



# Interim Forest Management Plan

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## C.D. Buzz Besadny Fish and Wildlife Area Mashek Creek

County: Kewaunee

Property Acreage: 2682 Acres

Forestry Property Code: 3132

Master Plan Date: 1982

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### Part 1: Property Assessment

#### General Property Description

The C.D. Buzz Besadny Fish and Wildlife area is located adjacent to the Kewaunee River in Kewaunee County in the Central Lake Michigan Coastal Ecological Landscape (CLMCEL). The property extends from the Kewaunee River estuary, near the mouth of the river, upstream 10 miles to include a large swamp around the little Scarboro Creek. Besadny's long linear nature produces a lot of public/private edge. Posting and land use conflicts/neighbor issues provide a significant workload for staff. Management on Besadny is focused on the upland grasslands along Hill road and Hwy A, as this area constitutes the bulk of the upland cover, parking lot maintenance, tree plantation maintenance, and boundary issues. The majority of public use on Besadny includes deer and pheasant hunting, salmon fishing, and viewing at the Anadromous fisheries facility. Other uses include small game hunting and wildlife viewing.

The Central Lake Michigan Coastal Ecological Landscape (CLMCEL) stretches from southern Door County west across Green Bay to the Wolf River drainage, then southward in a narrowing strip along the Lake Michigan shore to central Milwaukee County. Owing to the influence of Lake Michigan in the eastern part of this Landscape, generally summers here are cooler, winters warmer, and precipitation levels greater than at locations farther inland. Dolomites and shales underlie the glacial deposits that blanket virtually all of CLMCEL. The dolomite Niagara Escarpment is the major bedrock feature, running through the entire Landscape from northeast to southwest. Series of dolomite cliffs provide critical habitat for rare terrestrial snails, bats, and specialized plants. The primary glacial landforms are ground moraine, outwash, and lakeplain. The topography is generally rolling where the surface is underlain by ground moraine, variable over areas of outwash, and nearly level where lacustrine deposits are present. Important soils include clays, loams, sands, and gravels. Certain landforms, such as sand spits, clay bluffs, beach and dune complexes, and ridge and swale systems, are associated only with the shorelines of Lake Michigan and Green Bay.

Historically, most of this Ecological Landscape was vegetated with mesic hardwood forest composed primarily of sugar maple, basswood, and beech. Hemlock and white pine were locally important, but hemlock was generally restricted to cool moist sites near Lake Michigan. Areas of poorly drained glacial lakeplain supported wet forests of tamarack, white cedar, black ash, red maple, and elm, while the Wolf and Embarrass rivers flowed through extensive floodplain forests of silver maple, green ash, and swamp white oak. Emergent marshes and wet meadows



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were common in and adjacent to lower Green Bay, while Lake Michigan shoreline areas featured beaches, dunes, interdunal wetlands, marshes, and highly diverse ridge and swale vegetation. Small patches of prairie and oak savanna were present in the southwestern portion of this Ecological Landscape.

## Site Specifics

- Current forest types, size classes and successional stages

Of the 2656 acres on the property, 1377 acres or 52% of the property is forested. Forest types across the property are primarily lowland, consisting of cedar and bottomland hardwood species. The current forest types by acreage are as follows:

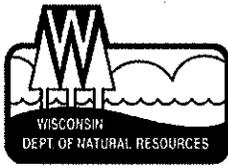
Swamp Hardwood	339 acres	25%
White Cedar	301 acres	22%
Bottomland Hardwoods	243 acres	18%
Northern Hardwoods	172 acres	12%
Aspen	79 acres	6%
Tamarack	81 acres	6%
Red Maple	35 acres	3%
Misc. Deciduous	33 acres	2%
White Birch	22 acres	2%
Hemlock	25 acres	2%
Red/ White Pine	22 acres	2%
Misc. Conifer	21 acres	1%

Size classes are variable throughout the different forest types but are predominantly poletimber and small sawtimber with a few scattered large sawtimber stands in the Northern hardwood and Bottomland hardwood type. In addition there are a few early successional aspen and birch stands in the sapling size class that are a result of harvesting activities in the late 1980's through the early 2000's

