

Natural Resource Commission Agenda

May 16, 2019 7:00 p.m.

**Community Meeting Room - 100 Village Center Drive, Suite 150
North Oaks**

- 1. Call to Order**
- 2. Roll Call**
- 3. Approval of the Agenda**
- 4. Approval of April 18, 2019 Minutes**
- 5. Pollinator Resolution**
- 6. Review of NRC's Mission Statement**
- 7. Discussion of NRC's Role in Development**
- 8. Tick Task Force Report**
- 9. Kate Winsor's Report**
- 10. City Update**
- 11. NOHOA/NEST Update**
- 12. Other Business**
- 13. Next Meeting June 20, 2019**
- 14.**

Natural Resources Commission Minutes

April 18, 2019

5:30 P.M.

Call to Order:

Chair Bob Larson called the meeting to order at 5:15 p.m.

Roll Call:

Present: Chair Bob Larson, Vice Chair Kate Winsor, Commissioners David White, Damien LePoutre, Commissioner Dan McDermott, and City Councilmember Rick Kingston.

Staff: Recording Secretary Gretchen Needham and City Administrator Mike Robertson.

Absent: Mayor Nelson and NOHOA Liaison Diane Gorder.

Approval of Agenda:

Commissioner White moved to approve the agenda. **Commissioner McDermott** seconded. **Motion approved unanimously.**

Approval of Minutes:

Commissioner LePoutre corrected the minutes to remove mention of a brochure in the pollinator resolution, changing of wording about Black Lake, changing of "acre" to "square mile" in discussion of deer, and correct spelling of the Vadnais Lake Area Water Management Organization (VLAWMO)'s acronym. **Commissioner Winsor** moved to approve amended March 21, 2019 minutes. **Commissioner McDermott** seconded. **Motion approved unanimously.**

Pollinator Ordinance

Commissioners discussed a draft of a resolution endorsing pollinator protection and promoting pollinator habitat. A presentation was given by students of the University of Minnesota. The NRC hope to have the resolution finalized and ready for the City Council meeting on May 9.

Review of League of Minnesota Cities Award Application

The City plans to submit the Tick Task Force (TTF) information for the League of Minnesota Cities 2019 City of Excellence Awards. The application deadline is May 6, 2019.

Discussion of Open Meeting Law and NRC's Role in Development

Commissioners reviewed the primary stipulations of the Open Meeting Law and how it applies and does not apply to the NRC. Commissioner LePoutre asked if Commissioners could discuss topics outside of meetings, such as data findings. Councilmember Kingston highlighted the intention of the law, which is to keep voting blocks from being formed ahead of scheduled meetings. Subcommittees would be allowed to do information gathering and sharing and that is within the spirit of the Open Meeting Law. Vice Chair Winsor mentioned that the NRC makes recommendations to the City Council, instead of deciding resolutions and ordinances that are binding. Commissioner LePoutre would like a definition on record of NRC's role in advising the City Council and the Planning Commission.

Chair Larson entered into the record a memo regarding a meeting he held with Stephanie McNamara, the Superintendent of VLAWMO. Once the City approves the development project in East Oaks, VLAWMO will give their opinion regarding whether or not the plan has the minimum impact on wetlands.

Commissioner LePoutre questioned whether or not Sambatek is a good choice for consulting with the City on environmental matters given that they work for developers. Administrator Robertson said Sambatek provides an advantage to the city because they are familiar with developers and their experience navigating the specifics involved.

Commissioner LePoutre recommended that the NRC's mission statement be reviewed at the next meeting.

Tick Task Force Report

The newest TTF survey has begun. The survey will be publicized on the City's website, Facebook page, email blast, and in the North Oaks News. The state's health department data will be analyzed with the TTF data to do a compare/contrast of results. Next year, the Polco survey tool will be used, which will have additional features.

Kate Winsor's Report

The article in this month's North Oaks News is about Oriental bittersweet. May 11 is the Garden Club Plant Sale at the Hill Farm. There will be a table manned by NRC staff. Free trees available will be pine saplings and some varieties of oak.

City Update

The City has received a grant from the MN Department of Agriculture for \$2,750 to combat Oriental bittersweet. Liaison Gorder will assist managing the project, which includes volunteer hours, removal efforts, and education.

