

Preliminary Vision, Goals and Conceptual Management Alternatives Powell Marsh State Wildlife Area – July 2013

Introduction

During development of the Northern Highlands – American Legion State Forest Master Plan, citizen panels developed drafts of a property vision statement, property goals and management alternatives for Powell Marsh Wildlife Area (PMSWA). The vision statement and property goals shown below are substantially the same as those written by the panels in 1999. The management alternatives have been changed slightly as a result of new information and new circumstances that have occurred since they were originally drafted. The overall scope and intent of the original alternatives remains intact.

One of the new circumstances is the determination that the impoundments on PMSWA must provide a minimum flow (estimated at 1.2 cfs.) in the stream, Main Ditch, that flows from the property. Furthermore, water leaving the property shall not produce color, odor, taste or unsightliness in such amounts as to interfere with public rights in waters of the state [NR 102.04 (1) (c)]. Iron precipitation and iron bacteria in Main Ditch and the ditches of Main Pool must be maintained at a low level to address concerns about unsightliness. The revised draft management alternatives address the minimum flow and the aesthetic water quality standard.

Powell Marsh State Wildlife Area Draft Vision Statement

The Powell Marsh Wildlife Area is an expansive, open wetland ecosystem that supports a wide variety of plant and animal species, particularly waterfowl. The property provides hunting, trapping, bird watching, other compatible recreational pursuits, and educational opportunities. The area's natural, cultural, and historical resources are managed and enhanced with the cooperation of tribal governments and adjacent landowners.

Powell Marsh Wildlife Area Draft Property Goals

1. Provide a large area of high quality open wetland habitats for migratory and resident birds, semi-aquatic furbearers, and other wildlife. Protect wildlife Species of Greatest Conservation Need, and enhance their habitats whenever possible.
2. Maintain and enhance hunting, trapping, wildlife viewing, and other compatible recreational opportunities and public access within the physical capabilities of the property. Provide opportunities for natural history and environmental interpretation and education.
3. Assure the Powell Marsh State Wildlife Area waters and the water flowing from the property are of good quality and meet aesthetic water quality standards.

Management Alternative One - Maximize habitat for waterfowl and other wildlife species that require large, open wetlands.

This management alternative maximizes habitat for waterfowl and other species that require large, open wetlands. Besides a strong emphasis on maintaining the open character of the marsh, this alternative also includes expanded mowing and possibly the construction of two new flowages. This approach would benefit ducks, geese and semi-aquatic furbearers and would optimize hunting and trapping opportunities. Several Species of Greatest Conservation Need that require large, open wetland habitats will greatly benefit from this management approach. Shorebirds, raptors, reptiles and amphibians will also benefit. This management alternative will also provide the most wildlife viewing opportunities for hikers and bird watchers.

Recreational opportunities would be increased. In particular, hiking and biking trails would be developed and educational opportunities expanded. This alternative would be the most costly of the four in staff time and annual operating costs. To help support this effort additional management funding from alternative sources, such as Ducks Unlimited, could be sought.

A. Management of Flowages/Water

- Maintain existing dikes and water control structures.
- Store as much water as possible during spring run-off. Provide a minimum flow of 1.2 cfs from Main Pool and its compartments from spring breakup through fall freeze-up. Drain each compartment sequentially, assuring that the maximum amount of open-water brood habitat is maintained through the summer. If Main Pool is dewatered during summer drought, draw water from Steppingstone to continue minimum flows throughout the summer.
- Meet the aesthetic water quality standard for water flowing into Dead Pike Lake.
- Consider options to move water across tributary stream watersheds onto the Lac du Flambeau Reservation in order to regularly flush drainage ditches in the upper reaches of the PMWA.

B. Vegetation Management of Open Peatlands

- Aggressively control woody vegetation to maximize open character.
- Cut and shear to keep tamarack at bay. Maintain Vista Pool.
- Conduct burns when possible and use mowing and shearing to maintain openness.

C. Wooded Upland Fringe of the Marsh

- Maintain wooded upland fringe areas in forested state through clear-cutting on appropriate sites to maximize young forest habitat for deer and Ruffed Grouse.

D. Grassy Upland Areas

- Plant grasses and crops in upland areas with mineral soils to attract migrating waterfowl and to stabilize sandy areas.

E. Wildlife Management

- Maximize hunting opportunities on Powell Marsh. To increase waterfowl hunting opportunities, mow upland areas in late summer for goose grazing sites.
- Consider relocating refuge boundaries to trails or removing refuge entirely.
- Plant wild rice in flowages on trial basis to see if flowages will support wild rice. Restrict rice to Marsh flowages and do not allow it to establish in Dead Pike Lake.

- Monitor for and remove invasive plant species.

