

Implementation

Planning Areas and Approaches

The Michigan Natural Features Inventory utilized existing data sets to complete a scientific process that identified Potential Conservation Areas in Presque Isle County. This information was used to establish green infrastructure hubs, links and sites. **Figure 6.1** depicts the Presque Isle County green infrastructure planning areas. Public lands are overlaid on top of the planning areas to demonstrate the location of core areas afforded some level of long-term protection. These core areas form the foundation of the green infrastructure system. Streamside and lakeside corridors function as ecological conduits, conveying energy/nutrients from terrestrial habitats to water habitats and even across the county's landscape. Waterfront corridors also function as key wildlife corridors and habitat areas. The stream corridors should be used to connect intact green infrastructure areas to provide the framework for an interconnected ecological web.

When looking at the large hubs, it may be difficult to decide where to start working on conservation and management of the green infrastructure within a community. Priority focus areas would be waterfront corridors, large tract hunt camps and urban/subdivisions. Landowner education and technical assistance programs that work towards maintaining intact native riparian vegetation would be a first step. In addition, enhancing stream through farmlands, and developed areas by planting riparian buffers will strengthen the landscape connections. Another primary target area would be large tract, undeveloped lands. Promoting voluntary conservation and conservation easements is the preferred approach in these areas. Lastly, in Onaway, Millersburg, Rogers City, and the Presque Isle Harbor Association, maintaining and expanding green space and implementing backyard conservation will connect residential areas to natural resources. See **Figures 6.2 – 6.5** at the end of the chapter for examples of implementation actions.

Collaboration on Implementation

Teamwork is the key to achieving goals and strategies of this plan. Local government, agencies, organizations and landowners must work together to build partnerships that rely on each other's strengths and resources. The Green Infrastructure Steering Committee can be touted as a shining example of teamwork and has set the groundwork for building partnerships. Another example of partnerships can be found in watershed planning and management efforts in Northeastern Lower Peninsula of Michigan. NEMCOG, Huron Pines RC&D Council, County Conservation Districts, Natural Resource Conservation Service, Headwaters Land Conservancy, Michigan Department of Environmental Quality, Watershed Councils, local units of government and citizens have worked together to develop and implement a number of non-point source management plans.

Many organizations and agencies provide landowner technical assistance, education programs, regulate activity on land and water and offer incentives for long term preservation of critical areas. Coordination of the existing multitude of options is lacking in the planning area. NEMCOG, as the regional planning agency for northeast Michigan, will continue to work towards implementing the Green Infrastructure. However, to ultimately achieve desired outcomes recommended in the plan, local government, agencies and organizations must take an active role. This plan was developed as a blue print for preserving the resources of Presque Isle County; to be used by any entity, public or private, to achieve this goal.

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List of the Stakeholders During Implementation Phase

Allis Township
Bearinger Township
Krakow Township
Presque Isle Township
Rogers City
Presque Isle County
Local, state and federal elected officials
Presque Isle Conservation District
District Health Department #4
Presque Isle County Road Commission
NEMCOG
Huron Pines RC&D Council
Grand Lake Watershed Steering Committee
Thunder Bay Watershed Council
Ocqueoc Watershed Council
Tip pf the Mitt Watershed Council
Headwaters Land Conservancy
The Nature Conservancy
MSU Extension
MSU Sea Grant
Michigan Karst Conservancy
Michigan Department of Natural Resources
DNR State Parks
Michigan Department of Environmental Quality
Michigan Department of Transportation
Michigan Department of Agriculture
Natural Resource Conservation Service
Great Lakes National Program Office of the EPA
US Fish and Wildlife Service
NOAA
Private Landowners
Real estate agencies, local businesses and industries
Trout Unlimited
National Wild Turkey Federation
Whitetails Unlimited
Hammond Bay Anglers
Michigan Audubon Society
Citizens for Environmental Inquiry
Upper Black River Restoration Committee
US Army Corps of Engineers
Schools
Presque Isle Academy
Key Club

Voluntary Conservation

The quality of the environment and the integrity of the ecosystem can, in large part, be attributed to the stewardship of landowners. The miles of undeveloped shoreline, undisturbed wetlands and tens of thousands of acres of forestland and farmland are present today because of the actions of the many landowners in the area. The best opportunity for long-term conservation of the fragile

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and unique areas will be through voluntary conservation. The plan supports continued resource stewardship and recognizes the need to offer education and technical programs to assist landowners.

