



Interim Forest Management Plan

Property Identifiers

Property Name and Designation: North Branch Beaver Creek Fisheries Area

County: Marinette

Property Acreage: 1,152

Forestry Property Code(s): 3806

Master Plan Date: February 28, 1980

Part 1: Property Assessment (1-2 pages maximum)

General Property Description

- Landscape and regional context: The North Branch of Beaver Creek is a tributary of the Beaver Creek watershed flowing into the lower Peshtigo River basin. The North Beaver drains a 23 square mile area of Beaver Township located in the southwest corner of Marinette County. It has an 8.7 mile stream length with an average width of 15 feet. Walker Creek is a tributary stream to the North Branch. Both streams have natural reproduction of trout and the area has numerous springs providing cold water to the system.
- History of land use and past management: The North Branch Beaver Creek Fisheries Area was approved as a land acquisition project in November 1959. The impetus for the project grew out of a partnership between the Department, local sporting groups, and Marinette County. Projects on the stream focused first on fencing to reduce livestock damage to the stream. A town road was re-routed to avoid an area known as Williston Springs and to traverse a less sensitive portion of the area. Stream habitat projects were implemented to improve in-stream habitat for brook and brown trout. A fishing platform accessible to handicapped anglers was installed at a place known locally as Holley's Hole. Recent road work which replaced a perched culvert at this location has changed the nature of the stream and the continued maintenance of the platform at this site is being assessed. In 2012, a sand trap was constructed below 21st Road (Holley's Hole) to collect sediment impounded by the perched culvert. This trap will be maintained for at least 5 years. Two stream segments (25th and 21st Roads) are surveyed every other year to detect trends and assess natural reproduction of the brook and brown trout populations. Forest management has focused on upland portions of the Fisheries Area and longer-lived mid-tolerant species have been encouraged along the stream corridor.

Site Specifics

Current forest types, size classes and successional stages: Current forest cover types are as follows: 53% white cedar, 17% swamp hardwood, 7% aspen, 7% oak, 6% northern hardwood, 5% red maple, and 1% each of white birch, scrub oak, jack pine, red pine, and tamarack.

Over 90% of this property is forested, although less than 50% of the forest stands are scheduled for management. The primary forest cover types include northern white cedar, swamp hardwood, aspen, oak, red maple, and northern hardwoods (primarily composed



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of red maple). Scattered small forest stands of tamarack, pine, white birch, and scrub oak are also present. More than half of the forested acreage has been removed from the planning schedule (Z-prefixed), with the majority of that acreage being northern white cedar and swamp hardwoods. A 200 foot buffer strip along the North Branch Beaver Creek was recommended by WDNR fisheries management, and was mapped to ensure no adverse impacts to the creek. The Z-prefix was applied to these and other stands to prevent soil erosion and compaction, protect water quality, and promote ideal trout stream corridor characteristics. A large percent of these stands are designated as winter deer yards, adding forest regeneration concerns when considering harvest operations.

Northern white cedar forest stands comprise more than half of the forest within this property. Within the cedar forest type, over 50% is estimated to be more than 100 years old, with most of the remainder just under 100 years old. This long-lived forest type is likely the result of heavy logging and land clearing in the late 1800's and early 1900's. Most of the even-aged aspen, red maple, oak, and pine stands were harvested or re-established between the 1940's and 1960's when there was a large amount of forest conversion from agriculture use. This management history resulted in the current abundance of even-aged forest types that are approaching and past biological and economic maturity.

Swamp hardwood stands comprise just under 20% of the forested acreage within the property. Similar to the cedar, more than 50% of these stands are estimated to be more than 100 years old, with the remainder mostly near 80 years old. These stands also have not been intensively managed in the past due to soil and water quality concerns, in addition to questionable natural regeneration results.

Oak, aspen, red maple, and northern hardwood forest types comprise the remainder of the primary forest types, with most of these cover types intermingling. All of the oak stands present are estimated to range between 70 and 100 years in age, which is past or approaching maturity for the site conditions present. Similar to the oak, nearly 75% of the aspen stands scattered throughout this property are exceeding 50 years in age (40+% exceed 70 years old) and beginning to decline. All of the red maple stands mapped are mature, ranging between 60 and 80 years old, with no young stands present throughout the property.

