Draft Document

Master Plan for the Operation and Maintenance for the Blind Sucker Wildlife Flooding
Dam ID. No. 0258

Introduction

Purpose of the plan: The purpose of this master plan is to ensure that legal obligations to manage for the stated purpose of the wildlife area management are fulfilled. Public input was considered in developing the plan, but this is not a consensus document.

Project location: The Blind Sucker Wildlife Flooding is located entirely within Luce County in the Upper Peninsula of Michigan. T 49 N, R 12 W, Sections 1-18, 20-23. This boundary contains the dam, the flooded area itself and the area that the flooding influences (drainage area) (Appendix, Figure 1).

The vast majority of the land contained within the flooding boundary was tax reverted. Dates of acquisition range from 1906-1978 with the bulk of the land reverting in 1916-17. A small portion of land was purchased using Fish and Game funds in section 14.

The flooding was created for, and maintained for the purpose of wildlife restoration and management, and therefore, restoration and management of wild birds and mammals, and provision for public use of wildlife resources is the primary management goal.

Historical Vegetation: Vegetation Circa 1800 maps, as mapped by Michigan Natural Features Inventory, Comer et. Al 1995, indicates that the area was primarily mixed conifer swamp. Other vegetation types included within the boundary are listed as follows in order of predominance: Shrub swamp/ emergent marsh, muskeg/bog, lake/river, hemlock-white pine forest, jack pine-red pine forest and beech-sugar maple-hemlock forest. Knowledge of Presettlement vegetation is useful as a benchmark for understanding the potential conditions that can exist in an area, but should not be viewed as a management goal for an area (Appendix, Figure 2).

The Blind Sucker Wildlife Flooding lies within Sub-subsection VIII.2.2, Grand Marais Sandy End Moraine and Outwash, as classified by Albert's "*Regional Landscape Ecosystems of Michigan, Minnesota, and Wisconsin: A Working Map and Classification*". Sandy ridges of end moraine and pitted outwash are characteristic of this area. Lacustrine deposits are broken into two major types: the droughty sand dunes and beach ridge deposits along the Lake Superior shoreline and the poorly to very poorly drained glacial lacustrine deposits concentrated in northern Luce County. Presettlement vegetation of the area included areas of sandy lake plain along Lake Superior, which supported several wetland and upland communities. Emergent marshes, bogs, and speckled alder-willow swamps were common in the swales associated with the shoreline and small lakes immediately inland. Peatlands were dominated by stunted black spruce, northern white cedar, and tamarack; narrow beach ridges within the peatlands were dominated by white and red pine. Excessively drained fire-prone portions of the lake plain supported forests dominated by jack pine and red pine-jack pine. Jack pine dominated forests were extensive along the shoreline between Grand Marais and Whitefish point. Extensive complexes of beach ridges and swales occurred on the sandy lake plain along Lake Superior.

Common natural disturbances of the sub-subsection include fires in the pineries and large areas of windthrow in the cedar-tamarack swamps near the shoreline. The average growing season ranges from 100-140 days, annual precipitation is between 32 and 34 inches and snowfall depths reach as high as 180 inches near Lake Superior.

Abiotic Resources and Landscape Characteristics: The average growing season is approximately 140 days close to Lake Superior ranging to 100 days further inland. Average temperatures range from a high of 76 degrees to a low of 8 degrees. Average snowfall is as high as 180 inches near Lake Superior with an average annual snowfall of 108 inches for Luce County.

Ordovician sandstone and dolomite are the underlying bedrock, and landforms include sandy ridges of end moraine and pitted outwash with inclusions of poorly drained deposits (Albert). The Blind Sucker River flows along the base of a high escarpment (approximately a 60% slope) dominated by hemlock and white pine. Soils within the flooding area range from very dry and sterile Rubicon sands at higher elevations to muck and peat complexes in the lowlands (Luce County Soil Survey, Interim Report Oct. 2002).

Biotic Resources: The landscape is dominated in the lowlands by lowland swamp conifers including cedar, black spruce, balsam fir and some tamarack. There are areas of alder thickets, peatlands dominated by leatherleaf and emergent marsh communities along the edges of the flooding. The water body itself is composed of a drowned river channel that supports some floating aquatic plant habitat as well as submerged plant habitats. Upland forests within and adjacent to the flooding include mixed pine forest and a rich mesic forest that has white pine and hemlock components (Appendix, Figure 3).

