State of Wisconsin Department of Natural Resources

> Public Forest Lands Handbook 2460.5

Chapter 1

100	PUBLIC LANDS RECORDS & FOREST COMPARTMENT RECONNAISSANCE	
	PUBLIC LANDS RECORDS	100-1
	WISCONSIN FIELD INVENTORY & REPORTING SYSTEM WISFIRS	110-1
	FOREST COMPARTMENT RECONNAISSANCE	120-1
	RECONNAISSANCE PROCEDURE	130-1
	RECONNAISSANCE DATA UPDATING	140-1
	FOREST COMPARTMENT RECORDS	150-1
200	COUNTY FOREST LANDS	200-1
	DEPARTMENT LIAISONS TO COUNTY FORESTS	210-1
	Position Summary	210-1
	Goals and Worker Activities	210-2
	Technical Assistance	210-6
	Law Enforcement	210-7
	Annual Adjustments to Technical Assistance	210-7
	COUNTY FOREST ADMINISTRATORS	210-8
	Goals and Worker Activities	210-8
	COUNTY/STATE ROLES	210-9
	Administration - County Forest Law	210-9
	Resource Management	210-9
	Administration of Contracts for Management Projects	210-10 210-11
	Cooperation COUNTY FOREST TIME STANDARDS - TECHNICAL ASSISTANCE	210-11
	Time Standards Guidelines	210-11
	Time Standards Annual Adjustments (Additions or Subtractions)	210-11
	Time Standards Activity Definitions	210-13
	Time Standards Worksheet	210-13
	Time Standards Summary	210-24
	ANNUAL MEETING TO EVALUATE COUNTY/DEPARTMENT PARTNERSHIP	210-36
	WISCONSIN COUNTY FORESTS ASSOCIATION	210-36
	COUNTY FOREST FINANCIAL ASSISTANCE	220-1
	Grant Programs	220-1
	County Forest Administrator Grant Program	220-1
	Sustainable Forest Grant Program	220-1
	County Forest Time Standards Grant Program	220-2
	Knowles-Nelson Stewardship Grant Program	220-2
	Forest Wildlife Habitat Improvement Program	220-2
	Loan Programs	220-6
	Variable Acreage Share Loans	220-6
	County Forest Project Loans	220-6
	Repayment of Loans	220-7
	Other Funding Sources	220-7
	Federal Cost Sharing Programs	220-7
	Town Revenues	220-7
	County Forest Financial Assistance Summary	220-8
	COUNTY FOREST COMPREHENSIVE LAND USE PLAN	230-1
	LAND ACQUISITION	240-1
	Acquisition of Private Land Enrolled in Forest Tax Law	240-1
	Entry of County Forest Lands	240-1
	Acreage Printouts	240-2
	County Forest Land Withdrawal	240-2
	Adverse Possession TIMBER SALES	240-4 250-1
	TIMBER SALES TIMBER THEFT	250-1 250-1
	RECREATION	250-1 260-1
	WILDLIFE MANAGEMENT	260-1 260-1
	ENDANGERED RESOURCES	260-1
	LIDINOLICED RESCONCES	200-2

	WATER REGULATIONS AND WETLAND PROTECTION	260-4
	WILDERNESS, SCIENTIFIC, AND NATURAL AREAS	260-6
	CHIPPEWA TREATY RIGHTS	270-1
	ROADS	280-1
	TREE PLANTING STOCK SOURCES	280-1
	EQUIPMENT RENTALS	280-2
	PEST MANAGEMENT	280-2
	SPECIAL LAND USES	290-1
	Military Maneuvers	290-1
	Rifle Ranges	290-1
	Land Use Agreements/Easements	290-1
	Cabin Leases/Permits	290-2
	Mineral Exploration, Prospecting, Mining	290-2
	Sand and Gravel	290-2
	Telecommunication Towers	290-3
300	PUBLIC LANDS MANAGEMENT, CERTIFICATION, AND AUDITS	
	STATE OWNED LANDS MANAGEMENT	300-1
	Forest Management Planning	300-1
	Annual Property Implementation Plans	300-2
	Annual Property Management Meeting	300-4
	The Role of Foresters in the APIP and APIM Processes	300-5
	FOREST REGENERATION PROJECTS ON STATE OWNED (DNR) LANDS	310-1
	REGENERATION MONITORING	320-1
	PUBLIC LAND TIMBER SALES: PROGRAMMATIC & FISCAL REVIEW	330-1
	STATE LANDS FOREST CERTIFICATION	340-1
	Chain of Custody	340-2
	COUNTY FOREST LAW CERTIFICATION	350-1
	STATE-OWNED ISLANDS MANAGEMENT	360-1
	Island Examination Procedures	360-5
	Island Classification and Management	360-6
	Posting of Islands	360-9
	Inspection Records	360-12
	Equipment and Supplies	360-13
	Adding and Deleting Islands	360-15
	APPENDICES	
A	Mapping Terms and Standards	A-1
B	Completing a Tally Sheet	B-1
C	WisFIRS Codes Reference Guide	C-1
D	Cover Type, Size, & Density Classifications, and Stand Classification Procedure	D-1
E	Forest Habitat Types	E-1
F	Species, Nursery Stock, Invasives, and Deer Browse Codes	F-1
G	WisFIRS Management Objective Codes	G-1
Н	Planned Treatment Appendix	H-1
I	Stand Examination Data Sheet (WisFIRS) Example	I-1
J	WisFIRS Security Options	J-1 V 1
Κ	Plantation and Cultural Report Example	K-1

- Η Ι
- J
- Κ Plantation and Cultural Report Example L State Owned Islands Listings

This document is intended solely as guidance, and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations, and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

L-1

PUBLIC LAND RECORDS

Accurate records for public purposes and resource management are essential for overall administration and proper planning on public forest lands. This section recommends the minimum acceptable records to be maintained for each property, and provides some of the information sources that are considered to be public records. Additional property records may be required under state statute or local ordinances. The County Clerk, County Public Records Manager or Corporation Council should be consulted for additional requirements or suggestions. The Records Management Handbook (<u>HB 9520.5</u>) should be consulted for additional requirements or suggestions.

Chapter 19, Wis. Stats., covers the general duties of public officials and defines what constitutes public authority and records.

s. 19.32(1) Wis. Stats. states:

"Authority" means any of the following having custody of a record: a state or local office, elected official, agency, board, commission, committee, council, department or public body corporate and politic created by constitution, law, ordinance, rule or order: a governmental or quasi-governmental corporation...

[See exceptions s. <u>19.32(1)</u>.]

s. 19.32(2) Wis. Stats. states:

"Record" means any material on which written, drawn, printed, spoken, visual, or electromagnetic information is recorded or preserved, regardless of physical form or characteristics, which has been created or is being kept by an authority. "Record" includes, but is not limited to, handwritten, typed, or printed pages, maps, charts, photographs, films, recordings, tapes (including computer tapes), and computer printouts. "Record" does not include drafts, notes, preliminary computations and like materials prepared for the originator's personal use or prepared by the originator in the name of a person for whom the originator is working; materials which are purely the personal property of the custodian and have no relation to his or her office: materials to which access is limited by copyright, patent or bequest: and published materials in the possession of an authority other than a public library which are available for sale, or which are available for inspection at a public library.

Any local governmental unit may provide for the keeping and preservation of public records kept by the governmental unit. A local governmental unit or agency shall make such provision by ordinance or resolution (s. 19.21(4)(c)).

The proper officer of any county may under s. 44.09, Wis. Stats., offer title and transfer custody to the historical society of any record deemed by the society to be of permanent historical importance (s. 19.23(2)).

WISCONSIN FIELD INVENTORY & REPORTING SYSTEM (WisFIRS)

In 2006, the existing public land timber database was determined to no longer be adequate to serve the needs of 21st century, thus, WisFIRS was developed. As an integrated, web-based application, the WisFIRS Public Lands application allows foresters and habitat managers to store data collected from the field, plan and track habitat treatments, report accomplishments, and calculate the financial aspects related to those treatments. The WisFIRS database has evolved since its conception; continuously undergoing enhancments to increase its capacity to meet the needs of core business functions and the objectives of land managers across State, Federal (GNA), and County Forest lands.

Below is a brief summary of how to access the WisFIRS Public Lands Management application and the pages, or tabs commonly used. It is not intended to be a how-to in using WisFIRS, rather to provide a quick reference to see what the capability of each of the pages includes. The training manual and the On-Line Help Manual in the system should be referenced for specific how-to information.

Accessing Public Land WisFIRS

1. Internal users

Department employees can automatically access WisFIRS through their work computer on the DNR Division of Forestry intranet site: <u>http://intranet.dnr.state.wi.us/wisfirs/internal/wisfirs.aspx</u>. No additional password is required.

- 2. <u>External Users</u> (such as County Forest employees and Department employees working from a personal computer)
 - a. External users must obtain the overall approval to use WisFIRS through County Forest & Public Lands Specialist. New County Foresters should work through their County Forest Administrator.
 - b. County Forestry partners who are authorized to edit data in the system, and Department employees approved to work externally, need a WAMS ID from the State of Wisconsin in order to access WisFIRS. The WAMS ID must then be provided to the WisFIRS administrator to configure access.
 - Get a State of Wisconsin WAMS ID [exit DNR].
 - Send the WAMS ID to the WisFIRS Public Lands administrator.
 - c. It is recommended to save the WisFIRS site to the computer desktop for ready access in the future.
 - d. Access for employees leaving the DNR or County will be revoked. The immediate supervisor (for DNR employees) and the County Forest Administrator (for County Forests) will be responsible for removing access, or can notify the County Forest & Public Lands Specialist when subordinates are leaving their employ.

Note: WisFIRS works best in Internet Explorer. Do not open the platform in multiple browsers.

Overview of the WisFIRS Public Lands Management application

- 1. Properties
 - a. Properties is the opening or default tab in WisFIRS. Use this tab to:
 - See the list of properties that you are authorized to edit
 - Search for Properties
 - Navigate to property, compartment, or stand information

- Access core property groups
- Create or edit custom property groups
- Launch the WisFIRS Public Lands GIS mapping portal

2. <u>Recon</u>

- a. Use the Recon tab to:
 - Create new stands, modify/update stand information, copy stands, delete stands
 - Search or sort by compartment, stand, stand type, primary forest types, harvest status, invasive species, stand prefix, exam year, or year of origin
 - Create new planned treatments
 - Record completed treatments
 - Access a blank Stand Examination Data Sheet and the Field Recon Data Sheet for Non-Forested Habitats.
 - Launch the WisFIRS Public Lands GIS mapping portal.

3. <u>Treatments</u>

- a. Use the Treatments tab to:
 - Edit or delete an existing scheduled treatment
 - Edit stand data
 - View and sort scheduled or completed treatments individually, by stand, compartment, stand type, treatment type, primary type, year or range of years.
 - Sort and view stands not scheduled for management (due to passive management, recent update, or active sale status)
 - Record and edit a completed treatment
 - Launch the WisFIRS Public Lands GIS mapping portal

4. <u>RX (Prescribed) Burns</u>

- a. Use the Rx Burns tabs to:
 - View existing RX burns for a property
 - Search RX burns by property, county, statuses, name, tracking number, recommended year, or season of burn.
 - Property habitat managers will utilize this tab to initiate an Rx burn plan for a property by completing overview, location, description, NHI, and Documents sections and provide their approval.
 - Burn bosses (RXB3) will complete Documents, Prescription Range, Fire Behavior, and Implementation sections and provide their approval.
 - County Foresters will view the burn plan information and provide their approval, if appropriate.
 - Technical reviewer will view the burn plan information and provide final approval.