- State Natural Areas: None
- High Conservation Value Forest (HCVF) or other resources /natural community types limited in the landscape: None
- Biotic Inventory Status: Yes
- Deferral Consultation area designations: None
- Rare Species: None
- Invasive Species-Russian Olive *Elaeagnus angustifolia*, Autumn Olive *Elaeagnus umbrellata*, Black Locust *Robinia pseudoacacia*, Crown Vetch *Coronilla varia*, Garlic Mustard *Alliaria petiolata*, Japanese Barberry *Berberis thunbergii*, Multiflora Rose *Rosa multiflora*, Phragmites *Phragmites australis*, Wild Parsnip *Pastinaca sativa*,
- Soils-Loams and Mucks

## Cultural and Recreational Considerations

A cultural and archeological site (including tribal sites) exists according to the Master Plan. There is one archaeological site (Copper culture) on the property. The site remains undisclosed to protect it from development.



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## Part 2: IFMP Components

### Management Objectives (Outline primary forest management objectives):

Grass cover will be maintained on present open areas. Forested sites will be maintained in the present timber types.

Forest management goals for the property should focus on objectives that maintain or improve wildlife and fishery-based recreation across the property. With a large portion of the property being lowland and directly influenced by navigable waters, it's of the utmost importance that all timber harvest activities will strictly adhere to BMP's addressing water quality. In addition, BMPs should also focus on invasive species, erosion and fish and wildlife resource concerns. Most forestry activities will be limited to frozen ground conditions due to the nature of the soil types on the property.

### Property Prescriptions:

Maintenance (mowing, chemical treatments, tube replacement) tree plantations located at the end of Ryan Radio Road, intersection of Hwy A and C, and along the pipeline. Chemical treatment of russian/autumn olive, multiflora rose, wild parsnip, and crown vetch throughout dog training area. Chemical treatment of Black Locust and Phragmites as seen fit by property manager. Removal of woody encroachment with grasslands area, NW end of property.

All timber harvesting activities on the property will be conducted only after consulting with an integrated team, including staff from Wildlife, Fisheries, Endangered Resources and Forestry. Stands will generally follow the prescriptions below.

Aspen- Regeneration will be primarily through coppice harvesting (even-aged management) Rotation ages vary across the property, but in general are 45-60 years. Consideration will also be given for snags, high quality cavity trees, mast and conifer trees along with green tree retention areas as appropriate.

Swamp and Bottomland hardwood- Management of these types may be through even-aged or all- aged prescriptions. Determination will be based primarily on the quality and location of the site, as well as the overall objectives for the individual stand. Individual stand prescriptions may be highly variable due to potential problems with reed canary grass as well as future problems with Emerald Ash Borer.



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Cedar,- Where appropriate, white cedar may be managed through intermediate thinnings. These stands will be addressed on an individual basis. Currently there are no stands that are at an age where regeneration is recommended. Regeneration techniques for the various cedar stands on the property will likely not be implemented due to the challenges faced in regeneration of this species.

Northern Hardwood- Uneven-aged management techniques will be implemented to improve stand quality by removing poor quality and low vigor trees, as well as focusing on releasing crop trees. Canopy gaps will be incorporated throughout these stands.

Pine- Management will be even-aged through periodic thinnings. Long term objective may be to naturally convert these stands to other native timber types at rotation age.

Miscellaneous species with small acreages- Other covertypes/stands with smaller acreages will be addresses on a stand by stand basis and decisions on forest management will be made through an integrated team approach.

### Fish Management-Vegetation Control

Some tree and brush control may be necessary along Little Scarboro Creek to improve brook trout production and angler access and for maintenance of the berm near the low dam at the Besadny Fisheries Facility (BAFF) on the Kewaunee River. Work on the Little Scarboro will utilize stream bank brushing and selective tree removal to create open areas that will allow sunlight to increase the primary productivity of the stream or will improve angler access to the stream. Vegetative control at BAFF is needed to maintain safety of the dam and facility for staff and the general public by cutting brush and trees.

Approvals:

Joe Henry 12/9/13  
Regional Ecologist Date

Chris Phok 12/10/13  
Forester Date

Jan Robard 12-10-13  
Property Manager Date

Ed E. Kober 12-16-13  
Area/Team Supervisor Date