Assets, Priority Areas and Concerns



Recreational and year round home development has increased over the last few decades. While no subdivisions have been platted since 1960, larger tracts are being divided into smaller parcels, typically five and ten acres parcels. Given the current development pressures and zoning regulations, further land fragmentation is expected to continue. The challenge is to accommodate further development without degrading the natural resources of the rich and diverse ecosystems in the

area. Coincidental with residential development, recreational uses such as ORV's and snowmobiles have resulted in increased pressure on fragile coastal resources along Misery Bay. The purpose of this chapter is to identify assets and values, issues and concerns and priority areas.

Misery Bay Initiative Committee Input

A committee workshop was held on January 15, 2004 to discuss assets and values, issues and concerns, and priority planning areas. Due to weather conditions and conflicting schedules, some members were not able to attend the workshop. As a result, a committee input form was emailed to all members asking for additional input. Two of the committee members, who didn't attend the workshop, provided additional comments. Below is a compilation of committee comments

Assets and Values

<u>Ecological</u>

- Bedrock geology karst, sinkholes, earth cracks, swallow holes
- Diversity of flora pitcher plants, dwarf lake iris, wild rice, orchids
- Home for numerous threatened and endangered plants and animals
- Rich diversity of plant communities
- Conifer forests along shorelines
- Coastal wetlands
- Oak and aspen forests
- Old growth pine forests
- Extensive northern cedar forests
- Alvar communities
- Great Lakes marshes
- Rare fen wetland plant communities
- Inland lakes with undeveloped shorelines
- Beaches cobble, alvar, sandy, bolder
- Land based and waterfowl migratory bird stop over
- Piping plover and other shorebirds
- Bald eagle
- Many different species of songbirds
- Game species such as northern white tail deer, grouse and squirrels
- Black bear, bobcats, and badgers
- Badgers
- Pileated woodpeckers, owls and wild turkeys

- Rookeries
- Fish spawning habitat and feeding habitat
- Undeveloped islands: Thunder Bay, Sugar, Crooked, and Round Islands
- North Point and Potter's Point
- El Cajon Bay with sinkhole and outlet to underground river
- Pollock and Norwegian Creeks
- Grass Lake
- Ecological connection to other Lake Huron coastal features such as South Point
- Remoteness
- Undeveloped large tracts
- Diversity of habitats
- Many unique areas

Recreation

- Kayaking and canoeing
- Boating and sailing
- Snowmobile-ORV's
- Hiking
- Biking
- X-country skiing and snowshoeing hunting and fishing
- Divino
- Bird watching
- Botany/wildflower
- Rock hunting
- Nature walks
- Spiritual-nature retreat
- Exploring wildlands
- Driftwood collection

Cultural

- Native American archeological sites
- Early logging camps and fishing camps
- Stone duck hunting blinds
- Stone cribs in the bay use unknown
- Thunder Bay Island Lighthouse and Life Saving Station
- Shipwrecks
- Old road beds
- Old railroad grade
- El Cajon cement plant
- North Alpena Plat
- Prospect Park
- Beach swimming along Isaacson Bay
- Old log cabins
- Old farmsteads

Landowners

- High quality of land attributed to their long term stewardship
- Large tracts of individual ownership

- Public lands
- History of landowner involvement
- Interest in preserving the natural resources
- Strike a balance with private property rights and preservation

Community

- Long term view of Alpena Township government to preserve special areas
- Community planning at all levels of government
- Thunder Bay National Marine Sanctuary

Priority Conservation Areas

- Section 15 of T.31N.-R.9E.
- North Point
- Islands
- Coastal wetlands
- Shoreline
- Beaches cobble, alvar and sandy
- SW1/4 of SW1/4 of Section 10, T.31N.-R.9E.
- Inland lakes
- Norwegian Creek and Pollock Creek
- Thunder Bay Lighthouse and other historic structures and remains on the island
- Technical assistance and education effort for shoreline landowners from El Cajon Bay north along the coast.
- Large tract landowners technical assistance and education
- Hunting Camp technical assistance and education
- Many small creeks, intermittent drainages
- Karst areas with sinkholes, swallow holes and earth cracks.
- Prospect Park acquire the few privately owned lots.