F. Educational Opportunities

- Improve the primary vista area and parking lot located at the end of the town road spur, the Steppingstone lot. In cooperation with the Town of Manitowish Waters, improve the town road spur that runs into the primary vista area.
- At both the Vista and Steppingstone parking lots, place a kiosk where visitors can get information about the marsh and wetland.
- Make available naturalist-guided walks, pamphlets, and brochures for the marsh.
- Improve parking area and add some disabled access to make it easier to access marsh.
- Encourage volunteers and friends groups.

G. General Recreation

- Increase marsh accessibility for users, especially hunters and trappers.
- Expand public access to the refuge area from the current January 1-August 31 window.

H. Trails

- Construct biking and hiking trails (with parking area) along existing management roads across the marsh to the state forest and connect either south or onto Powell Road West loop – Hiking and Biking Trail. East loop – Hiking Only.
- Install state-of-the-art kiosks with educational materials.

I. WDNR and Lac du Flambeau Coordination

- Cooperate with tribal biologists and managers on maintaining the open character of the marsh, maintaining flowages and water levels, conducting prescribed burns, obtaining additional funding, and maintaining tribal hunting and gathering rights as per the treaties.
- Develop memorandum of understanding with Lac du Flambeau tribe to coordinate management projects on the state and reservation portions of the marsh. Meet semi-annually with Lac du Flambeau to determine a work plan.

Management Alternative Two - Maintain existing habitat conditions on the Powell Marsh State Wildlife Area

This management alternative maintains significant portions of the wildlife area as open peatlands and grassy uplands. The wooded fringe along the marsh boundary is maintained. There are pockets of trees and larger brush in scattered patches around the marsh. The existing water control structures, dikes, and ditches are maintained. Main Pool is kept high for as long as possible during summer and Main Ditch is lined with an impermeable membrane to reduce groundwater seepage to control iron floc formation. Plant native grasses in the upland sites.

Ducks, geese and semi-aquatic furbearers would benefit from this management alternative, as well as several Species of Greatest Conservation Need that require large open wetland habitats. Shorebirds, raptors, reptiles and amphibians will also benefit. The amount of open habitat will be less than management alternative one, so there will be fewer numbers of these species present.

A. Management of Flowages/Water

- Maintain existing dikes and water control structures.

- Store as much water as possible during spring run-off. Install an impermeable liner in Main Ditch to eliminate groundwater seepage into the ditch. Drain other compartments into the lower compartment of Main Pool as soon as possible. Keeping Main Pool as full as possible will reduce groundwater seepage into the ditches within Main Pool. Provide a minimum flow of 1.2 cfs from Main Pool and its compartments from spring breakup through fall freeze-up. If this pool is dewatered during summer drought, draw water from Steppingstone to continue minimum flows throughout the summer.
- Meet the aesthetic water quality standard for water flowing into Dead Pike Lake.
- Consider options to move water across tributary stream watersheds onto the Lac du Flambeau Reservation in order to regularly flush drainage ditches in the upper reaches of the PMWA.

B. Vegetative Management of Open Peatlands

- Conduct burns when possible.
- Maintain openness and halt succession through shearing and mowing.

C. Wooded Upland Fringe of the Marsh

- Maintain in early succession stage, other than on appropriate oak or pine sites that would be managed more selectively. Focus on shade intolerant tree species (especially oak and aspen) where ever possible to optimize habitat for deer and Ruffed Grouse.

D. Grassy Upland Areas

- Plant a combination of permanent grasslands.

E. Wildlife Management

- Continue to provide habitat for Sharp-tailed Grouse.
- Keep woody vegetation along flowage where it does not adversely impact dikes.
- Consider moving refuge boundaries to trails or removing refuge entirely.
- Monitor for and remove invasive plant species.

F. General Recreation

- Increase marsh accessibility for all users, especially hunters and trappers.
- Provide recreation trails along the existing road system.
- Expand public access to the refuge area beyond the current January 1-August 31 window.

G. Educational Opportunities

- Create hiking trails with interpretive signs.
- Develop self-guided hiking and birding brochures and maps.

H. WDNR and Lac du Flambeau Coordination

- Cooperate with tribal biologists and managers to maintain the characteristics of this alternative and maintain tribal hunting and gathering rights as per the treaties.
- Develop memorandum of understanding with Lac du Flambeau tribe to coordinate management projects on the state and reservation portions of the marsh. Meet semi-annually with Lac du Flambeau to determine a work plan.

Management Alternative Three – Reduced effort to establish and maintain open habitat conditions on the Powell Marsh State Wildlife Area

This management alternative maintains significant portions of the wildlife area as open peatlands and grassy uplands but with less management effort than Alternative Two. The wooded fringe along the marsh boundary is maintained. There are pockets of trees and larger brush in scattered patches in the marsh. The existing water control structures, dikes, and ditches are maintained. Native grasses are planted in upland area to attract waterfowl.