- State Natural Area designations: No State Natural Areas are designated on this property. If field data affirms some areas (compartment 212, stands 3, 4, 7, 11, 15, 17, 20, and 23) of the North Branch of Beaver Creek as an HC VF, then the area could be a candidate SNA during the Master Plan process.
 - High Value Conservation Forests (HC VF) or other resources/natural community types limited in the landscape: Preliminary site inspection data for the North Branch of Beaver Creek (compartment 212, stands 3, 4, 7, 11, 15, 17, 20, and 23) indicates a high probability the area exhibits the characteristics for inclusion as a High Conservation Value Forest. Additional field work is needed to make the final determination.
 - Biotic Inventory status: No comprehensive biotic inventory has been conducted on this property. Fish population assessments and incidental observations of rare species have been conducted.
 - Rare species: An NHI query of the North Branch of Beaver Creek property yielded two rare species; 1 reptile and 1 invertebrate.
 - Invasive species: Reed canary grass (*Phalaris arundinacea*), giant reed (*Phragmites australis*), and buckthorn (*Rhamnus spp*) are present on the area but not pervasive.
- Soils: The North Branch Beaver Creek Fishery Area lies in the Eastern ridges and plains area. Geologically, it is in a series of ground moraines, deposited by the final Wisconsin glacier, with a local thin overburden of clay related to the Valders substage. The underlying rocks are dolomites included in the Prairie du Chien group. In sharp contrast



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to other trout waters in the area, there are no granite outcrops within this unit; these are all presumably overlain by dolomite and sandstone. Excepting those soils of recent origin, all soils on the area relate to the ground moraines that dominate the geologic profile of the Town of Beaver. There are no eskers, terminal moraines, or mantle rock in the area. The soil situation is relatively uncomplicated and can be included in the following general types:

- 60% Emmett-Sandy Loam & Menominee-Loamy Sand types which are well drained.
- 10% Solona--poorly drained types related to the above.
- 30% Organic deposits related to extinct lakes and recent fluvial action.

Cultural and Recreational Considerations

- Cultural and archeological sites: There are no listed historical sites on the property. The North Branch of Beaver Creek was used to transport timber during the logging era and evidence of that use can be found in places along the stream. A private fish hatchery was acquired and abandoned by the Department and the springs in that area restored to provide water to Walker Creek, a tributary to the North Branch. A prehistoric village site is located within the boundary of the area. Other archaeological sites may exist but no comprehensive survey has been conducted. Access sites for the property have been located along roadways near stream crossing and most access to the property is by foot.

Part 2: IFMP Components (1-2 pages maximum)

Management Objectives: The objective for this project is to manage and protect the area to perpetuate the trout population within the North Branch of Beaver Creek, provide fishing opportunities, manage habitat for fish (primarily trout) and wildlife, implement sustainable forest management, and provide opportunities for wildlife-based recreation. Forest management is informed by stand type and location relative to the stream corridors of the North Branch Beaver Creek and Walker Creek. Much of the area along the streams is in passive management or in extended rotation to preserve canopy cover and avoid soil compaction. Forest management which would encourage use of the streams by beaver is not conducted so type conversion along the stream corridors is occurring naturally or by design in places. Within the sites available for silvicultural management, the primary management objective is to ensure the regeneration and future productivity of mature, overmature, and declining stands. Aspen, oak, and red maple stands will be managed on an even-aged basis to regenerate these forest types.

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): Most of this property is forested. Of the 1,152 acres, only 72 acres are non-forest covert types. The remaining 1,080 acres are split almost equally between stands scheduled for management and those where passive management is prescribed. A 200-foot buffer has been delineated along the stream to prevent soil compaction and ensure water quality is maintained. This buffer strip is primarily composed of swamp conifers on organic soils, particularly cedar, and is passively managed. Approximately 70% of the forested acres on the property are lowland cover types and the majority of the passive management prescriptions are in these stands. Upland timber types include aspen, oak, red maple, and northern hardwoods with minor inclusions of pine and birch. Even-aged management of aspen and oak will be implemented unless the location of aspen stands is such that beaver are likely to benefit. Even-aged management or all-aged management will be prescribed in the red maple or northern hardwoods depending on landscape location and site characteristics. Management in the pine types will



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generally emphasize long rotations and large tree development in red and white pine. Jack pine will be managed with an even-aged prescription.

Approvals:

District Ecologist Date

Forester Date

Property Manager Date

Area/Team Supervisor Date