Current and Long Term Issues and Concerns

- Increasing property valuations pressure landowners towards development, sub-division and sale, logging revenue, or other income producing methods to offset tax burdens.
- There is no public/water access onto Misery Bay.
- While current constraints such as lack of infrastructure limit potential, development at "build-out analysis zoning minimum lot size scenario" would negatively impact biodiversity of the area.
- Large 4-wheel drive vehicles have severely impacted fragile fens wetlands along Indian Road.
- Need to assure timber management and harvesting activities follow BMP guidelines.
- It needs to be appreciated that encroachment of private property rights are a genuine concern to landowners.
- Removal of cedar and pine forests adjacent to water bodies eliminates critical wildlife habitat and migratory bird stopover habitat.
- There needs to be a balance between development and preserving the unique, valuable natural resources.
- Land fragmentation

- Increased shoreline development could result in loss of natural buffers, wildlife habitat, aquatic habitat and scenic views.
- Degradation of surface and groundwater quality
- Exotic and nonnative species
- Shoreline modification/bottomlands alterations.
- Recreational Use from ORV's, 4-wheel mud trucks, late season snowmobile along the lakeshore.
- Loss of habitat for migratory and resident wildlife
- Improper logging practices
- Wildfire suppression is compromised by inaccessible land areas and limited fuels management.
- Lafarge ownership of large acreages of land across the northern part of North Point controls access and influences development on North Point and north of Misery Bay Road.
- Increasing pressures for year round and second homes up north could result in over development.
- Upgrading roads to all season, paved condition, will increase pressures for development.
- Roads should be maintained as gravel with minor improvements to address conditions such as flooding and wash boarding.
- As the area continues to develop and recreational usage of public lands increases, there will need to have increased law enforcement.
- Dumping of appliances, construction material and household trash historically has been a problem on state land and along segments of Hamilton Road. A local group cleaned up this trash and the State has blocked off access. Another group is working to remove trash dumps along Hamilton Road.
- Noise intrusion by snowmobiles and ORV's along the Lake Huron shoreline in late winter disturbs early nesting birds such bald eagles.
- ORV usage along the beaches, fens, coastal wetlands and exposed bottomlands are causing harm to plants and soil structure, along with disturbing nesting song birds and shorebirds.
- Industrial uses.
- Removal of vegetation adjacent to water bodies eliminates buffering greenbelts and has a negative impact on water quality and visual quality.
- There are a few lots in Prospect Park that are still privately owned.
- The special areas should be protected.
- Industrial and marine pollution poses a current threat to the shoreline along Thunder Bay, and to a lesser extent along Misery Bay.
- The lack of public access promotes trespassing.
- Increase in usage of motorized personal watercraft

Build-Out Analysis

Much of the land area is divided into parcels 40 acres or larger in size. Small lots, less than five acres in size, tend to be located along the coast and in platted subdivisions. Highest density residential uses are clustered in subdivisions and small tract developments along the Lake Huron shoreline. In addition, low density seasonal and year round residential development is occurring throughout the project area. North Point and inland areas consist of large tracts, primarily used for hunting camps and outdoor recreation. Current development trends are

toward subdividing larger tracts into five to twenty acre parcels. Chapter 3 presents information on the current zoning regulations and contains a map of the locations of zoning districts. With the exception of the Conservation zoning district, which has a five acre minimum lot size, minimum lot sizes of less than one acre are allowed over most of the project area. Forest Recreation zoning district covers over 90 percent of the area and allows for minimum lot sizes of 40,000 sq. ft. Therefore the potential is very high for considerable development to occur.

To gain an understanding of potential development densities allowed by current zoning, two simplified build-out analyses were conducted. The first scenario is based minimum lot sizes according to current zoning regulations and the second is based on current development trends of 10 acres lots splits. It is likely, the eventual development density will fall somewhere between these two extremes.

