



# Interim Forest Management Plan

## Property Identifiers

Property Name and Designation: **Totogatic Wild Rivers**

County(ies): **Washburn and Douglas**

Property Acreage: 2373

Forestry Property Code(s):6618

Master Plan Date: **Master Plan has not been completed for this property**

## Part 1: Property Assessment

### General Property Description

- **Landscape and regional context**

The Totogatic Wild Rivers property is found within the Southeastern portion of the Northwest Sands Ecological Landscape. The LTA's that make up this property include Gordon Rolling Barrens (212Ka11), Webb Lake Collapsed Barrens (212Ka05), and Lower Namekagon Rolling Barrens (212Ka15). The western most portions of the property are part of the Namekagon-Solon Springs Important Bird Area, and the Namekagon Barrens Conservation Opportunity Area. The Totogatic River itself is listed as an aquatic Conservation Opportunity Area for its diversity of both invertebrate and vertebrate wildlife.

This property is found in a local landscape that is dominated by large forested tracts which are owned by both public agencies such as Washburn and Burnett County Forests, as well as private forest industry. Numerous wetlands, shallow ponds and lakes are scattered across the area, and some of these lakes contain significant shoreline development. Large river systems, including the Namekagon and St Croix are found in close proximity to the Totogatic Wild Rivers property.

- **History of land use and past management**

WI DNR acquired most of these parcels in 2009, and in a separate transaction in 2012. A majority of the property was previously owned by the Wausau Paper Company, which managed these parcels for the production of pulp timber. Numerous parcels were harvested and subsequently row-planted to red pine shortly before acquisition by the Department. The parcel known as the Solar Property has seen a more limited amount of timber harvest, but was divided into parcels and had a network of small roads installed, in order to facilitate residential development.

### Site Specifics

- **Current forest types, size classes and successional stages**

Recon Acres	2,393	
Forested Acres	2,250	Forested acres include acreage from stands that have a true forest type for their primary forest type.
Scheduled for Management	1,988	
Not Scheduled for Management	262	Acreage not scheduled for management includes acreage from stands with a prefix of: R - Designated Wild River Zone Y - Designated Wilderness Area Z - Other Stand Omitted from Management
Non-Forested Acres	143	



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## 6618 - TOTOGATIC WLD RIVER

Forest Type	Forest Type Description	Stands	Acres	Percent of Forested Acres	Percent of Recon Acres
A	ASPEN	9	209	9 %	9 %
BH	BOTTOMLAND HARDWOODS	5	178	8 %	7 %
OX	SCRUB OAK	10	248	11 %	10 %
FJ	JACK PINE	24	1,004	45 %	42 %
PR	RED PINE	16	532	24 %	22 %
PW	WHITE PINE	3	66	3 %	3 %
SB	BLACK SPRUCE	2	5	0 %	0 %
T	TAMARACK	1	8	0 %	0 %
<b>Total:</b>		<b>70</b>	<b>2,250</b>	<b>100 %</b>	<b>93 %</b>

Non-Forest Type Acreage	Forest Type	Forest Type Description	Stands	Acres	Percent of Non-Forested Acres	Percent of Recon Acres
	K	MARSH	1	1	1 %	0 %
	KB	MUSKEG BOG	1	2	1 %	0 %
	KG	LOWLAND GRASS	1	13	9 %	1 %
	L	WATER	4	100	70 %	4 %
	LB	LOWLAND BRUSH	1	13	9 %	1 %
	UB	UPLAND BRUSH	1	14	10 %	1 %
<b>Total:</b>			<b>9</b>	<b>143</b>	<b>100 %</b>	<b>7 %</b>

### Summary

- These properties are heavily forested (93%) in species common to northern forests of Wisconsin.
- Conifer tree species dominate this property. Jack pine & red pine are the most common timber types (70%).
- **State Natural Area designations**  
There are currently no SNA designations on any of these parcels.
- **High Value Conservation Forests (HCVF) or other resources/natural community types limited in the landscape**  
Good quality examples of Pine Barrens and Northern Dry Forest are found on several areas of the property.
- **Biotic Inventory status**  
Inventory field work completed in 2012. Report is being drafted during winter, 2012-2013. Publication number: PUB-ER-844 2013.
- **Deferral/consultation area designations**  
There are 3 Consultation sites and 1 Deferral site designated on these parcels. Refer to the Rapid Ecological Assessment (Publication PUB-ER-844 2013) for more details on the location of these sites.
- **Rare species**  
Numerous rare species and good-quality examples of native communities have been documented within the Totogatic Wild Rivers Property. Refer to the Rapid Ecological Assessment (Publication PUB-ER-844 2013) for more detailed information.

NHI screening will be conducted prior to all future management activities.

- **Invasive species**  
Those invasive species that pose a serious threat to the ecological integrity of these properties include: Spotted Knapweed, Bush honeysuckle, Glossy Buckthorn and Reed Canary Grass.



