

Coastal Areas of Significance

Some coastal areas are particularly significant or have special conditions that warrant increased attention. These areas are distinguished by either their unique coastal-related qualities or the intense competition for the use of their resources. The Coastal Zone Management Program (CZMP) allows the designation of coastal areas of significance as either Areas of Particular Concern or Areas for Preservation and Restoration.

Areas of Particular Concern (APCs)

The Lake Michigan Coastal Program (LMCP) will use the process of APC designation to identify these existing initiatives and partnership opportunities. The creation of APC will accomplish this by prioritizing the allocation funds for the LMCP and Coastal Grants Program, promoting interagency cooperation, providing technical assistance, and supporting research and local planning. APC status will thus serve as an important tool for those state agencies, local governments, and organizations grappling with complex and pressing coastal issues. APC are broad groups of coastal areas facing similar problems for which priorities can be defined. Federally owned or leased lands cannot be designated as APC due to the restriction that prevents the use of LMCP funds on federal lands. Section I provides specific information on the location, status, and goals for APC.

Areas for Preservation and Restoration (APRs)

Establishment of Areas for Preservation and Restoration provides for the designation of specific areas for the purpose of preserving or restoring them for their ecological, conservation, or recreational values. Specific areas that represent at least one of these values will be designated as Areas for Preservation and Restoration (APR). APR are clearly delineated areas on publicly held lands or on lands subject to use restrictions that are voluntarily submitted for designation. Federally owned or leased lands cannot be designated as APR due to the restriction that prevents the use of LMCP funds on federal lands. Section II provides specific information on the location, status, and goals for APR.

Categories of APCs: Currently 6 Categories listed

1. Areas of unique, scarce, fragile or vulnerable natural habitats
2. Areas of historical significance, cultural value, or substantial recreational value or opportunity
3. Areas of high natural productivity or essential habitat for living resources, including fish, wildlife, endangered species, and the various trophic levels in the food web critical to their well-being
4. Areas needed to protect, maintain, or replenish coastal lands or resources including coastal flood plains, aquifers and their recharge areas, sand dunes, and offshore sand deposits
5. Areas where development and facilities are dependent upon the use of, or access to, coastal waters or areas of unique features for industrial or commercial uses or dredge spoil disposal
6. Areas where if development were permitted, it might be subject to significant hazard due to storm, slides, floods, erosion, and settlement

Categories of APRs: None listed at this time.

Nominations for APC

Nominations for APC (either generic or site-specific) or for site specific APR that are submitted for consideration must include the following information:

- Identification of status requested: Area of Particular Concern or Area for Preservation and Restoration.
- General description and location(s), demonstrating it occurs within the Coastal Program Area (see Chapter 3). For a site-specific area, a letter of support from the landowner and a map clearly showing the location of the area must also be included.
- Identification of criteria, as identified in this chapter, which qualify the site for consideration.
- Description of the area's coastal related values and current condition relative to those values.
- Description of area's management issues and any problems that may be degrading its ecological, recreational, cultural, historical, or esthetic values.

The LMCP will review nominations annually and, prior to approval, will seek comments from:

- Appropriate federal, state, and local agencies;
- The Natural Resources Commission; and
- Members of the public in the coastal region.

A new APC category or site-specific APR will be created if the LMCP determines both that the primary values of the area in question are being degraded and that the existing management frameworks are insufficient to fully address the situation. If creation of a new APC category is necessary, the LMCP will prepare a statement that justifies its designation. The statement will include an explanation of how improved management strategies will alleviate the principle concerns. The new APC would then be submitted to OCRM for final approval.

Section I.: Areas of Particular Concern

1. Areas of unique, scarce, fragile or vulnerable natural habitats

Nature of the Concern

Natural communities in the coastal region include beach and foredune, forest, wetland, prairie, and lake. Table 8.1 outlines the natural community classification used for the LMCP. Together, the natural components of these communities are what constitute biological diversity or biodiversity.