5. <u>Pesticides (for State Lands only)</u>

- a. Use the Pesticides tab to:
 - View existing pesticide treatments scheduled for a property
 - Search treatments by property, county, statuses, name, tracking number, treatment date range, or preparer.
 - Individuals responsible for land management activities will utilize this tab to create or complete pesticide treatments.
 - If the treatment type requires approval by a Pesticide Treatment Approver, the Approver will utilize this tab to view the pesticide treatment and provide final approval.

6. <u>Timber Sales</u>

Timber sales are viewable by all users, but only authorized users may create or edit timber sales.

- a. Use the Timber Sales tab to:
 - View existing timber sales.
 - Search sales by tract number and year, sale number, sale type, sale status, established year, sold or completed year, or by contractor.
 - If authorized, create new timber sales, modify established and active sales, and close sales. This includes notice and reports, approvals, journals/ledgers/invoicing (Department Lands only), performance bonds, and other documents.
 - View Public Land Stumpage rates
 - View Private Land Stumpage rates
 - Launch the WisFIRS Public Lands GIS application

7. <u>Planning</u>

Section <u>28.025 (2)</u> Wis. Stats., requires that the Department establish annual allowable harvest levels on Department lands and <u>s. 28.025 (3)</u> Wis. Stats., requires that the Department report biannually on the timber harvests established, providing justification for any cases where the timber harvest on a property was more than 10% above or below the allowable harvest level. The Department utilizes WisFIRS to generate an annual and a long-term harvest schedule and goals to meet the needs of both Department work planning and the statutorily required reporting of annual allowable harvest to the legislature. Annual harvest calculations for DNR lands are determined using an acreage-based control method for sustainable harvest levels The creation of harvest schedules and goals by property is accomplished by utilizing the WisFIRS Planning features.

WisFIRS Planning functionality attempts to more evenly distribute timber harvest practices over a 15-year period by cover type and treatment type (e.g. aspen clear-cuts) for each property. It does this by utilizing early and late harvest constraints (when applied), along with estimated average harvest intervals by cover and treatment type for each property. For example, if the typical harvest interval for aspen on a property is 48 years, with an early constraint of three years and a late constraint of seven years, WisFIRS will recommend a harvest schedule that levels out natural peaks and valleys in the schedule by re-scheduling aspen stands at as early as age 45 and as late as age 55. WisFIRS will maintain both the the scheduled year and recommended year for each stand; however, the annual and long-term harvest schedules and goals will be a reflection of the scheduled year. Planning functions at the property level and the smoothing of harvest levels only occurs when there are at least 400 acres of a particular cover and harvest type, the WisFIRS planning schedule will simply utilize the recommended year without redistributing based upon constraints.

Completing the Planning schedule for a property MUST be completed before the schedule of treatments and the associated harvest goals can be created. For Department lands, in consultation with the property manager, only the Lead State Lands Forester should run and accept the planning schedule for a property. **Planning should be accepted only once each year, prior to March 31**st, and preferably after the annual planning meeting.

For County Forest lands, only the County Forest Administrator and DNR County Forest Liaison should run and accept the planning schedule for a property. **Planning should be accepted only once each year**, and preferably at the same time every year.

A Planning schedule **must be run and accepted for each property every year** in order to generate an accurate harvest schedule for the property and for certain property accomplishment tracking features in WisFIRS to work. Additionally, Department and county forest work planning is completed utilizing the harvest schedules generated, so it is imperative that they are as accurate and up to date as possible. In order

to ensure that planning has been run and accepted once annually, the harvest schedules for all properties are reviewed by the Bureau of Forestry Field Operations in March each year. If a harvest schedule has not been accepted for the current year by March 31st, the harvest schedule shall be run and accepted centrally.

The Planning tab will not show when you are working in a Property Group. Planning is only available for an individual property. Property groups can view co-mingled data from planning conducted on individual properties, however you cannot plan for multiple properties at one time. Planning can be accessed by selecting the tab in the main menu bar.

- a. Use the Planning tab to:
 - View and print a report / chart showing property acreage by forest type
 - Determine the acres scheduled for active management on a property
 - Set the harvest intervals and constraints by forest type and treatment type for your property
 - Run a schedule of practices for a property for a selected planning interval
 - "Tune" a harvest schedule for a specific forest type or harvest type
 - View, print, sort, or download the annual or long-range treatment schedules for a property
 - Determine a property's annual harvest acreage goal and long term harvest goals for all forest types
 - View and print an age class distribution chart for a forest type
 - Monitor progress on both annual and long-range harvest goals
 - View and print harvest establishment accomplishments in total or by forest type for the past 20 years
 - Launch the WisFIRS Public Lands GIS mapping portal (Harvest & Cultural Schedule)

8. <u>Downloads</u>

- a. Use the Downloads tab to:
 - Find instructions to download information and links for DNR Forestry's ArcView Optional Recon Tool (ACORN).
 - Find instructions to download information and links for Forest Metrix.

9. <u>Reports</u>

WisFIRS includes Recon & Assessment, Planning & Schedules, Timber Sales & Monitoring, County Forest Land Administration, GIS, Treatment, and Custom reports. Future phases will expand upon the reports available. All of the standard reports can be printed from this tab; however many can also be viewed and printed from other tabs. In particular, "Planning" provides several opportunities for reporting:

- a. Use the Reports tab to:
 - View and print standard reports
 - Create and print custom reports
 - Export data to a spreadsheet by compartment
 - Export GIS shapefile data sets for a property

10. Security

WisFIRS allows for all users accessing the system (either internal DNR or through an external WAMS password) to view and report on recon data for all DNR managed lands as well as County Forests. However, only those assigned to a specific property have the authority to edit recon or timber sale information. Those with delegation authority for a property can grant edit authority to other users by

assigning them to a property, or delegation authority by adding them to the delegation list. Delegation authority is granted primarily to supervisors, including County Forest Administrators. For DNR managed lands, Property Managers and first line Forestry supervisors will jointly determine to whom edit authority will be granted and assign them to the property. On County Forests, the County Forest Administrator and DNR Liaison Forester will jointly agree on whom to assign. A summary of all available security options is provided in Appendix J.

- a. Use the Security tab to:
 - View forester assignments and delegation authority for a property by running a report
 - View properties for which you or others have edit authority or delegation authority
 - Assign or revoke edit authority to another user
 - Assign or revoke delegation authority to another user

FOREST COMPARTMENT RECONNAISSANCE

Purpose

Reconnaissance (recon) of land is a tool utilized in the assessment of geographical, structural and compositional attributes of existing resources. This field information is stored in WisFIRS Public Tabular. The GIS (Geographical Information System) data is referenced as WisFIRS Public GIS. The tabular and GIS information is linked within WisFIRS. Basic resource information is collected, stored and updated systematically and continuously. The database is used to analyze existing resources, evaluate management alternatives and assist in the development and implementation of management plans. Recon is one tool used to assess forest resource information at the property level. This information will provide a data layer that should be used for regional analysis. This type of assessment is necessary to implement ecosystem management.

DNR annual allowable harvest goals are based upon statewide recon data. It is imperative that data be kept up to date, accurate, and correctly reflect property management goals. Inaccurate data can result in unrealistic establishment expectations, missed management opportunities, and work/property management planning challenges.

This section contains policy and guidance for Department owned and managed lands; including, but not limited to, State Forests, Fish, Wildlife, Parks, and Natural Heritage Conservation Lands. It can be used as a reference for County Forest Lands. It is important to note that each County Forest conducts business according to their own specific procedures and policies, in accordance with <u>s. 28.11</u>, Wis. Stats.

Recon Policy

- 1. Recon will be collected on all County Forest and Department lands.
- 2. Responsibility for maintaining the recon database of forested land on Department properties will be with the Division of Forestry
- 3. Responsibility for maintaining the recon database of non-forested land on Department properties will be with the Division of Fish, Wildlife, & Parks (FWP). Please reference *FWP WisFIRS Non-Forested Habitat Protocols* for further information about non-forested prefixes. It can be located within the FWP SharePoint site located at: <u>FWP Non-Forested Habitat Information</u>
- 4. County Forests will still maintain recon on non-forested lands however may enlist the help of local Wildlife Biologist to identify and develop management opportunities for these areas. County Forests may obtain information on non-forested habitat protocols through their County Liaison Forester.

When to Update

Recon data is a vital tool for land managers in planning management activities and in documenting the composition of the landscape. Obsolescence of recon data starts the day it is collected. To minimize obsolescence, recon data is updated on an ongoing basis as changes are observed or created. Updating of recon data will be considered part of the normal daily routine of doing business.

The following activities or situations may require the update of recon data:

- Timber Sale establishment
- Timber Sale close-out
- Cultural work
- Planting
- Errors in original data
- Catastrophic events (wind, fire)
- Insects
- Disease
- Acquisition or sale of land

- Habitat manipulation projects on fish and wildlife areas
- Establishment of special use areas or changes involving change of land management objective
- Stand/Compartment data is older than 20 years on State and County Forest lands. County Forest are exempted from this requirement for even-aged timber types being managed on a 40+ year rotation with no scheduled intermediate treatments.

Integrated Resource Management

- 1. Recon enhances integrated resource management opportunities. Data collected may feature primary goals and objectives for the property. Input should be obtained from all disciplines involved in the management of the property.
- 2. Prior to commencing the reconnaissance of a property, concurrence will be reached between the fish, wildlife, forestry, endangered resources, and recreation managers involved regarding identification and collection of data specific to each discipline. Items to be considered for identification would include but not limited to spring ponds, aesthetic zones, deer yards, and wildlife openings.
- 3. All annual forest management activities that are carried out by any program (Fish, Wildlife, Parks, NHC) that alter vegetation in any way (e.g. invasive species treatments, timber stand improvement, site preparation, tree planting, timber sales, wildlife habitat management, prescribed burning) will be identified by compartment and stand within the WisFIRS database. The listed needs in the database, in addition to other multi-disciplinary input, will be used in determining property budgets and annual work plans.
- 4. Recon should be used as resource assessment tool in the development of a Master Plans and/or County Forest Comprehensive Land Use Plans.

RECONNAISANCE PROCEDURE

Field Examination

The Division of Forestry currently supports three options to gather forest reconnaissance data using point sampling: Forest Metrix, Cubic Cruise, Sticks Plus Trees (based on BAF 10).

