

Introduction

What is Green Infrastructure?

According to Webster's New World Dictionary, Infrastructure is defined as - "the substructure or underlying foundation, especially the basic installations and facilities on which the continuance and growth of a community or state depends". GreenInfrastructure.net defines Green Infrastructure as "our Nation's natural life support system - an interconnected network of protected land and water that supports native species, maintains natural ecological processes, sustains air and water resources and contributes to the health and quality of life for America's communities and people. It is a strategically planned and managed network of wilderness, parks, greenways, conservation easements, and working lands with conservation value that supports native species, maintains natural ecological processes, sustains air and water resources, and contributes to the health and quality of life for communities and people."

Furthermore GreenInfrastructure.net states: "Most land and water conservation initiatives are reactive not proactive; haphazard not systematic; piecemeal not holistic; single-scale not multi-scale, single-purpose not multi-functional. Current conservation efforts often focus on individual pieces of land, limiting their conservation benefits to the environment and human health."

Background

Over one half of the Presque Isle County's political boundary is defined by the Lake Huron Shoreline. Add in 282 miles of stream shorelines and 292 miles on inland lake shorelines to the 83 miles of Lake Huron shoreline and one can see water is no stranger to Presque Isle County. Townships with coastal areas and inland lakes are seeing increased pressure for second and retirement home development. The Presque Isle County Master Plan states, "Of these high growth townships, one common attribute is worth noting; namely, the presence of private property development on or near waterfront. Not only is new residential development occurring in these townships, but homes that were previously used as vacation homes are being converted to year-round homes as homeowners retire and move north permanently."

The 2000 Census showed that 33.1 percent of the housing units in the County were seasonal. Seasonal housing units tend to be concentrated along lakes, rivers and Great Lakes shoreline. Current trends see a conversion of small seasonal cottages to larger year round homes. Coupled with a loss of natural greenbelts to well manicured lawns and increases in impervious surfaces, waterfront conversions will have a long term negative impact on water quality.

According to the countywide land cover/use inventory in 1995, 92 percent of the landscape is in an undeveloped state. This includes farmland, upland openings, forests, and wetlands. The trend with agricultural land is to transition from farming to idle open space, unlike conversion to urban uses in more rapidly developing parts of the Lake Huron watershed. This trend essentially adds acreage to the natural landscape each year and presents opportunities for expanding the green infrastructure in the county.

Expansive areas of natural landscape lend themselves to a proactive effort to conserve the biodiversity and ecosystem integrity on the community. Proactive resource management and

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conservation is an excellent investment and less costly than efforts to recapture and restore disregarded natural systems. This approach brings to mind the old saying, “an ounce of prevention is worth a pound of cure.” Public input sessions associated with county and township master plans clearly show residents value the natural resources. Quality of life, rural life, open space, outdoor recreation opportunities, farmland, wildlife viewing, clean air and water, flora & fauna, and natural resources-lakes, animals, forests consistently top the list of assets to preserve.

One of the goals in the Presque Isle County master plan is: Conserve, protect and maintain the natural resources in Presque Isle County for the enjoyment of residents and visitors and for future generations. Related objectives include: Develop zoning and land use regulations, which protect environmental features identified as important to County residents; and protect wildlife and waterfowl habitat. As development continues to expand in Presque Isle County, natural areas, wild rivers, and critical ecological processes will suffer from the cumulative impacts of numerous individual projects. However the solution isn't to stop development but to manage development in a manner that will not deplete the very reasons people choose to live and recreate in the county. Presque Isle Township, Krakow Township, Allis Township, City of Rogers City, Village of Millersburg and Village of Posen administer their own zoning, while the balance of the county falls under county zoning. Although each community employs a part time zoning administrator, none employ planners.

Location

Current and future patterns of land use and development grow out of the community's natural, social and economic history. Before preparing a green infrastructure plan for Presque Isle County, it is important to review the community's general characteristics, and the significant historic events that continue to influence local land use and development patterns.

Presque Isle County is located in the northeastern portion of Michigan's Lower Peninsula. A location map is provided as **Figure 1.1**. Bordering the Lake Huron shoreline, the County is roughly triangular in shape and has a land area of about 688 square miles. Most of the County is rural in nature and characterized by low population density. The year 2000 census registered a County population of 14,441. Rogers City, the County seat, is the largest incorporated community, with a population of 3,322. The City of Onaway has a population of 993, while the Villages of Millersburg and Posen have populations of 263 and 292 respectively. The 14 townships within Presque Isle County vary in population from Bearinger (329 persons) to Presque Isle (1,691 persons). Census figures reflect year-round population, but the County has many seasonal residents as well. One-third of the County's housing units are for seasonal or recreational use, therefore the summertime population is much greater than the winter.



Figure 1.1: Location of Presque Isle County

Plan Development

The lumbering and quarry industries that built the communities are still key components of the area's economy, and the agricultural landscape is one of the most valued aspects of the rural environment. Tourism and recreation have always been important components of the local character and economy. The presence of larger tracts of private lands is directly attributed to the presence of "Hunt Clubs." Water resources continue to draw both people and businesses to the area. All of these resource based uses depend upon County's "green infrastructure".

Today, approximately 90 percent of the County is undeveloped. If the concept of conservation based development were to be fully implemented with the target of preserving 50 percent of the development in open space, what 50 percent of the natural landscape should be preserved? The challenge is, while communities have a strong interest in conserving their natural resource base, none have the expertise to develop and implement a science-based approach to identify potential conservation areas (PCA). This project will facilitate conservation by identifying potential conservation areas and developing a process to conserve these areas.

NEMCOG and Michigan's natural heritage program (MNFI) worked in partnership with local communities, organizations and individuals to develop the Presque Isle County Green Infrastructure Plan. Funded by a grant from the Great Lakes National Program Office of the USEPA, the effort focused on developing strategies and recommendations for long-term conservation of ecological resources and priority Potential Conservation Areas in Presque Isle County.

The overall goal of the project has been to expand communities' abilities to incorporate natural resource information and conservation strategies into their land use planning, zoning and land development practices. Additionally, the project identifies a framework for providing a voluntary conservation programs to address technical assistance and education programs for private landowners. The project addresses biodiversity and ecosystem change and supports the conservation of fish and wildlife habitat.

A steering committee was created and served as an advisory board during the development of the project. Local units of government, interested landowners, conservation organizations and agencies were invited to join the committee. Through this collaborative planning process, the committee members provided input into the process; shared ideas; learned the importance of protecting ecological resources; and developed commitment and ownership of the plan.