Deer management is completed for the year; 24 deer were taken in total. Whether or not to trap next year will be discussed. Commissioner White wondered if the traps served any purpose anymore, since they are catching so few deer. Councilmember Kingston suggested the City not do a deer count automatically but wait and see if one is warranted.

The week after the 4th of July will be the target date for weed removal in Pleasant Lake.

Adjournment:

Commissioner Winsor made a motion to adjourn. Commissioner McDermott seconded. The motion was approved unanimously. The meeting ended at 7:12 p.m.

Next Meeting: May 16, 2019



State of Minnesota)
County of Ramsey) ss
City of North Oaks)

RESOLUTION NUMBER 1347
City of North Oaks Resolution
Endorsing Pollinator Protection and Promoting Pollinator Habitat

WHEREAS, pollinators, including bees, butterflies, and other insects, are an indispensable component of a healthy ecosystem and food system, providing flowering plants with the pollination needed to grow fruits, vegetables, nuts, and herbs; and

WHEREAS, scientific research has shown that pollinator populations are in rapid decline in the State of Minnesota, and across the United States; and

WHEREAS, research has shown that the decline is a result of multiple, interacting factors, including loss of food and habitat, pathogens and parasites, climate change, and the increased use of pesticides, including neonicotinoids; and

WHEREAS, neonicotinoids are a class of systemic chemical insecticides that have been shown to impair pollinators at low doses and kill them at higher doses; and

WHEREAS, alternative land management practices are available that would significantly increase pollinator habitat and reduce maintenance costs; and

WHEREAS, Minnesota state law preempts municipalities' ability to regulate pesticides, but does not restrict a municipality's treatment of the land it manages; and

WHEREAS, many North Oaks residents, businesses, and entities are concerned about the well-being of pollinators; and

WHEREAS, the North Oaks Home Owners' Association values the natural environment; its mission includes preserving and enhancing North Oaks through stewardship of its resources, and its vision includes being a place where people, history, and nature grow together;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of North Oaks:

The City of North Oaks is hereby declared a Pollinator Friendly Community. The city celebrates current policies and practices that protect and promote pollinator health, including:

- The North Oaks Home Owners' Association, with the help of NOHOA volunteers,





successfully converted approximately 2,000 square feet of Lake Gilfillan shoreline into pollinator habitat.

- NOHOA's shoreline restoration projects emphasize the use of a wide variety of native pollinator-friendly plants.
- The North Oaks Garden Club only uses vendors who do not use neonicotinoids on their annuals, vegetables and herbs sold at the annual Plant Sale.
- The North Oaks Garden Club passes out Mammoth sunflower seeds at the Plant Sale, encouraging residents to grow them providing food for pollinators.
- The management firm that manages NOHOA properties does not use insecticides or herbicides in their work.
- NOHOA's buckthorn removal at the 3.4-acre Mary Hill Park has allowed flowering plants to once again flourish in the sunny areas of the site.
- City of North Oaks departments use pesticides selectively and in targeted areas to protect against threats like the emerald ash borer. In order to preserve the quality of the playing surface on high-value sports fields, herbicides and insecticides are periodically applied to control weeds, ants, and mosquitoes.
- The City seeks to incorporate pollinator habitat with storm water management through the use of rain gardens and native plant buffers where feasible.
- The Natural Resource Commission has implemented a Conservation Award Program that recognizes residents and organizations for excellence in habitat management and wildlife conservation on their property. One category of the award program is for best practices in pollinator conservation.

BE IT FURTHER RESOLVED that the City shall undertake its best efforts to reverse pollinator decline by adopting new policies and practices that protect pollinators, including:

- North Oaks will identify potential pollinator habitat projects, including the recreation property on Larkspur Lane, as well as foster the continued improvement and maintenance of completed projects.
- NOHOA plans to supplement Mary Hill Park with more pollinator friendly plants over time.



