Property Identifiers

Property Name:
(multiple, small properties can be grouped):

Big Creek State Fishery Area
La Crosse River State Fishery Area
Sand Creek State Fishery Area

Property Designation or Type

DNR Property Code(s) (DNR Prop Code Number)

Forestry Property Code(s):

4204 - Big Creek State Fishery Area
4205 - La Crosse River State Fishery Area
4209 - Sand Creek State Fishery Area

Property Location - Counties:

Monroe
Jackson

Property Acreage:

1474 acres - Big Creek State Fishery Area
454 acres - La Crosse River State Fishery Area
679 acres - Sand Creek State Fishery Area

Property Manager:

Jordan Weeks

Property Assessment

The following should be considered during the property assessment:

A. Ecological Landscape description and property context:

Hydrology: The TCWA lies in the Western Coulee and Ridges Ecological Landscape. Dendritic drainage patterns are well-developed in this mostly unglaciated Ecological Landscape. Natural lakes are restricted to the floodplains of large rivers. Large warm water rivers are especially important here, and include the Wisconsin, Chippewa, and Black. The Mississippi River forms the Ecological Landscapes’ western boundary. Numerous spring-fed (coldwater) headwater streams occur here. Cool water streams are also common.
**Current Land Cover:** The Western Coulee and Ridges Ecological Landscape is a mosaic of forest, cropland and grassland with wetlands mostly in the river valleys. Primary forest cover is oak and hickory. Maple and basswood forests, dominated by sugar maple, basswood and red maple, are common in areas that were not burned frequently. Bottomland hardwoods dominated by silver maple, swamp white oak, river birch, ashes, elms and cottonwood are common within the floodplains of the larger rivers. Relict “northern” mesic conifer forests composed of hemlock, white pine and associated hardwoods such as yellow birch are rare but do occur in areas with cool, moist microclimates. Dry rocky bluffs may support xeric stands of native white pine, sometimes mixed with red or even jack pine. Prairies are now restricted to steep south or west facing bluffs, unplowed outwash terraces along the large rivers, and a few other sites. They occupy far less than 1% of the current landscape. Mesic tallgrass prairies are now virtually nonexistent except as very small remnants along rights-of-way or in cemeteries.

**Property context:** Contextually, these three properties are situated in an area that is heavily to moderately dissected and fragmented with agricultural fields and other open areas. Subsequently, opportunities for large block old forest development for area sensitive forest interior species are limited. However, this more fragmented setting offers great opportunities for “edge” game species and early successional “Species of Greatest Conservation Need” as identified within the state’s Wildlife Action Plan. See below for species/opportunities.

**B. General property description**

The fisheries properties contain class 1 and 2 trout streams. Big Creek Fishery Area is managed to protect the public trust, enhance coldwater fishery (game and non-game), and provide outdoor recreational opportunities.

**SOILS**

The soils of these properties are predominantly made up of sand, about 90%. The rest of the soils are made up of muck and loam. Slopes are 0 to 60%. The bedrock is made up of mostly sandstone with a minor component of dolomite and shale.

**CURRENT FOREST TYPES, SIZE CLASSES AND SUCCESSIONAL STAGES**

The total acreage for all of the three fisheries management properties is 2607. Of these acres 2229 are forested and made up of Scrub oak (27%), Jack pine (25%), White pine (24%), Central hardwoods (8%), Red pine (7%), and Swamp hardwoods (4%). Oak, Bottomland hardwoods, Red maple and Aspen make up the remaining 5%. The remaining 378 non-forested acres is made up of true grasses, lowland brush (alder), lowland brush, marsh, herbaceous vegetation, emergent vegetation, a right of way, and a minor lake.

The Scrub oak cover type has 353 acres in the 0-5inch size class, 183 acres in the 5-11 inch size class, 12 acres in the 11-15 inch size class, and 47 acres in the size class of 15 plus. The Jack pine cover type has 361 acres in the 0-5inch size class, 192 acres in the 5-9 inch size class. The White pine has 200 acres in the 0-5 inch size class, 88 acres in the 5-9 inch size class, 120 acres in the 9-15 inch size class, and 136 acres in the size class of 15 plus. The Central hardwoods cover type has 137 acres in the 0-5 size class, 39 acres in the 5-11 inch size class. The Red pine
has 11 acres in the 0-5 inch size class, 83 acres in the 5-9 inch size class, and 59 acres in the 9-15 inch size class. The Oak cover type has 20 acres in the 5-11 inch size class, 15 acres in the 11-15 inch size class, and 10 acres in the size class of 15 plus.

C. NHI: Endangered, threatened, Special Concern species:

The Natural Heritage Inventory database indicates that 5 state endangered, 5 state threatened, and 13 special concern species were identified within the general vicinity of the 3 Fishery Areas.

