



I am the Natural Resource Coordinator for the City and one aspect of this position is to help coordinate and protect Duluth's public lands in order to better sustain and improve upon the City's natural areas.



Duluth is poised to protect publically-owned ecologically significant landscapes through tools that already exist in the City's plans and policies. First, I will bring you up to speed on the work being done to assess some of these lands ecologically and environmentally and what the Duluth Natural Area Program is about. Second, I will share the information related to the nomination process for Hartley as a natural area under the Duluth Natural Areas Program.



A bit of background to remind all of us of the rich history in this community to protect and preserve our natural resources. Over the past 20 years, Duluth has worked hard to write and periodically update their long-range land use visions and plans. In 2001 and Beyond, a public visioning process, three guiding principles were identified which set the stage for the 2006 Comprehensive Land Use Plan

1. Preserve and Enhance the Environment
2. Invest in people, neighborhoods and community
3. Build a strong economic base.

We understand even more today how our environment and the economy are linked from a human perspective. From an ecological perspective, I cannot say enough for the importance of diversity and sustainable plant and animal communities in relation to the natural world and human health especially as the earth transitions in this changing climate.



Prior to the 2001 visioning and the 2006 comprehensive land use plan, land use planning was not really done and when it was (1927 and 1958 (not formally adopted)) it was more or less centered around direct infrastructure needs for an economy that was quite different. When the 2006 plan was complete, it included 12 governing principles one of which is to “Declare the necessity and secure the future of undeveloped places”. Today the concept of setting aside green infrastructure before identifying where development should go is shaping where we are heading in service to our land, water, and community. In many places our community makes extensive use of these open spaces even though they are not owned by the City. And in instances where the land is owned by the City, they do not have a designation that protects them in perpetuity from future sale and possible development.

## Goal - Protect Lands Valued for Open Space



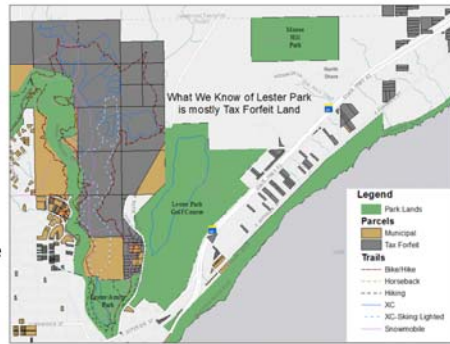
### VALUED for Natural Resources

- Diversity of plants and animals
- Protection of water quality and flooding
- Sense of place (recreation, awe, solitude)

### NEED to Protect

- Not all lands are protected.
- Tax Forfeit Lands (grey areas) are not secure nor are they the City's to manage

### FOR Future Generations



Many of our treasured open spaces are on tax forfeit land. Take a look at Lester Park here. The grey areas are lands owned by the state and managed by the county who works to sell them. We call them tax forfeit lands. The beige colored parcels are City owned, but here where you might think they are designated park and protected as such, they are not. The green area is the park and the golf course. Whether these areas were officially designated by park is yet another question. And so, lands we generally think are open space and will always be there for us are not necessarily protected from other uses nor are they managed for natural resource protection and restoration.

Today the update to the Imagine Duluth 2035 Planning Process is complete and voices from across the City shared their ideas for open space, energy and conservation, housing, economic development and transportation.

## Imagine Duluth 2035: Open Space Plan & Strategy



### Introduction

**Mission Statement:** Duluth will strive for a sustainable open space system that enriches the lives of all Duluthians. These open spaces will reflect the community's ecological, historic, cultural, and recreational values, and will contribute to the community's resilience to natural disasters.



### Policy 2: Examine the value and need for all of Duluth's publicly-owned open space

In the newly adopted update to the comprehensive land use plan, one of the five policies under the open space section is to examine the value and need for all of Duluth's publicly owned open space and it includes a strategy to encourage the use of the Duluth Natural Areas Program as a local tool to protect important natural resources. This is our best tool to protect remaining relatively undisturbed natural areas to ensure we retain the environmental values of these places such as plant and animal diversity, water quality, flood protection, and a sense of place for each of us.

## Duluth Natural Areas Program



A City program created to protect and preserve Duluth's natural heritage for the public good by

- Ensuring a greater opportunity to better manage Duluth's biodiversity
- Supporting our economy's diverse markets
- Promoting the well-being and happiness of our citizens and visitors
- Maximizing our efforts to retain and enhance carbon sequestration and build resiliency in a changing climate

Read slide first

E. O. Wilson, a well known biologist, researcher, and naturalist suggests that conserving half the land and sea globally, will protect 85% of all species from extinction. In addition, studies have and continue to show that as the impervious surface in a watershed increases (e.g., roads, buildings, parking) the water quality degrades. Protecting vital lands as open space and natural resource protection is an excellent way for Duluth to do our part not only locally, but regionally and globally as well.