Guidelines on Priority of Uses

Priority uses in areas of unique, scarce, fragile or vulnerable natural habitats are those uses that provide for the maintenance of the area's natural values in perpetuity. Uses of lowest priority are those uses that degrade the ecosystem's integrity so that the area no longer is capable of supporting characteristic species of plants and animals.

Criteria for Designation

- Habitat of endangered or threatened plant or animal species
- Natural areas that contain high quality natural communities, and usually contain species of plants or animals considered endangered, threatened, or rare
- Areas that contain assemblages of rare species including one or more species of plant or animal considered rare, special concern, or watch list
- Areas that contain natural community types that are rare in the State of Indiana (Table 8.1).
- Dedicated state nature preserves
- Streams classified as natural, scenic, or recreational rivers

Table 8.1 Natural Community Classification

1. Forest	3. Savanna
a) Upland forest	a) Savanna
-dry-mesic upland forest*	-dry-mesic savanna
-mesic upland forest*	-Mesic savanna*
-wet-mesic upland forest	b) Sand Savanna
b) Dune forest	-dry sand savanna*
-dry dune forest*	-dry-mesic sand savanna*
-dry-mesic dune forest*	-mesic sand savanna*
-mesic dune forest**	4. Aquatic
c) Floodplain forest	a) Open water
-mesic floodplain forest	-perennial stream*
-wet-mesic floodplain forest*	-lake* (3)
-wet floodplain forest*	b) Marsh
d) Flatwoods	-marsh*
-boreal flatwoods*	c) Swamp
-northern sand flatwoods*	-swamp
2. Prairie	d) Bog
a) Prairie	-graminoid bog* (4)
-dry-mesic prairie	-low shrub bog* (1), (4)
-Mesic prairie*	-forested bog** (1), (4)
-wet-mesic prairie*	-tall shrub bog** (1), (4)
-wet prairie	-calcareous floating mat
b) Sand prairie	e) Fen
-dry sand prairie*	-graminoid fen*
-dry-mesic sand prairie*	-low shrub fen*
-mesic sand prairie*	-tall shrub fen
-wet-mesic sand prairie*	-forested fen** (5)
-wet sand prairie*	f) Sedge meadow
c) Hill prairie	-sedge meadow*
-glacial drift hill prairie	g) Panne
-gravel hill prairie	-panne*
-sand hill (dune) prairie** (1), (2)	h) Seep and spring
d) Shrub prairie	-seep*
-shrub prairie*	-calcareous seep
	-sand seep
	-spring
	5. Primary
	a) Littoral
	-beach**
	-foredune**
*Natural communities represented in natural and notable areas.	(1) Indiana Dunes National Lakeshore (2) Indiana Dunes State Park
**Natural communities extant but not represented in natural or notable areas	(3) Lake Michigan (4) Pinhook bog, LaPorte County (5) Cowles bog

2. Areas of historical significance, cultural value, or substantial recreational value or opportunity

Nature of the Concern

Northwestern Indiana's cultural resources include: Prehistoric and historic archaeological sites and resources; Early settlement resources; Ethnic heritage and resources; Agricultural resources and farmsteads; Wood, metal, and concrete bridges; Educational institutions and libraries; Social institutions, fraternal orders, and religious resources; Social welfare institutions; Transportation-related resources; Urban planning and historic designed landscapes; Industrial resources; and Resources from the recent past.

Guidelines on Priority of Uses

The DNR Division of Historic Preservation and Archaeology and local ordinances set guidelines on priority uses for resources of cultural and historic value. Priority uses in these areas are those which maintain or enhance attributes of the area identified in historic district ordinances developed by local units of government. Uses of lowest priority for sites of historic or cultural significance are those uses that would destroy or diminish those attributes.

