



Hallie Marsh Wildlife Area Interim Forest Management Plan

Property Identifiers

Property Name and Designation: HALLIE MARSH WILDLIFE AREA

County: CHIPPEWA

Property Acreage: 513

Forestry Property Code(s): 0907

Master Plan Date: None

Property Assessment

Hallie Marsh Wildlife Area is a recently acquired state owned property with the primary objective of providing waterfowl and upland wildlife habitat. It is located 1 mile south of the City of Chippewa Falls, in the Township of Hallie, Chippewa County. This marsh and woodland property is bounded by privately owned farmland, woodland and wetland to the east, west and south. To the north is a county conservation property known as Kemper Woods. State Highway 29 lies to the west of the property. The property is bisected by 40th Avenue that runs east to west, and 160th Street makes up a portion of the east boundary. Two small parking areas are located on 40th Avenue and one on 160th Street.

LANDSCAPE AND REGIONAL CONTEXT

Hydrology: The Hallie Marsh lies in the Western Coulee and Ridges Ecological Landscape, but also close to the Forest Transition Landscape. This property consists of a large wetland area made up of Markey and Seelyeville muck soils. Many areas were drained by creating ditches in an attempt to farm the acreage, with ditches still visible on air photos. The water table is near or above the surface in these wetlands. The upland fringe areas contain tag alder, white birch and white pine. The Hallie Marsh is situated in an area that is heavily dissected and fragmented with agricultural fields and development. The property contains almost 70% open, nearly treeless habitat providing a large block of habitat for area sensitive, open landscape species.

Current Land Cover: The Hallie Marsh area is heavily influenced by urban development. The landscape is a mosaic of urban development, farmland, wetlands and patchy forested areas. Primary forest cover includes oak, aspen, red maple and white birch.

HISTORY OF LAND USE AND PAST MANAGEMENT

The Hallie Marsh was originally a black ash swamp that opened up over time due to wild fires and high water levels. Wild hay was cut on the marsh until the mid 1930's when peat fires consumed some of the soil, resulting in higher water levels and making the area too wet to farm. Eighty acres in the center of the marsh was purchased from Chippewa County in 1956. The old Wisconsin Conservation Department started leasing the land as a Public Hunting Grounds at about the same time. At one point 1,680 acres were leased for public use. The leased acreage was reduced over time until 1990, when all remaining leases were terminated. During that period, one of the marsh landowners ditched the marsh in an attempt to lower water levels and make it more suitable for farming. Due to nearly level terrain and soil composition, the drainage was only partially successful. These ditches remain today and continue to partially drain the marsh.

The local Chapter of Pheasants Forever adopted Hallie Marsh as an acquisition project and started buying land and donating to the DNR in 2006. Current acreage is 513 acres, however PF has recently purchased an additional 148 acres on the west side of the property that will eventually be transferred to DNR.



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CURRENT FOREST TYPES, SIZE CLASSES AND SUCCESSIONAL STAGES

The Hallie Marsh WA is 513 acres of a wetlands, grassland and patchy forest mosaic. The property is comprised of approximately 350 acres of wetlands, 97 acres upland grasses and 66 acres of woodlands. The wetlands are mostly cattail and sedge meadow, while the upland grass areas include native grass plantings. Upland forest acres include white birch (24 acres), aspen (22 acres), oak (12 acres), red pine (6 acres) and white pine (2 acres).

Oak:

There is one stand of oak on the property covering 12 acres. The trees are around 95 years of age and in generally poor condition. Mixed with the oak are red maple and aspen. These stands typically reach forest product maturity between 60 and 80 years of age. After that time, individual trees begin to decline in vigor and timber quality. As mortality occurs, red maple becomes established in the understory in the partial shade conditions. Cavity trees and snags are an important habitat component and some oak mortality is desired. Forest management of this stand will look to regenerate areas through harvesting, while maintaining the healthiest oak to provide mast and cavities for wildlife, and at the same time provide ecological legacies and structural diversity. A harvest in 2018 will be considered in conjunction with the adjacent aspen stand.

White Birch:

There are 3 stands of white birch on the Hallie Marsh property. White Birch is a “pioneer” tree species that is intolerant of shade. It becomes established on open areas of disturbed soil because the seed is relatively light and travels a distance by wind. The trees grow in even-aged stands and at maturity can decline rapidly. White Birch is often succeeded by maple, oak or white pine as mortality takes place. On these wetland fringe sites, white birch will be managed on a 50-year rotation basis. Clearcut harvesting of mature patches will promote regeneration of a mixed stand of birch, maple, oak and aspen. This will provide early succession cover for wildlife.