## Duluth Natural Areas Program Purpose

*Legislative Code, Chapter 2*

*Article XXIX, Sec. 2-152*



- Adopted 2002
- Findings: The City of Duluth is the owner of a substantial number of tracts of real estate, some of which are of **special or unique ecological or environmental significance to the community**, that should be considered for conservation designation in order to protect those values.
- Purpose: To create a local program **to protect and preserve the natural heritage of the Duluth area**. Includes mechanisms for identifying those properties and establishing a means to protect such properties from development or exploitation.

The Duluth Natural Area Program was adopted by ordinance in 2002 in partnership with the Nature Conservancy as a local tool designed to protect and restore areas noted as special, unique ecologically, or environmental significant to the community. While the original intent of the DNAP was modeled after the state Science and Natural Area program, in Duluth we are interpreting it a bit more broadly. The ordinance establishes a means to protect and preserve the natural heritage of the Duluth area by providing a mechanism for identifying those properties and establishing a means to protect such properties from inappropriate development or exploitation.

## Duluth Natural Areas Program Guidelines



1. Program Administrator – Planning Director
2. Parks and Recreation Commission – Recommendations to the Planning Commission and City Council
3. Planning Commission – Recommendations taking into account the relationship of the Program to the Comprehensive Plan, to the City Council
4. City Council – Final Determination

Read Slide: When this ordinance was adopted, the public process and decision making was set up to be administrated by the PC. At the time, the EAC was to do the primary work and provide recommendations to the PC for further review, followed by a City Council decision. Today we will go through the Parks and Recreation Commission as part of the public process and decision-making for nomination to formally adopt a natural area. In addition, we are holding this stakeholder meeting and open house.



## Duluth Natural Areas Program Guidelines



Promote the protection and preservation of the City of Duluth and the surrounding region's natural heritage of viable, natural communities and species habitats representative of the Duluth area. This includes areas supporting:

- o Significant Native Plant Communities
- o Special Species
- o Natural Water Features
- o Important Bird Congregation Areas
- o Geologic Landforms

Read slide - Defining the City's natural heritage through the DNAP will help support the renewal and protection of our viable (resilient) ecological communities. Ecology is the branch of biology that helps us understand the relationship between organisms and their environment. This includes humans and how we act on the land in support of the diversity of these plant and animal communities. Most of Duluth's natural areas have been heavily influenced by humans. Much of our preservation opportunities are likely to be first to secure the lands, second to restore portions of these lands, and third to monitor and maintain their integrity into the future.

## Duluth Natural Areas Program Guidelines



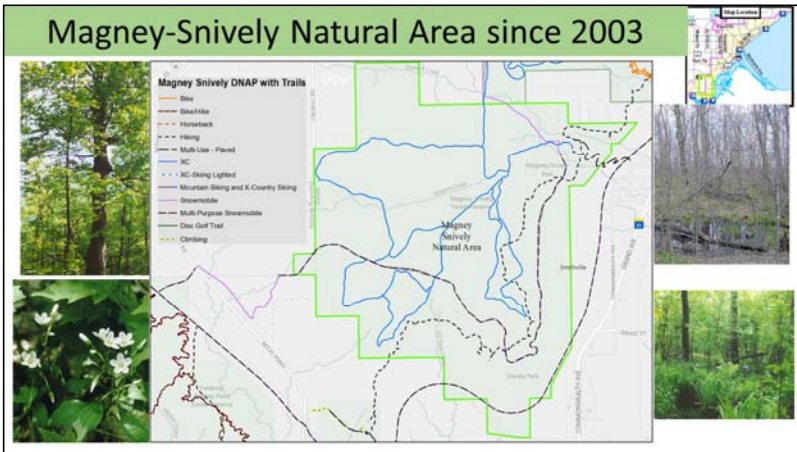
If the City Council approves the nomination ....

the Program designation is final when the **real estate transactions** are complete and the **management plan** approved.

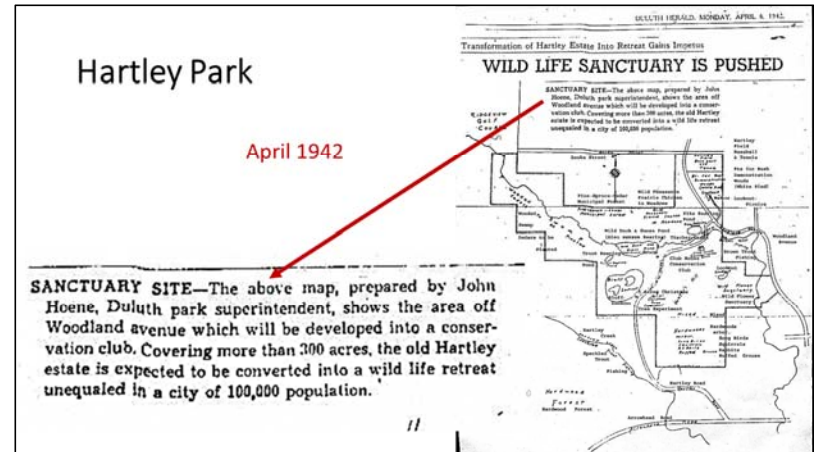
If the City Council approves the nomination .... the Program designation is only final after the real estate transactions are complete and the management plan approved. The ordinance allows for different levels of land protection (vote of 7-1) through the appropriate process resolution or ordinance. This may include