- The City shall seek to clarify guidelines against the use of neonicotinoid pesticides and pesticide treated plants.
- The City of North Oaks will prioritize nurseries that refrain from using neonicotinoids when purchasing plants for City projects.
- The City of North Oaks will encourage developers seeking permits to plant more pollinator forage where appropriate.
- The City of North Oaks shall also encourage private developers to incorporate pollinator friendly plantings into required landscaping.
- The City of North Oaks and NOHOA shall support efforts to educate the broader community about the action it has taken and the importance of creating and maintaining pollinator friendly habitat.
- The City of North Oaks shall post a copy of this resolution to the City website and periodically post a Pollinator Friendly Activities Report in the City newsletter.
- The City shall review and revise the current Integrated Pest Management Plan to better accomplish the goal of controlling pests with the least possible disruption to ecosystems.
- The North Oaks Garden Club will continue to host an annual plant sale that offers a variety of pollinator friendly plantings, including native plants.
- North Oaks shall manage for pollinators by selecting native plantings for any future City stormwater management projects.
- The City will not mow rain gardens and other native plantings throughout North Oaks where bees may overwinter.
- The City, in conjunction with the Tick Task Force, will work to minimize the impact of pesticides used within forested areas and along forested trails due to the importance of forests for nesting habitat and flowering trees and shrubs as a food source.
- The City shall pursue a reduction in the use of herbicides on managed lawns.
- When feasible, the City shall allow coarse woody debris to accumulate in open or natural, forested areas as a means of nesting and overwintering habitat for pollinators.





- The Natural Resource Commission shall be responsible for ensuring the success of the agenda presented in this resolution.

BE IT FURTHER RESOLVED that the City of North Oaks urges all property owners, residents, businesses, institutions, and neighborhoods to assist pollinators by adopting practices including:

- Committing to avoid using pesticides, including systemic insecticides, on their property;
- Avoid planting flowering plants that have been treated with systemic insecticides;
- Discontinuing the sale of pesticides and plants that are treated with systemic insecticides;
- Incorporating more pollinator forage into their property;
- Refrain from treating lawns with herbicide;

BE IT FURTHER RESOLVED that the City of North Oaks transmit copies of this resolution to the Minnesota Department of Agriculture, Governor Tim Walz, State Representatives and Senators, U.S. Representatives and Senators, U.S. Environmental Protection Agency, and U.S. Department of Agriculture, and will continue to advocate at the State and Federal level for pollinator friendly policies.

PASSED BY THE COUNCIL of the City of North Oaks this 9th day of May, 2019.

APPROVED:

Gregg Nelson, Mayor

ATTEST:

Michael Robertson
City Administrator



CITY OF NORTH OAKS

Natural Resources Task Force

REPORT TO CITY COUNCIL

July 2005

TABLE OF CONTENTS

	PAGE NO.
I..... EXECUTIVE SUMMARY	4
II..HISTORY AND PRESERVATION OF THE NORTH OAKS NATURAL ENVIRONMENT	5
III.....COMMUNITY FOREST	7
IV.LAKES AND WETLANDS	8
V.....URBAN WILDLIFE	11

APPENDICES

- Appendix “A” - Excerpt from the Comprehensive Plan detailing the Physical Features and Environmental Resources in the City**
- Appendix “B” - Watson memo dated 4/6/04**
- Appendix “C” - Open Space Conservation Easement**
- Appendix “D” - Restoration Report to NOHOA – Shawn Tracy**
- Appendix “E” - Wildlife and Habitat Assessment**
- Appendix “F” - DNR and/or VLAWMO info.**
- Appendix “G” - Minutes of the Natural Resources Task Force**

EXECUTIVE SUMMARY OF MAJOR FINDINGS

1. A strong and consistent recommendation from the experts is that the first step for a natural resource management plan is to identify the community's priority areas, perform a natural resource assessment and develop a management plan. This approach is described in the attached *Guide to Using Natural Resource Information* by the DNR and Shawn Tracy's attached presentation on Natural Resource Management. The task force identified priority areas and interviewed experts in those areas. However, the completion of an overall assessment and development management plan was not in the scope or capabilities of this committee. Nevertheless, given the nature of North Oaks property ownerships, a successful plan must carefully consider the role of the City, NOHOA and the residents. The assessment and plan development should be accomplished with assistance from the DNR and other service providers.
2. Through its series of meetings, the task force's overall observations regarding the current status of our natural resources are:
 - The major risk that exists to our forests is invasive species such as buckthorn, purple loosestrife, and garlic mustard preventing the reforestation of natural species. Over the last decade reforestation has been the primary management focus for maintaining the community forest. The key strategies include preservation of existing trees, management of diseased trees, removal of invasive species such as buckthorn and planting native and diverse trees.
 - Further evaluation is required to assess our lakes and wetlands. Concerns do exist regarding appropriate long term remedies for weed and algae control.
 - The ability to determine all aspects of the carrying capacity of whitetail deer in this community has been well managed in the past.
3. Given that the City of North Oaks does not own land, a high level of involvement of the community and NOHOA is essential to natural resource management. Because homeowners are primary stewards of our natural resources, education is perhaps the most important element of the North Oaks natural resource management plan. Frequent and easy to understand best practices for woodland, lake, wetland and wildlife management is necessary. For example, the City should frequently publish a standard list of Do's and Don'ts for protecting natural resources including forests, wetlands and wildlife. As residents come and go, it is imperative to barrage the populace with the do's and don'ts related to each of the individual topics.
4. The Task Force recommends that the Natural Resources Task Force be disbanded after submission of its Report to the City Council. The Task Force does recommend, however, the establishment of a Natural Resources Commission to help promote community involvement, and to further define the role of NOHOA, the City, and the North Oaks