Priority uses for areas of substantial recreational value are those uses that encourage access by the public and provide a quality recreational experience. Specific uses for recreational sites are set by the public entity managing the land. Uses of lowest priority for sites of recreational significance are those uses that prevent public access.

Criteria for Designation

- Site, district, object, and building significant in the development of Indiana, local history, architecture, archaeology, and culture that possesses integrity of location, design, setting, materials, and workmanship
- Properties rated as "Outstanding" or "Notable" in the Indiana Historic Sites and Structures Inventory (available from the Division of Historic Preservation and Archaeology)
- Property achieving historical significance within the past 50 years
- Archaeological sites whose contextual integrity has not been significantly altered by natural sources or human activities
- Existing public access sites to lakes, fishing along the shoreline and boat ramp facilities
- Areas along the Lake Michigan shoreline and salmonid streams that are suitable to provide public fishing access, are not presently providing access, and would not interfere with other areas of concern
- Areas that are conducive to the expansion of interpretive and educational facilities
- Marshes, bogs, and swamps of significant recreational value for sport fishing, hunting, and or wildlife viewing
- Areas suitable to trail opportunities for walking, hiking, bicycling, horseback riding, and crosscountry skiing
- Public lands managed by the Division of State Parks or the Division of Fish and Wildlife
- Offshore shipwrecks

3. Areas of high natural productivity or essential habitat for living resources, including fish, wildlife, endangered species, and the various trophic levels in the food web critical to their well-being

Nature of the Concern

Essential habitats that support key life stages include breeding grounds, migratory stopover habitat, rearing habitat, and wintering habitat. Essential habitats can include a range of habitat types for one species. For example, many reptile and amphibian species require aquatic habitats for breeding and for the development of their young. These aquatic habitats, sometimes only temporary wetlands, provide needed food, water, and protection from predation. During the remaining stages of life these species use other types of habitat including dry woodlands. Other species use different habitat types during the fall and winter. Copperbelly water snakes move from dry forest habitat to wetlands each spring where their main food supply exists, and they return to their forest dens in the fall.

Guidelines on Priority of Uses

Priority uses for areas of high productivity are those uses that maintain or improve the integrity of such habitat and support wildlife and plant populations. Uses of lowest priority are those uses that degrade ecosystem's integrity so the area no longer is capable of supporting characteristic species of plants and animals.

Criteria for Designation

- Sites designated as Salmonid streams and tributaries required for spawning and release sites
- Isolated marshes, bogs, and swamps including those not regulated by federal and state laws
- Offshore waters used by migratory waterfowl
- Stopover habitat used by migratory birds
- Public lands managed by the Division of Fish and Wildlife: Fish and Wildlife Areas or Wetland Conservation Area
- Private lands voluntarily enrolled in state programs administered by the Division of Fish and Wildlife: Classified Wildlife Habitat
- Private lands voluntarily enrolled in state programs administered by the Division of Forestry: Classified Forests and areas within the Forest Legacy Program
- Shoreline waters required for the reproduction of fish species other than salmonids
- Riparian corridors and in-stream habitat
- Wetlands including marshes, bogs, fens, mesic and wet prairie, and swamps as identified by the U.S. Fish and Wildlife Service National Wetlands Inventory

4. Areas needed to protect, maintain, or replenish coastal lands or resources including coastal flood plains, aquifers and their recharge areas, sand dunes, and offshore sand deposits

Nature of the Concern

The interaction of surface and groundwater maintains and replenishes wetlands, flood plains, and aquifers. Some areas such as wetlands are sites of groundwater discharge, where groundwater moves towards the surface. Other sites, or sometimes the same sites under differing environmental conditions, recharge aquifers and the groundwater. The recharge potential of wetlands is affected by many factors including wetland type, location, season, soils, and precipitation, and appears to be more important in small wetlands than large ones. Based on the National Inventory of Wetlands, about 40% of the Lake Michigan region's wetlands are one acre or smaller; 48% are between 10 and 40 acres; and 2% are greater than 40 acres. Location serves a vital role in determining the contribution of these wetlands to the aquifer.

