNENH Tag#	
422001	Male with Antiers (Small 8 point)
422008	Male with Antiers (Small 3 point)
422022	Male with Antlers (Small 6 point)
422028	What appears to be gunshot wound in flesh above spine, shoulder area close to neck, fairly recent injury.
422033	Blind left eye, removed a .177 cal. Pellet from eye socket.
422049	Old healed fracture to right front leg.
422055	Old healed fractures to from legs.
422061	Old puncture wounds to left side chest, some lung damage
422070	Male with Antiler, left side (3 point).
67.2071	Over half of lungs brown in color and webbed to left side of + chest
422079	Very undersized with almost no body fat, and deformed rear hooves.

TRAP DATA



SITE # 8:

S.

 DEER REMOVED:
 51

 SITE # 14LB: 6
 SITE # 29: 9

 SITE # 43: 3
 SITE # 44: 13

SITE # 79EP: 10

HARP SHOOT DATA

DEER REMOVED: 4

Condition Report

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MNENR Tag #	
422001	Male with Antiers (Small 8 point)
422008	Male with Antiers (Small 3 point)
422022	Male with Antlers (Small 6 point)
422028	What appears to be guitshot wound in flesh above spine, shoulder area close to neck, fairly recent injury.
422033	Blind left eye, removed a .177 cal. Pellet from eye socket.
422049	Old healed fracture to right front leg.
422055	Old healed fractures to from legs
422061	Old puncture wounds to left side chest, some lung damage
422070	Male with Antilar, left aide (3 point)
<i>67307</i> 1	Over half of lungs brown in color and webbed to left side of + chest
422079	Very undersized with almost no body fat, and deformed rear hooves.

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				Dissolved		Secchi	Total			Total Kjedahl		Nitrite and		Total	Surface Water	Oxygen Reduction			
Lake	Sampler	Temperature	Conductivity	Oxygen	рН	Depth	Phosphorus	Orthophosphate	Chlorophyll-A	Nitrogen	Ammonia	Nitrate	Chloride	Nitrogen	Elevation	Potential	Iron	Manganese	Turbidity
Black	VLAWMO	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х					
Charley	VLAWMO	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х					
Deep	VLAWMO	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х					
Gilfillan	VLAWMO	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х				
Pleasant	VLAWMO, SPRWS	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х
Wilkinson	VLAWMO	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х				

Notes:

VLAWMO = Vadnais Lake Area Water Management Orgnization

SPRWS = St. Paul Regional Water Services

Table North Oaks Lakes Years Sampled

Lake	Sampler	Years of Data	Sampler	Years of Data
Black	VLAWMO	2009 through 2020	SPRWS	No data
Charley	VLAWMO	2009 through 2020	SPRWS	No data
Deep	VLAWMO	2009 through 2020	SPRWS	No data
Gilfillan	VLAWMO	1997 through 2020	SPRWS	No data
Pleasant	VLAWMO	2020	SPRWS	2010 through 2021
Wilkinson	VLAWMO	1998 through 2020	SPRWS	No data

Notes:

VLAWMO = Vadnais Lake Area Water Management Orgnization SPRWS = St. Paul Regional Water Services North Oaks News:

Submitted article about Japanese barberry Submitted article about NRC Commissioner vacancy

Attended a webinar about zero waste/packaging - I would like to see our City continue with the conversations that former Council member Katy Ross initiated with local business owners about phasing out the use of polystyrene take-out containers.

October Month in Review

October 2021



- Homeowner calls at @ 87 East Pleasant Lake Rd, 5 Hawk Ln, 23 Oriole Ln, and 63 East Pleasant Lake Rd
- Deadline for removal of diseased oak trees is set at February 1rst, 2022. We will send reminder notices in December and re-inspect for compliance starting February 1.
- Working directly with residents to provide information on invasive species control such as Oriental Bittersweet, buckthorn, and Garlic Mustard.
- Sent out notices with regards to Operation Clearview. Will stop by and visit with homeowners if possible/necessary.
- We have provided copies to City Hall and NOHOA of the spreadsheets we use to document diseased trees so that they are available to staff as needed.
- Ash tree inspections will ramp up shortly as it is easier to diagnose ash trees when they do not have leaves.
- Attended Natural Resource Meeting on October 21rst.