Company that meets on an as needed basis, perhaps after a comprehensive natural resources plan is prepared. Since NOHOA is one of the largest property owners in the community, it is recommended that NOHOA take the lead on establishing a Natural Resources Commission. It is recommended that the City of North Oaks take the lead working with the St. Paul Water Utility on water quality issues.

5. The establishment of a "Natural Resources Tab" on the city web site was suggested by City Administrator March and he will work to make this a key component to be used to provide education on many of the topics that have been discussed.

I. HISTORY AND PRESERVATION OF THE NORTH OAKS NATURAL ENVIRONMENT

The City of North Oaks has long been known as a protector of its unique natural environment. This concept is well documented through the various versions and updates of municipal comprehensive plans and regulatory ordinances. The past, present, and future development patterns and planning reflects the adherence to this concept.

The primary governing document for a municipality is its comprehensive plan. A comprehensive plan is required by the 1976 Metropolitan Land Act. Every city creates a comprehensive plan and part of that plan is a detailed public input process. The process of creating the plan allows the citizens themselves the ability to customize a plan to reflect the values of the local residents. The Mission Statement in the current version of the 1999 City of North Oaks Comprehensive Plan reads as follows:

North Oaks shall strive to preserve and maintain the city's status as a unique place to live. In concert with all established Home Owner's Associations, Commercial Associations, property owners, developers and citizens, the city shall continue to emphasize community and individual privacy with the protection and management of all natural resources.

In summarizing portions of the comprehensive plan, one realizes that it is difficult to compare North Oaks with other suburban communities. James J. Hill purchased most of the community in 1883 from Charles D. Gilfillan. Mr. Gilfillan had originally purchased the land in order to preserve a future water supply for the City of St. Paul. The St. Paul Water Utility maintains the rights to control water in the lakes through the use of an extensive conduit system. When Mr. Hill acquired the property his aim was to create an agricultural experimental farm. His son, Louis W. Hill Sr., preserved it in its natural unspoiled state until his death in 1948.

The North Oaks Company and local government formation around 1950 was set forth to develop North Oaks as a low density, rural community within a metropolitan area. A major emphasis was placed on the protection of the environment including the natural topography, woodlands, lakes, ponds, and wetlands for the benefit of current and future property owners.

Many of the regulatory ordinances that the City of North Oaks currently has in place are designed to support the mission and philosophy of development in the community. Some examples include ordinances on the topics of subdivisions, zoning, tree diseases, shoreland, ISTS, and erosion and sediment control.

The original and updated versions of the City of North Oaks comprehensive plans have consistently emphasized the maintenance and preservation of the unique natural environment within the city. (See Exhibit “A” for an excerpt from the comprehensive plan that provides a detailed description of the Physical Features and Environmental Resources in North Oaks)

History of the Natural Resources Task Force

In 1992, City Council Member Tom Watson coordinated a series of environmental meetings to investigate “all the components of our natural environment – forests, animals, water, soils, and air – which are interrelated.” In April of 2004, as Mayor of the City of North Oaks, Tom Watson outlined in memo format a plan to revisit the subject of natural resources similar to the effort that was undertaken in 1992 (See Exhibit “B”). However, this time the effort would be more formally structured with the creation of a Natural Resources Task Force charged with delivering a report to the City Council within nine months.

