

# MASTER PLAN

## BLOMGREN'S MARSH

**Location: Dickinson County (WUPMU)**  
**Section 8; T 40N R 28W**  
**Approximately 75 Acres Impounded**  
**Maximum head of water: 6 Feet**

### I) INTRODUCTION

#### A. Purpose of 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.

#### B. History of Area

Blomgren's Marsh was constructed in 1967 to control a wildlife flooding originally created by a beaver dam.

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 a primary management goal. PR funds are generated from taxes paid by hunters and shooters.

The dam consists of a 166-foot long embankment with a height of 10 feet as measured from the top of the embankment to the invert of the outlet channel. The principal spillway is a rock cut channel in the right abutment. The channel has a bottom width of 15 feet, and side slopes of 4 vertical to 1 horizontal. The channel is flat for 80 feet, then slopes downstream at approximately 3.33%.

The second spillway serves as a drawdown facility for the impoundment. The spillway consists of a 62 foot long 30 inch diameter corrugated metal pipe (CMP) with a hand operated slidegate on the upstream (impoundment) end. The slidegate is normally closed. A steel frame walkway with a wood deck provides access to the gate operator.

The embankment consists of unspecified earth fill with an upstream slope of 3 horizontal to 1 vertical, downstream slope of 2.5 horizontal to 1 vertical, and a top width of 12 feet. The embankment foundation consists of rock overlain by sand and gravel up to 5 feet thick, and covered with topsoil up to 2 feet thick. Normal

freeboard is approximately 4 feet and the impoundment created by the dam has a surface area of approximately 75 acres.

Native (pre-flooding) settlement was upland aspen to the south and west and lowland conifer and bog to the north and east. A few small islands and hardwood peninsulas are included in this complex. 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.

The flooding is included within the boundaries of the Copper Country State Forest and is a part of the Crystal Falls Forest Area.

Hancock flooding is located on the western edge of the Subsection VIII.3.1 of Landscape Ecosystems of Michigan's Upper Peninsula (Albert 1994). This is characterized by sandy and loamy ground moraine, drumlin fields that are composed of northern hardwood forest (with large amounts of sugar maple, hemlock, yellow birch, and northern white cedar), northern white-cedar swamp and hardwood-conifer swamp. Most of this subsection remains forested today, but post-settlement logging changed the composition from predominately conifer to a much greater proportion of hardwoods, both on uplands and in swamps.

Soils are made up of Northern Lake Michigan (Hermansville) Till Plain, a loamy till plain over limestone bedrock. Soils on the drumlins are generally well drained and classified primarily as Spodosols and Alfisols. The growing season is short (less than 100 days) and extreme minimum temperatures of -40 degrees F occur. Snowfall is relatively light, 60-80 inches annually. Surface deposits of glacial drift reflect the local bedrock from which the till was derived.

Early logging of white pine occurred in this area and some agriculture followed. No rare plant communities have been identified in this area of the Upper Peninsula and only three plants are listed as rare; *Ranunculus cymbalaria* (seaside crowfoot), *Danthonia intermedia* (wild oatgrass) and *Linum sulcatum* (furrowed flax). None of these have been found on the project area.

Most species of birds and mammals common the western upper peninsula are found here. *Odocoileus virginianus* (white-tailed deer), *Felis rufus* (bobcat), *Canis latrans* (coyote), *Ursus americanus* (black bear), *Castor canadensis* (beaver), *Aix sponsa* (wood duck), *Scolopax minor* (american woodcock), *Bonasa umbellus* (ruffed grouse), are examples of animals common to the project area. *Gavia immer* (common loon), *Pandion haliaetus* (osprey), *Haliaeetus leucocephalus* (bald eagle), *Canis lupus* (grey wolf), *Alces alces* (moose) are all animals that are threatened or of special concern that inhabit or frequent the project area to varying degrees.

### **C. Management**

A large grass opening approximately 40 acres in size has been maintained mechanically and by controlled burning to benefit a variety of upland species as well as serving as a pasture for *Branta Canadensis* (Canada geese). The flooding, which originated as a natural beaver pond, blends into the landscape today, much the same as when it was established over 50 years ago by beaver in the area and then made permanent with an earthen dam and water control structure. The project area has been managed as a part of the Copper Country State Forest following state forest guidelines and SHPO procedures have been followed for all documented work done on the area. The only commercial use that occurs on, or adjacent to the flooding is the treatment of timber stands prescribed through the review process. These prescriptions are a joint decision arrived at by the Wildlife Biologist and Area Forest Manager and undergo public review and comment. All commercial activities are incidental to management activities that are undertaken to meet stated management goals. Federal aid requirements mandate that all facilities paid for with PR funds be maintained. The water control structure receives regular inspections by local personnel and is formally inspected on a regular basis by a representative of the Dam Safety Program of the Land and Water Division of the Department of Environmental Quality. Any and all repairs deemed necessary are completed in a timely fashion.

### **D. Public Use**

The project area is used extensively by hunters pursuing deer, waterfowl, turkeys, bear, grouse and woodcock. Trappers commonly use the area to trap mink, muskrat, beaver, bobcat, otter, coyote, and other species. Bird watching is also common in the area, as is wildlife viewing in general.