There are a number of existing programs that provide some level of technical assistance and resource education to landowners. Several of the agencies providing these services are: Michigan DNR, Huron Pines RC&D Council, Presque Isle Conservation District, Natural Resource Conservation Service, NEMCOG, and U.S. Fish and Wildlife Service. Services are provided on a walk-in basis or are project specific. A landowner-targeting program that focuses on the hubs, links and sties would likely generate more interest than existing staffing and funding levels at agencies could accommodate. To implement the plan, additional funding will be necessary to support either existing staff or hire new staff to contact landowners, provide landowner assistance, conduct education programs, develop demonstration projects and coordinate with existing programs.

Long Term Preservation

Organizations and agencies have programs designed to protect special areas either through fee simple purchase or conservation easements. Examples of these are Michigan Department of Environmental Quality Coastal Management Program, Michigan Natural Resource Trust Fund, Headwaters Land Conservancy, Michigan Karst Conservancy and The Nature Conservancy. Land Conservancies can lead efforts to work with landowners and units of governments to achieve long-term protection of critical and sensitive areas through conservation easements and fee simple purchases. Publicly owned lands such as Thompson's Harbor State Park and Rockport offer a high level of long-term protection. Both of these properties are home to many threatened and endangered species, in addition to numerous unique natural communities and geological features.

Regulation and Policies

Local, state and federal regulations and policies afford some level of protection. Local communities hold the first level of responsibility in protecting the unique resources of the area through their land use planning and zoning responsibilities. Community master plans recognize the need to limit development in sensitive natural resource areas and to maintain the working landscapes (farms and forests). Communities offer varying levels of protection through their zoning standards. For example, waterfront setbacks vary from 25 feet to 75 feet and greenbelts range from no provision to 75 feet. While extensive areas are zoned for agriculture and forest recreation, typical minimum lot sizes for residential development are 0.5 to 1.0 acre. One community has an environmental conservation-zoning district that recognizes environmental constraints. It is the committee's hope that resource information and recommendations in the plan will be considered when communities update their master plans and zoning ordinances. Some examples include 1) reviewing waterfront zoning standards and greenbelts, 2) incorporating special areas overlay zones, 3) environmental assessment requirements, 4) fees for professional reviews, 5) sensitive areas protection, 6) PUD/cluster development, 7) conservation cluster residential development, 8) site plan review standards, 9) shoreline protection provisions, 10) recommended setback distances, 11) stormwater management guidelines, 12) greenbelt provision language, 13) groundwater protection standards and 14) coordinated permit review and approval procedures. Communities adopting sustainable development and open-space conservation approaches in their planning and zoning can achieve long-term preservation. Coastal communities can apply for funding from the Michigan Department of Environmental Quality Coastal Management Program to update their master plans and zoning ordinances to reflect resource friendly planning.

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One of the greatest challenges in the long term is that critical resource areas and river systems are not contained within one political entity. The steering committee, with representatives from many communities in the County, can play a key role in working towards collaboration and consistent planning and zoning standards across political boundaries. The optimum approach is for communities to develop common planning and zoning standards that will result in a holistic approach to conserving the ecological and biological integrity of the identified Green Infrastructure hubs, links and sites.