The first Natural Resources Task Force meeting was held on January 20, 2005. At that meeting, the City Engineer provided an overview for how to create a natural resources inventory. To become focused on what the overall goal of the Task Force would be the following goal was clarified early:

Goal: To assess the City’s natural resources situation in terms of:

- What is the present status of natural resources in our City?
- What is the effectiveness of current management approaches?
- Are there priority areas for strengthening and improvement?
- Do we need to establish a natural resources advisory “commission”, and advisory body to the City Council?

The initial Task Force was to be comprised of a cross section of community stakeholders. Residents, staff, and those representing other organizations that were on the mailing list and that participated in the work of this Task Force are as follows: Chair Babette Apland, Bob Elgin, Ken Richter, Karen Emanuelson, George Rux, Kevin Scattum, Barb Rowe, Bob Scholz, Tim Taylor, Betty Cowie, John Youngstrom, Stephanie McNamera, Tom Watson, Tom Welna, Jim March, and John Chirhart.

This group has met approximately once a month since the group’s inception. The organization of this group will sunset upon delivery of this final report to the City Council.

II. Community Forest

The task force spent time at both the April and May 2005 meetings discussing the status of the North Oaks forest. Guest speakers included Joe Walton (Kunde Company), Shawn Tracy (Earth Wizards) and Gary Eagles (North Oaks Company).

Over the last decade reforestation has been the primary management focus for maintaining the community forest. The key strategies include preservation of existing trees, management of diseased trees, removal of invasive species such as buckthorn and planting native and diverse tree species.

During the course of discussions, it became apparent that there are two major property owners in the community that are both working in ways to preserve and enhance the existing forest. Gary Eagles revealed that the North Oaks Company has prepared a detailed management plan on the Conservation Area. The Conservation Area is a part of the East Oaks PUD and is covered by a very specific easement. (See Exhibit "C" for Open Space Easement Agreement)

The other major property owner is the North Oaks Homeowner's Association. The Association is responsible for several large tracts of recreational and open space. NOHOA commissioned a report titled "Potential Areas for the Restoration or Creation of Native Plant Communities and Habitats on North Oaks Home Owners Association Property – May 21, 2004" (Exhibit "D")

In aggregate North Oaks homeowners are the most influential stewards of the community's natural resources and, in particular, forests. North Oaks homeowners appear to take pride in protecting and preserving the trees on individual lots under private ownership. Residents avail themselves of the services provided by the City Forester, Kunde Company. Kunde currently inspects for diseased trees including oak wilt and Dutch elm disease and performs root cuttings and injections to handle diseased trees. Kunde also responds to individual homeowner inquiries regarding tree diseases and advice on new planting recommendations.

The oak wilt control program has been in place for several years. North Oaks has been successful in applying for and receiving MN Releaf grants that help fund the tree root severing and tree injection projects that are part of the municipal oak wilt control program.

General Forestry Recommendations

Our first overall recommendation is to develop a citywide management plan for reforestation including:

- 1) Identify and treat diseases (i.e. oak wilt, Dutch elm disease) and invasive species (i.e. buckthorn, purple loosestrife, garlic mustard)
- 2) Removal of invasive species
- 3) Reinstate native plantings

Our second overall recommendation is to educate and enable residents. A management plan for invasive species that defines the best ways to control them should be developed and disseminated through multiple venues to residents. For example, experts should present at regularly scheduled community natural resource meetings and articles should be published routinely in the North Oaks News.

Other Suggestions for Program Improvement:

- Provide inventory on maps using GIS.
- Explore all grants available to help finance our program.
- Develop a plan to include:
 - a. Educate residents regarding impending arrival of gypsy moths.
 - b. Create Disaster Preparedness Program. Clean up debris after tornados, ice storms, etc.
 - c. Use of students to advise residents of “Fire Wise” program.
 - d. Use College of Natural Resources students to take an inventory. Integrate wetlands, forests and wildlife for best chance to get grant money.
 - e. Require licensing of vendors who perform forestry work in the community.
 - f. Send letters to all present and new shoreland residents.
 - g. Encourage volunteer groups like the Eagle Ridge/Otter Lane Group who have taken a grassroots approach to organizing and removing buckthorn on a neighborhood basis to obtain favorable vendor pricing.

Other Considerations:

NOHOA can play a leadership role and be a visible model for homeowners in managing reforestation. Mary Hill Park is an excellent example of reforestation. NOHOA should identify other highly visible areas in the community for reforestation efforts.