Wildlife using the area includes Neotropical songbirds, white-tailed deer, many species of furbearers- especially mustelids, moose and waterfowl. Osprey have historically nested in the flooding as well as bald eagle. Fisheries resources are primarily perch and pike. There has never been an extensive survey of the area for species of concern.

Nuisance species are not a problem at the flooding to date but do occur within the campgrounds associated with it. Primarily spotted knapweed occurs there.

Surrounding land use includes multiple forms of recreation, second homes and forest product extraction.

Management History: The Blind Sucker Wildlife Flooding was proposed initially in 1936, with construction to be done under the Civilian Conservation Corps (CCC) program. The intent and purpose of the flooding was to benefit the production of waterfowl, furbearer populations and to increase hunting and trapping opportunities in the region. The site already contained an old dam that was used to raise the water level on the Blind Sucker River to facilitate the floating of logs to the mill at Grand Marais. Before construction could begin, however, the CCC was disbanded.

Discussions concerning the construction of a new dam resumed in the 1940's, but Fish Division opposed the project when it became known that brown trout were being caught in the river. Their opposition subsided when it was learned that the trout catches were probably from pothole lakes in the area to be flooded.

In 1950, Warren Shapton, Assistant Coordinator, Pittman-Robertson Projects, notified Otto DeWard, District Game Supervisor, that the project proposal was going to be submitted to the Conservation Commission. The Luce County Board of Supervisors approved the construction of the dam on September 19, 1950.

In 1953, Harry Ruhl, Chief of Game Division, recommended approval of the project under the Federal Aid in Wildlife Restoration Act and requested the Conservation Commission to obtain bids for construction. Bids were obtained in 1954 and the cost of construction was $22,901.29. The flooding was filled in 1955. An April 1956 waterfowl survey noted an estimated 3000 ducks on the flooding. Limited historical survey information suggests fair brood production and light hunting pressure. The flooding became a popular destination for bait and hook fishermen and the access road was improved and two campgrounds constructed by Forest Management Division to accommodate this use.

John A. Kadlec prepared a management plan for the flooding in 1962. He recommended a stable water level and possible drawdown from mid or late June to September. Until 1962, the only management attempt was the planting of wild rice in 1958, with little or no success noted. In 1956, Loyd G. Schemenauer, District Game Supervisor, reviewed Kadlec's plan and recommended a minimum drawdown time of two years based on the drawdowns being performed at the Seney National Wildlife Refuge. Unfortunately, there are no local files relating to the flooding for the period of 1965 to the mid 1980's.

Only one drawdown has been conducted on this flooding in recent years. Stoplogs were removed in the fall of 1987, with new stoplogs installed in early spring of 1990 and the flooding refilled.

At present, no drawdown is scheduled. People interested in the flooding primarily for fishing purposes were mildly enraged at the 1987 drawdown. It would be advisable, prior to any scheduled drawdown, to hold meeting with local publics to carefully detail the proposed action.

From the mid 1980's, numerous releases of Canada Geese have been made with birds translocated from southern Michigan to increase hunting opportunities in the region.

Public Use: The primary public use of the flooding in spring is fishing. According to the local fisheries biologist, the species that receives the most fishing pressure are yellow perch and pike. Most pike are undersized with a few trophy fish. The majority of fishing is catch and release (Jim Waybrant, personal communication). The flooding receives moderate pressure from waterfowl hunters in the fall and there are a few local trappers who take advantage of the furbearer resources in the area. Bird watching, canoeing and kayaking are recreational activities that occur throughout the spring, summer and fall. There is light pressure from ORV and snowmobile traffic in this area. Fisheries Division indicates that there are some local winter anglers as well. There are two State Forest campgrounds within the boundary that are managed by Forest, Mineral and Fire Management Division (FMFMD) through the Newberry Forest Management Area. In fiscal year 2002 campers at both campgrounds accounted for 6,029 camper days.

Commercial Use: The primary commercial use of this area is timber management. Agreements on timber management and vegetation alteration are made by all divisions through the compartment review process. Timber sales are set up and administered by FMFMD. All commercial activities are incidental to management activities that are undertaken to meet stated management goals.

Management Goals and Objectives

Overall Management Goal: The flooding was created for, and maintained for the purpose of wildlife restoration and management, and therefore, restoration and management of wild birds and mammals, and provision for public use of wildlife resources is the primary management goal.