Evaluating Success

An effective evaluation process is necessary to determine the overall effectiveness of the plan. Implementation methods can be modified or improved as information gathered from evaluations process is analyzed. If accomplishments are well documented and made available to stakeholders, the evaluation program will increase the likelihood of continued support from partnering agencies, community organizations and community members. It is not in the scope of this phase of the planning effort to design a detailed evaluation program. The design and incorporation of a detailed evaluation plan should be one of the first steps in the implementation phase. The following criteria are suggested:

- Health of indicator plant and animal populations
- Percent of green infrastructure network protected vs. percent of green infrastructure network not protected
- Number of acres undergoing ecological restoration
- Ratio of open space preserved to acreage developed
- Percent of wetlands and watercourses (lakes and streams) with a minimum upland buffer
- Number of communities that incorporated Green Infrastructure plan components into the master planning process
- Number of communities that adopted zoning ordinance language to address gaps in existing natural resource conservation measures
 - ◆ Physical and chemical water quality monitoring
 - ◆ Biological life measurements
- ◆ Photographic or visual evidence, before and after photos
 - ◆ Documentation of site BMP's installed
 - ◆ Pollutant loading measurements
 - ◆ Stakeholder surveys to evaluate knowledge or change in behavior
 - ◆ Focus group sessions to determine effectiveness of project activities