1. Forest Metrix Pro (FM Pro)

Forest Metrix Pro is a timber cruising application for mobile devices. FM Pro operates on mobile devices running iOS, which is an operating system from Apple Inc. FM Pro is completely customizable, can calculate timber volume and value by species, and has on-board reports. The User Manual for Forest Metrix Pro can be found at the following location: <u>https://sp.dnr.enterprise.wistate.us/org/fd/Intranet-FD/Documents/FM-Pro_USER_MANUAL_20190625.pdf</u>. The User Manual can also be found within the program on your device. Within the program, open a template and choose the help screen to find the manual. You can view the manual on the device or export it to your computer using iTunes File Sharing. General overview, resources, training and support for FM Pro can be found at: https://sp.dnr.enterprise.wistate.us/org/fd/Intranet-FD/Documents/FM-Pro_USER_MANUAL_20190625.pdf. The User Manual can also be found within the program on your device. Within the program, open a template and choose the help screen to find the manual. You can view the manual on the device or export it to your computer using iTunes File Sharing. General overview, resources, training and support for FM Pro can be found at: https://sp.dnr.enterprise.wistate.us/org/fd/Intranet-FD/Pages/it-and-gis/electronic-field-data-collection/applications/forest-metrix-pro.aspx.

2. <u>Cubic Cruise</u>

Cubic Cruise is a single product cruising system based on the relationship between the volume of a tree and the DBH; more specifically, the volume to basal area ratio, or VBAR. Form correction factors can be developed to modify volumes when the form of your trees varies from the norm. Cubic cruise is a very quick system since you do not need to estimate tree height while taking plots. It provides reasonable accuracy and provides the user with volumes to various top diameters, making it particularly suitable on properties advertising to variable top general utilizations, including whole tree. Cubic Cruise instructions found are at: https://dnr.wi.gov/topic/ForestManagement/cruising.html Toolkit and in Public Lands at: https://sp.dnr.enterprise.wistate.us/org/fd/Intranet-FD/Pages/forest-management/public-lands-toolkit.aspx.

3. <u>Sticks Plus Trees (and the Stand Exam Tally Sheet)</u>

Sticks Plus Trees is a point sampling cruising system that is also based on a simplified VBAR formula. As such, the volume estimations for small diameter and short trees, or large diameter and tall trees, tend to be over or underestimated, respectively. Complete the Stand Examination Tally (Form 2400-032) or equivalent information for each stand. Thoroughly evaluate the entire area of the stand, collecting as much information as possible from each sample point. The number of plots used per stand will depend upon the size of the stand and the desired sampling intensity. An example of a Stand Examination Tally Sheet is found in the Appendix.

Only qualified resource professionals and technicians fully trained in the collection and coding of recon data shall conduct recon.

The gathering of recon data is designed to be used for areas which have been stratified into stands prior to the cruise. Complete the Stand Examination Tally Sheet (Form 2400-032) or the equivalent information on a data collection device for each stand. Thoroughly evaluate the entire area of the stand, collecting as much information as possible from each sample point. Take a minimum of 4 plots per stand; stands that are large or more diverse may require more plots. Make sure the stand number on the Stand Examination Tally correlates with and is recorded on the field map. The number of sheets used per stand will depend upon the size of the stand and the desired sampling intensity. Do not record more than one stand on the same sheet.

<u>Mapping</u>

Compartment reconnaissance maps must be created utilizing current stand conditions and information, and then updated as the tabular stand data changes.

A current compartment map showing all the compartment boundaries on a property should be available in an electronic form in the WisFIRS Public GIS. The property boundary will be that boundary established in the Master Plan on state lands or in the County Forest Comprehensive Land Use plan on county lands.

It is imperative that there is a backup for all compartment GIS data. WisFIRS tabular and GIS data are backed up daily. Daily backups are kept for 7 days. At the end of each week, the most recent backup for that week will be kept for one month. At the end of the month (4 week cycle), the most recent backup for that month will be kept for one year. These backups will satisfy the requirements of Manual Code <u>8622.20</u>

New Property Acquisition

- 1. Contact the County Forest & Public Lands Specialist to request the creation of a Forestry Property Code (if needed). The County Forest & Public Lands Specialist will authorize delegation authority to the appropriate supervisor or property manager.
- 2. After completing the field work, transfer the information from the Stand Exam Tally sheet (Form 2400-32) or data recorder into WisFIRS Public Lands tabular. Enter by Stand number, housing each new stand number within a compartment. Compartments should be identified giving thought to logical physical boundaries or subdivisions for the property as a whole.
- 3. In the WisFIRS GIS application, create the approximate WisFIRS Management Boundary (WMB) using the DNR Managed Lands layer as reference if the shape already exists in that layer.
 - Optional upload the WMB layer from ACORN to WisFIRS GIS.
 - Optional if you have a shape from another source, upload using My Uploads and use as reference.
- 4. Create stand polygons to identify the stand boundaries. *Note: Refer to WisFIRS Online Help Manual for digitizing and creating stands.*
- 5. Run Compartment Summary Report (Report 110) to double check data entry.
- 6. Make any adjustments to the WisFIRS Management Boundary that may have been discovered when cruising the property and reviewing the aerial photography.

Compartment Maps:

This must be in GIS format on the WisFIRS Public GIS. It is recommended that a current copy of the compartment map be retained in the compartment folder (see 140-10). The map should be an up-to-date graphic representation of the on-the-ground conditions and should be current with the tabular information. The hard copy or electronic map (.pdf file) can be produced using the Map Output tool in the WisFIRS Public GIS.

The following information should be used in preparing the compartment map:

- 1. It is recommended that maps be at a scale of 4 inches per mile on 8-1/2 by 11 inch sheet of paper. This can be accomplished through WisFIRS Public GIS by setting the map scale to 1:15840 or 4" = 1 mile.
- 2. Include the following information in the map heading information by entering it into the text fields in the map output dialog box in WisFIRS Public GIS:
 - a. Property name & compartment number.
 - b. Compartment acreage
 - c. Town, range, and section
 - d. Date the map was prepared
 - e. Enter your name in the "Forester" field

The scale and north arrow are system-generated on the WisFIRS GIS map that is created.

- 3. Mapping symbols, which can be found in Appendix A, may be used for all map features, including types of trails, monumented corners, etc. In some instances, GIS technologies in WisFIRS preclude adhering to these guidelines exactly and those exceptions are permissible.
- 4. Compartment boundaries should be the outermost continuous line on the map.
- 5. Stand numbers should be properly prefixed in order to easily identify stands that may have special land management practices.

Office Work (Non-GIS) After Field Examination

- 1. Tabular information should be entered into WisFIRS prior to making GIS map changes.
- 2. Summarize the Stand Exam Tally information to provide for easy entry into the WisFIRS application.

Transfer the data from the Stand Examination Tally to the Stand Detail page in WisFIRS. Enter a rough estimate for the acreage. When the stands are digitized in the WisFIRS Public GIS, the acreage is calculated based on the stand shape and the tabular record is updated with the total acreage amount for that stand. It is recommended that each individual forester enter their own data. For properties electing to have one person responsible for data entry, the Stand Exam Data sheet (2400-026) should be used to summarize the Stand Exam Tally for the data entry person.

Office Work (GIS) After Field Examination

Stands: Using WisFIRS Public GIS without ArcMap (normal Web-based WisFIRS GIS)

- 1. Access WisFIRS Public GIS through WisFIRS tabular application
- 2. Digitize stand boundary lines
- 3. Enter the appropriate attributes for each stand drawn. The stand data record must exist in the WisFIRS tabular database prior to digitizing the stand shape in the WisFIRS Public GIS.

Changes to the stand boundary lines will be seen by the user immediately after an edit occurs. Stand boundary changes that coincide with a compartment boundary will not be reflected in the compartment GIS layer until the next day. The compartment GIS layer is re-created based on the stand boundary lines through a nightly system process.

Stands: Using ArcMap with the ArcView Optional Recon (ACORN) tool in conjunction with the WisFIRS Public GIS

ACORN is an ArcMap extension that allows the selecting, coding, and uploading of shapes from the desktop computer to the WisFIRS Public Land GIS web application. ACORN will also unzip, and add to an ArcMap document (.mxd file), selected shapes from the four WisFIRS STAGE layers that have been exported from the WisFIRS application.

To update WisFIRS Public GIS using ArcMap and ACORN, refer to the online help accessible through the applications.

Completing WisFIRS Stand Detail Page or Stand Exam Data Sheet (Form 2400-026)

Listed below are the items of information to be recorded on the Stand Detail page – WisFIRS and the Stand Examination Data Sheet (Form 2400-026 – instructions and example are found in Appendix B). A reference guide of WisFIRS codes can be found in Appendices F and G.

<u>Required Fields</u>- Fields that must be filled in to update or add a stand.

- Stand Type
- Compartment
- Stand Number
- Acres

- Exam date SI and BA measured
- Primary Type (Cover, Size, Density)
- Invasive Level (Present, Not Present, Not Evaluated)
- Management Objective (Primary)

Conditionally Required Fields

- Year of Origin (for even-aged forest types)
- Total Height (for even-aged forest types)
- Mean Stand Diameter (for forested types)
- Site Index Species (for even-aged forest types
- Site Index (for even-aged forest types)
- Total Basal Area per acre (for forested types if poles or sawtimber)
- Total Volume Cords per acre (for forested types if poles or sawtimber)
- Total Volume BF per acre (for forested types if poles or sawtimber)
- Species information (for forested types, listing the first major tree species and its associated basal area and volume
- information is required. Additional tree species should be listed (up to four total) for stands with mixed composition.
- 1st Invasive Species (Type, Density, Acres when invasive level is "present")

Forest Metrix Data Load

Forest Metrix Pro allows you to load data from the program directly into WisFIRs stand detail page by importing a .json file. Follow the steps below.

- 1. In Forest Metrix Pro, after running Analyze Stand for each stand, select the Stands Tab and select the WisFIRS Public button (lower left).
- 2. You will see the cruise information that FM Pro auto-populated. Fill in any of the other information if you desire (you can always enter the information in WisFIRS if you don't want to do so here)
- 3. You must complete Steps 2 and 3 for each stand in the cruise.
- 4. Once all Stands are complete, you can select the Export Json in the upper right of the WisFIRS Public page in FM Pro, or select the Home button and then select Export. On the Export page there's a JSON button in upper left under the WI Custom Exports. The JSON file will export to the mobile device.
- 5. Connect mobile device to computer and transfer JSON file to computer through iTunes.
- 6. In WisFIRS tabular application while in the Recon, Stands page, you'll see the Forest Metrix Data Load as the first section under Stand Detail. Click on Browse and navigate to where you saved the file in Step 6. Then click on Load.
- 7. Complete Step 7 for each stand in the cruise.

Property Heading Information

Property description, property type, and property code will appear automatically at the top of each Stand Detail page.

Note: For new Recon, a property code will be needed. Properties can be found utilizing the search function within the Properties tab within WisFIRS. If no code exists, contact the County Forest & Public Lands Specialist.

Stand Heading Information

Stand Type

Stand type will be Forested (FH-Forested) or Non-Forested (NFH- Non-Forested). By definition, a forested stand type is stocked with 10% or more commercial tree species.

Compartment Number

Compartment number will appear automatically based upon your previous selection in the Stand Search or Property page in WisFIRS. A compartment is a subdivision of a property, with easily defined physical boundaries such as rivers, lakes and roads. Compartments should be logical, efficient management units, considering access and other related attributes.