The amount of stable water habitat will be less than management alternative one, so there will be fewer furbearers, waterfowl and other birds that use this habitat. As in alternative one, Species of Greatest Conservation Need that require large open wetland habitats will benefit, as will shorebirds, raptors, reptiles, amphibians.

A. Management of Flowages/Water

- Plug Main Ditch at the north end. Divert water flow from Main Pool into Vista Pool. The main water control structure for all impoundments will be the outflow from Vista Pool. Maintain other existing dikes and water control structures.
- Store as much water as possible during spring run-off. Provide a minimum flow of 1.2 cfs from spring breakup through fall freeze-up. Completely drain Vista Pool, and then sequentially drain the compartments of Main Pool as needed to provide minimum flow. If additional water is needed to provide minimum flow during summer drought, draw water from Steppingstone to continue minimum flows throughout the summer.
- Meet the aesthetic water quality standard for water flowing into Dead Pike Lake.

B. Vegetative Management of Open Peatlands

- Conduct burns when possible.
- Maintain openness and halt succession through shearing and mowing.

C. Wooded Upland Fringe of the Marsh

- Maintain in early succession stage, manage appropriate sites for oak more selectively.

D. Grassy Upland Areas

- Plant a combination of permanent grasslands rather than annual crops.

E. Wildlife Management

- Continue to provide habitat for Sharp-tailed Grouse.
- Keep woody vegetation along flowage where it does not adversely impact dikes.
- Consider relocating refuge boundaries to trails or removing refuge entirely.
- Monitor for and remove invasive plant species.

F. Recreational and Educational Opportunities

- Provide access to the marsh for users, especially hunters and trappers.
- Create hiking trails with interpretive signs.
- Develop self-guided hiking and birding brochures and maps.

G. WDNR and Lac du Flambeau Coordination

- Cooperate with tribal biologists and managers on maintaining the characteristics of this management alternative and maintaining tribal hunting and gathering rights as per the treaties.
- Develop memorandum of understanding with Lac du Flambeau tribe to coordinate management projects on the state and reservation portions of the marsh. Meet semi-annually with Lac du Flambeau to determine a work plan.

Management Alternative Four – Minimal intervention in natural processes on the Powell Marsh State Wildlife Area

This habitat management alternative would have minimal artificial maintenance of the wildlife area. Natural processes would be allowed to dominate and largely determine the habitat composition. Large areas of open peatlands and grassy uplands would not be maintained. Management under this alternative would include maintenance of existing roads in upland areas. Trails that currently cross through wetlands may be blocked, and dikes would eventually become unsafe for vehicle traffic. Periodic prescribed burns would still be used on upland sites, but burns in wetlands would be restricted to dry summers. No additional management actions would be taken to maintain or attract waterfowl or to enhance the area for specific wildlife species. There would be no obligation to provide a minimum flow since there would be no dams on the property.

This would be the lowest cost for annual management, but it requires expensive alteration of the existing infrastructure that may have the highest overall cost. Because the large, open wetland habitats cannot be maintained under this management alternative the planning team believes this management alternative would not meet draft goal number one. This alternative would require the Department to renegotiate existing agreements with Ducks Unlimited, Lac du Flambeau and USFWS pertaining to wildlife habitat management.

A. Management of Flowages/Water

- Remove the stop-logs from all water control structures except Northwest Flowage. Lower all dikes 2-3 feet. Armor potential erosion sites. Plug ditches as needed to establish a sheet flow of water across the wetlands.

B. Vegetative Management of Open Peatlands

- Stop mowing and shearing of young trees in the wetlands. Prescribed fire could only be used in dry summers and would be difficult to manage without an intact network of dikes for movement of fire control vehicles. Invasion of tamarack and spruce trees into the marsh would quickly occur, converting the open wetland habitat.

C. Wooded Upland Fringe of the Marsh

- Allow wooded areas to grow to mature timber along the wooded fringe perimeter of the marsh.

D. Grassy Upland Areas

- Plant permanent grasses.

E. Wildlife Management

- Keep woody vegetation around Northwest Flowage as cover for wildlife.

- Remove refuge entirely.

F. Educational Opportunities

- Do Nothing.

G. General Recreation

- Continue to allow hunting and trapping.
- Allowing informal hiking and birding access. However, travel would be limited to foot traffic and hikers would encounter frequent wet areas.

H. Trails

- Do Nothing.

I. WDNR and Lac du Flambeau Coordination

- Cooperate with tribal biologists and managers on maintaining the characteristics of this management alternative and maintaining tribal hunting and gathering rights as per the treaties.
- Develop memorandum of understanding with Lac du Flambeau tribe to coordinate management projects on the state and reservation portions of the marsh. Meet semi-annually with Lac du Flambeau to determine a work plan.