Part 1: Property Assessment

The following should be considered during the property assessment. Not all sections may be relevant for all properties:

A. ECOLOGICAL LANDSCAPE AND PROPERTY CONTEXT

This property is located within the Southeast Glacial Plains Ecological Landscape which is made up of glacial till plains and moraines. Soils tend to be lime-rich tills overlain by silt-loam loess. Historically the landscape provided a mixture of prairie, oak forests and savanna and maple basswood forests. End moraines and drumlins largely supported savannas and forests. Wet-mesic prairies, southern sedge meadows, emergent marshes and calcareous fens are also found within the landscape. In terms of hydrology and aquatic productivity, this Ecological Landscape is among the highest in the state. Major river systems include the Wolf, Bark, Rock, Fox, Milwaukee, Sugar, Mukwonago and Sheboygan and several lake chains also exist. Extensive marshes, fens, sedge meadows, wet prairies, tamarack swamps and floodplain forests are also significant features found within this landscape.

Since Euro-American settlement, large portions of the Southeast Glacial Plains have been intensively developed for agricultural or urban-industrial uses, significantly altering the historical vegetation. The hydrology of this Ecological Landscape has been greatly altered and affected by modifications (ditching, diking, tiling), grazing, invasive plants, excessive inputs of sediment- and nutrient-laden runoff from croplands and human development. Remaining forests today occupy only about 10% of the land area and consist of maple-basswood, lowland hardwoods and oak. Most of the rare or natural communities that remain are associated with large moraines or in areas where the Niagara Escarpment occurs close to the surface.

The extensive wildlife habitat properties (EWHP) of Jefferson County consist of 21 properties scattered throughout 7 townships of Jefferson County. These are relatively small properties with somewhat limited management opportunities based on acreage limitations. Land total acreage in Jefferson County is 372,938 acres. According to the "Jefferson County Land and Water Resource Plan for 2011 to 2020", agricultural land totaled 206,914 acres or 55.5% of the total land surface, wetlands totaled 56,277 acres (15.1%), developed lands totaled 52,987 acres (14.1%), upland forest totaled 25,192 acres (6.8%), and open water totaled 17,440 acres (4.7%). Much of the current forested acreage has been degraded by poor management in the past or introduction of invasive exotic plants. Examples of poor forest management practices that result in degraded stands include pasturing or unsustainable harvesting practices.
B. GENERAL PROPERTY DESCRIPTION — MANAGEMENT, ADJACENT LAND USES, TOPOGRAPHY, SOILS, ETC.

Prior to European settlement less than half of Jefferson County was forested. The unforested portions of the county at that time supported a stand of open grown white oak, bur oak and red oak intermingled with tall prairie grasses. Some small areas were treeless grasslands. Following European settlement agriculture quickly became the dominant land use. On the DNR Jefferson County EWHP lands, very little active management has been implemented and only a couple of small commercial timber harvests have been executed in the past 10 years. There has been a very limited effort to control invasive non-native plants, primarily buckthorn and honeysuckle, and only a few of the properties have had non-commercial forestry practices implemented. Total forested acreage on these parcels according to the most updated WisFirs data is 299 acres, of which nearly half is considered bottomland and swamp hardwoods and the remaining acreage comprised of central hardwoods, northern hardwoods, oak, scattered aspen and pine plantations. The dominant land cover type for these properties is lowland brush, which accounts for 966 acres or 56% of the total property acreage. The next most significant land cover types are forest cover (299 acres, 18%), emergent vegetation (135 acres, 8%), and lowland grass (123 acres, 7%). Grasslands account for 93 acres (5%). Remaining cover types include farmland, upland brush, and open water. Much of the properties are dominated by muck or silty clay loam soils in the bottomlands. In the uplands most soil is well drained silt loam. Some intermittently drained silty clay loams also exist.

C. CURRENT FOREST TYPES, SIZE CLASSES AND SUCCESSIONAL STAGES

Total forested acreage on these parcels according to the most updated WisFirs data is 299 acres. Bottomland hardwoods and swamp hardwoods accounts for 143 acres or 48% of the total forested acreage, followed by central hardwoods at 43 acres (14%) and miscellaneous deciduous hardwoods at 30 acres (10%). The remaining forested acreage is comprised of northern hardwoods at 28 acres (9%), oak at 22 acres (7%), and aspen at 12 acres (4%). Remaining forest types include miscellaneous coniferous, white spruce, white pine and red pine.