Legislation and Policies that affect Management:

1. Federal regulations/acts/laws (e.g., NEPA, MBTA, Endangered Species Act)
2. State laws - Under the Dam Safety part of the Natural Resources and Environmental Protection Act, 1994 PA 451, part 315, regular inspections to evaluate the structural conditions and hydraulic capacity of this dam is required. Following such inspection, a report is given to the Wildlife Management Unit Supervisor listing deficiencies found. Deficiencies such as accumulated brush on dam, beaver problems, and control structure maintenance

needs are given a hazard rating to determine priority and urgency in completing repairs. Permits for the Inland Waters Part 301 of Act 451 of 1994, formerly Inland Lakes and Stream Act, P.A. 346 of 1972 and/or the Goemare-Anderson Wetland Protection Act, P.A.203 of 1979 may be needed.

3. FMFMD procedures - The area surrounding this flooding will continue to be managed as part of the general state forest system.

Local Agreements: The documentation for the original planning and development of the flooding in the 1950's suggests that all interested parties were contacted and all legal obligations were met at that time. The parties included personnel from Forestry and Fish in the Department of Conservation, the Conservation Commission, the Luce County Board of Supervisors, and private landowners. There are no known long-term agreements or special management considerations with any local governmental body but there may be recorded easements for some private properties to cover potential flooding.

In order to meet the stated goal, the objectives are:

1. Wildlife restoration and management – To maintain the wetland habitat that supports nesting and migrating waterfowl and resident furbearers, and that promotes plant and animal diversity in managed water systems.
2. Wildlife related recreational activities – To continue to provide access for canoes or small hand-carried boats that enables hunting, trapping, fishing, and bird watching by the general public.
3. Rare species – To provide nesting, feeding and resting habitat for bald eagles and osprey, and provide forage areas for moose.
4. Facilities management and maintenance – To maintain a functional stoplog structure for water control purposes and a structurally sound earthen dike to hold expected head of water.
5. Land acquisition – The area within the boundary and surrounding the boundary is land owned by the State of Michigan.
6. Monitoring – To record the use of the flooding by wildlife and the general public; to quantify the habitat diversity resulting from water regulation; to perform periodic inspections of the control structure to ensure proper operation.
7. Regulation of non-wildlife related recreational activities – To advertise and enforce, where needed, state forest land use rules.

Management Activities

The Blind Sucker Flooding is part of the Lake Superior State Forest and located within the Newberry Management Unit in compartments 1, 2, 4 and 5. The land is co-managed with FMFMD personnel and each compartment reviewed on a ten year cycle. The compartments within the flooding have been or will be reviewed in the year 2001, 2002, 2003, and 2004.

Timber sales or other land manipulations will not affect the direct operation of the flooding and Wetland ecosystems are given considerable buffers to maintain their integrity. The objective is for a mix of forest types to encourage greater wildlife species diversity and timber harvest is a tool to achieve this objective. New roads that are built to access timber should be closed per FMFMD policy. Existing public access to campgrounds and the flooding is good and will be maintained.

Periodic drawdowns should be scheduled to release nutrients and stimulate the growth of emergent vegetation. Required permits will be obtained in a timely manner. Form 2706 (or its successor), as required by The Inland Lakes and Streams Act, 1972 P. A. 346, must be filed prior to drawdown activities.

To date, only one drawdown has been conducted on this flooding which began in the fall of 1987. New stoplogs were added in 1990 and the flooding refilled at that time.

The water control structure and earthen dam will be inspected quarterly. Beaver debris will be removed as needed. Activities required by the dam safety inspection report of August 2003 and any subsequent reports will be included in the annual work plan. The embankments of the dam will have trees and brush removed yearly.

The master plan will be reviewed annually to determine if management goals stated within the plan need modification, if the stated objectives are still consistent with the management goals of the area, and to consider public input in the context of the plan.

Public Input:

A public open house will be held on August 20th in Mackinac County co-inciding with the FMFMD Sault Management Area open house to review this planning document. Past FMFMD open houses in the Newberry Forest Management area that have reviewed portions of the flooding have been in 2001 and 2002.

Conclusion

It is our responsibility as land stewards to examine this land use and habitat and place it within the larger context of landscape management. Seventy years ago, in someone's minds eye the Blind Sucker Flooding was envisioned. The flooding was created for the enhancement and creation of waterfowl habitat and is still used for these purposes today. Socially, the flooding plays a large role in the recreational activities of community members and visitors from within the state and around the country.