The City Forester could provide a certification to buckthorn removal vendors and advertise those vendors that have received a license in the *North Oaks News*.

Finally, as the City Forester is inspecting homeowner’s properties for oak wilt, he/she could also serve the community by providing educational materials, noting the levels of invasive species on the property and the impact of the invasive species on the forest, suggestions for best ways to address it, and potentially a list of certified vendors to contact for assistance.

III. LAKES AND WETLANDS

The task force spent time at both the March 22 and June 28 meetings discussing the status of the North Oaks lakes and wetlands. Guest *Speakers included Joel Stiras (MN DNR), Stephanie McNamara (VLAWMO) and Jim Bode (St. Paul Water Utility).*

North Oaks has many lakes and wetland areas with hundreds of acres of open water in lakes and ponds, all of which is subject to oversight by a variety of agencies or organizations including VLAWMO, the St. Paul Water Utility, and the Minnesota DNR.

- Vadnais Lakes Area Water Management Organization, VLAWMO, was formed in 1983 through a Joint Powers Agreement ratified by the seven local units of government. The organization was formed to comply with the metropolitan Surface Water Management Act. The VLAWMO originally adopted its watershed management plan in 1987. The current (second-generation) plan was approved by the Minnesota Board of Water and Soil Resources and adopted by VLAWMO in 1997. This plan sets forth goals, policies, management strategies and implementation criteria for the watershed.
- The St. Paul Water Utility regulates Charley and Pleasant Lakes and has flowage rights to the water based on a document from the late 1800s. The Water Utility can pump water in and out but has no land rights. Other North Oaks lakes are managed by Vadnais Lakes Area Water Management Association and the MN DNR.

Education seems to be a key component for all areas reviewed by the Task Force. As residents come and go, it is imperative to barrage the populace with the do's and don'ts related to each of the areas studied by the task force. The St. Paul Water Utility indicated that 30 to 40 million gallons of water from the Mississippi are pumped daily through Pleasant Lake which is comprised of approximately 4.5 billion gallons. Sediment from the Mississippi River accumulates in the lake and Charley Lake, in particular, may need to be dredged at some point in time. The Water Utility can request permits for chemical treatment of the lakes through the DNR. Regular water tests are taken of Pleasant, Charley and the canal from Deep Lake. The Water Utility measures water quality, in particular, phosphorous and nitrogen levels. Phosphorous drives algae growth, which in turn impacts the taste and odor of water so it is important to the Water Utility. The goal for phosphorus levels is 25 parts per billion in Vadnais Lake, whereas, phosphorous in Pleasant Lake is 40-60 parts/billion. The Water Utility is managing phosphorous in Pleasant Lake through aerators and through the use of iron. The Water Utility is adding iron at a pumping station in Fridley. The Water Utility added copper sulfate into Pleasant every Tuesday from 1990 until 2002. When they did, there was not an algae problem. The Water Utility stopped the copper treatment because it is an environmental issue – copper does not decompose, rather it accumulates in the sediment.

- Joel Stiras of the DNR indicated that nutrients cause weed growth, thus weeds are the symptom, not the problem. Short term solutions to weed control include chemical applications and harvesting.
- Stephanie McNamara of VLAWMO recommended a lake assessment to identify types and amounts of plants present and then, to determine appropriate treatment methods. VLAWMO can help homeowners do an assessment and then create a plan.

General Water and Wetland Recommendations

Natural Resources Commission to further define the role of NOHOA, the City, the North Oaks Company and the residents.

The quality of surface water in North Oaks is of significant concern to all of the agencies with oversight authority; however as a community we need to determine how our understanding and definition of water quality fit with those of the oversight agencies. As an example, there is a general perception that several of the lakes including Pleasant, Deep and Gilfillan have significant weed problems consisting of curly leaf pondweed and recurrent algae bloom. Excess phosphorus is generally pointed to as the main contributing factor for these problems. There is however no clear consensus as to the source of excess phosphorus. We need more information. There are several core questions, which still need to be answered:

Need dos and don'ts to protecting resources –and buckthorn forests, wetlands, and wildlife.

1. How do we, as a community, define and measure water quality for our lakes and wetlands?
2. What information already exists regarding water quality in our community lakes and ponds?
3. What is the current condition of water quality in our lakes and ponds?
4. How do we determine which lakes and/or ponds need to be studied?
5. Whose responsibility is measuring, reporting, and evaluating the data?
6. How much does our community affect (positively or negatively) our water quality?
7. What are the options for remediation?
8. What are the options for prevention?

