

Chapter 3 WORKING WITH NATURE

POLICY GUIDELINE:

WORKING WITH NATURE

Extensive and diverse sensitive natural features found throughout the County provide the foundation for the present and the future quality of life in the County. They should be protected where pristine, restored where damaged, and have access and use managed for long term sustainability.

ENVIRONMENTAL FEATURES

The natural environment of Leelanau County is of exceedingly high quality. All but two short stretches of streams fail to provide the oxygen and low temperatures for trout. Most of the lakes are either oligotrophic or mesotrophic (a measure indicative of high water quality, and clarity). Wildlife is abundant. Dunes have world class ranking. Significant land areas are in federal or state ownership to protect natural characteristics. See Maps 3-1 and 3-2.

ENVIRONMENTAL CHALLENGES

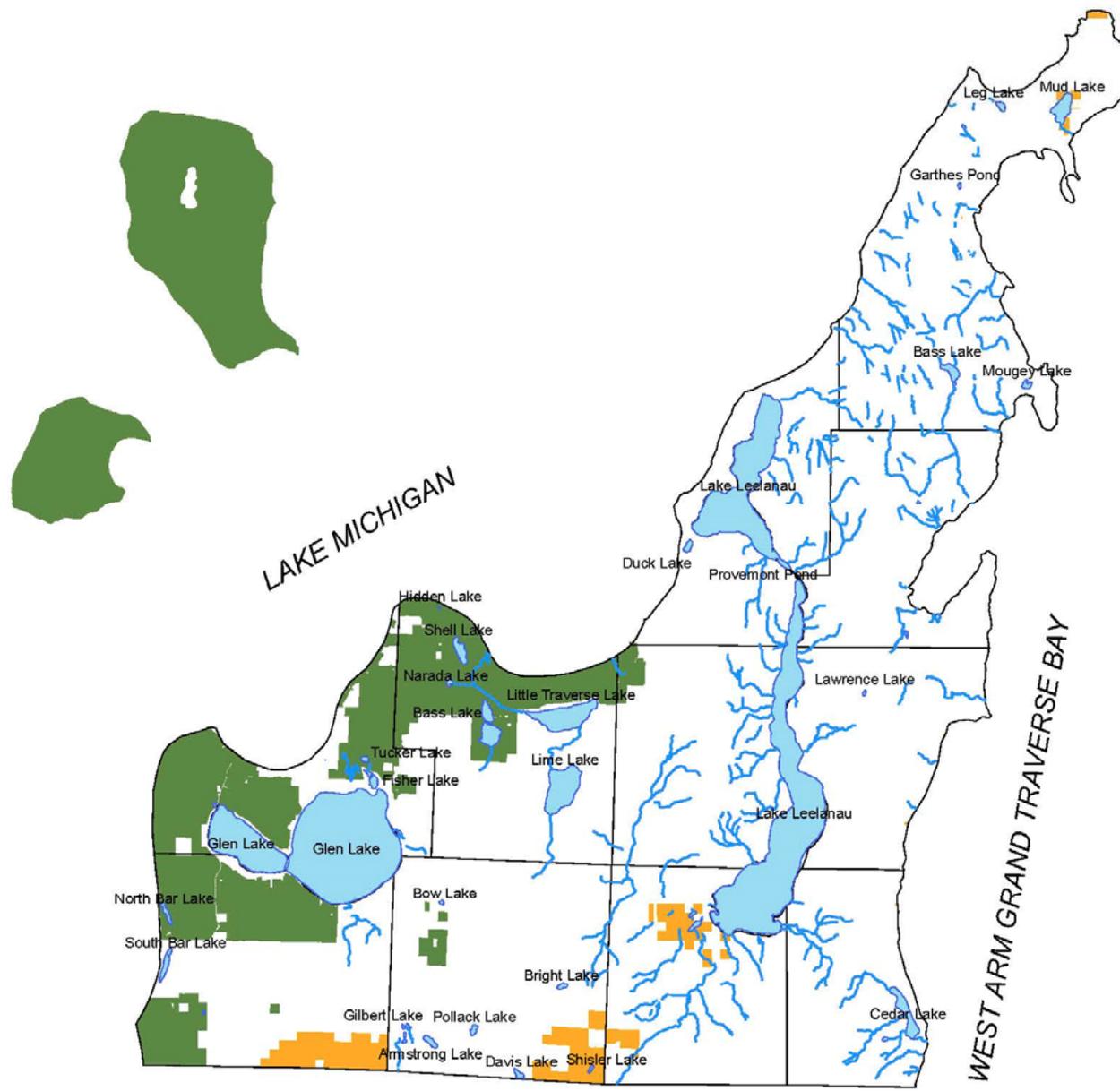
The natural environment in Leelanau County is at risk. While air quality is still good, ozone levels are rising due to contaminants brought from elsewhere (presumably southern Lake Michigan communities). Groundwater is extremely sensitive to contamination due to very sandy soils and 42 sites are now officially on the Act 201 list of contaminated sites in Leelanau County. This is an increase from 35 sites in 1994. Small incremental wetland fills continue to reduce wetland areas. Land fragmentation is cutting into farm and forest lands, and subsequent residential development is reducing animal habitat and hence biological diversity. About 2,540 acres of land were converted to urban between 1990 and 2000. Wildlife corridors and linked open spaces are being lost (except on federal and state land). The lack of proper septic system maintenance and uniform stormwater management regulations poses threats to water quality in lakes and streams from nutrients, sedimentation, and other pollutants.

