

**The health of the land by the lakes, nearshore terrestrial ecosystems, is degrading throughout the Great Lakes**

# Ecological communities

## *Definition*

Ecological communities are places having unique physical features and habitats supporting unique plant and animal life.

# Factors used in determining the quality of Great Lakes ecological communities:

- % remaining in a healthy state
- Major stresses
- Sources of stress
- Processes/functions impaired
- Species/communities threatened/endangered
- Stewardship activities in place
- Trend from no change to severely degrading

*“B” Rated Ecological Community*

A photograph showing a rocky shoreline with a dense forest of evergreen trees in the background and blue water in the foreground. The rocks are light-colored and appear to be limestone. The forest is thick and green, covering a hillside that rises from the water's edge. The water is a deep blue with some ripples. The sky is a clear, pale blue.

Limestone cliffs/talus slopes

*“B” Rated Ecological  
Community*

Arctic-alpine  
disjunct  
communities



*“C” Rated Ecological  
Community*

Sand beach



## *“C” Rated Ecological Community*

A photograph of a large, eroded sand dune bluff. The bluff is composed of light-colored sand and is partially covered with dense green forest. The top of the bluff is also covered in trees. In the foreground, there is a body of water, likely a lake or bay, with a dark shoreline. The sky is blue with scattered white clouds.