- Designation alone
- Inclusion in a state preservation program and/or
- Granting of a conservation easement

Once designated as a DNAP, it will take a city council vote of 8-1 to later remove any of these designations EXCEPT for a conservation easement, which is much more permanent.



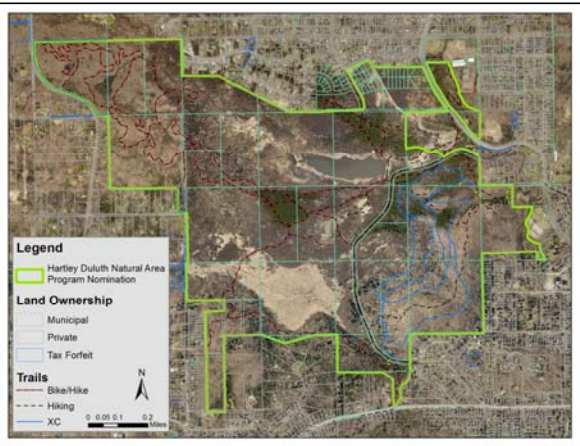
To date, Magney Snively is the only Duluth Natural Area. Many people enjoy hiking, skiing, birdwatching, and horseback riding here. Establishing this as a natural area has been important to the community for appropriate recreation, reflection and quality of life. We now have the opportunity to preserve and restore areas with relatively undisturbed natural characteristics. All of this will help to protect and sustain the natural functions of these valued lands.



We are beginning the public process of nominating Hartley to be included in the Duluth Natural Area Program. The Hartley area:

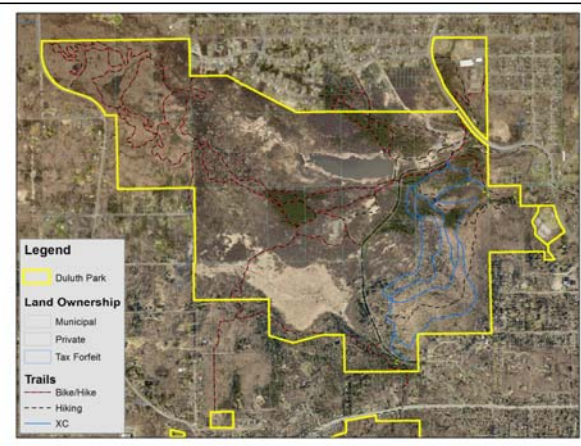
- Is recognized for its unusual expanse, landscape diversity and water resources (Master Plan, 2014)
- Includes one of Duluth's largest northern hardwood forests and wet meadows
- Has a Long history of educational and recreational use (hiking, biking skiing)
- Is working in partnership to preserve and restore its' native plant communities

## Hartley Park Duluth Natural Area Program Nomination



Over 620 acres of City, HNC and tax forfeit lands.

## Hartley Park





## Hartley Park Nature Center

### *Duluth's Premier Nature-Based Park*



- Long tradition of nature-focused education, recreation and ecological data collection
- Fosters an appreciation and understanding for the natural environment
- Preservation and restoration of these natural resources upholds the City's declared purpose Hartley.

#### **City Council-declared purpose for Hartley:**

*"Foster and enhance educational and recreational activities aimed at promoting the preservation of, learning about, and understanding of the natural environment of the Duluth area."*

## Nominating Hartley Park as a Duluth Natural Area

### *Significant Plant Communities*



- 14 high quality occurrences totaling 488 acres of diverse viable plant communities
- One of largest remaining remnants of the sugar maple and red oak forest type
- Largest wet meadow in Duluth other than along the St. Louis River
- Patch of white pine highly resistant to blister rust



- 14 high quality occurrences totaling 488 acres of diverse viable plant communities
- Sugar-Maple-Basswood forest is relatively rare for the landform
- One of largest remaining remnants of the sugar maple and red oak forest type
- Largest wet meadow in Duluth other than along the St. Louis River
- Patch of white pine highly resistant to blister rust compared to any tree found in MN

## Nominating Hartley Park as a Duluth Natural Area

### *Natural Water Feature*



- Tischer Creek - one of 16 named trout streams in Duluth
- Review options for the pond to
  - reduce temperatures
  - retain sediment in floodplain
  - improve water quality
- Influence how well fish will thrive



- Tischer Creek - one of 16 named trout streams in Duluth
- Management criteria will include reviewing options for the pond to
  - reduce temperatures
  - retain sediment in floodplain
  - improve water quality
- What happens here influences how well fish will thrive both in the natural area and downstream to the lake.