D. Wildlife Action Plan, Species of Greatest Conservation Need, Conservation Opportunity Areas (COA):

Big Creek and La Crosse River Fishery Areas are both listed in the Wildlife Action Plan’s Implementation document for the Western Coulee and Ridges Ecological Landscape (WCREL) for Globally Significance (Oak Barrens, Sand Prairie, Oak Woodland) management opportunities.

The La Crosse River falls within the “Fort McCoy Barrens and Oak Savanna” Conservation Opportunity Area as described within the Wildlife Action Plan.

Species of Greatest Conservation Need associated with Oak barrens, Dry forest, shrublands/alder thicket, wetlands, grasslands, spring seeps, and cold-water streams of all 3 of these properties include; Blanding’s Turtle, Bullsnake, Northern Prairie Skink, Prairie Racerunner, Western Slender Glass Lizard, Yellow-bellied Racer, Wood Turtle, American Woodcock, Bell’s Vireo, Black-billed Cuckoo, Blue-winged Warbler, Brown Thrasher, Eastern Meadowlark, Field Sparrow, Grasshopper Sparrow, Lark Sparrow, Louisiana Waterthrush, Northern Bobwhite, Red-headed Woodpecker, Vesper Sparrow, Whip-poor-will, Willow Flycatcher, Yellow-billed Cuckoo, Eastern Red Bat, Franklin’s Ground Squirrel, Northern Long-eared Bat, Prairie Vole, Woodland Vole, Dusted Skipper, Wild Indigo Dusky Wing, Karner Blue Butterfly, Ottoe Skipper, Dion Skipper, Gorgone Checkerspot, Henry’s Elfin, Frosted Elfin, Hoary Elfin, Olympia Marble, Persius Duskywing, Ernestine’s Moth, Phlox Moth.

E. Significant cultural or archeological features

There are known archaeological and historical sites located within the properties boundaries. The sites will be protected from management activities that occur on the properties.
F. Invasive species
Buckthorn, honeysuckle, spotted knapweed, crownvetch, and reed canary grass are known to be on one or all of these properties. Control of these invasive species is important before significant canopy opening and earth moving occur.

G. Existing State Natural Areas (SNA), special designations, natural community types limited in the landscape:

Sand Creek contains “Sand Creek Pines State Natural Area”: http://dnr.wi.gov/topic/Lands/naturalareas/index.asp?SNA=376 The primary feature of Sand Creek Pines is the undeveloped mile-long corridor containing Sand Creek, a cold, fast, sandy bottom soft water stream that supports native brook trout. An alder thicket borders the stream with fen-like seepages along its banks with angelica, purple avens, swamp aster, common rush, and skunk cabbage. Beds of Canadian waterweed are common in the stream. White pine is dominant on the north-facing slopes with red pine locally abundant as naturally occurring groves. Jack pine, oaks, and red maple are also present. The level uplands away from the stream are a mix of overgrown Jack pine-oak barrens with red cedar, pine plantations, and old field. The understory is dense with prickly-ash, and hazelnut. Scattered prairie species are found in areas with an open understory with such plants as prairie dropseed, Indian grass, prairie larkspur, lead-plant, smooth blue aster, short green milkweed, cream wild indigo, and sand evening-primrose. The feeder creek, Cascade Creek, has a 10-foot high cascading sandstone waterfall. The forest is more mesic here with second-growth red maple, basswood, bitternut hickory, and herbs such as maidenhair fern, yellow blue-bead-lily, and bishop's cap. The rare cliff goldenrod (Solidago sciaphila) and woolly milkweed (Asclepias lanuginosa) occur on the steep sandy bluffs on the north side of Sand Creek. Also present are big blue-stem, poverty grass, butterfly weed, showy goldenrod, field goldenrod, hairy goldenrod, and bracken fern. Sand Creek Pines is owned by the DNR and was designated a State Natural Area in 2002.

Additionally, the La Crosse River Fishery Area lies within the “Fort McCoy-Robinson Creek Important Bird Area” designated for its importance to grassland and savanna birds http://www.wisconsinbirds.org/iba/sites/FortMcCoy.htm.

Pine and oak barrens, sand prairie, and spring seeps are rare and limited on the landscape.

H. Primary public uses (recreation)

Recreational opportunities could include: hunting, trapping, hiking, fishing, wildlife viewing, bird watching, berry picking and others.