Stand Prefix(es)

Record one to four stand prefixes in the spaces provided. Stand number prefixes are given special recognition. Example: Stand 3 is a red pine plantation in an aesthetic zone. The stand should be numbered as follows: <u>A P 3</u>. Any prefix code may be written first. Stands identified in the preceding manner may be singled out for either omissions or special consideration in scheduling and planning. Stands with the prefixes R, Y, and Z are removed from planning. For a listing of prefixes and their intended use refer to Appendix C or the Online Help section of WisFIRS.

Stand Number

A stand is any community group of plants (grass, shrubs, trees, etc.), relatively uniform in composition, with a common management objective and silvicultural prescription and of sufficient acreage to warrant separate management. Sufficient acreage can be found starting at 2 acres and can be variable based on land base size, objectives, and complexity. Keeping stand acreage sufficient is best achieved by assuring that small stands created during management activity can be added to another stand as a multi-part stand, or retained in the existing stand (e.g. Riparian Management Zones, Green Tree Retention).

Record stand number in space provided. New stands are created using the Create New Stand button in the Stand Search screen or copying existing stand attributes to a new stand within the copied stand detail page. Copying stands can be used to retain attributes of a stand that is partially treated.

The Stand Search screen displays a list of all the existing stands in a compartment. Give <u>each</u> stand a number, including lakes, road zones, etc. Choose a stand number that is not currently in use, while also attempting to keep numbers sequential. Fill in stand number gaps prior to adding a new stand number to the end of the list. Combine similar cover types into multi-part stands when they are similar in composition, identical in management objectives, and are close enough in proximity to receive uniform treatment at one point in time. The use of multi-part stands should be encouraged when the preceding conditions are met. In addition, multi-part stands can be used to combine non-forested stand pieces into a larger stand with one set of attributes.

There currently is not a standardized policy from the Division of Fish, Wildlife and Parks (FWP) concerning the numbering convention for non-forested stands. Many are choosing to begin at a high number such as 500 and go consecutively up from there. Until the adoption of a formal policy, Forestry and FWP staff should consult together at the local level to determine what works and best meets their needs.

Acres

- 1. Enter acreage. When the stands are digitized in the WisFIRS Public GIS, the acreage is calculated based on the stand shape and the tabular record is updated with the total acreage amount for that stand. Initially an estimate of the acreage can be entered.
- 2. Acres <u>must be</u> in whole numbers.

Exam Date - Site Index and B.A. Measured

Record the date the site index and basal area were measured for each stand. This date should not be changed for simple acreage changes when no field visit is conducted. Stand Attribute Information

Primary Type

Record the primary type for each stand. For forest types include cover type, size class, and density code. A list of cover type classifications and the procedure for selecting appropriate type, size class, and density code can be found in Appendix D.

Secondary Type

Record a secondary type for each stand if one is present. For forest types include cover type, size class, and density code. A secondary cover type typically provides additional clarity as to the species mix and structure present in a stand.

Understory Type

Record an understory type for each stand if one is present. For forest types include cover type, size class, and density code. An understory cover type typically provides additional clarity as to the species mix and structure present in a stand and may provide insight on future stand conditions.

Habitat Type

- 1. Refer to the *Field Guide Habitat Classification System*.
- 2. Determine the Habitat Classification which best describes the majority of the stand. This should be done on a random, visual sample basis.
- 3. Enter the proper habitat type code.

A listing of habitat codes can be found in Appendix E

Year of Origin of Primary Timber Type

Types managed on an even-aged basis. This is required for all stands except BH, C, H, MC, MD, NH, and SH. It is optional for these types but should be recorded if the stand has a representative age class.

- 1. Take a minimum of three borings per stand to determine age, unless the stand age is known (ex. plantations).
- 2. Bore only dominant and co-dominant trees of the primary timber type.

Total Height of Primary Timber Type

Types managed on an even-aged basis. This is required for all stands except BH, C, H, MC, MD, NH, and SH. It is optional for these types but should be recorded if the stand has a representative age class.

- 1. Take heights of dominant and co-dominant trees. Height must be in whole numbers.
- 2. Measure a minimum of three representative trees for average height. Several tree measurements may be necessary if heights vary considerably.
- 3. Heights may vary between trees on ridge, side hill, and valley bottom. Avoid sampling extreme conditions.

Mean Stand Diameter

1. The quadratic mean diameter, which represents the diameter of the tree of average basal area. If the stand is a pole or sawtimber stand this measurement should only consider stems > 5 inches dbh. Enter the individual tree diameters into the calculator on the WisFIRS screen. The quadratic mean stand diameter will automatically calculate.

Site Index

A measure of forest site quality based on the height of dominant trees at 50 years of age. Record for types managed on an even-aged basis. This is required for all stands except BH, C, H, MC, MD, NH, and SH. It is optional for these types but should be recorded if the stand has a representative age class.

- Once the "site index species" is selected the site index will automatically be calculated and entered in WisFIRS.
 *In some instances, the curves may not be available in the database. Consult the Silviculture Handbook (2431.5). In certain circumstances (e.g. juvenile pine stands where 5-year intercept method may be used) it may be necessary to override the automatic calculation.
- 2. Use the "5-year intercept method" for red and white pine less than 25 feet tall.
- 3. Determine site index of stands that are too young to take measurements by using the site index of similar nearby stands or timber sale records, or previous recon data for that stand.
- 4. In a newly established regeneration stand with no records or nearby site index indicators, make your best estimate.
- 5. Extrapolate to determine site indexes beyond the normal curves.

6. Record species SI was taken from. Use the major species present, or in cases of conversion, the major species in the future forest type.

<u>Accepted Site Index Species Codes</u> All valid species types are eligible. Those with site index curves in the database listed below:

A – Aspen	BE – Beech	FB – Balsam Fir	PR – Pine, Red
AB – Ash, Black	BW – Birch, White	MH – Maple, Sugar	PW – Pine, White
AQ – Aspen, quaking	BY – Birch, Yellow	MR – Maple, Red	SB – Spruce, Black
AW – Ash, White	C – Cedar, White	OR – Oak, Red	SW – Spruce, White
AY – Aspen, big-toothed	CH – Cherry, Black	OW – Oak, White	T – Tamarack
BA – Basswood	EA – Elm, American	PJ – Pine Jack	

Number of Crop Trees/Acre

Record number of crop trees per acre. Crop trees should be well-formed, vigorous dominate/co-dominate trees of desirable species able to be maintained until rotation or harvest entry. The classification of a crop tree will be highly dependent upon site potential and management objectives at the local level.

% Acceptable Growing Stock

Record percentage of acceptable growing stock. Information can be found within the Silvicultural Handbook and will need to be based upon local factors influencing tree quality and future potential.

% Unacceptable Growing Stock

Record percentage of unacceptable growing stock. Information can be found within the Silvicultural Handbook and will need to be based upon local factors influencing tree quality and future potential.

Total Basal Area per acre

Measurement of the cross-sectional area of all trees on an acre, taken at 4-1/2 feet above the ground and expressed in square feet.

- 1. Record the average basal area per acre of all trees 5" dbh and larger.
- 2. In stands converting from saplings to poles but typed as a pole-size stand, the basal area stocking should include all dominants and co-dominants in the stand even if some of them are less than 5 inches DBH.
- 3. Stands typed as seedling and sapling stands may not have any stems > 5 inches. In those cases use the density code based on the number of seedlings and saplings per acre.

Total Volume Cords per acre

- 1. Record the total net cordwood volume per acre for all species combined. Use whole numbers only.
- 2. Volumes recorded here are intended to be approximate. Precise volumes will be determined when the stands are cruised for timber sales.

Total Volume in BF per acre

- 1. Record the total net board foot volume per acre for all species combined. Use whole numbers only and write out all digits for total board feet. <u>DO NOT USE MBF.</u>
- 2. Volumes recorded here are intended to be approximate. Precise volumes will be determined when the stands are cruised for timber sales.

Last Harvest Treatment Year

This will auto-populate in WisFIRS.

Last Cultural Treatment Year

This will auto-populate in WisFIRS.

Species Information

- 1. Record up to four major forest species present in the stand, including type, basal area (\geq 5" dbh) and volume for that species. Enter species codes from the list above under "Accepted Site Index Species Codes".
- 2. A minimum of one major species must be entered for all forested stands. In mixed stands, record the species basal area, and volume for the four most common species.
- 3. Species information indicates relative abundance of individual species which is important for forest health and harvest potential considerations.

Invasive Level

- 1. Based on simple visual observations, record the invasive species presence and the level of evaluation.
- 2. <u>If "Present", the invasive species and its approximate density within the stand are to be recorded under "Invasive Species and Density" (shown below)</u>

Code	Level of Evaluation
30	Present
31	Not present
32	Not evaluated – not trained
33	Not evaluated – off season

Invasive Species and Density

- 1. If invasive species are present, record species information, approximate density and estimated area of coverage within stand. This is based on field observations on and between plots. This is a three-parted entry.
- 2. Record up to 4 species, their respective ground cover densities, and approximate acres.

Soil Types

Stand soil information will now be auto-populated from the stand spatial data in WisFIRS Public GIS. Self-populated information will include: soil type, slope, and acres/percentage of map unit. Stand shape must be correctly delineated in Public GIS to have accurate information.

Browse Level

Use visual indicators to define browse level within a stand.

Management Objectives (Primary and Secondary)

- 1. For Department lands, forestry staff are responsible for forested cover types, and habitat managers are responsible for non-forested cover types. For County Forest lands, consultation with the Wildlife Biologist and County Forest Liaison can help with the development of management objectives. Record a management objective for each stand, including non-forested types. The objective should reflect moving the stand toward future desired conditions. For a listing of management codes refer to Appendix G or the dropdowns available within WisFIRS.
- 2. In selecting the proper code for timber types managed as even-aged, indicate whether the stand will continue to be managed for the existing type in the <u>next rotation</u>, or if forced or natural conversion is planned.

<u>Planned Treatments</u> (initial stand record must exist in order to enter planned treatments)

Planned Treatments help maintain the health and quality of a stand whether forested or non-forested and can be used in the conversion of a stand from forested to non-forested, or vice-versa. Planned Treatments can assist in meeting goals for the properties where a stand is located. Additionally, planned treatments can be utilized to schedule and track practices not connected to habitat manipulation activities. For a complete list of planned treatments see Appendix H.

- 1. Determine management objective(s) based on information found in the Silviculture and Forest Aesthetics Handbook (2431.5). Record planned treatments for each stand, whether commercial or non-commercial, when applicable. Select the "Create" button in the Planned Treatment box to enter a new treatment. For updates, select the "Edit" icon next to the treatment you wish to change.
- 2. Code the <u>next</u> prescription that needs to be undertaken under each treatment category.
- 3. More than one prescription may be coded, however only one treatment may be coded for each treatment type. After selecting a "treatment type", indicate the "treatment action". Lastly, record the recommended year to complete the practice.
- 4. Determining the correct year to perform silvicultural practices in a stand frequently requires a projection of basal

area growth.

Note: Adjusting the following list of average annual basal area growth rates to fit local conditions is often necessary to accurately project the year of treatment.