Next Steps in Evaluating Water Quality Issues in Pleasant Lake

1. Review the report being prepared by a consultant to NOHOA on options for consideration for the short and long-term water quality improvement for Pleasant Lake.
2. Review all of the relevant original documents relating to the agreement or agreements between the North Oaks Company and the St. Paul Water Utility.
3. Perform a thorough search and review of all the relevant scientific data for the establishment of the appropriate technical database from which the final options and recommendations will be made.
4. Establish a work group to begin a dialogue with the St. Paul Water Utility to outline and initiate an agreement on the course of action for the short and long-term improvement for the water quality of Pleasant Lake. This would include:
 - a. A thorough review of #1 outlined above.
 - b. Establishment of a scientific study of the aerators and possible improvements in location, design, operations, etc.
5. Many residents have lots with one or more small wetland areas. Therefore, homeowners are the primary stewards of North Oaks' smaller wetlands. The community needs greater involvement in proper wetland management including:

- a. Dissemination of an easy to understand, standard guidelines for homeowners' management of ponds and small wetlands. This should include the Do's and Don'ts of pond and wetland management.
 - b. Offer at least annually a resident workshop on wetland management.
 - c. Offer workshops and materials on "How to Maintain a Healthy Pond?"
6. Outline all of the relevant organizations that will be included in the drafting and implementation of all recommendations.
7. Outline of actions and consultation with NOHOA and the North Oaks City Council regarding the financial commitment to the recommended improvements.

IV. Urban Wildlife

Managing White-tailed Deer – A presentation outline by Mayor Tom Watson

1. Objective

- a. Every attempt has been and continues to be made to preserve the existing physical and environmental characteristics that have made North Oaks unique in its abundance of natural resources.
- b. Manage the white-tailed deer population consistent with the biological and cultural carrying capacity of the land.

2. History and Background

- a. Hill Family/North Oaks Company and the University of Minnesota
 - i. North Oaks community provided a location for graduate students in forestry and wildlife management fields to do research; involved removal of wildlife to support the research
 - ii. Article – "Trap-and-Shoot and Sharpshooting Methods for Control of Urban Deer: The Case History of North Oaks, Minnesota": Jordan, Moen, DeGayner, and Pitt
- b. State-wide and regional white-tailed deer issues today
 - i. See "Minnesota deer facts" article from the DNR
- c. White-tailed deer populations grew very rapidly in the 1970s, 1980s and early 1990s
 - i. Urban white-tailed deer management issues throughout the United States
 - 1) Competition between urban/suburban housing expansion and the increasing population of the white-tailed deer
 - ii. Community residents petitioned the City Council in the 1970s to commence removing excess white-tailed deer

- 1) Request to tranquilize and transport away from the community; DNR denied the request and recommended a shooting program
 - 2) Shooting program approved and implemented in or about 1980
 - a) Univ of MN authorized to conduct the removal employing primarily graduate students using a trap & dispatch method
 - 3) City set an aerial counted population of 400 deer, below which all removal would stop; removal stopped in 1985
 - 4) No removal from 1985 to 1992; resumed removal in the winter 1991
- iii. Watson addressed the Council in 1991 about approving a Natural Resources Management Program, in large part to address the growing, unmanaged white-tailed deer population

- 1) Resident complaints about deer browse
- 2) Conducted a series of public education meetings
 - a) Learned for the first time about no natural regeneration of North Oaks hardwood trees, primarily oaks
 - b) Learned about an over-population and eco-system imbalance of any component and the consequence to the City's natural environment
 - c) Learned about buckthorn and other invasive species
- 3) Created support for managing natural resources – forest management, white-tailed deer, hardwood tree regeneration [buckthorn removal], etc.
- 4) The approved Natural Resources Preservation Plan

In 1991, the City Council approved a Natural Resources Preservation Plan. The purpose of this plan is to deal with separate natural resources activities in an interrelated and coordinated, rather than piecemeal, basis. The plan anticipates a three phase approach:

Phase I Assessing the environmental situation in North Oaks with assistance by the Department of Natural Resources and other service providers; determining the biological and cultural carrying capacity of the land; and holding public information meetings.