Local plans and zoning regulations vary greatly in the degree to which environmental concerns are addressed. Local land use decisions often do not fully apply the environmental protection standards already included in existing ordinances.



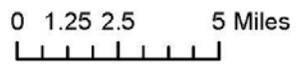
Birdseye view of the Cedar swamp and river

Map 3 - 1 Inland Lakes and Streams

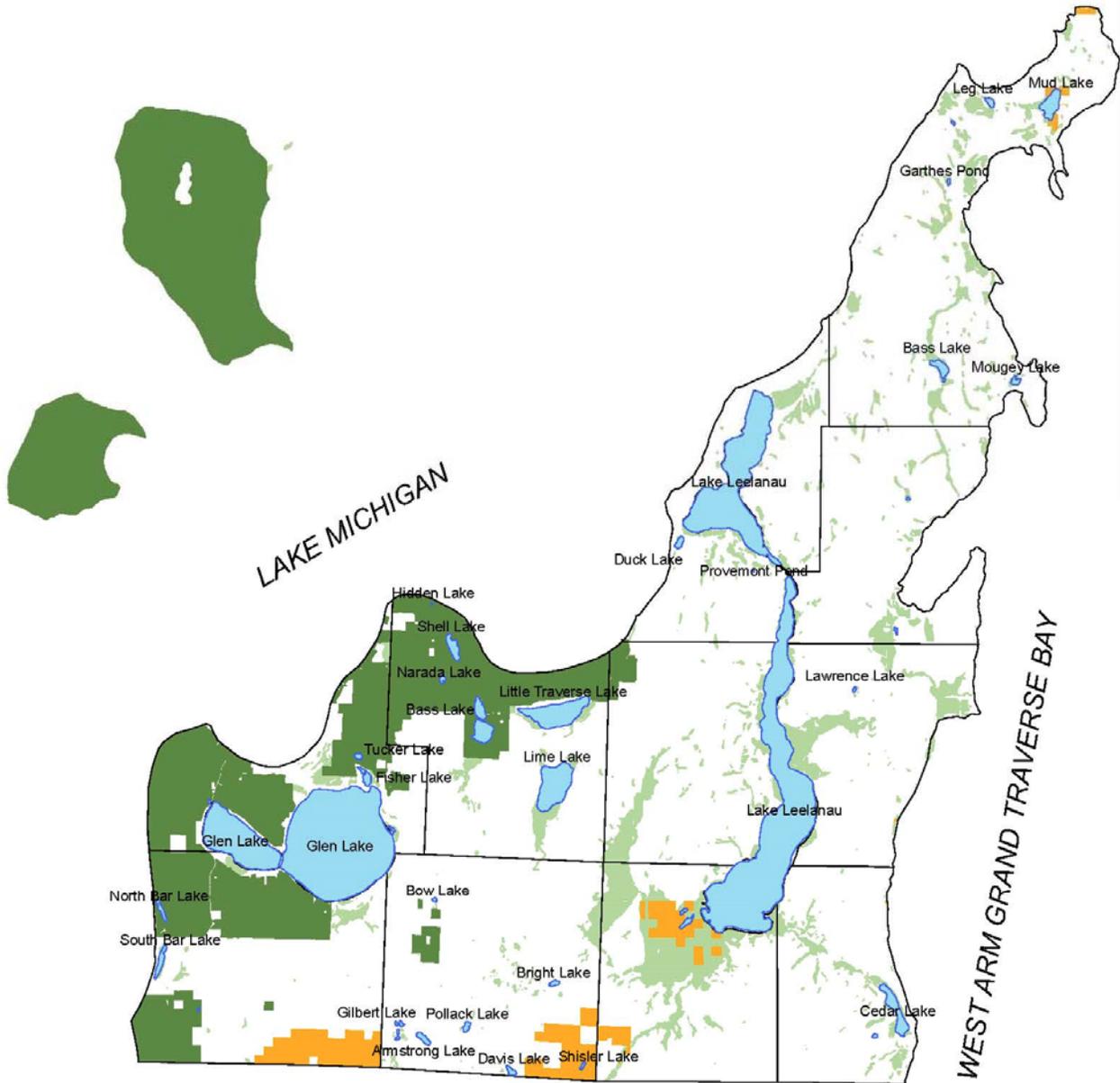


Map is for Reference Purposes Only
 Prepared by Leelanau County
 Planning & Community Development 2019

-  Streams
-  National Park
-  State Land

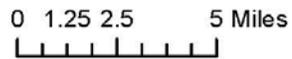


Map 3 - 2 Wetland Areas



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- Wetland
- National Park
- State Land



On the plus side, however, citizen interest in environmental protection is high as is citizen vigilance. The Leelanau Conservancy has quickly established itself as an important positive force in protecting lands with sensitive environmental resources. This is done by outright land purchase, conservation easements and gifts. Currently, over 13,893 acres of land have been preserved by the Conservancy.

NATURAL RESOURCES

The natural resources of Leelanau County are vital to the economic health and the sense of well being of area citizens. These natural resources are interrelated biological systems. They require knowledgeable and careful stewardship for protection measures to be effective.

STEWARDSHIP ETHIC

The natural resources of the County should be treated as if they are a trust for use by all generations. Long term quality of life, a sustainable economy, and generational equity all demand this. A stewardship ethic views renewable resources as resources to be managed for long term productivity based on their potential value and contribution to local quality of life. In some cases they may be managed for single use (such as for an orchard), in others for multiple use (such as a forest for wildlife habitat, hunting, and timber production). In contrast, however, contemporary land use practices are too often focused more on resource exploitation for short term economic gain to the owner/operator without consideration of long term impacts on that or adjoining land or water resources. As a result, land is scarred, water may be contaminated, and quality of life is reduced for generations—usually by the time the damage is recognized, the exploiter is long gone.



Fall color in Leelanau County

Thus, the primary environmental goal of the **Leelanau General Plan** is the protection of unique and sensitive lands and the water resources from inappropriate and poorly designed development. This includes unique and prime agricultural lands as well as sensitive environments like dunes, wetlands, and wildlife habitat.

