Chapter 5: Natural Resources

Introduction:

"Prioritize, Protect, Preserve and Conserve Natural Resources to ensure compatibility of land use planning and development". (2008 City of Isanti Comprehensive Plan, Chapter 5, Natural Resources)

The 2008 Comprehensive Plan recognized the need to preserve the natural resources of the area, including watercourses, wetlands, woodlands and sensitive environmental features that either are or will in the future, be a part of the City. The City will continue to grow out into these natural areas in the next 10 years, and depending on land use planning and how approved development proceeds, the areas will be altered, maintained or possibly enhanced. It is not just the City that will make these decisions as new land areas are added over time, but also the current governmental jurisdictions that control zoning and current development activities. Increasing rural residential development, allowed by current planning and zoning authorities is one example of a change that is currently affecting natural systems.

Part of the past comprehensive plan effort included substantial resources being placed to study, identify and make recommendations on natural areas either in corporate limits of the City at that time, but also the future planning areas. Adjacent areas were also studied, as water courses (creeks, ponds and Rum River) wetland and woodland complexes are often interrelated with those areas. This Chapter's intent will be to recheck the past plan for validity, report on current situations, and provide any additional goals and recommendations for this update's time period.

Continued sustainability of natural systems remains the key for those systems remaining relevant and productive not just for wildlife and ecological systems, but also for urban systems which will be integrated over time. One example of this is the integration of storm water systems as construction of non-pervious roadway, building and lot treatments change the natural ability of the land to absorb and treat rainwater. It is possible through well designed storm water systems to absorb, hold and release water, sediment, phosphorus and other chemicals in a way not to tax the capacity of creeks, ponds, wetlands and ultimately the Rum River, which is a high valued pristine river. Another example is retaining and enhancing wildlife corridors in the City, either through retention of natural areas, improvement of passive park lands, or even conservation easements. These allow for wildlife to move through the City from adjacent rural areas to natural areas in the City and the river basin. Recognition of the need to include these items lends to development of a Conservation Planning Approach.

Conservation Planning:

The Conservation Planning Approach was and continues to be recognized as a way to move forward with development of the City with ecological factors as a priority. This Chapter can re-affirm past discussion and recommendations, but if they are not included in updates of the zoning, subdivision and development codes, they remain words in a document to the detriment of the current and future citizens and the City as a whole. As an example of possible implementation, the City allows flexible zoning through planned unit developments, which could be used on land that has already been altered through farming activities but contains valued natural systems. It would allow the altered land to be developed to a higher density, with the land containing natural systems to be retained through easements or public dedication. This approach allows development to proceed in densities making sense for extension of roadway, utilities and private investment.

The Conservation Plan was developed by the naturalists as a part of the 2008 Comprehensive Plan and is related through a series of maps and text in that document. Field work by staff for this comprehensive plan update have verified that the plan is valid and should be utilized in the time period of this update and beyond, serving as a guide for the conservation and development of the City.

<u>Conservation Planning Goals</u>

The following approaches should continue to be utilized to protect existing natural resource areas in present and future Isanti:

- Enhance Existing Park and Recreation Lands. The City has acquired land that are now passive parks. The natural areas that are present should be enhanced through plantings of vegetation that was native at the time of settlement. Examples of this include re-establishment of white pine stands in Legacy Park and plantings of trees and native grasses to re-establish oak savanna in River Bluff Preserve. In active recreational areas, native grasses could be established in non-mowed areas and tree canopies with native diverse species could be established or enhanced.

- Protect Public Interest Land – Public interest land is land that is held in ownership or easements by government entities such as the School District, County or State in the City of Isanti or its planned growth area. Such lands as previously identified in the conservation plan and those lands that potentially be acquired should be monitored for both potential enhancement and stabilization of natural systems on such properties.

- Future Proposed Park – The 2008 plan included a proposed “Grand Rounds” park that would be composed of private land adjacent to the Rum River, Isanti Brook and Spirit Brook and their contributing wetland / woodland areas. These lands would be targeted for acquisition through development contributions, dedications by

owners, or acquisition using public funding from local or state sources. The proposed park would provide a corridor for natural systems and wildlife that move through these flowages. Areas would be managed to enhance their natural systems. Public use could include interpretive sites that identify natural features and species and public trail systems to provide natural trails and linkages between parks and City sidewalk/ trail systems.

- Stormwater Management Lands- These lands are also addressed in the existing plan. They serve two purposes. The first is to assist in capturing increased runoff from developments, slowing release of storm water to preserve natural vegetation and slow erosion, and the second is the filtering of stormwater to capture sediments and elements that would be harmful to the waterways. Since the 2008 plan was developed, the City has established a storm water utility and storm water regulations that will assist with conservation and possibly enhancement of natural systems. The City should also review its zoning and subdivision ordinance regarding setbacks for development and buffers, to separate natural areas from development based on development density and other attributes. Other options previously discussed and applicable for consideration include: stormwater area easements, a low impact development ordinance, and closed basin ordinances. Retro-fitting of existing developments to minimize impacts of stormwater on wetlands and waterways is another option to assist in preservation.