Zoning Minimum Lot Size Scenario

Criteria used to conduct this simplified build-out scenario included removing hydric soils (wetlands), state lands and subdivisions from the primary analysis. The acreage of undeveloped land was calculated for each zoning district and based on the minimum lot size allowed in each district, an estimate of the maximum number of parcels/homes was determined. (See Table 4.1) Areas mapped as hydric soils have limited potential for development. Therefore, an estimate of one dwelling unit per 40 acres was assigned to the 5,700 acres mapped as hydric. This would add a potential of 140 more homes. Based on this simplified analysis a maximum build-out shows the potential for more than 8,300 new homes in the study area.

In order to develop at such densities, considerable community infrastructure investments would need to occur. The road system in the area consists primarily of gravel, dirt and unimproved seasonal roads. In order to accommodate traffic generated by such development densities, existing public roads would need to be upgraded to paved roads and a transportation network of new roads would have to be constructed. Alpena Township has a private roads ordinance that requires developers of residential subdivisions to construct roads to county roads commission standards. Before the county road commission takes over a private road, it also requires the roads be built to their public road standards. Given the development constraints of bedrock at or near the surface, sandy soils and high water table, sustainable high density residential development would require public water and public sanitary sewer systems. Community master plans do not support such development plans and investments over the next 20 year planning horizon.

Table 4.1			
Build-out Analysis			
Zoning District	Potential Area Available	Minimum Lot Size	Potential New Parcels/Homes
Water Resource (WR)	121 acres	15,000 sq. ft.	351
Residential (R-3)	292 acres	15,000 sq. ft.	848
Forest Recreation (FR)	6,412 acres	40,000 sq. ft.	6,983
Conservation (C)	96 acres	5 acres	18
Totals	6,921 acres		8,199
Source: Alpena Township Zoning Ordinance and NEMCOG			

Ten Acre Parcel Scenario

Another simplified approach, which follows current trends of 10 acre splits. Alpena Township digital parcel data from 1999 shows a total of 556 private parcels in the planning area. Of these, 124 parcels are 15 acres or greater in size and cover 10,600 acres of land area. The maximum number of 10 acre parcels can be found by dividing 10,600 by 10 and would result in 1,060 ten acre parcels, which includes the 124 original and 936 new parcels. By adding 556 existing parcels to the 936 possible new parcels the number of parcels would be 1,492. This estimate nearly triples the potential number of lots and residences within the planning area.

Ten Acre Scenario

556 - 124 = 432 small tracts

10,600 acres / 10 acre lot sizes = 1,060 ten acre parcels

1,060 - 124 (existing parcels) = 936 new parcels

Land Fragmentation

The past 100 years have seen major changes in property ownership configurations within the Misery Bay Initiative project area. A review of the plat book from 1903, finds 40 acre and larger parcels common in the area. Ownership was non-industrial private with some lands still designated as tax homestead and state swamp. North Alpena plat in Section 4 and El Cajon

The Landscape Today

Larger tract ownerships of 40 acres or more are common. Subdivisions are limited to small sections of the Lake Huron shoreline and overlay 16 percent of the 28.7 miles of shoreline. Inland lakes and intermittent ponds are undeveloped and provide 14 miles of undisturbed natural vegetated shoreline. Numerous islands remain in a relatively undeveloped state. Low density residential development and seasonal hunting camps are found throughout the inland area. Minimal road development has not fragmented the landscape or created barriers to wildlife movement.

Beach plat in Section 10 of in T.31N.-R.9E., recorded prior to 1903 contained parcels less than 30,000 sq. ft. in size. Curiously, neither of these plats exists today. In the 1930's, Ford Motor Company was a major land owner with 3500 acres in the northern portions of the project area. Actna Port Cement was also a major industrial land owner. The State of Michigan owned 40 acres and with the exception of L.T. Kline who owned Sections 35, 36 and Sections 1 and 2 at the southern tip of North Point, most of the non-industrial private land holdings were in 40 to 80 acre parcels. There were no recorded small tracts or platted subdivisions in the 1930's, and shoreline ownership was still in large tracts.