<u>Timber Type</u>	Estimated Annual Average Basal Area Growth Per Acre
White and red pine	2.0 - 7.0 sq. ft.
Jack pine, balsam fir, spruce, and oak	3.0 sq. ft.
Northern hardwood	1.5 - 3.0 sq. ft.
Swamp hardwood	2.0 sq. ft.

Intermediate Treatments-Noncommercial

Intermediate Treatment–Non-Commercial is used to improve stand quality between harvest entries. It may apply to invasive species management, regeneration checks, survival checks, inter-planting, and/or cutting/girdling. A treatment can be further classified as hand, herbicide, fire, or mechanical.

Intermediate Treatments-Commercial

Intermediate Treatment-Commercial is used to manage a stand when marketable product is removed and sold. It may apply to a thinning prior to a regeneration harvest or an unscheduled entry to salvage damaged timber.

Habitat Management-Noncommercial

Habitat Management-Noncommercial is primarily used to monitor both natural and artificial stand regeneration. For artificially regenerated stands or stands with questionable regeneration, it is recommended that survival checks are done at years one, three, and five to ensure planting/seedling success.

Current Harvest Information

The tract number (for draft and established sales) and sale number (for sold sales) entered on the Timber Sale Notice and Cutting Report (Form 2460-001) will automatically be added here (until the sale is closed out and put into the completed treatment section). When a stand is added to a draft timber sale, it is removed from the treatment schedule (planning).

Remarks

Record any and all pertinent remarks for the stand, supplementing and clarifying the preceding items. Individual remarks have a character limit, but the number of remarks will be unlimited and will stay on the file until removed by the field forester.

User Defined Fields

This section provides up to ten opportunities to track unique attributes specific to a set of stands that is not otherwise captured by prefix codes or remarks. The property manager or the county forest administrator, in consultation with the other professionals managing the property, should jointly agree on what, if any, additional stand information might be of value. User defined fields should be labeled and used the same for all stands on the property. (e.g. user defined field #1 might indicate all those stands within a focused Ruffed Grouse Management Unit). Future enhancements to WisFIRS will allow the data fields to remained named within an export with the data.

RECONNAISSANCE DATA UPDATING

A. General

1. <u>Importance of Recon Update</u>

Recon data is the most vital tool for land managers in planning management activities and in documenting the composition of the landscape. Obsolescence of recon data starts the day it is collected. To minimize obsolescence, recon data is updated on an ongoing basis as changes are observed or created. Accurate updating of recon data will be considered part of the normal daily routine of doing business.

2. <u>When to Update</u>

The following activities or situations may require the update of recon data.

- a. Timber sale establishment
- b. Timber sale close-out
- c. Cultural work
- d. Planting
- e. Errors in original data
- f. Catastrophic events (wind, fire)
- g. Insects
- h. Disease
- i. Acquisition or sale of land
- j. Habitat manipulation projects on fish and wildlife areas
- k. Establishment of special use areas or changes involving change of land management objective
- 1. Stand/Compartment data is older than 20 years (maximum). Note: Counties are exempted from this requirement for even aged timber types managed on 40+yr rotations without intermediate treatments.

3. <u>Timber Sales</u>

Recon must be less than a year old when used to establish a timber sale in WisFIRS. When only part of a stand is being treated in a timber sale, the stand must be split following the guidance below and updated in both tabular and GIS applications to correctly reflect acreage being treated prior to being placed in draft status.

Whenever a timber sale is closed, the data for all stands which have been affected by the timber sale must again be accurately updated so that the new post-sale stand conditions are accurately reflected and new treatments can be scheduled.

4. <u>Splitting/Combining Stands</u>

During the recon update process, stands may be split or combined as a result of management activities. When stands are divided, a new stand number and new data must be assigned to each new stand and a remnant will remain. When combining stands, the new stand can retain one of the original stand numbers, but must be updated to reflect new stand conditions. Leftover stand numbers must be deleted on the tabular side of WisFIRS.

5. <u>Record Keeping/Tracking Changes</u>

WisFIRS will automatically track recon update acres based on the stand exam date. WisFIRS Reports 114

(Forest Recon Status) and 115 (Forest Recon Accomplishment) will compile that information by property. Once the tabular updates have been made, if the geographic boundary is needed to be changed, updates must be made on the WisFIRS Public Lands GIS to correct the acreage in the tabular data. Recon accomplishments will be tracked on a property-wide basis. Individual tracking can be accomplished via user-defined fields in WisFIRS, located at the bottom of the Stand Detail page.

WisFIRS will also be able to track recon updates resulting from deferral of harvest treatments. Scheduled harvest treatments that, upon examination, are not silviculturally ready for treatment need to be updated and a new harvest date set by the forester. On county lands, acres of recon resulting from such deferrals during the schedule year of harvest may be credited to the harvest accomplishments for that year, if the harvest is rescheduled more than three years into the future.

Recon updates independent of treatment activities are typically focused on maintaining the currency of the recon database. Up-to-date recon is the most important aspect for sound management decisions and is discussed during forest certification audits. State lands and County Forests have a goal of updating all recon within a 20-year cycle. The frequency of the existing recon can easily be found through the stand search function of WisFIRS (RECON tab / Stands sub-menu). Sort by Exam Date to find stands with the oldest recon.

B. Workflow for Updating Data Using WisFIRS

WisFIRS is an integrated system that combines tabular data with geospatial data. Recon information must exist in WisFIRS Public Lands tabular application before a geospatial representation of the data can be entered into the WisFIRS Public Lands GIS mapping portal. The WisFIRS Public GIS cannot be accessed independently of the WisFIRS Tabular application. For new stands, a record must exist on tabular side prior to creating a geospatial shape. The GIS stand acreage is automatically calculated and entered into the tabular record. For detailed instructions on how to enter data into the WisFIRS Public Lands Tabular or WisFIRS Public Lands GIS mapping portal refer to the online help accessible from the applications.

1. WisFIRS Public Lands Recon Updates

- a. Upon completing field recon, update WisFIRS Tabular data by adding stands or copying, deleting or editing existing stands including Planned Treatments and Remarks. *Note: Refer to online help for editing assistance.*
 - i. Use Stand Exam Tally Sheet (Form 2400-32) to enter data or summarize the data on the Stand Exam Data Sheet (Form 2400-26) if a third party does the entry. Additionally, Forest Metrix data can be directly loaded into WisFIRS Tabular following instructions provided in Chapter 110.
 - ii. Run Compartment Summary Report (Report 110) to double check data entry.
- b. Adjust stand/compartment/WisFIRS management boundaries as needed.
- c. Remember to update or delete approximate polygons that may have been created to generate cruise points prior to field exam.
- d. Prior to updating Recon on a closed timber sale, finish the completed treatments portion as outlined in Chapter 120.

2. <u>WisFIRS Public Lands Planning</u>

Planning needs to be run and accepted annually on all properties in order to create a harvest schedule.

Only the Property Manager & Lead State Lands Forester or County Forest Administrator & DNR County Forest Liaison should run the planning schedule for a property. See Chapter 100 for additional details.

3. WisFIRS Public Lands Timber Sale Data Entry

Once established on the ground, and prior to advertising, the timber sale shall be entered into WisFIRS. Entering the sale information upon establishment will guarantee that sale accomplishments are tallied in a timely fashion.

Full details on how to enter timber sales in the Timber Sale database will be found in the Timber Sale Handbook (<u>HB 2461</u>).

4. Completing Treatments

See the complete treatment section of the WisFIRS Online Help for a full description.

The Completed treatment procedure will largely depend on the type of treatment, but also when the treatment was scheduled and completed. Variation in the process is highlighted in this section.

a. <u>Treatments Associated with a Timber Sale</u>

Prior to a treatment being implemented in the field it is assumed the recon is updated (e.g. presentday recon for timber sales must be updated in WisFIRS and reflected on the 2460-1 as part of the sale establishment process). Once the treatment has been completed in the field the record of that activity needs to be stored. In order to record the pretreatment conditions in the completed treatment snapshot it is important to complete that treatment in WisFIRS *before* doing the postsale Recon update.

The process for completing treatments associated with a timber sale will depend on when the treatment was assigned to the timber sale. If the treatment was assigned prior to February 8th, 2018, the process will be different than treatments assigned after.

b. <u>Timber Sale Treatments Assigned Prior to 2/8/2018</u>

When a Scheduled Treatment has been completed WisFIRS data must be updated. A scheduled treatment can be updated to a completed treatment from the planned treatments section of the recon stand detail page *OR* scheduled treatment page of the WisFIRS public lands tabular application.

The process for completing the treatment using either page is the same and goes as follows:

To record a completed treatment, select the "Complete Treatment" button in the Planned Treatment box. Check the box and select the Tract number and Tract Year if the treatment is a Timber Sale. Record the treatment type, treatment purpose, and the treatment year. If you wish to use the current GIS stand boundary as the GIS completed treatment boundary, check the box and then select "Complete Treatment" in the Completed Treatment detail box. This information, a snapshot of the stand attributes, and the GIS shape if indicated, will be recorded as a historical record for the site. *After* the completed treatment has been created & stored the post-treatment Recon for that stand can be updated.

Additional treatments can be added to an existing timber sale at any time by either creating a new

Public Forest Lands Handbook

stand or adding an existing stand in the Recon Information section of the Timber Sale Notice and Reports tab. This applies to sales established prior to 2/8/2018. Unplanned treatments must be created in the stand details page using the same process as above prior to adding them to a Timber Sale. Completing the treatments will also follow the same guidance as all other treatments added prior to 2/8/2018.

c. <u>Timber Sale Treatments Assigned After 2/8/2018</u>

If the Timber Sale stand treatment is initiated after 2/8/2018, the treatment is completed in the Timber Sales tab under the sale that the stand is associated with. Scroll down the Notice and Report tab to Recon Information and select "Complete Treatments". A box for the associated stands will appear with each stand associated with the sale. Select which stands to complete, enter Actual Cut Acres and the date treatment was completed. You may also select the box titled "Create CT GIS Shape", which will result in WisFIRS creating a snapshot of that stand, associating the treatment with the boundary. Completing the treatments will unlock the WisFIRS stand details page and you can then begin to enter stand level updates.

Additional treatments can be added to an existing timber sale at any time by creating a new stand or adding an existing stand in the Recon Information section of the Timber Sale Notice and Reports tab. Completing these treatments will be accomplished by following the same process as all other treatments assigned after 2/8/2018.

d. Other Treatments

To record a completed treatment, select the "Complete Treatment" button in the Planned Treatment box. Record the treatment type, treatment purpose, and the treatment year. Treatments not assigned to a timber sale can be added and completed at any time. Examples of non-timber treatments may include Site Preparation, Planting, Direct Seeding, Regeneration Monitoring, Timber Stand Improvement, and many others.

e. Document Upload

WisFIRS allows users the ability to upload documents associated with a completed treatment. This function can be utilized to incorporate electronic documents into the database that are specifically tied to an individual completed treatment. Examples could include regen stocking surveys, tree planting specs, island examination forms, plantation/cultural report forms, etc. This record is not tied to an individual stand record and is only searchable within the completed treatments.

FOREST COMPARTMENT RECORDS

The WisFIRS database stores all compartment data electronically, however certain information may still be important to retain in hard copy paper records.