Aspen:

There are 3 stands of aspen on the Hallie Marsh property. Aspen is a short lived, intolerant species that is an important component of upland habitat. Regeneration is primarily achieved through coppice harvesting (clearcut). Aspen will be managed on a 40 to 50-year rotation basis depending upon site quality. Current (2012) age distribution includes one stand of 60 years, one stand of 50 years and the third stand is 13 years old. Management will be geared toward maintaining the aspen timber type acreage on the property. Aspen and birch harvest can be coordinated with periodic pine plantation thinning to allow commercial harvesting of this small quantity. Stand #1 on the far south end of the property will be removed from the harvest schedule because of poor access, wet soils and to allow for natural succession. This will provide structural diversity in the form of snags, nesting cavities and eventually coarse woody debris.

Red Pine:

There is one plantation of red pine on the Hallie Marsh property that was established in about 1979. It consists of 6 acres. Mixed with the red pine are some white pines also. This stand has been thinned at least once in the past. Current stand density requires additional thinning and a 2013 harvest is established. The pine can be managed on a 70-year rotation with periodic thinning about every 10 years. Thinning will increase growth of the best trees and allow more understory development of hardwood trees and shrubs. Some buckthorn was noted in the understory of this plantation.



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WILDLIFE ACTION PLAN/SPECIES OF GREATEST CONSERVATION NEED

Although the Hallie Marsh is not specifically listed in the Wildlife Action Plan's Implementation document, Species of Greatest Conservation Need (SCGN's) associated with wetlands, planted warm season grasslands and fields will find habitat. Many of these are grassland bird species in addition to 2 game species that are SCGNs. Management for sedge meadow, warm and cool season grass fields and early successional forest, will also greatly benefit game species such as white-tailed deer, pheasants, turkey, ruffed grouse and rabbits.

NATURAL HERITAGE INVENTORY (NHI)/RARE SPECIES

At the time of this plan (2012) one threatened reptile, one threatened bird and one special concern bird are listed within the general Hallie Marsh geographic area. Forest management activities will utilize completed species guidance documents and possibly other techniques such as time-of-year restrictions to avoid impacts to rare species. High potential range for one federally listed endangered insect is listed as in the vicinity of the property. However, there is no known habitat on the Hallie Marsh property for this endangered insect. NHI screening will be conducted prior to all future management activities.

HIGH VALUE CONSERVATION FORESTS (HCVF) OR OTHER RESOURCES/ NATURAL COMMUNITY TYPES LIMITED IN THE LANDSCAPE

No High Value Conservation Forests have been identified on the Hallie Marsh property.

BIOTIC INVENTORY STATUS: There is no known biotic inventory for this property.

CULTURAL AND ARCHEOLOGICAL SITES (INCLUDING TRIBAL SITES)

No archaeological or historical sites have been identified by the Wisconsin Historical Society on the Hallie Marsh property.

RECREATIONAL USES

Bird watching and hunting are the primary recreation uses of this property.

INVASIVE SPECIES

Buckthorn was observed in the understory of the pine plantation. Control will be difficult since surrounding properties also have populations of this invasive plant species.

SOILS

The soils in this area are deep, very poorly drained muck or loam on the surface, underlain by sand and gravel. Markey and Seelyeville muck soils are formed in decomposed organic material that makes permeability moderately rapid to rapid. The majority of the property is good for wetland plants and wildlife but poor for tree growth. Upland sites have Chetek and Rosholt loamy sand soils that are considered fair to good for upland tree growth.



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FUTURE MANAGEMENT

As acquisition continues, sharecropping will continue with the long term goal of converting farmed acreage to permanent grass cover. Small scale timber sales will be utilized to maintain age class diversity or conversion to grassland. Flowage construction and other forms of wetland management will be explored. Prescribed burning may be employed to control woody invasions into grasslands/wetlands. Artificial nesting boxes will continue to be erected for both wetland and upland bird species. Historically, pheasants have been released on the property. This may be considered again if there is local interest and game farm birds available.

The table below shows forested acreage by timber type. Because of the small acreage of forest on this property, annual allowable harvests are less meaningful than on larger properties. Forest management will consist of plantation thinning approximately every 10 years (2013, 2023, 2033...) along with small patches of aspen or birch being harvested at the same time to create age diversity of those timber types. The lone oak stand will be considered for management in approximately 2018.

Timber Type	Acres
Oak	12
Aspen	22
White Birch	24
Red Pine	6
White Pine	2
Totals	66

Forest Management Objectives:

1. Maintain a variety of timber types with primary focus on oak, aspen, birch and red pine.
2. Conduct small scale timber sales to provide a variety of succession stages.
3. Use harvest patterns to meet nesting, shelter, and feeding habitat needs.
4. Identify invasive species and implement practices to eliminate/minimize impact to property.
5. Identify rare/endangered species and protect/provide habitat.