Since the 1930's two opposite trends in landownership have been occurring in the Misery Bay Initiative project area. On North Point, land holdings have been consolidated into three ownerships, La Farge,

Beaumont Point Club and Stephen Fletcher. Some 40 acre and smaller land holdings, including Northpoint Shores Subdivision, are owned by other individuals. Lands owned by the Ford Motor Company in the northern portions are again under non-industrial private ownership in parcels of

40 acres or more in size. Several subdivisions and areas of metes and bounds small tracts have been developed along the Lake Huron Shoreline.

Given most of the area is still in large tracts of 40 acres or more, land fragmentation is minimal at this time. Land fragmentation is most noticeable along the Lake Huron shoreline, where subdivisions and smaller tracts occur. Residential development in these subdivisions has altered

shoreline vegetation and negatively impacted the land-water interface. Still only 4.5 miles of the 28.7 miles of Lake Huron shoreline, as identified from Michigan Framework GIS shoreline file, have been converted to subdivisions and small tracts. No subdivisions have been platted around the several inland lakes. Shorelines still support undisturbed natural vegetation and excellent wildlife habitat.

Linear Distances of Waterfronts

Mainland Shoreline - 28.7 miles Island Shorelines - 14.1 miles Inland Lake Shorelines - 7.7 miles Creek Lengths - 3.8 miles

Source: Michigan Framework GIS files

The same holds true for Norwegian and Pollock Creeks. Islands remain in a relatively undeveloped state, with one cabin on Crooked Island and a Lighthouse on Thunder Bay Island. In summary, the shoreline vegetation over much of the project area still remains in a relatively natural state, providing critical habitat for flora and fauna.

Low density residential development and seasonal hunting camps can be found throughout the inland area. Low intensity development has not fragmented the landscape or severely impacted wildlife habitat/corridors. Road Impacts related to land fragmentation have been minimal up to this point. There are relatively few roads and except for the western segment of Misery Bay Road, which is paved, roads are gravel, dirt or unimproved seasonal two tracks.

Non-Native and Exotic Species

Autumn Olive St. Johnswort Shasta daisy Leafy spurge Spotted knapweed Purple Loosestrife

See Lake Huron Initiative (Appendix C - List of Non-indigenous Species found in the Great Lakes and specifically Lake Huron)

State of the Lakes Ecosystem Conference 1998

Current Threats to Ecological Values

- *Development*. Occurring just north of Misery Bay on the coast and in scattered areas throughout the peninsula, residential and commercial development may present a threat to the coastal communities, particularly the marshes. Although current pressures are not intense, they are increasing, and there is great potential for further expansion of development activities.
- *Industry*. A limestone quarry near Whitefish Bay may have an impact on aquatic organisms and the water quality of the bay. A kiln dust pile from an old cement plant has eroded into the bay, but not enough is known about its current or potential impacts. An incinerator at the plant may be having an impact on air quality.

- *Marina development*. Only one small marina exists on the peninsula, however, additional development would affect the marshes and the bird populations.
- *Shoreline modification*. Seawalls, dredging, and sedimentation have the potential to alter the shoreline significantly.
- Recreational use. Increased use of off-road vehicles (ORV's) may damage sensitive habitats. The shallow shoreline, coastal marshes, near shore fish spawning habitats, and other fragile shoreline habitats may be damaged by boat wakes.
- Cats and dogs. Increased development often results in an increase in pets, which tend to prey on avian species.
- Sewage treatment. Increased development will require new drainage and septic systems to prevent water contamination.
- *Deer*. The deer population is high, causing depletion of vegetation. Greater deer populations are the result of a changing forest composition. Clear cutting and poor regeneration of trees, such as White cedar, leaves open areas and good habitat for deer to browse.