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- **Soils**  
Menahga Sand, Grayling Sand, Graycalm-Menahga Complex, Mahtomedi Loamy Sand, Totogatic-Winterfield Complex

## Cultural and Recreational Considerations

- There are no historical or archeological sites listed for this property on the Archeological Sites Inventory.
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## Part 2: IFMP Components

### Management Objectives

Sustainably manage the forest resource to:

- Maximize native wildlife species habitat by promoting aspen, white oak, northern pin oak, and other hardwood species in addition to jack pine, red pine, and white pine.
- Use the Ecological Landscapes: Northwest Sands - to guide forest management in the associated portions of the county.
- Take advantage of forest stands that would allow for maintaining and prolonging an older age class of timber type to survive.
- Maintain the extent and quality of swamp hardwood, alder, bottomland hardwood stands and other wetland types.
- Maintain and/or create pine barrens habitat by controlling woody encroachment with mowing, prescribed burning or other habitat maintenance means
- Over time, convert coniferous plantations to more natural looking forest stands. Forest restoration should be done over time with native species and mimic natural structure associated with the proper ecological landscape.
- Work to maintain the jack pine timber type. Use opportunities to naturally regenerate these stands over time using a variety of techniques that may include scarification or burning. Disperse harvesting to create disturbance over the range of the property, and to create / maintain age-class diversity.
- Red and white pine. Explore opportunities to naturally regenerate these stands over time using a variety of techniques that may include scarification or burning. Consider multi-cohort management.
- The Rapid Ecological Assessment for the Totogatic Wild River, the Wildlife Action Plan and NHI will be used as references for management.

### Property Prescriptions

- Per Wild Rivers law (SS.Ch.30) and Administrative Code (NR 302), no vegetative management will occur within a 150 foot buffer zone along the river corridors, other than invasive species control or restoration activities. Further, land beyond the 150- foot zone shall be managed in accordance with the DNR's Silviculture and Forest Aesthetics Handbook (HB 2431.5), as a "Class D scenic area". NR 302 further specifies a protection zone within 400 feet of the water or to the visual horizon from the water, whichever is greater. NR 302.03(2) requires that there be no "development" in any protection zone (other than that necessary to accommodate the users of the wild river areas), beyond the protection zone and up to at least ¼ mile from either side of the wild river.



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- **Aspen:** Regenerate by clear-cutting (even-aged management). The rotation age for aspen varies based on site conditions, but it is generally 45-60 years. Though these rotation ages can be extended on good quality mesic sites, opportunities for extended rotation on this property are limited. Large aspen stands should be divided and harvested years apart to increase age-class diversity. As appropriate, snags, high quality cavity, mast and conifer trees along with green tree retention areas will not be harvested. Green tree retention should be concentrated around and between ephemeral ponds, wherever possible.
- **Scrub Oak:** Regenerate by clear cutting (even-aged management). The rotation age for oak varies based on site conditions, but it is generally 70 – 90 years, though could be extended to 110 years. Successful sprouting in scrub oak is greatly reduced at over-mature ages. Green tree retention in these stands should be concentrated on leaving large crowned, mast producing trees in addition to trees with cavities.
  - The Oak Chapter of the WI DNR Silviculture Handbook indicates the anticipated rotation lengths for oak. Site specifics will dictate the actual rotation length for individual stands.
- **Jack Pine:** Maintain stands through even age management techniques and natural regeneration harvest systems appropriate for the stand and site conditions. The rotation age for jack pine is generally 45 – 65 years based on site conditions. Rotation ages should not be extended much further than this due to loss of seed source through mortality.
  - Site preparation to include soil scarification, herbicide treatments and prescribed burns may be necessary to establish regeneration.
  - Allow variable densities of jack pine regeneration in order to create patchiness of variable sizes across the stand. Less than fully stocked stands of jack pine are acceptable.
  - Artificial regeneration from seed or seedlings may be necessary to establish reproduction prior to or after timber harvests when natural regeneration is not adequate.
- **Red Pine:** Maintain stand health by conducting periodic, intermediate thinning to promote healthy crowns. Thinning's are typically conducted every 8-12 years depending on basal areas. Over time, thin stands to take on a more natural forest appearance. Upon rotation age, promote natural regeneration through the use of shelter wood or seed tree harvests in combination with prescribed burns or scarification. The rotation age for red pine is typically 80 – 120 years though could be extended 120 – 200 years for extended rotations.
  - Site preparation to include soil scarification, herbicide treatments and prescribed burns may be necessary to establish regeneration.
  - Artificial regeneration from seed or seedlings may be necessary to establish reproduction prior to or after timber harvests when natural regeneration is not adequate.
- Selection of the most appropriate silvicultural system for managing swamp hardwood and bottomland hardwood stands will be site specific.
- Within the Deferral site, all management will be deferred until after the Natural Resources Board approves a master plan. Within the Consultation sites, timber management or other major projects should be completed only after consulting with an integrated team, including staff from Facilities and Lands, Wildlife Management, Endangered Resources, Fisheries and Water Quality.
- Apply prescribed burns on some pine barrens and to oak or jack pine stands to select against fire intolerant forest species. Keep some areas in an early seral stage pine barrens condition.
- Where opportunities exist, manage for extended rotation of natural-origin white and red pine stands.



# Interim Forest Management Plan

Approvals:

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Regional Ecologist Date

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Forester Date

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Property Manager Date

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Area/Team Supervisor Date