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Figure 1

Blind Sucker Wildlife Flooding Boundary Map

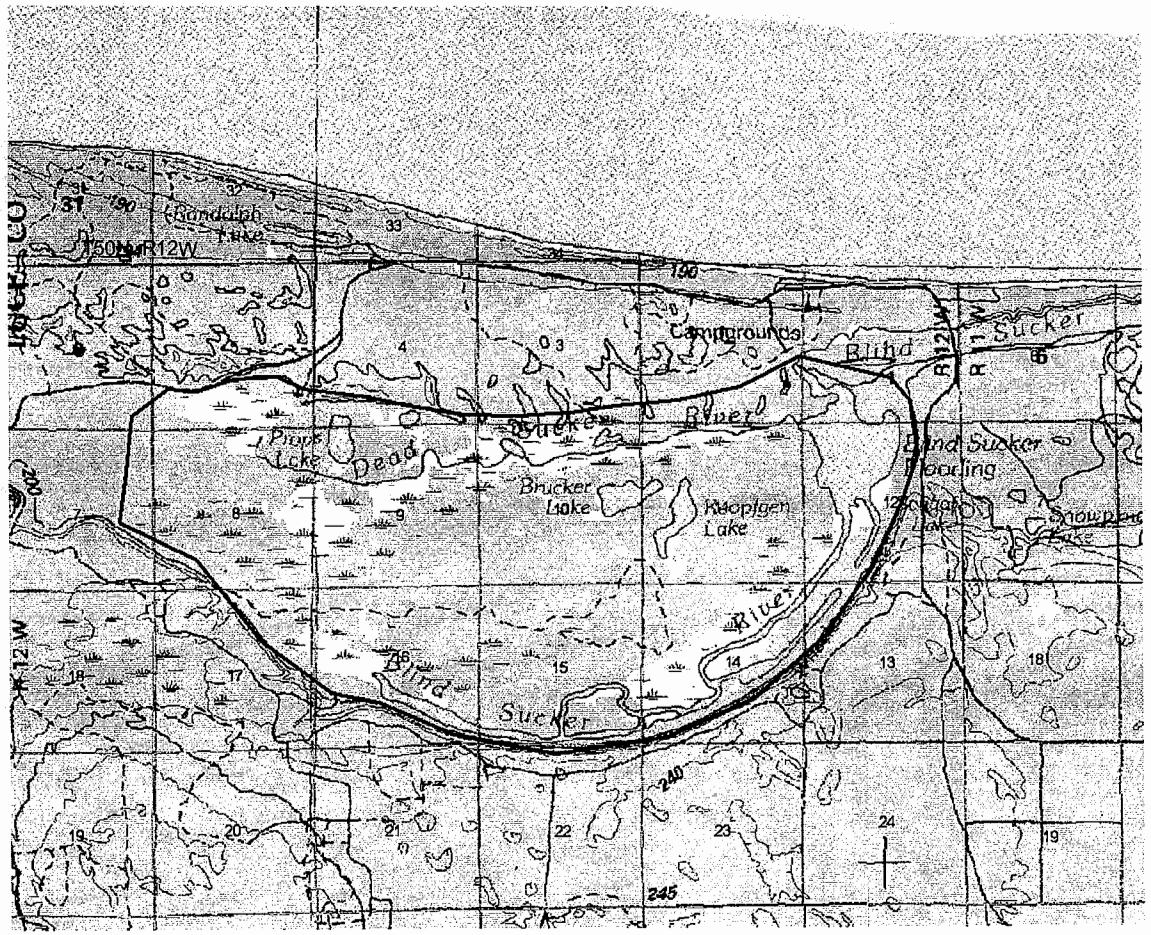

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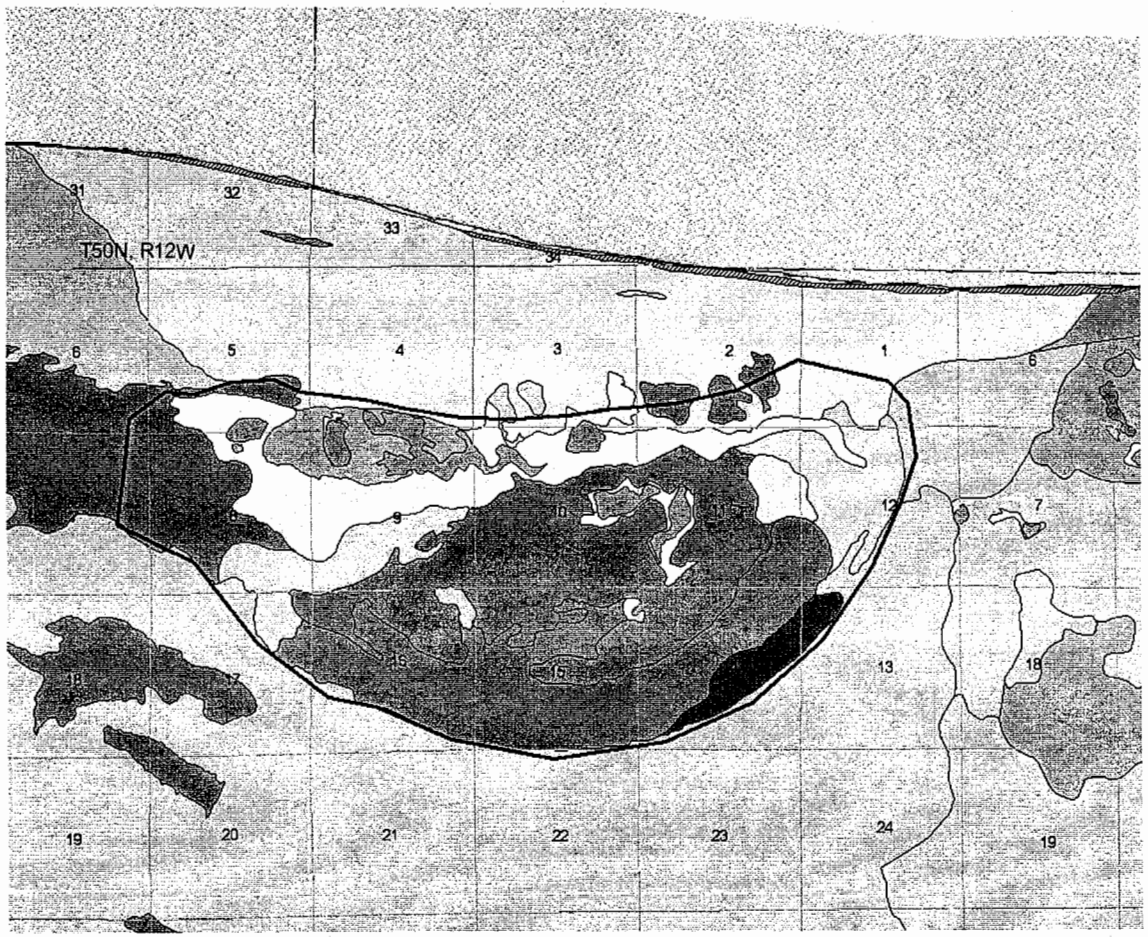
Figure 2

Blind Sucker Wildlife Flooding Circa 1800 Vegetation



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Public_land_survey_system_labels.cad
Text Section/Twp/Range Number
Land_cover_1800.shp

- ASPEN-BIRCH FOREST
- BEECH-SUGAR MAPLE-HEMLOCK FOREST
- BLACK ASH SWAMP
- CEDAR SWAMP
- HEMLOCK-WHITE PINE FOREST
- HEMLOCK-YELLOW BIRCH FOREST
- JACK PINE-RED PINE FOREST
- LAKE/RIVER
- MIXED CONIFER SWAMP
- MIXED HARDWOOD SWAMP
- MUSKEG/BOG
- PINE BARRENS
- RED PINE-WHITE PINE FOREST
- SAND DUNE
- SHRUB SWAMP/EMERGENT MARSH
- SPRUCE-FIR-CEDAR FOREST
- SUGAR MAPLE-HEMLOCK FOREST
- WHITE PINE-MIXED HARDWOOD FOREST