Forest Compartment Folders

Items below are generally housed within a compartment folder. It is important to remember that any updates to the electronic database would also require changes to be made within the compartment folders to maintain an accurate record.

- 1. Report 110 -Stand Information by Compartment (in the Reports Tab in WisFIRS) that summarizes all the stand data for the compartment. Some properties may wish to retain the Individual Stand Examination Data Sheets (Form 2400-026).
- 2. Compartment map. It is critical that all forest compartment reconnaissance data be maintained in WisFIRS Public Lands GIS and updated as the tabular stand data changes. Compartment maps can be printed using the Map Output tool in WisFIRS GIS. Detailed information on what is to be included on the compartment map can be found in Chapter 120 (120-11).
- 3. Additional resource management information

The following resource management information should be kept as either an acetate overlay, GIS layer, or hard copy map.

a. Wildlife management activities including:

i. Designated wildlife openings - These are openings which have been <u>agreed</u> upon by the County Forest Administrator/Property Manager, Forester and Wildlife Biologist in accordance with M.C. <u>2112</u>.

- ii. Trails and roads These are trails and roads that the state and/or county have expended funds upon in the past and you intend to maintain in the future. Trail length can be recorded on a map to facilitate project planning. This information is commonly maintained through a GIS layer in the WisFIRS GIS application (ancillary line layer).
- b. Archeological and Historical Information that is determined through archeological and historical database checks. Additional specific information may be suitable as well. <u>The information</u> identified here is for internal use only and is not subject to the Open Records Law.
- c. Timber sale activities

This map or GIS layer is intended to be a quick cross-reference of past timber sale activity with more detailed information filed within the appropriate timber sale file.

d. Prescribed burn activities for silviculture or habitat management

Plantation (Regeneration) and Cultural Report

All information relative to plantations, natural regeneration, and/or cultural practices will be recorded on Form 2400-79, Plantation and Cultural Report. These reports will be filed by compartment and stand number. An example can be viewed in Appendix K.

1. Description

All available information should be recorded if known. A map of the stand can be included and will provide additional information as to location.

2. <u>Plantation & Seeding Data</u>

The plantation number may be determined by combining the compartment number and stand number for a quick reference. For example, a plantation in compartment 89, stand P5, would have a plantation number of 89-P5. Local tracking mechanisms may however use a different procedure or tracking number.

Staff should record the average overall percent survival of the entire plantation. Survival checks should be completed during the first fall following spring planting and again after the third growing season. Record the year the survival checks were completed. Under remarks, indicate possible reasons for poor survival (e.g. stock conditions, stock type, weather and/or site condition during planting and during the first growing season).

Plantations should be checked during the fifth and tenth year after planting to determine cultural needs and/or possible pest control. Record the practice accomplished and year completed. Include release, deer browse assessment, gopher control, inspect suppression, etc.

3. <u>Plantation Thinnings</u>

Record the acres cut, year the timber sale is closed, volume/acre removed (indicate whether volume is in cords, tons or MBF), financial returns in dollars/acre, and residual basal area for each thinning completed in the plantation. Under the remarks column, provide information relative to stand condition, average dbh, average number of sticks/tree, utilization, thinning techniques (every other row, selectively marked, every fourth row), and any other relevant information.

4. <u>Plantation and/or Cultural Information</u>

This information must be recorded for <u>all</u> practices regardless of who completed the work (e.g. county personnel <u>and</u> contract work). Record the data for each practice completed in the stand. Indicate areas treated and method implemented. Costs (e.g. labor, travel) should be reported <u>per acre</u>. Indicate the date, and if appropriate, the funding source and project number.

Remarks should include the following information: planting weather conditions, planting stock condition, type of stock packaging, number of trees, species and age of stock used in replanting. If chemicals were used in release and/or pest suppression, include rate of application, success of kill, weather conditions, droplet size. For other treatments, information may include pruning height, basal area removed, average diameter removed for intermediate treatments and aspen maintenance work, and work completed by county personnel vs. contract.

Definitions

The following definitions will apply when recording cultural practices, as well as when developing work plan goals on a property:

- 1. Site Prep (record under the heading "Site Prep")
 - a. Discing
 - b. Rotavator
 - c. Braacke Scarification
 - d. Bulldozer scarification

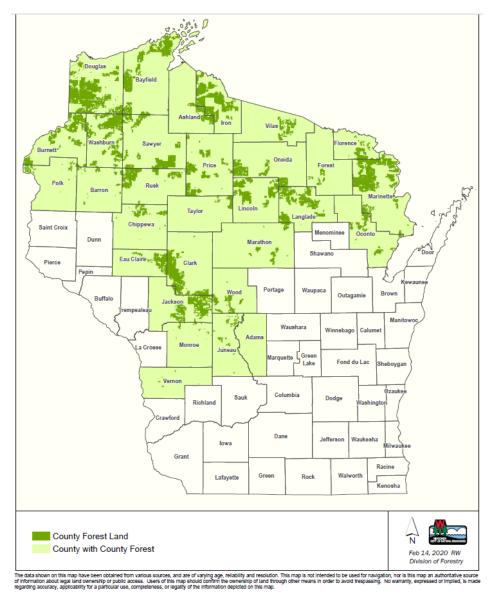
- e. Burning for planting purposesf. Herbicide application prior to planting
- 2. Intermediate treatments (Record <u>separately</u> under the appropriate heading).
 - a. Release specify hand or aerial
 - b. Pruning
 - c. Non-Commercial thinning

COUNTY FOREST LANDS

This chapter was developed to assist both the Department and county forest staff on issues relating to the cooperative partnership and management of the county forest lands. Statutory language covering County Forests is found in s. <u>28.10 and 28.11</u>, Wis. Stats.

The following Counties have lands enrolled under the County Forest Law:

Adams	Chippewa	Forest	Lincoln	Oneida	Taylor
Ashland	Clark	Iron	Marathon	Polk	Vernon
Barron	Douglas	Jackson	Marinette	Price	Vilas
Bayfield	Eau Claire	Juneau	Monroe	Rusk	Washburn
Burnett	Florence	Langlade	Oconto	Sawyer	Wood



The acreages and Administrators for each of the 30 County Forests can be found on the webpage of the Wisconsin County Forests Association (WCFA) at <u>http://www.wisconsincountyforests.com</u>.

DEPARTMENT LIAISONS TO COUNTY FORESTS

Section <u>28.11</u>, Wis. Stats. requires that the Department provide technical assistance to Counties having lands entered in the County Forest Law program. Each of the thirty Counties involved provides for local program administration through assignments of that responsibility to an appropriate committee of its Board of Supervisors. Such committees employ the services of a County Forest Administrators who oversees day-to-day operations of the forest.

Each County Forest has an assigned DNR County Forest Liaison Forester who coordinates the partnership between the Department and the County Forest. Department personnel serving as the Liaison Forester for each County Forest are listed in the DNR Personnel Directory.

The responsibilities of the Liaison Forester are:

- 1. Attending all meetings of the County Forest Committee.
- 2. Informing immediate supervisor of significant County Forest matters. Liaison Foresters and supervisors share responsibility of informing other Department staff of matters affecting their programs.
- 3. Ensuring that appropriate Department technical assistance is provided for County Forest administration. The type and minimum hours of technical assistance are determined every five years by completion of the County Forest Time Standards Worksheet.
- 4. Coordinating County Forest administration contacts from other Department personnel.
- 5. Tracking County Forest accomplishments of contributing Foresters and report to the Forestry Team Leader as necessary.

The Department is responsible for selection of Liaison Foresters and for keeping the DNR County Forest & Public Lands Specialist informed of any changes in Liaison Forester assignments. In cases of a position vacancy, Team or Area Leaders assign an interim Liaison to be responsible for ensuring Liaison Forester duties and responsibilities are met for a particular County.

Position Summary

The Department Liaison Forester is responsible for coordinating the state/County partnership from the state standpoint by administering the County Forest Law (s. <u>28.11</u>, Wis. Stats.). The Liaison Forester is expected to have a high level of technical expertise and function as the Department's primary source for technical assistance and provide information transfer to County Forest personnel. The Liaison Forester must fully understand the Department's overall capabilities and activities and maintain a good working knowledge of all facets of their County Forest program.

In instances where the technical assistance is beyond the scope of the position, the Liaison Forester will determine the appropriate source and obtain the necessary assistance. The Liaison Forester will coordinate all County/Department contacts and cooperate with other programs to achieve integrated management of the resources and County Forest staff to enhance overall efficiency of the County Forest program.

The Liaison Forester will be responsible for all activities described in the position description but may delegate onthe-ground data collection and technical assistance to others with supervisory approval. In cases where delegation is necessary due to other workload commitments, the Liaison Forester must maintain good communications, to determine that objectives are being met and that consistent technical assistance is being provided. Operations that involve new methods or untested policies and procedures will require considerably more field time. The Liaison should make every effort to directly participate in field operations of this type. Except under extreme circumstances, no activity should be totally delegated by the Liaison Forester.

Goals and Worker Activities

The following are the goals consistent with the Liaison Forester's position description needed to accomplish the Department's statutory responsibilities.

- A. Administer the County Forest Law
 - 1. <u>Assist in the preparation of the annual plan and the County Forest 15 Year Comprehensive Land</u> <u>Use Plan (hereafter referred to as the County Forest Plan)</u>

Per s. <u>28.11(5)(a)</u>, Wis. Stats, Counties must develop and maintain the County Forest Plan. The Liaison Forester assists the County Forest Administrators in determining annual allowable timber harvests, recreational developments, fish and wildlife management activities, endangered resource protection and management, silvicultural operations, and operating policies and procedures. Participating in these activities will assure compliance of the County Forest Law, identify the need for changes, and represent the statewide public interest.

2. Participate in establishing annual goals for timber sale establishment

Per s. <u>28.11(5)(a) and (b)</u>, Wis. Stats., the Liaison Forester assists the County Forestry committee in developing an annual plan of work and budget based upon the County Forest Plan. These goals shall include timber sales to be established by location and other multiple use projects where appropriate.

3. Help formulate, investigate, and process applications for lands entered or withdrawn

Per s. 28.11(4)(a) and (11)(a), Wis. Stats., the Liaison Forester assists in preparation of necessary documents for entry and withdrawal. During the entry/withdrawal process, the Liaison Forester maintains communications between the Department and County Forest staff for the purpose of ascertaining the status of the entry/withdrawal. Participating in the entry and withdrawal process ensures the Liaison is able to assure compliance of the County Forest Law, interface with other affected Department programs, and represent the statewide public interest. Specific details can be found within this handbook under County Forest Withdrawal and Entry of County Forest Lands in Chapter 250.

4. Participate in development of project and variable acreage share loan requests

Per s. <u>28.11(8)(b)1 and 2</u>., Wis. Stats., the Liaison Forester may assist the County Forest Administrators in preparing requests for variable acreage and project loans. The Liaison Forester also provides the Department with the information necessary to determine if project loans are feasible, desirable, and consistent with the County Forest Plan. By participating in development of loan requests, the Liaison Forester is able to assure compliance of the County Forest Law, provide technical assistance, and represent the statewide public interest.