Unconsolidated shore bluff

*“C” Rated Ecological Community*



Gneissic rocklands



*“C” Rated Ecological  
Community*

Atlantic coastal  
plain  
communities



*“C” Rated Ecological Community*



Islands

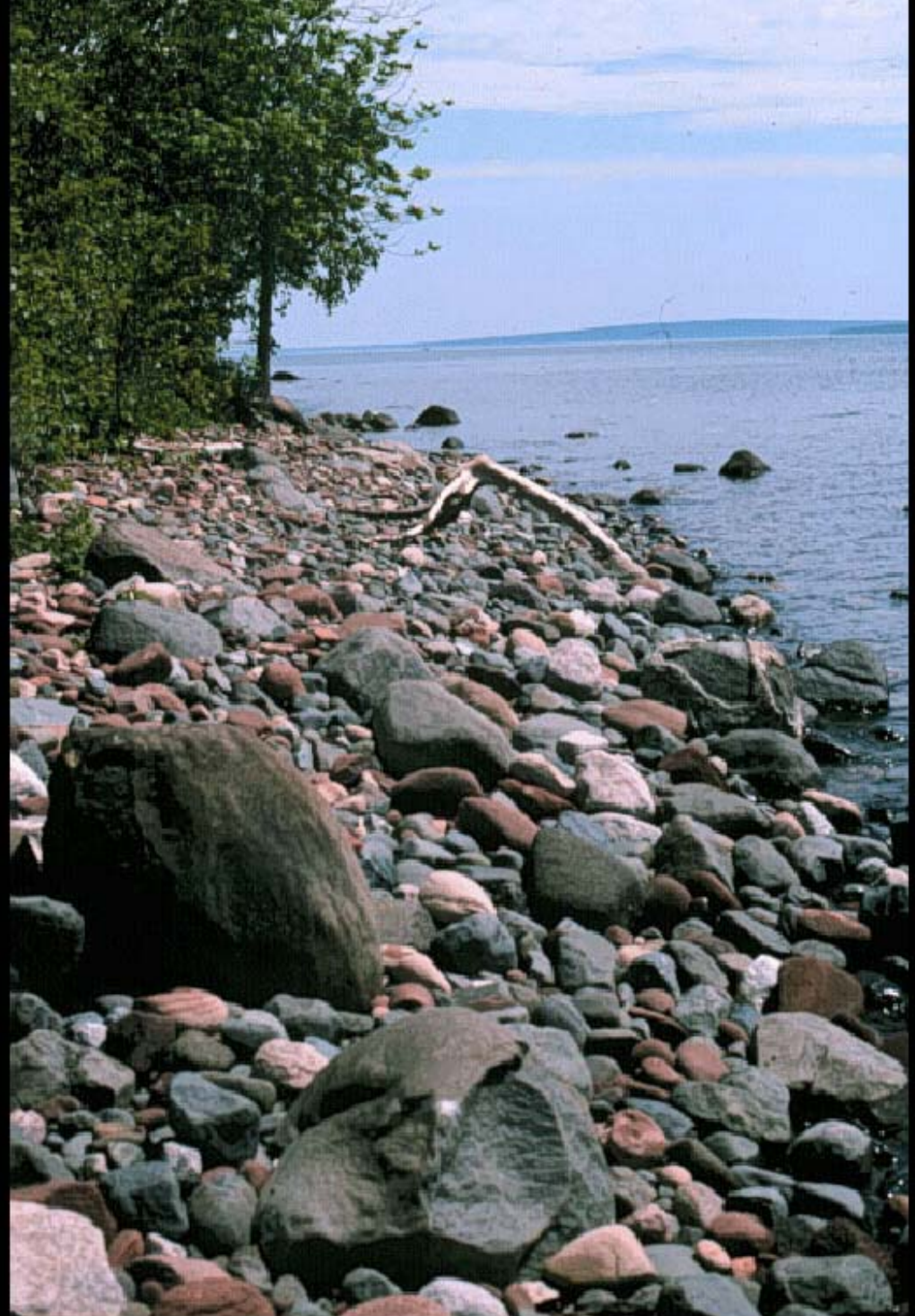
# *“D” Rated Ecological Community*



Sand dunes

*“D” Rated Ecological  
Community*

Bedrock  
beach



**“D” Rated Ecological  
Community**

**Sand barrens**



# ***“F” Rated Ecological Community***



**Lakeplain prairie**

*“F” Rated Ecological  
Community*

Shoreline  
alvars

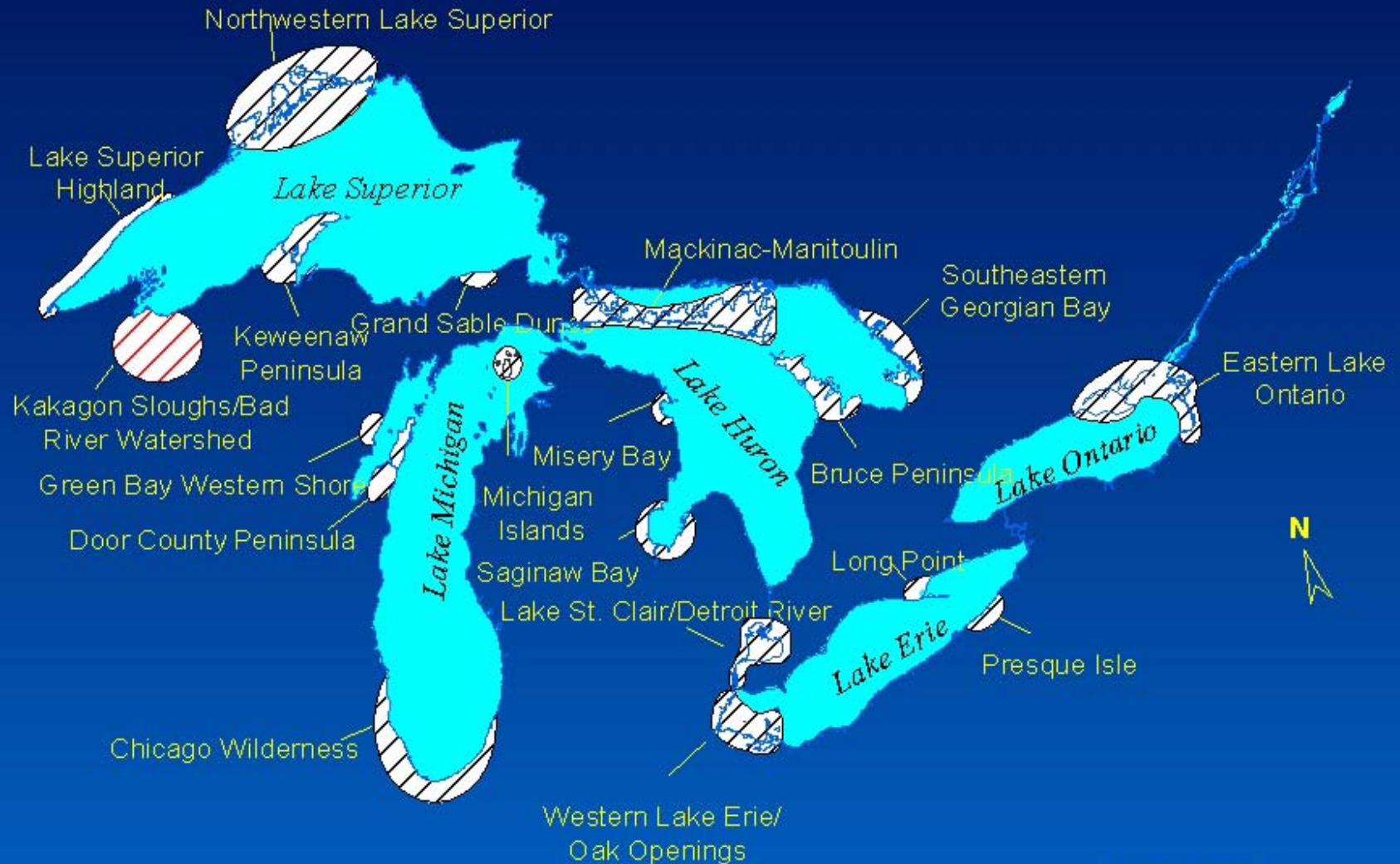


# Conservation Needs:

- Identify the effects of human-induced water-level changes on the functioning of shoreline natural ecosystems;
- Increase understanding of the long-term effects of beach and dune erosion or nourishment;
- Establish the synergistic effects of human-induced stressors on the 12 special lakeshore community types; and,
- Assess the representation of coastal biodiversity within ecoregions and ecodistricts.



# Biodiversity Investment Areas



Note: areas are not drawn to scale