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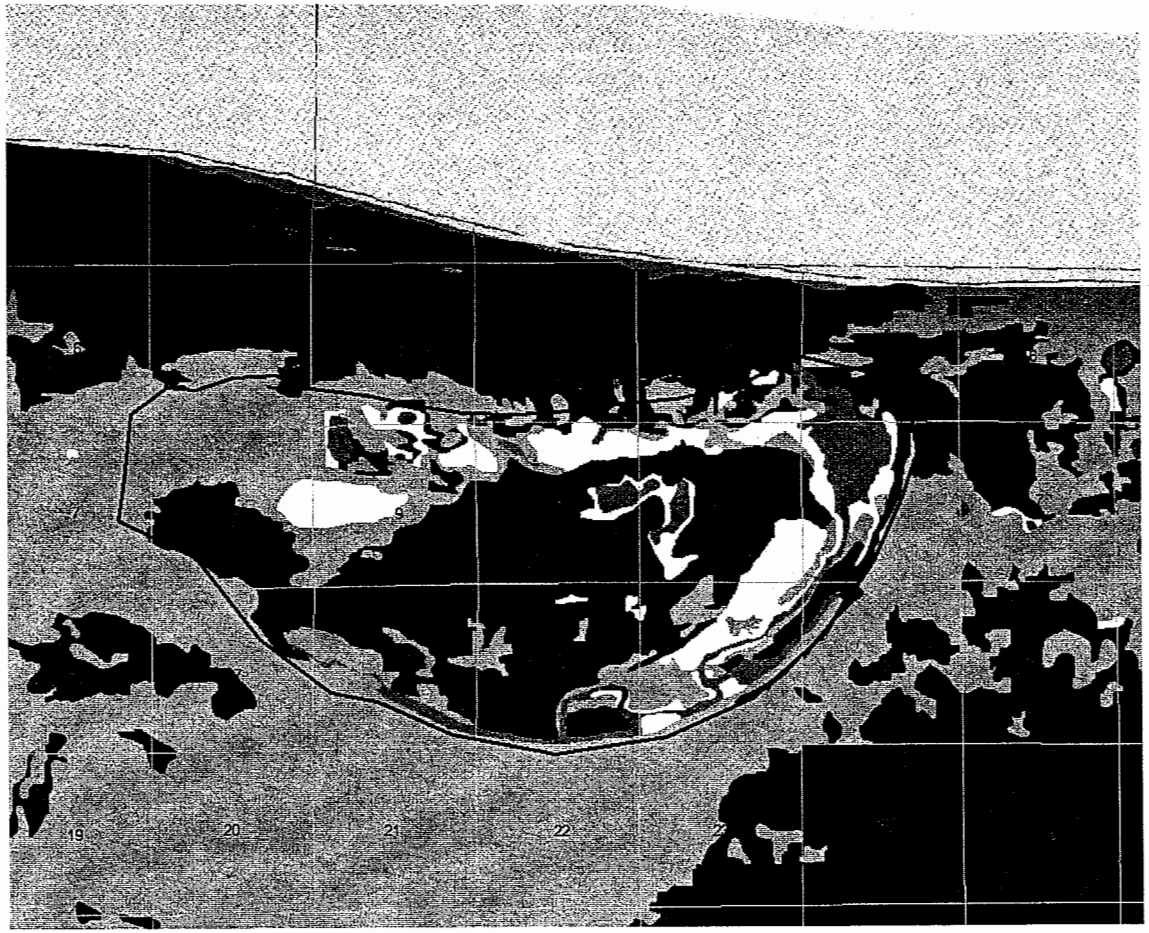
Figure 3

Blind Sucker Wildlife Flooding 1978 Vegetation



Section_In.shp
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Text Section/Twp/Range Number
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Beaches and Riverbanks
Broadleaved Forest (Generally Deciduous)
Commercial, Services, and Institutional
Confined Feeding Operations
Coniferous Forest
Cropland, Rotation, and Permanent Pasture
Extractive
Forested (wooded) Wetlands
Herbaceous Rangeland
Industrial
Lakes
Non-Forested (non-wooded) Wetlands
Open and Other
Orchards, Vineyards, and Ornamental
Other Agricultural Land
Permanent Pasture
Pine or Oak Opening (Savanna)
Reservoirs
Residential
Sand Other than Beaches
Shrub Rangeland
Streams and Waterways
Transportation, Communication, and Utilities

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Literature Cited

Albert, Dennis A. 1995. *Regional landscape ecosystems of Michigan, Minnesota, and Wisconsin: a working map and classification.* Gen. Tech. Rep. NC-178. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station.

USDA *Luce County Soil Survey- Interim Report*, October 2002.

References

Michigan DNR files, Newberry Operations Service Center
Michigan DNR files, Newberry Forest Area Compartments 1, 2, 4 and 5
Jim Waybrant, Fisheries Biologist personal communication July 6th, 2003