5. <u>Review and approve all timber sale cutting notices/reports</u>

Per s. 28.11(6)(b)3. and 4., Wis. Stats., a Department representative, typically the Liaison Forester, is responsible for reviewing and approving all timber sale cutting notices (Form 2460-001). The Liaison Forester will maintain knowledge of the resource and timber sale establishment procedures as outlined below under "Worker Activity B".

By reviewing and approving cutting notices, the Liaison Forester assures compliance of the County Forest Law, assesses applicability of silvicultural prescriptions, best management practices, and forest certification standards (if applicable), identifies need for technical assistance

and training, provides for interface with other affected Department programs, and represents the statewide public interest.

6. Maintain regular personal contacts with County Forest Administrators

The Liaison Forester must have regular personal contacts with the County Forest Administrators in order to maintain and enhance an open cooperative relationship. A minimum suggested level of contact is four per month. More frequent personal contacts are encouraged and may be needed during certain periods of high activity.

7. Attend all County Forestry committee meetings and any County Board meetings as requested

The Liaison Forester is responsible for maintaining an open cooperative relationship with the County Forestry Committee members and other County Board Supervisors. Attending County meetings fosters this relationship and allows an opportunity for the Liaison Forester to advise, provide technical assistance, ensure compliance with the County Forest Law, and serve as a point of contact to arrange for Department or other specialist expertise as needed.

B. <u>Provide technical forestry assistance as needed</u>

1. <u>Participate in field operations in conjunction with County Forest personnel as required to maintain</u> <u>a first-hand understanding of resource needs and opportunities</u>

The Liaison Forester needs to be directly involved with all field operations on the County Forest in order to provide technical assistance to meet resource needs and to determine technology transfer needs. By maintaining familiarity with local timber types and resource needs the Liaison Forester will be better able to conduct data analysis and identify the need for specialist expertise. To be most effective and foster the County-Department partnership, the Liaison Forester should work with County and other Department personnel on as many projects as possible, rather than working independently to complete a portion of the work plan.

a. <u>Cruise and mark timber, establish timber sales boundary, and prepare maps and appraisals, all in accordance with the County and state procedures</u>

The Liaison Forester will cruise and mark timber, establish timber sale boundaries, and prepare maps and appraisals. Establishment of property boundary lines shall be the responsibility of the County. This will allow the Liaison Forester to maintain familiarity with resource and establishment procedures and effectively monitor s. 28.11(6)(a), Wis. Stats., relative to qualifications of personnel involved with sale establishment. It will also provide the Liaison Forester with the ability to assess applicability of silvicultural prescriptions, best management practices, and forest certification standards (if applicable), provide technical assistance, and identify needs for specialist expertise.

b. <u>Conduct timber sale inspections</u>

The Liaison Forester will conduct a minimum of one on-site timber sale inspection per sale, typically at closing, in order to ensure compliance with the cutting notice per <u>s.</u> 28.11(6)(b)(3) Wis. Stats., and the County Forest Plan.

c. Administer timber sales in accordance with County and state procedures

The Liaison Forester will assist in timber sale administration in conjunction with County Forest personnel. By participating in sale administration, the Liaison Forester will be able to ensure compliance with s. 28.11(6)(b)4. and (9)(a), Wis. Stats., and monitor

compliance with the County Forest Plan. Participating in timber sale administration will provide the Liaison Forester with information needed to evaluate silvicultural prescriptions, and the need for technical assistance and technology transfer. The Liaison Forester will participate in scaling as needed to ensure compliance with s. 28.11, Wis. Stats.

d. <u>Conduct final silvicultural inspections in conjunction with County Forest personnel</u>

The Liaison Forester will conduct final silvicultural inspections in conjunction with County personnel. This will enable the Liaison Forester to monitor compliance with the County Forest Plan and provide the required information necessary to evaluate the silvicultural prescriptions.

e. <u>Identify sites and make recommendations for cultural and regeneration work through use</u> of compartment reconnaissance and field examinations

The Liaison Forester will participate in identifying sites and making recommendations for cultural and regeneration work through use of compartment reconnaissance and field examinations. The information directly received from field operations will allow the Liaison Forester to monitor compliance with the County Forest Plan and interface with other affected Department programs (e.g. wildlife, endangered resources, state nurseries).

f. Mark boundaries or otherwise designate areas needing the cultural and regeneration work

The Liaison Forester will assist County personnel with designation of sites needing cultural and regeneration work. This will allow the Liaison Forester to insure implementation of the County Forest Plan.

2. <u>Coordinate implementation and application of new technologies in cultural and regeneration work</u>

The Liaison Forester will assist Counties with implementation and application of new technologies in cultural and regeneration work. By participating in field operations for cultural and regeneration work, the Liaison Forester is able to evaluate silvicultural prescriptions, evaluate nursery stock suitability, and identify possible needs for technical assistance and technology transfer.

3. <u>Develop</u>, refine and evaluate existing data as necessary to identify trends, potential problems, and <u>opportunities in management of the County Forest</u>

The Liaison Forester will continually evaluate new and existing procedures and trends to determine what assistance may best meet the County's needs.

4. <u>Continue development and maintenance of compartment reconnaissance on the County Forest</u> including data collection and analysis, records, updating, management information systems, (e.g. <u>GIS and WisFIRS)</u>

The Liaison Forester and County Forest staff share the responsibility for developing and maintaining compartment reconnaissance on the County Forest, including collecting and analyzing compartment reconnaissance field data, maintaining compartment reconnaissance office records, and routing updated information.

The Liaison Forester will continuously assess whether the recon system meets County needs, maintain familiarity with local timber types and identify need for information transfer. The Liaison Forester will effectively participate in data analysis, monitor compliance with the County

Forest Plan, and provide technical assistance.

5. <u>Identify sites and make recommendations for endangered resource fish and wildlife management</u> <u>and protection</u>

The Liaison Forester will participate with assistance from the Bureau of Natural Heritage Conservation and local fish and wildlife staff in providing resource information to the County Administrators, including identifying sites and making management recommendations for rare, threatened, endangered plants, animals and communities, and specific fish and wildlife management projects.

- C. <u>Function as a catalyst for information transfer</u>
 - 1. <u>Maintain first-hand familiarity with County Forest resources and management procedures in order</u> to effectively match Department resources with the County Forest needs

The Liaison Forester maintains familiarity with the County Forest through participation in County Forest operations and through constant communication with the County Forest Administrators. The Liaison Forester is also responsible for staying current with other Department programs such as wildlife, endangered resources, fish, parks, mining, community aid programs, snowmobile funding, etc.

By discussing County Forest needs with personnel from other programs, the Liaison Forester will be better able to ascertain what resources will best meet County needs. This will allow the Liaison Forester to effectively serve as a point of contact to arrange for specialist expertise as needed and to represent the statewide public interest.

2. <u>Maintain involvement on technical committees and maintain currency with state-of-the-art forestry</u> <u>technology, capitalize on advances, experiences, training opportunities, and potential solutions that</u> <u>relate to individual County needs</u>

The Liaison Forester will maintain a high degree of silvicultural expertise in order to function as the primary source for technical assistance. The Liaison Forester should attend technical sessions, keep up to date on current literature, and discuss silvicultural practices with Department specialists. Information obtained should be shared on a timely basis with County Forest staff. The Liaison Forester is responsible for keeping the County Forest staff informed of Department-sponsored training opportunities and inviting them to attend.

By maintaining a familiarity with all Department resources, the Liaison Forester will be able to provide a high degree of technical assistance and identify opportunities for further technology transfer.

3. <u>Recommend and assist the Counties in providing training and interpretation relative to Department</u> <u>technical procedures and capabilities</u>

The Liaison Forester must maintain a high level of understanding of Department policies and procedures as they pertain to the County Forest program. These procedures include the reconnaissance system, timber sale establishment and administration procedures, silviculture, wildlife, and aesthetic guidelines. This will allow the Liaison Forester to assure compliance with s. <u>28.11</u>, Wis. Stats., and assess whether or not systems meet County needs.

- D. Cooperation with County Forest and other Department personnel
 - 1. Coordinate and provide assistance to County staff in meeting short-term workload increases and

arrange for use of Department equipment and/or personnel as necessary to enhance overall efficiency and capitalize on immediate opportunities

Periodic, short-term workload increases will be necessary for the Liaison Forester as a result of temporary shortage of County staff, salvage operations as a result of natural disaster, insect and disease outbreaks, or other similar situations. The Liaison Forester should make full use of staff other Department staff as priorities allow to meet these increases. Likewise, the Liaison Forester needs to utilize and coordinate all of the resources at his or her command to capitalize on immediate opportunities. The Liaison Forester should keep up to date on the capabilities, cost, and availability of Department equipment that can be used to meet County Forest needs. The Liaison Forester should coordinate Department equipment use on County Forests.

2. <u>Coordinate and facilitate cooperation between with County Forest Administratorss and all</u> <u>Department activities that occur on or affect the County Forest in order to enhance the integrated</u> <u>management approach</u>

The Liaison Forester will serve as the contact for cooperation with other functions in achieving integrated management goals on the County Forest. The Liaison Forester is responsible for coordinating all County-Department contacts, because integrated management is accepted and desirable, the Liaison Forester should be aware of these needs and opportunities on the County Forest.

This allows the Liaison Forester to interface with other affected Department programs, monitor compliance with the County Forest Plan, and represent the statewide public interest.

3. Coordinate and provide technical specialists for the County

The Liaison Forester is responsible for functioning as the primary source for technical assistance to County Forest personnel. It is realized, however, that there will be situations beyond the expertise of the Liaison Forester. In these cases, the Liaison Forester will coordinate the assistance of technical specialists. It is important that the Liaison Forester maintain good communications with the Department's technical experts so that potential problems can be proactively managed and addressed in a timely manner. The Liaison Forester will also be responsible for involving other functions during the annual partnership meeting.

Technical Assistance

Technical assistance from the Department will be coordinated through the Department Liaison Forester. Assistance may be available in the following specialties:

- 1. Endangered Resources
 - Conservation Biologists Bureau of Natural Heritage Conservation
- 2. Fisheries Management
 - Fisheries Biologists Bureau of Fisheries Management
- 3. Forest Economics
 - Forest Economist Division of Forestry
 - Forest Products Specialists Division of Forestry
- 4. Forest Management
 - County Liaison Foresters Division of Forestry
 - Forest Ecologists or Silviculturalists Division of Forestry
 - Regeneration Specialist Division of Forestry

- 5. Land Acquisition
 - Regional Real Estate Specialists Bureau of Facilities and Lands
- 6. Protection
 - Insects & Disease: Forest Health Specialists Division of Forestry
 - Invasive Plants & Animals: Invasive Plant Coordinator and Specialists Division of Forestry
 - Fire Management (Response): Forest Rangers Division of Forestry
 - Fire Management (Planning): Wildland Urban Interface Coordinator and Specialists Division of Forestry
- 7. Recreation Management
 - Outdoor Recreation Grants: Financial Assistance Specialists Division of External Services
- 8. Technology (Geographic Information Systems, WisFIRS)
 - Field Technology Support Staff Division of Forestry
- 9. Water Resources & Regulations
 - Water Regulation Specialists Division of External Services
 - Water Resources Engineers Division of External Services
 - Wastewater Specialists Division of External Services
 - Forestry Best Management Practices for Water Quality: Forest Hydrologists Division of Forestry
- 10. Wildlife Management
 - Wildlife Biologists Bureau of Wildlife Management

Law Enforcement

The Department's Division of Forestry has maintained non-sworn Forest Rangers as "Enforcing Officers". Forest Rangers have authority to issue civil forfeiture citations for violations in <u>Chapter 26</u>, Wis. <u>Stats</u>., which covers *Protection of Forest Lands and Forest Productivity*. Any provisions within Chapter 26 that are applicable to the County Forest can be enforced.