## Nominating Hartley Park as a Duluth Natural Area

### *Geologic Features*



- Examples of Midcontinent Rift
  - Part of an 1,800 mile long scar feature extending underground across the central U.S.
  - 1.1 billion year old rock
- Examples Glacial History (10,000 years ago)

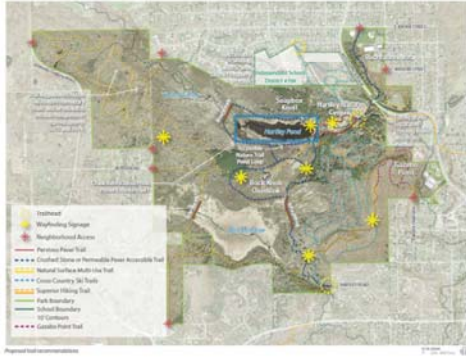


- Examples of the Midcontinent Rift
  - Part of an 1,800 mile long scar feature extending underground across the central U.S.
  - 1.1 Billion Years old rock
  - Almost tore North America apart
  - Signature rocks are ancient volcanic rocks seen at the surface
  - Cultural influence – transport system, metals for mining, cool geology
- Examples of glacial history (10,000 years ago) - undisturbed flutes

## Trail Use in Relation to the Proposed Natural Area



- Adhere to the 2014 Master Plan
- Respect the setting and minimize habitat impacts
- Respect the rules to minimize erosion and sedimentation
- Help monitor and maintain invasive species



- Trail Recommendations adhere to the 2014 Master Plan
- Respect the setting and minimize habitat impacts
  - Review plant surveys as they become available to adapt for plant community resiliency and sustainability
- Respect the slope and grading rules to minimize erosion and sedimentation
- Help monitor and maintain invasive species

## Invasive Species in Relation to the Proposed Natural Area



- Adhere to the 2014 Master Plan
- Complete Plant Surveys
- Monitoring and Maintenance
- Build in resiliency by enhancing native plant and animal habitats



- Recommendations adhere to the 2014 Master Plan
- Plant Surveys, Monitoring and Maintenance
  - Start in areas lightly invaded and continue toward heavily infested areas
  - Work to protect the area from potential future invaders
  - Native Plantings for the future
- Work with Volunteers when possible
- Build in resiliency by enhancing native plant and animal habitats

## Water Resources in Relation to the Proposed Natural Area



- Preserve and enhance the ecological value of Tischer Creek and Hartley Pond



- Build in resiliency for a changing climate



- Preserve and enhance the ecological value of Tischer Creek and Hartley Pond
  - Commission an objective, scientific feasibility study to assess alternatives
  - Open this process to public review and approval of the Parks Commission
- Build in resiliency for a changing climate

## Duluth Natural Areas



### **will not:**

- Alter trail plans
- Affect private land development adjacent to the natural area.
- Require any adjacent private property owner to sell.

### **will:**

- Bring valued open space under city ownership and protect it from sale and development.
- Lead to management plans that provide for protection and restoration.
- Increase access to federal and state funds.
- Assure park and trail plans are consistent with natural resource conservation goals.

Just to clarify a few other things.

The trails that are part of the Hartley Master Plan **will not** be altered.

Duluth Natural areas **will not** place limitations on private development nor does it require any property owner to sell. They can choose to be a part of the program, however.

It **will** bring valued open space under city ownership and protect it from sale and development.

It **will** lead to the development and implementation of management plans that provide for both restoration and protection and increase our access to funding opportunities.

It **will** assure our park and trail plans are consistent with environmental conservation goals in these areas



Next Steps



Re-iterate:

The City of Duluth in partnership with Hartley Nature Center is submitting a nomination to incorporate this area into the Duluth Natural Areas Program. This program is a local tool for the City to assess the title work on these lands to attain ownership and protect them under this program and/or by the most appropriate means such as a conservation easement for more permanent and secured protection so these lands can be preserved and restored using a management plan for natural resource protection.



Diane Desotelle  
Natural Resources Coordinator  
[ddesotelle@duluthmn.gov](mailto:ddesotelle@duluthmn.gov)  
218-730-4329



**WEBSITE:**

[www.duluthmn.gov/parks/parks-planning/duluth-natural-areas-program](http://www.duluthmn.gov/parks/parks-planning/duluth-natural-areas-program)



Contact