It is important to guide new development in a way which works with nature rather than against nature. A healthy economy depends on a healthy environment. Where there are legitimate conflicts between proposed new development and an important sensitive natural resource, and reasonable and prudent alternatives exist, then the new development should yield to the sensitive environmental feature and be built elsewhere.

Where long term sustainable economic or public safety and welfare benefits outweigh small environmental impact, then the new development should be allowed to proceed with appropriate mitigation measures. In all cases, planning and development regulation should be oriented to preventing pollution, impairment, or habitat destruction.

ENVIRONMENTAL PROTECTION STRATEGY

The basic strategy for environmental protection in Leelanau County as advocated by this **General Plan** follows (see Figure 3-1). More specific policies and action statements are found in Part Two.

- Identify and avoid sensitive environments in advance. New development could then avoid wetlands, dunes, floodplains, and endangered or threatened plant and animal habitat. Site plans need to be developed based on state, County, and local maps of sensitive resources, as well as on site specific reconnaissance.
- Protect water quality of surface water and groundwater with regular inspection and maintenance of septic tanks and management of stormwater.
- Minimize land fragmentation of large parcels. Uniform local zoning and land division regulations should be enacted which prevent fragmentation of prime farm, forest and important open space lands.
- Linking open spaces. Wildlife corridors, habitat protection, and linkages between open spaces should be primary consideration in the development of new local plans and County-wide open space plans. Efforts should be made to acquire fee simple interests or conservation easements across such lands where they are not already in public ownership. Other efforts such as mapping biodiversity should be encouraged whenever possible.
- Compact development. New residential development in the County should be encouraged in villages and in clusters on non-prime resource lands.
- Keyhole development. Control of private keyhole development around inland lakes has become necessary. New lakefront public access sites should be carefully sited to minimize environmental degradation and managed to avoid lake overcrowding and nuisance impacts on abutting properties.
- Protection of renewable resources. The protection of prime agricultural and forest lands and the promotion of environmentally sound sustainable agricultural and forest management practices can be achieved by coordinated County and local policies with the support of the farm community.