PRESQUE ISLE COUNTY GREEN INFRASTRUCTURE PLAN HUBS, LINKS & SITES

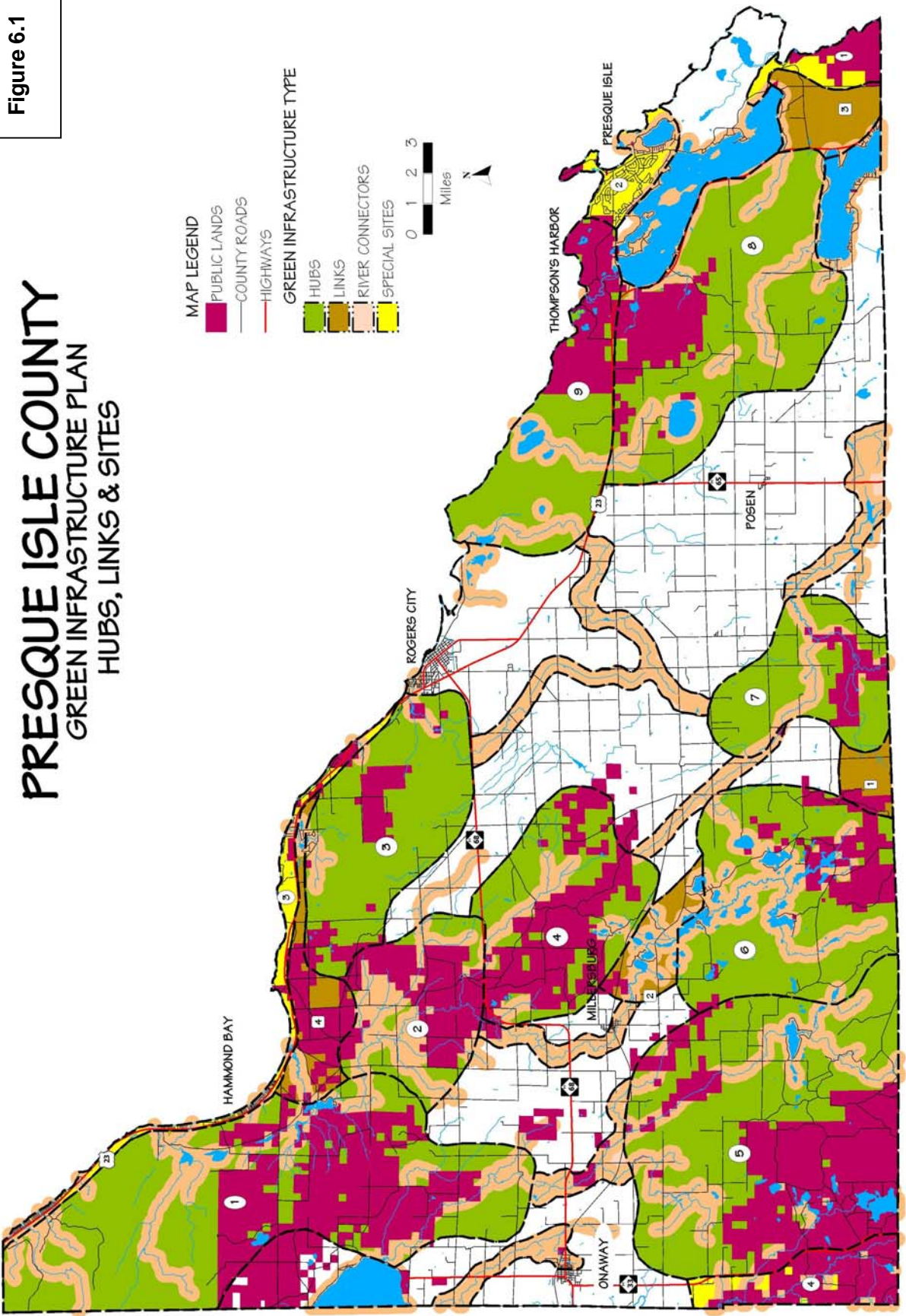