Guidelines on Priority of Uses

Priority uses are those uses that protect, maintain, or replenish coastal lands and waters. Uses of lowest priority are those uses that degrade the ecosystem integrity so that the area no longer is capable of supporting coastal resources.

Criteria for Designation

- Areas eligible as filter strips under the Filter Strip Act
- Undeveloped flood plains
- Wetlands as identified by the U.S. Fish and Wildlife Service National Wetlands Inventory
- Recharge areas mapped in the Atlas of Hydrogeologic Terrains and Settings of Indiana
- Sand dunes
- Offshore sand deposits

5. Areas where development and facilities are dependent upon the use of, or access to, coastal waters or areas of unique features for industrial or commercial uses or dredge spoil disposal

Nature of the Concern

Indiana's coastal region supports a diverse economy with international and national shipping, steel production, fishing industries, and recreational industries. However, Indiana's 45 miles of shoreline is subject to competition for space and resources from many of these interests as well as residential development and public access.

Guidelines on Priority of Uses

Priority uses for these areas are those that support, develop, restore, and manage coastal dependent uses as well as those providing public shoreline access. Uses of lowest priority are those uses that prevent the development of coastal dependent uses in proximity to the resource required, prevent public access to the shoreline, and encourage development away from existing city centers.

Criteria for Designation

- Prime industrial areas and urban waterfronts where 1) development is compatible with existing local zoning and land use; 2) there is easy access to modes of transportation, especially water; and 3) adequate utility systems exist
- Ports and related facilities associated with waterborne transportation
- Docking and mooring areas
- Port loading facilities
- Shipping channels
- Vacant lands adjacent to the lake or connecting waterways that are designated as brownfields for redevelopment of land previously used by industrial activities conditions.

6. Areas where if development were permitted, it might be subject to significant hazard due to storm, slides, floods, erosion, and settlement

Nature of the Concern

Lake level fluctuations continue to occur in the Great Lakes. The level of each of the Great Lakes, including Lake Michigan, depends on the balance between the quantities of water received and the quantities of water removed. As the supply of water changes under natural outlet conditions in a lake, the lake-level and outflow adjust continually to restore a balance between the net supply of water to the lake and the outflow through its outlet. Lake levels affect extent of flooding, and shoreline erosion.

Guidelines on Priority of Uses

Priority uses of areas designated as hazardous due to dune-bluff recession rates are those uses that do not accelerate dune-bluff recession and allow natural land cover and processes that minimize the loss to erosion.

Criteria for Designation

- Areas with coastal dune-bluff recession rates greater than one foot per year and considered to be “High Erosion Hazard” areas.

Section II: Areas for Preservation and Restoration

This section identifies specific Areas for Preservation and Restoration (APR) in the coastal region. APR are specific sites that meet the criteria under generic APC for which an additional level of attention is needed. These are public or otherwise protected sites where the preservation and restoration of ecological, conservation, or recreational values are the dominant public policies. Although funds may also be used through the Coastal Grants Program to acquire sites that meet APR designation criteria from willing sellers, Indiana remains sensitive to the potential impacts on local economies that might result. Efforts by the Program to address APR are the same as those identified above under APC.

Designation Criteria:

Several fundamental conditions must be met for a site to receive APR designation. First it must meet at least one of the criteria identified under the APC categories. Secondly, the special values of such a site must require additional restoration or protection to be fully achieved; methods required for restoration and protection must be identifiable and technically feasible. Finally, the site must be voluntarily submitted by the landowner and available, or potentially available, for public use, recognizing that restrictions may be necessary to protect the site’s character. Private lands without protection in perpetuity and without public access plans cannot be considered APR. These designation criteria must be clearly described when a nomination is submitted.

Designated Areas For Preservation And Restoration

The LMCP will consider nominations for designated APR annually.