The primary environmental goal of the General Plan is the protection of unique and sensitive lands and the water resources from inappropriate and poorly designed development.

**Figure 3-1
Environmental Strategy**

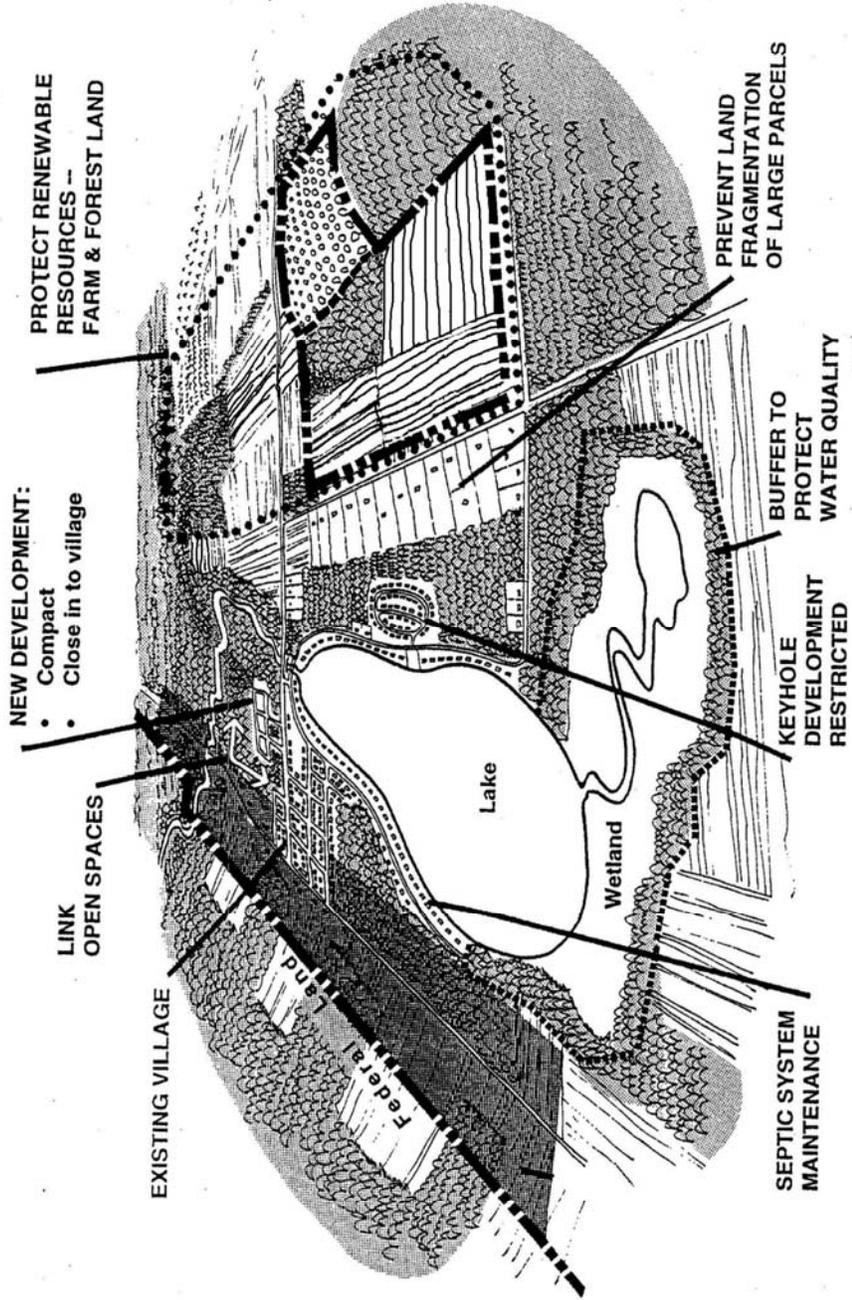


Illustration by John Warbach