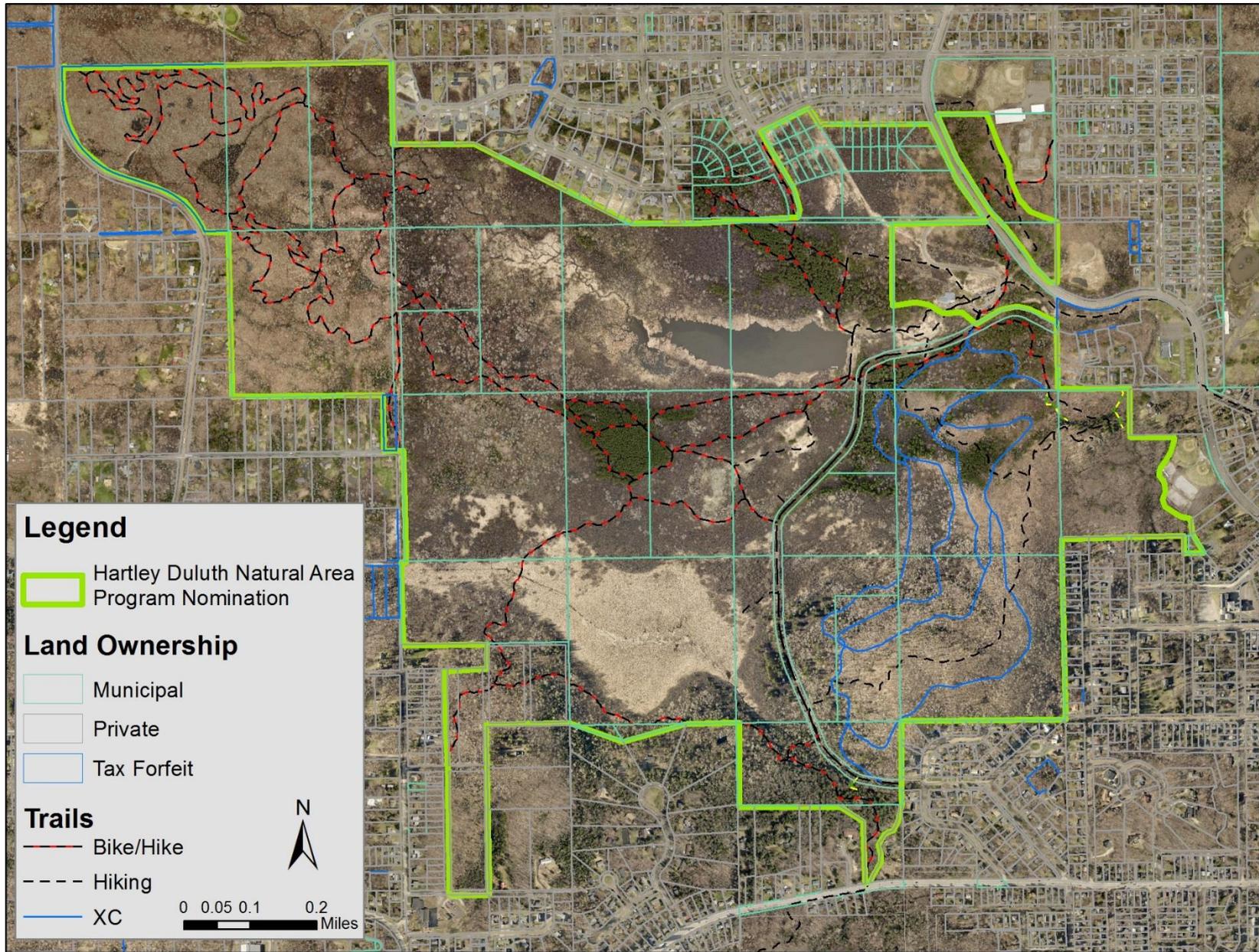


# Summary of Hartley Park's Eligibility for the Duluth Natural Areas Program



## **Introduction**

Hartley Park has areas of high natural quality and unique environmental value that should be preserved under the DNAP (Duluth Natural Areas Program) for the benefit of future generations.