Phase II Conducting an interim program that maintains the current situation in regard to issues such as water management, reforestation, and deer and goose control; and appointing a seven to nine-member task force to begin work on developing a long-range plan.

Phase III Completing a long-range plan and beginning implementation of this plan, including the appointment of a six to nine-member natural resources standing committee to advise the City Council on environmental issues.

Phase I of the Plan has been completed, Phase II is in process and Phase III will be started after Phase II is complete.

d. White-tailed Deer Population Data

i. Population Inventory and Removal Data

Year	# of deer counted *	Est. deer population	# of deer removed
1976	230	265	
1980	307	355	36
1983	519	546	54
1984	324	375	
1985	255		
1986	483		suspended
1989	636		suspended
1990			suspended
1991	669	720	109
1992	533	660	183
1993	726	800-850	190
1994	371	420	261
1995	318	355	128
1996	311	350	241
1998	371	420	218
2000	207	230	96
2001	304	340	84
2003	153	170	23
2005	285	320	64

* population count using a recorder/counter with the pilot

- 1) population count using aerial, visual counts; 80% of population due to tree cover, snow and color contrasts, and topographical conditions
 - 2) populations impacted by vehicle collisions, natural death events, migration, and natural predators
- ii. White-tailed deer population in North Oaks is healthy, very healthy
 - iii. Environment appears to contribute to white-tailed deer reproduction that has extended to natural, biological birth season in the late spring, early summer.
 - 1) Have seen fawns born late, in mid-summer, causing survival difficulties the following winter, especially if we have harsh winter weather.
 - iv. North Oaks summary of removal and aerial counts since 1991 – see table “Aerial – Confidential”
- e. MN Department of Natural Resources policies and guidelines
- i. Authority: MN Statutes 2004. Section 97A.401

- ii. DNR policy – City management programs – “*Urban Deer Population Control*”
- iii. *Annual Deer Harvest, 1972 - 2003*
- iv. Biological carrying capacity of a suburban/urban community – 15-20 deer per square mile, or about 120 to 160 deer in North Oaks [area = 8 sq. miles].
- v. Cultural carrying capacity – concept to address the community desire, tolerance, sight-seeing, and social viewing.
 - 1) Watson interpretation – that population that requires “us” to drive around to “look for deer” and minimizes garden disturbance on “our property”.
- vi. Management and removal methods
 - 1) Approved methods
 - a) Trap and Dispatch [Shoot]
 - b) Sharp-shooting
 - c) Bow and arrow
 - d) Special hunting seasons
 - 2) Unapproved methods
 - a) Trap and Relocation
 - b) Birth Control and Contraception
- vii. Annual permit approval requirement
 - 1) Approved methods – items 1 – 3
 - 2) No special hunts
 - 3) Contracted wildlife removal services
 - 4) Quantity – based on prior year updated modeling of aerial count, removal, and natural and vehicle deaths (est) as of November 1st
- viii. Article: *MN Conservation Volunteer* magazine – Sept-Oct 1996; “*Oh Deer!*”

3. Community Factors

- a. White-tailed deer are considered an asset of most suburban communities, when managed with reasonable populations
 - i. Stay out of the gardens
 - ii. Lyme disease
 - iii. Auto – deer accidents
- b. Deer should be maintained above the biological carrying capacity, or something related to the cultural carrying capacity of the community

- c. Deer population should not conflict hardwood tree natural regeneration, i.e. acorn growing into small oaks, etc.
- d. Encourage home management techniques
 - i. Select fencing
 - ii. Repellants
 - iii. Energized (electric) fencing
 - iv. Home remedies and repellants – soap bars, human hair, reflective materials, pets, etc.
- e. Community information

4. Recommendations and Suggestions

- a. Conduct every five (5) years community survey to determine the cultural carrying capacity; with NOHOA
- b. Continue community information with newspaper article at least annually
- c. Be very sensitive to the emotional concerns of our public about wildlife and control measures
- d. Continue to maintain some statistical analysis of the North Oaks deer population
 - i. Realize that the carrying capacity will be continually reduced as residential development continues, primarily in the north and east.
 - ii. Realize that the land development in the communities and areas outside our boundaries will have an impact on the location of the deer population and the deer-related issues, primarily vehicle collisions
- e. Determine the deer population in the context of a natural resources management plan, including all elements and components of our total eco-system; a local decision.