D. NHI: ENDANGERED, THREATENED, SPECIAL CONCERN SPECIES, SPECIES OF GREATEST CONSERVATION NEED (SGCN)

There are a number of threatened and endangered species associated with these properties. For the purpose of implementing forest management practices on a given property, NHI screening protocols will be conducted for proposed sites and species guidance protocols will be followed prior to and during any current and future management activities. If a threatened or endangered species is documented within 1 mile (for terrestrial and wetland species) or 2 miles (for aquatic species) of the proposed management site, a determination is made as to whether the species listed will be actually affected by the proposed management actions. If the species could be negatively impacted, steps will be taken to minimize or mitigate any impacts. Specific management guidelines have been developed for many species by the Bureau of Natural Heritage Conservation, and guidelines are continuously being developed for additional species.

E. WILDLIFE ACTION PLAN CONSERVATION OPPORTUNITY AREAS (COA)

While there are a number of identified Conservation Opportunity Areas in Jefferson County listed in the 2005 Wisconsin Wildlife Action Plan, none of the included properties for this plan overlap with those areas.

F. SIGNIFICANT CULTURAL OR ARCHEOLOGICAL FEATURES

According to the Wisconsin Historical Society database, a review of the properties revealed several cultural or archeological sites scattered throughout the properties. Sites include mounds, villages and known burial sites. Standard procedure calls for known sites to be protected during forest
management operations. If and when forest management practices are conducted on known archaeological sites, operations are conducted only during frozen ground and no ground disturbance is allowed.

G. INVASIVE SPECIES

As is unfortunately common in southeast Wisconsin, invasive non-native vegetation is present throughout these properties. Species that are abundant and problematic on forested portions of the property include common buckthorn, Asian honeysuckle, garlic mustard, barberry, multi-flora rose, autumn olive and reed canary grass. Herbicides are typically used to control invasive exotic plants for a variety of reasons, but most often to facilitate regeneration of desirable native vegetation. The emerald ash borer was first detected in Jefferson County in 2014. This invasive non-native pest is expected to kill 99 percent of all ash trees within the county over time. Those forest stands that are dominated by ash will be identified and managed in such a way to encourage establishment of tree species other than ash. Management of these stands may include timber harvesting, control of invasive exotic plants, and tree planting. Some areas that are not easily accessible or are already degraded may not be capable of being effectively managed.

H. EXISTING STATE NATURAL AREAS (SNA) DESIGNATIONS/NATURAL COMMUNITY TYPES LIMITED IN THE LANDSCAPE

There are no existing State Natural Areas on any of the properties, nor are there any identified examples of High Value Conservation Forests (HCVF).

I. PRIMARY PUBLIC USES (RECREATION)

Hunting, trapping, fishing, hiking, wildlife viewing, cross country skiing and bird watching are all uses that are allowed on the EWHP – Jefferson County properties.

J. BIOTIC INVENTORY STATUS

There is no Rapid Ecological Assessment or Biotic Inventory for the EWHP – Jefferson County properties.

K. DEFERRAL/CONSULTATION AREA DESIGNATIONS

There are no existing deferral or consultation area designations on any of the EWHP – Jefferson County properties.

Part 2: Future Management – IFMP components

FOREST MANAGEMENT OBJECTIVES (Outline primary forest management objectives)

With all forest management objectives, there are several more universal objectives that can be attained including options such as increasing large snags and coarse woody debris, controlling the spread of invasive non-native plant species and consideration for Wildlife Action Plan priorities and management of SGCNs.

The management objectives for these properties are generally the same throughout, with minor variations. For vegetative management, the forested areas also will be managed similarly on all properties, with consistent management objectives. Generally, the upland areas will be managed to promote oak with a lesser mix of central hardwoods (hickory, walnut and cherry).
Interim Forest Management Plan
Jefferson County Extensive Wildlife Habitat

APPROVALS:

[Signature] 12/14/15
District Ecologist

[Signature] 12/14/15
Forester

[Signature] 12/11/2015
Property Manager

[Signature] 12/14/15
Area/Team Supervisor