The “Declaration of Policy” of the lease agreement with Hartley Nature Center approved by the Duluth City Council states: *“The city hereby declares its intention that the primary use of Hartley Park shall be that of a nature center and, as such, that Hartley Park be used as a facility to 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. In order to serve this purpose, the City hereby declares its intention to maintain ownership and control of Hartley Park as it presently exists, to develop, in cooperation with Lessee, a plan to manage Hartley Park with the intent of protecting its natural qualities, and to authorize only those uses, events, and physical modifications of Hartley Park, including trails and other structures, which, in the determination of the City, do not materially interfere with its use as a nature center.”*

The Master Plan for Hartley Park approved by the City of Duluth on July 21, 2014 states: *“The Park is ... a laboratory, classroom, and regional showcase for ecological restoration ... learning about, creating and advocating for visionary restoration of Hartley’s diverse landscapes and similar landscapes in northern Minnesota.”* Further, it states: *“The Park provides a unique, immersive nature experience.”* and that *“Preservation and restoration of natural resources is unusually important to the use of Hartley Park. Ecological restoration is not only essential to the extensive environmental education programming occurring in the Park, but it is integral to place-appropriate recreational use.”* and *“to the unique purpose of Hartley as Duluth’s premier nature-based park.”*

Management to restore and protect natural qualities throughout the park is central to the Master Plan for Hartley Park and to the plan that will be submitted for management of Hartley Park under the DNAP. Park management will prevent fragmentation and give ecological resiliency to the diverse complex of plant communities.

Hartley Nature Center has worked in partnership with the City of Duluth to complete a DNAP application and requests it be submitted to the Planning Commission and City Council for review under Duluth City Code, Chapter 2, Article XXIX, Sect 2-152. The DNAP application elements noted in Article

IV.A.3., C.3., and E. 3 for significant plant communities, natural water features, and geological landforms are detailed in the full application.

## **Significant Plant Communities**

The diversity of community types (two types of northern hardwood forest, three types of lowland forest, pine forest, wet meadow, willow swamp, etc.) are in and of itself significant. Hartley Park lies within a land type called the Tettegouche Till Plain, which forms the backbone of Duluth where the predominant natural vegetation is a northern hardwood forest of sugar maple and red oak. Historically, most of this forest was removed and is either gone or has since converted to aspen forest. Today, Hartley Park has one of the largest remaining forest remnants (Magney-Snively/Spirit Mountain Forest is the largest). All places in Duluth have been impacted to some degree by humans and most places have been heavily impacted. These remnants stand among the best of natural vegetation in Duluth. In addition, Hartley Park has one of the largest wet meadow and willow swamp complexes in Duluth, which further increases its significance. Most of the park will serve as a managed buffer for natural processes of native plant communities, and on-going restoration will continue to increase the number and size of those communities.

## **Natural Water Feature**

Hartley Park includes the wet meadow/shrub swamp headwaters of two branches of the designated cold-water trout stream, Tischer Creek. Coldwater streams are very sensitive to human caused disturbance, and therefore, are given the highest level of protection by the state.

Hartley Park has numerous vernal pools that provide breeding habitat for a suite of northern amphibian species (e.g., blue-spotted salamanders, spring peepers, chorus frogs, gray treefrogs). Hartley Park is unique because it includes the breeding habitat for these amphibian species and the upland terrestrial habitat within an intact forested area, providing a safer environment for movement between habitats and migration (e.g., no roads to cross).

## **Geologic Landforms Area**

The evidence of geologic history within Hartley Park exemplifies the Midcontinent Rift, including volcanism, intrusion, and crystallization of plutonic rocks such as the Duluth Gabbro Complex, and deposition of sediments, about 1.1 billion years ago. This was followed by Tettegouche Till Plain glaciation period that sculpted the landscape of Hartley.