Property Prescriptions (Identify specific and pertinent prescriptions by area or forest type, including passive management areas, extended rotation, and other information that will help achieve the objectives)

1. Thin red/white pine plantation on a 10-year periodic basis (2013, 2023, 2033...).
2. Include a small patch of aspen or birch regeneration harvest each time the pine is thinned.
3. Maintain the one oak stand through a harvest in 2018 that will likely include a combination of patch clearcut and retaining other areas with old oak.
4. Remove the "fencerow" strip of woods between the fields and near the pine plantation. After harvest the stumps will be cleared and invasive plants eliminated. This strip can be replanted with a wildlife hedgerow of spruce and fruiting shrubs.



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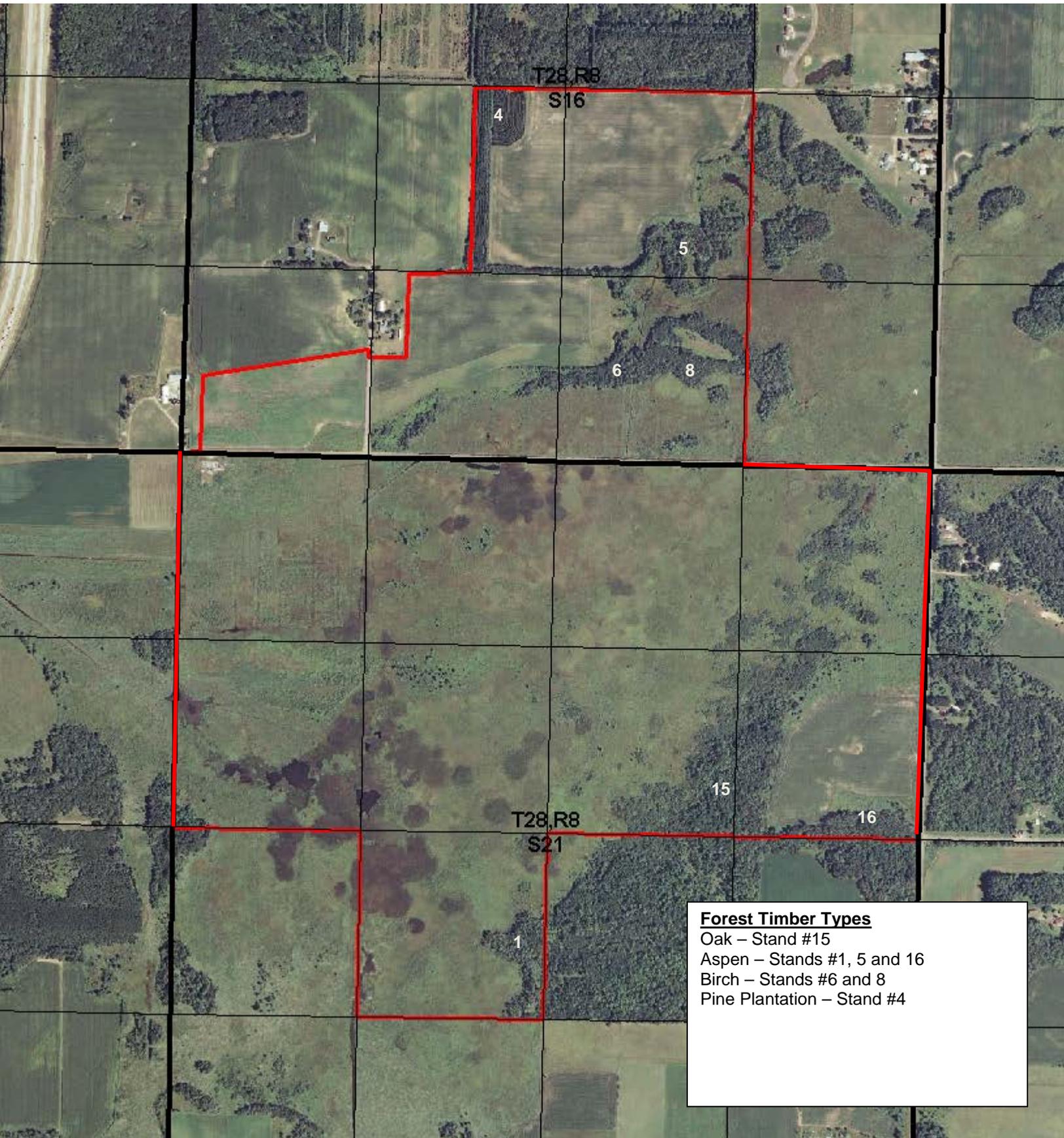
Approvals:

_____	_____
Regional Ecologist	Date
_____	_____
Forester	Date
_____	_____
Property Manager	Date
_____	_____
Area/Team Supervisor	Date



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AIR PHOTO OF HALLIE WILDLIFE AREA



Forest Timber Types

- Oak – Stand #15
- Aspen – Stands #1, 5 and 16
- Birch – Stands #6 and 8
- Pine Plantation – Stand #4