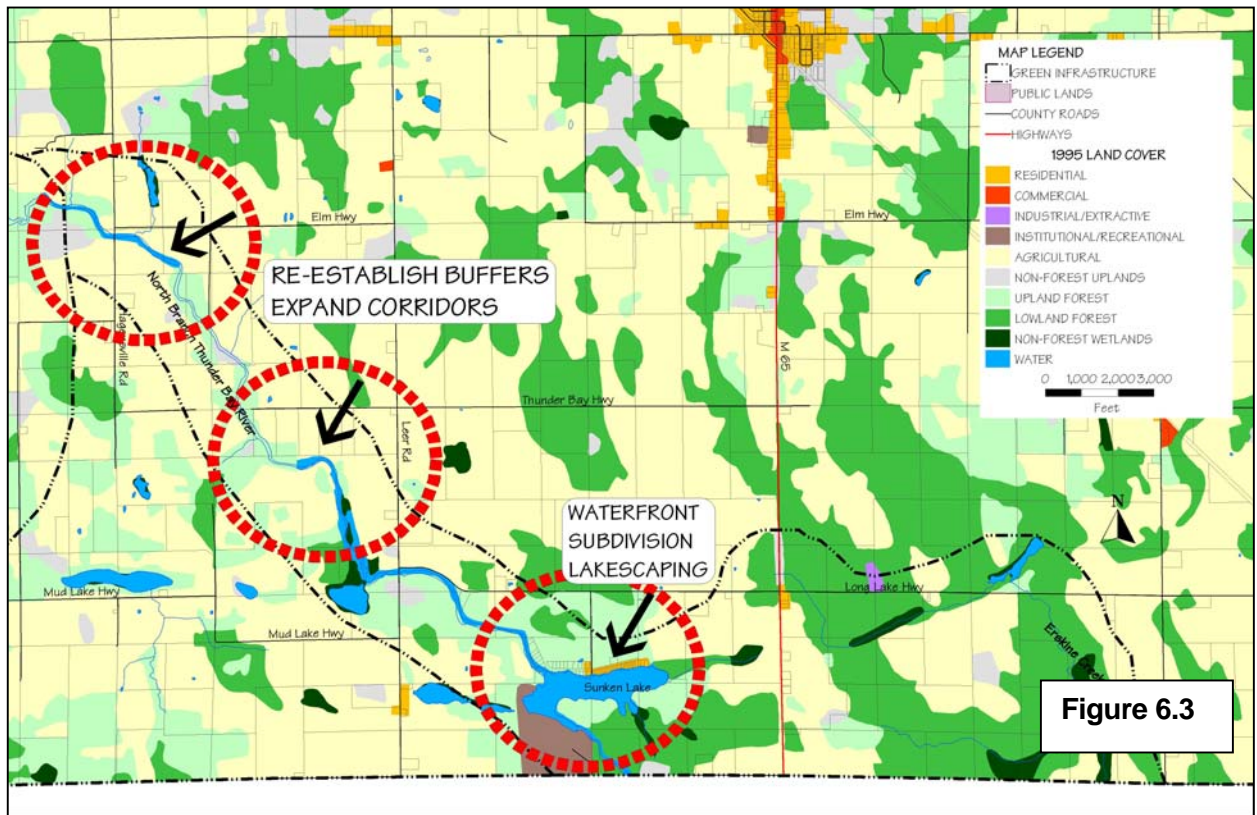
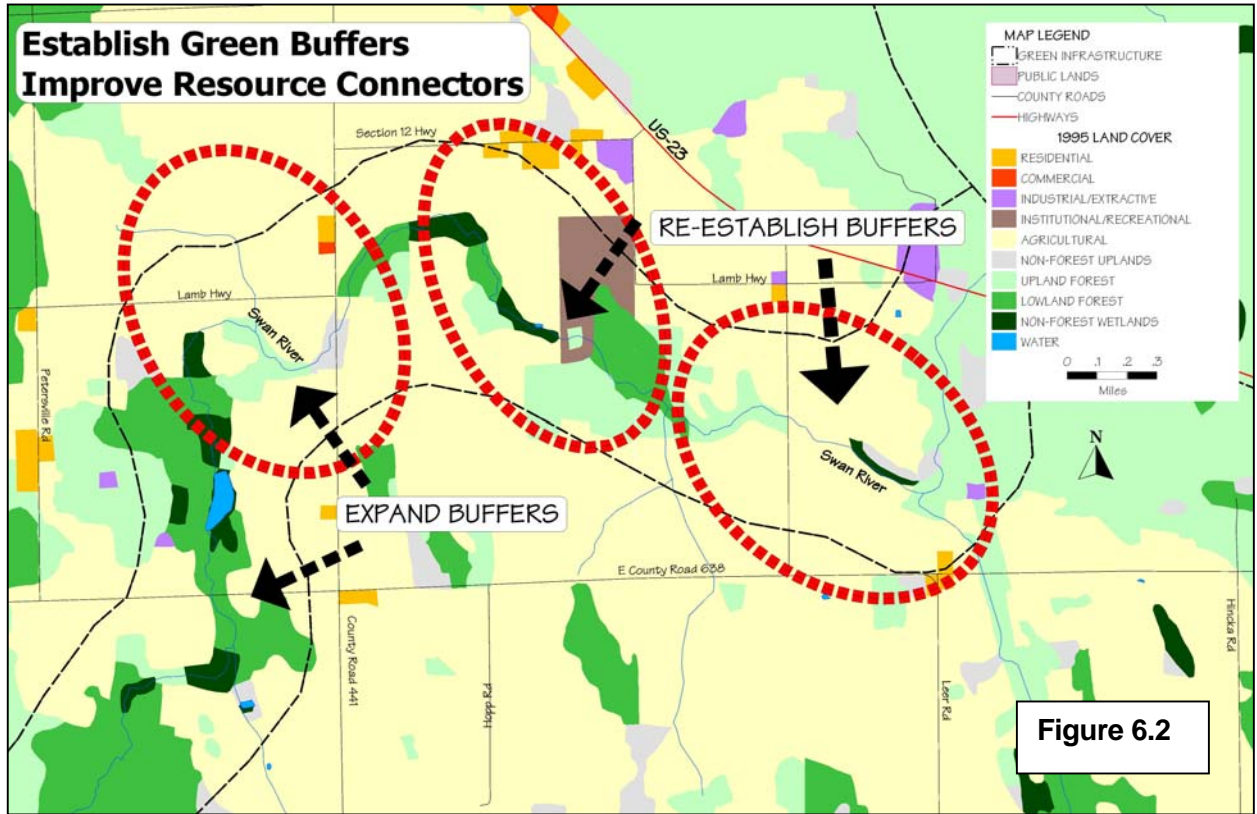


Figure 6.1



Presque Isle County Green Infrastructure