## **II) MANAGEMENT GOALS AND OBJECTIVES**

Blomgren's Marsh possesses a diverse vegetative community, capable of accommodating a wide variety of recreational opportunities. We intend to manage the area to conserve, enhance, and protect its unique habitats, while at the same time maintaining its recreational variety.

Most lands within this wildlife area have been purchased with and are managed using Federal Aid in Wildlife Restoration Act or Pittman-Robertson (P-R) funds. The Act's rules and regulations state that real property acquired or constructed with Federal Aid funds must continue to serve the purpose for which acquired or constructed – the restoration, conservation, management, and enhancement of wild birds and mammals, and providing for public use of and benefits from these resources. Multiple use of these areas is encouraged, provided it does not interfere with this primary purpose of wildlife management and habitat restoration. The

United States Fish and Wildlife Service (USFWS) is the agency responsible for the oversight of the Pittman-Robertson Program. Each state receives an allotment or apportionment from these funds based on the size of the state and the number of licensed hunters within the state.

Intensive uses, which cause modification of wildlife habitats or divert from the approved primary use, are considered by the USFWS to be a non-compatible use due to negative impacts on wildlife and wildlife habitat restorations. When wildlife management areas are utilized for other purposes to the extent that they are diverted from the approved primary use, the USFWS requires that either (1) the area be returned to its approved use, or (2) the area be replaced at no Federal cost by another area with commensurate benefits to fish and wildlife and of equal value at current market prices. Otherwise, the state becomes ineligible to receive further funds under the Federal Aid in Wildlife Restoration Program.

All known occurrences of Threatened and Endangered Species (T&E) are afforded the protection provided for in the Endangered Species Act. In addition, all activities associated with area management, such as, timber harvest, controlled burns, drawdown, and opening maintenance are scheduled through the Compartment Review Process which insures public input as well as consideration of all factors influencing the wildlife values associated with the area and the flooding.

The flooding is managed as part of a unit or Compartment of the Crystal Falls Forest Area. While the primary function of the flooding is to provide nesting and brood habitat for waterfowl, it serves a much broader function within the Compartment and Forest Area. Riparian areas provide excellent habitat for upland species, such as ruffed grouse, woodcock, beaver, mink, turkey, deer, songbirds, and a variety of reptiles and amphibians. Hunting, trapping, and wildlife viewing are all activities that occur in the flooding area.

Although no monitoring studies take place exclusively at the site of the flooding, several ongoing surveys are run near, within the compartment, or on adjacent lands. These include grouse drumming routes, woodcock singing ground survey, deer pellet group survey, bear tetracycline survey, furbearer track survey, and pheasant crowing survey. All of these allow for the monitoring of wildlife populations on the lands within which the flooding is contained.

Non wildlife related recreational activities are monitored to ensure that none conflict with the intended activities spelled out in the plan. Wildlife restoration and management, as well as wildlife related recreational activities are primary considerations when Compartment planning efforts occur, on the flooding area and on adjacent state lands. All lands purchased with Pittman-Robertson dollars are managed with wildlife and wildlife recreational activities as the primary considerations, when plans are written.

### **III) MANAGEMENT ACTIVITIES**

The flooding has been and will continue to be managed as a marsh complex. The water control structure will be monitored and checked periodically to ensure that it remains functional at all times and allows the option of a drawdown, if necessary. Wildlife surveys will continue in and around the area, as they have for decades.

Future management considerations will be derived only after taking into account all factors which might influence the effective management of the project and surrounding area. The area was once a beaver flooding and was created at a time when beaver numbers were low in relation to today. If trapping pressure remains at today's level or drops even further, the need to artificially manipulate water levels, to provide marsh habitats, may be reduced or nullified. If ample habitat conditions are provided naturally, and in many cases enhanced, by new beaver floodings, within or around the project area, the need to maintain a water control structure will have to be considered. It may be possible to remove the structure and the associated costs, in both time and money, and achieve the same or better results, through the natural manipulation of the marsh complex by beaver present in the system. The decision to maintain or remove the control structure, as well as any decision to manipulate water levels will be made in the Compartment Review process, ensuring all concerned and affected parties, including hunters, wildlife viewers, the public in general and landowners in the project area have input in the decision making process.

### **IV) PUBLIC INPUT**

The flooding is reviewed as a part of the Compartment Review Process which ensures that the public, special interest groups, all affected and or interested Divisions within the Michigan Department of Natural Resources and the Department of Environmental Quality, all have an opportunity to for both verbal and written comments on prescribed or proposed treatments. Open-houses are held before each review and each open-house is advertised on the Department calendar, the MDNR website, in local newspapers, and through the contact of stakeholder groups. Attendance has been light, even though the sites have been moved on occasion from local DNR facilities to the Dickinson County Library in Iron Mountain and the Crystal Falls Township Hall in Crystal Falls. Attendance has averaged 5-10 people at all open-houses. The general public has also had the opportunity to attend the final Compartment Review, but only occasionally has someone attended.