I. Biotic Inventory Status:
Complete. The Rapid Ecological Assessment for the Driftless Area Study Streams was completed in 2012.
J. Deferral/consultation area designations:
The Sand Creek Pines and Barrens “primary site”
http://intranet.dnr.state.wi.us/int/land/div/InterimPlanning/maps/Final_DC_Site_DAS06.pdf
and the LaCrosse River Pine-Oak Barrens “primary site”
http://intranet.dnr.state.wi.us/int/land/div/InterimPlanning/maps/Final_DC_Site_DAS07.pdf
are currently under “consultation” status until completion of the Master Plan.

IFMP components
Management Objectives: (Outline primary forest management objectives):

Forest Management Objectives:
These properties are managed primarily to restore habitat conditions within the stream
 corridor, protect water quality, and to provide quality wildlife habitat. Forest
management objectives include maintaining existing forest types and developing a
diversity of age classes focusing on young forest and maintaining small patches of old
forest areas for both game and non-game species dependent on these types. This will
largely be accomplished through sustainable silvicultural systems that will increase the
diversity and structural complexity of wildlife habitat while at the same time avoiding
disturbance to riparian areas along the stream corridor.

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. Maintain oak cover types where feasible.
   a. Diversify age classes with emphasis on developing older stands
   b. Crop tree release oak in young stands.
   c. Regenerate oak stands where feasible and promote oak in young mixed
      hardwood stands.
   d. Promote/retain larger diameter trees where feasible.
   e. Increase standing dead snags and course woody debris
   f. Manage to promote barrens structure and understory composition where
      appropriate in the scrub oak areas.

2. Maintain conifer cover types
   a. Promote older, large diameter white pine and red pine (non-plantation) for wildlife
      and aesthetics
   b. Increase course woody debris in white/red pine area (non-plantation)
   c. Promote conversion of red pine plantations to hardwoods with emphasis on oak
   d. Manage to promote barrens structure and understory composition where
      appropriate.
4. Central Hardwoods/Red Maple/other
   a. Promote species other than ash in the understory when conducting management
   b. Promote some larger diameter trees where better soils exists
   c. Increase standing dead snags and course woody debris

5. Aspen
   a. Maintain aspen and diversify age classes with emphasis on developing younger stands.

**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):

**OAK** – Maintain and promote oak through planting, timber stand improvement methods, thinning, coppice, overstory removal, shelterwood, and other techniques described in the DNR Silviculture and Forest Aesthetics Handbook. Reserve/legacy trees should be retained as groups or individuals throughout the property within harvested stands to maintain a component of large mast trees and promote both snag trees and course woody debris for wildlife. Harvest in a way that provides savanna structure (scattered trees mostly as individuals but some in groups) in the driest upland scrub oak sites. Consult NHC Ecologist for barrens opportunities and marking guidance.

**RED PINE/WHITE PINE** – Thin red pine plantations every 8-10 years or when stocking warrants maintaining healthy, vigorous stands. Thin non-plantation white and red pine from below to encourage older forest attributes such as large diameter trees, standing dead snags, and large course woody debris—especially on moister sites. Retain scattered trees that are not considered stands on the rest of the property as reserve/legacy trees EXCEPT on sites (specific areas) managed for barrens. In this case, remove all white pine. Consult NHC Ecologist for barrens opportunities and marking guidance. Leave dead and dying trees for wildlife habitat.

**JACK PINE** - Maintain and regenerate where feasible. Consult NHC Ecologist for barrens opportunities and well before ground scarification, trenching, or herbicide application for site preparation to avoid damage in areas with barrens potential.

**ASPEN** – Maintain aspen cover type by regenerating the stand using a coppice system. Favor winter harvesting for more abundant regeneration as well as reduced soil impact. Rotation age is generally 50 years. Achieve age-class diversity by flexing rotation age within the property.

**CENTRAL HARDWOODS/RED MAPLE/OTHER** - Lower quality sites will be rotated and regenerated via coppice with fiber as the product objective. Higher quality sites will be managed with a sawlog objective by either shelterwood or group selection regeneration techniques. The group selection technique can be used to maintain patches of red maple and other semi-tolerant species if management sees the site fit enough to support the type.

**ALL STANDS** –

- Follow proper BMP’s to protect streams on the properties.
- Identify invasive species and use proper BMP practices and treatment options to eradicate or minimize impact.
• Identify and protect rare and endangered species and provide habitat for these species.

• Use thoughtful planning with forest management practices to enhance recreation opportunities on the properties.

• Retain reserve/legacy/green tree retention trees as groups or individuals throughout the property within harvested stands

Summary of Public Involvement and Comments Received

Maps (Optional)

a. Property Boundary and ownership Maps
b. Forest Cover Type Maps

PREPARED BY:

Property Manager Date

APPROVED:

Area Program Supervisor Date

REVIEWED BY:

Forester Date

District Ecologist Date