Land Use Regulations

Besides park, public use and stormwater management lands, private lands that will be developed for residential development represent the largest land use group where conservation planning efforts should be directed to. This would be through the development of incentives, standards and regulations regarding the density and placement of development, location of roads, and utility systems. The City had the planning tool of planned unit developments in place at the time of 2008 plan which provided for flexibility and creativity in subdivision and development design, but little else has been added since to provide guidance, incentives and regulations to achieve conservation planning goals. It is recommended that after the comprehensive plan update is approved that the past recommendations and more recent innovations in designing development with natural systems are reviewed and that new incentives, guides and regulations are developed to implement the conservation plan. Areas previously addressed that have validity and should be considered are as follows:

- Conservation Design Ordinance – Develop a conservation design and development ordinance. Review publications, American Planning Association articles, similar ordinances and regulations and design one that serves Isanti's needs.

- Conservation Design Performance Standards – These are standards based on efficient subdivision design and performance standards that allow density development to preserve larger tracts of open space that have existing natural systems. It minimizes clearance activities and disruption of natural drainage systems. It reduces typical subdivision needs for road and utility systems, reducing impervious surface.

- Conservation Incentives – These are incentives that are placed in conservation design ordinances or regulations to provide an economic incentive for developers to follow conservation design requirements. Typically they revolve around increased density and number of lots for a developer.

- Stormwater Incentives and Closed Basins – This is subdivision design to encourage use of closed basins for stormwater impoundment or retention. If necessary, overflow to other systems or waterways would be allowed for peak rain events.

- Open Space Protection and Management – Through revised codes developers are encouraged to provide easements for trails, open space and lands with natural systems. Such developments often use Homeowner Associations (HOA) to maintain this open space and any improvements.

- Tier Land Use Districts – The City should consider expansion of extra territorial zoning and development codes beyond the current district boundaries to areas guided for urban development in the next 20 years. In order to be accepted, there will need to be an allowance for development of rural housing clusters in accordance with current densities. Standards for such housing districts need to take conservation design standards in consideration.

Natural Systems Enhancement – Other:

The following are other areas that are integral to the preservation and improvement of natural systems in the City of Isanti.

- Public Education – The need for "buy in" by the public, from school children to homeowners is necessary to have a successful program to retain and improve natural systems. The City should actively perform outreach activities to provide information in the schools and through public events. Forums to provide information and answer questions will greatly assist in the understanding how such natural systems are unique to Isanti and are of great benefit to the community and beyond.

- Wildlife Corridors – Wildlife have and will continue to use the stream and river corridors, wooded areas and wetlands in the City. They need safe travel routes between natural areas. The City needs to have these areas evaluated, mapped and preserved or planned for preservation as adjacent development occurs. The City should look for resources on a regional and State level to assist with this work.

- City Tree Canopy / Program – The developed City has areas of urban forest that contribute to the natural system in the City. Urban forests contribute with air quality, costs for heating and cooling buildings, and support for local wildlife that use tree canopies. The urban forest on participating private lands and on public property should be evaluated for both tree diversity and health. Programs using local, regional and state resources could be developed to assist with this effort. The City could also use development incentives and regulations to assist with meeting local goals.

- Natural Planting and Stormwater Gardens – Development of natural plantings on private properties, as well as rain gardens, accentuate the surrounding natural systems and provide natural filtration and benefit natural species, including pollinators and threatened species in those classifications.

Master Plan Designs:

The attached figures and plans from the 2008 Comprehensive Plan Natural Resources Master Plan (source: AES), are incorporated in this update to serve as overlays and guides for natural system preservation and protection as the City develops in the next 10 years. Important Natural areas, Ownership and the Master Plan - Conservation figures have been updated and are included with this Chapter.

- Figure 5-1 Natural Systems Map
- Figure 5-2 Important Natural Areas
- Figure 5-3 Subwatersheds and Flows
- Figure 5-4 Runoff Potential
- Figure 5-5 Ownership
- Figure 5-6 Isanti Master Plan – Conservation Plan

Goals/Strategies:

Natural resource goals and strategies are provided in Chapter 1. The following are additional goals and strategies for consideration.

1) After adoption of the Comprehensive Plan Update, review and update existing land use regulations, storm water regulations and development incentives to guide and support Conservation Planning Goals in land development activities.

2) Develop partnerships and work with the Minnesota Department of Natural Resources, Cedar Creek Nature Reserve, Isanti Soil and Water Conservation District, local governments, and volunteer groups to achieve Conservation Planning Goals.

3) Educate the public on the importance of Conservation Planning. Work on Outreach Programs with the C-I School District and other groups to get information out to the public.