Timber theft (s. <u>26.05</u>, Wis. Stats.) on County property should be referred to the County Forest Administrators and/or Sheriff's Department. Depending on availability, workload, and supervisory approval, Department personnel can assist or take the lead role in investigation, seizures and prosecution if requested by the County or Sheriff's Department. It is *strongly recommended* to involve a sworn law enforcement officer (e.g. Conservation Warden or local Sheriff's Department Deputy) upon notice of the violation, regardless of the severity of the case. However, if the violation is criminal in nature, the case *must* be referred to a sworn law enforcement officer.

Department personnel can provide information concerning a potential violation to any County law enforcement officer whereby citations can be written on information and belief.

Division of Forestry personnel *cannot* enforce County ordinances. The County Corporation Council, County Sheriff, and district attorney should be consulted for local procedures.

Annual Adjustments to Department Technical Assistance

The duties described in the "generic" position description for a Department Liaison Forester are common to all County Forests. In many cases, however, there may be additional Liaison Forester duties unique to a particular County Forest. These may involve specific, short-term projects, or may be additional duties of a continuing nature. These projects are negotiated at the local level, between the County Forest Administrators, Department Liaison Forester, and the Department forestry supervisor.

The process identifies, justifies, and quantifies both in time and duration the Department's time contribution given to meet specific County needs above and beyond the standards applied to all Counties. These special, unanticipated, or short-term projects are considered and addition to the minimum time standard requirement.

The status of annual adjustments must be annually reviewed and reported on as part of the annual partnership evaluation meeting held in each County.

COUNTY FOREST ADMINISTRATORS

The County Forest Administrators coordinates the State/County partnership with the Department Liaison Forester in administering the County Forest Law (s. <u>28.11</u>, Wis. Stats.). The Department expects the County to hire an Administrators with skill levels that will enable the position to carry out the County's end of the partnership.

The County Forest Administrators will be responsible for all activities described in the position description but may delegate these responsibilities to others under their supervision. The County Forest Administrators works directly for the County Forestry committee.

Goals and Worker Activities

- 1. Maintain good communications with the Department Liaison Forester to facilitate an efficient operation of the County Forest program.
- 2. Work in developing and updating the County Forest comprehensive land use plan to promote and implement integrated resource management with assistance from the Department as necessary.
- 3. Work with County Forest staff and County Forestry committee to develop an annual work plan and budget that is accepted by the County Board.
- 4. At least annually, in cooperation with the Department Liaison Forester, select compartments and stands from the County Forest compartment reconnaissance database (i.e. WisFIRS) for timber sale establishment. Divide the workload within the restraints of each partner.
- 5. Responsible for timber sale bids, contracts, and sale administration.
- 6. Prepare requests and receive approval by resolution from County Board for Project Loans and Variable Acreage Share Loans.
- 7. Responsible for coordinating (contracting, etc.) of all cultural and regeneration work performed on the County Forest.
- 8. Will take the lead regarding any property boundary issues on the County Forest.
- 9. Responsible for preparing applications for all grants and aids used on the County Forest, including the County Forest Administrators and Sustainable Forestry Grants.

Questions concerning the program may be directed to the County Forest & Public Lands Specialist in the Division of Forestry.

COUNTY/STATE ROLES

X = Role Lead, * = Assisting

А.	ADMINISTRATION OF COUNTY FOREST LAW, <u>S. 28.11</u> , WIS STATS.							
		County	State	Both				
•	Identify resource needs and provide technical assistance to meet resource needs			X				
•	Develop, Implement, and Amend (as needed) the County Forest comprehensive land use plan (County Forest Plan)	Х	*					
•	Develop Annual Work Plan	Х						
•	Request entries and withdrawals of land from <u>s.</u> 28.11(11)(a)1.	Х						
•	Process and approve entry <u>s. 28.11(4)</u> and withdrawal of lands under <u>s. 28.11(11)</u>		Х					
•	Request aids	Х						
•	Process and approve aid applications and disperse funds		X					
•	Disperse <u>County Severance</u> to towns	Х						
•	Disperse acreage share payments towns		X					
•	Appoint a committee and hold meetings	Х						
•	Attend forestry committee meetings			Х				
•	Establish forest use regulations	Х						
•	May enter into co-op agreements for fire protection	Х						
•	Provide fire protection as per <u>s. 26.11</u>		Х					
•	May establish aesthetic zones <u>s. 28.11(3)(e)</u> and transplant nurseries <u>s. 28.11(3)(f)</u>	Х						
В.	RESOURCE MANAGEMENT			÷				
•	Collect Recon data			Х				
•	Ensure Recon data accuracy. Continue to develop and maintain the recon system and procedures.			X				
•	GIS development and maintenance (e.g. WisFIRS, Arc)			X				
•	Determine annual harvest, reforestation, and annual cultural work.	Х	*					
•	Develop silvicultural guidelines and prescriptions (Silvicultural Guidance Team).		Х					
•	Develop silvicultural prescriptions in accordance with state guidelines.	Х	*					

		County	State	Both
٠	Promote and implement integrated management			Х
•	Review and approve management projects for compliance with statewide standards and compliance with County Forest Plan and <u>s. 28.11</u>		X	
•	Maintain consistent contact between the County Forest Administrators, department Liaison Forester, wildlife biologist, and endangered resources staff throughout the year.			X
•	Identify opportunities for habitat improvement projects on County Forest Land.			X
•	Seek and provide funding sources for habitat improvement projects.		X	
•	Provide opportunities to meet the need for County Forest-based recreation, including access opportunities to state waters.	Х		
•	Provide technical assistance in the development and enhancement of recreational trails and facilities on County Forest land.	х	*	
•	Request grant funding for acquisition and development of recreational trails and facilities.	Х		
•	Provide grant funding for acquisition and development of recreational trails and facilities.		Х	
C.	ADMINISTRATION OF CONTRACTS FOR MANAGE	EMENT PROJE	ECTS	
•	Prepare prospectus, advertisements, conduct bid opening, award bids, and sign contracts.	X	*	
•	Enforce contracts to represent Counties interest	Х	*	
•	Ensure completion of all financial aspects of contracts are completed. Monitor final timber sale billings and make severance payments	X		
•	Monitor compliance for severance collection and dissemination for state and towns		X	
٠	Conduct final contract inspections and prepare final reports	X	*	
•	Review and approve timber sale completions and track accomplishments.			X
•	Update and ensure accuracy of Recon			X

• Conduct and monitor follow-up studies and evaluations. Modify future project recommendations.			Х
	County	State	Both
D. COOPERATION			
• Maintain and enhance open cooperative relationship between the County and Department.			Х
• Assist Department/County in its responsibilities when faced with a short-term periodic workload increases, to maximize combined State/County efficiencies.			Х

COUNTY FOREST TIME STANDARDS – TECHNICAL ASSISTANCE

Time Standards Guidelines

The Department provides technical assistance to Counties having lands entered in the County Forest program in a variety of ways, including via a dedication of Department employee time working on identified projects on each County Forest. The County Forest time standards were established to provide each County with a specified amount of technical assistance to be provided by the Department each year. The time standards worksheet was developed and refined over time to fairly allocate the level assistance provided among the Counties enrolled in the County Forest Program. The worksheet helps calculate the average number of hours that the Department shall spend on a number of different activities which may occur annually on a County Forest.

The purpose of the time standards worksheet is to quantify the Department's technical forestry assistance commitments on County Forest lands based in part on the Department Liaison's position description. The **total found on Line 29 represents the commitment of hours** Department forestry staff will annually devote to the County Forest program to fulfill Chapter 28 responsibilities. This commitment includes both local and non-local hours. Hours may be added or subtracted to the time standard base hours each year (see description of Activity #28 – Annual Adjustments). These time standards will remain in effect through fiscal year 2022. Historical data and statistics used in calculating many of the individual worksheet activity hours are based on a *calendar* year. Hours and accomplishments will be tracked on a *fiscal* year basis.

The DNR's time standard commitment does not include Department personnel performing non-forestry work on the County Forest (e.g. wildlife staff doing openings maintenance). Similarly, a new Department Forester's or forest technician's time learning a task is *not* included toward meeting the time standards. (e.g. new Forester accompanying an experienced Forester taking plots or running lines, new technician learning how to operate equipment or completing training exercises). However, when the new employee is able to work independently and productively, then that time or accomplishment may be credited towards the time standards. For example, once a forest technician is deemed proficient, time spent on the County Forest to meet the annual 30-hour equipment operation proficiency requirement may be credited towards the time standards. The Department and County will mutually agree when an acceptable proficiency level has been obtained for these employees and when time may be credited to the time standards.

The County Forest time standards revision process is based upon a base commitment of 46,000 hours of DNR assistance to the program statewide. The worksheet will continue to be used to apportion the hours between Counties. The preliminary base hours from the worksheet (Line 25) for each individual County will be added together and compared against the 46,000- hour figure. This will establish a pro-rate figure that will then be multiplied by each County's worksheet hours (Line 25) to arrive at the base hour commitment for each County (Line 26). As described below the annual time standard commitment may be adjusted annually at the partnership meeting or at other times throughout the year based on unforeseen changes in circumstances. The next revision of the time

standards will be in FY22 to commence starting in FY23.

The time standard commitment to each County is meant to establish the base level of assistance that DNR will workplan to accomplish for each year. Forestry staff time is work-planned across a number of high priority programs including County Forests, state lands, private lands, and fire. County Forests are recognized as a valuable partner and consequently technical assistance to Counties is considered a high priority task. If other priority DNR workload has been or will be accomplished for the year, additional resources may be allocated to a County Forest if there is additional forestry workload to accomplish and time spent on the County Forest will produce the highest value outcomes. Simply put, the time standards are not a maximum amount of time that can be contributed annually.

The worksheet formulas are designed to represent a statewide average recognizing variability in property size and priorities, and to promote consistent calculation of the time standard hours with the Department's County Forest partners. Many of the formulas are derived from data gathered during the 1990 Workload Analysis, from 1999, 2003 and 2008 surveys conducted with County Forest Administrators and Department Liaisons, from trends evaluated over a reasonable time period, from local experience or from current operational needs. The forest reconnaissance (RECON) in the Wisconsin Forest Inventory and Reporting System (WisFIRS) is the fundamental data used in the worksheet calculations and represents the basic inventory system used to identify and plan management activities on the County Forest. While updating the inventory is a dynamic and on-going process, the expectation is to re-evaluate all forested stands during a 20-year period.

The Department and County have the flexibility to annually determine where the actual on-the-ground hours will be focused; this may create a deviation from the hours calculated on the worksheet for a specific activity. To ensure flexibility for the County Forest program and to address local workload, the total base hour commitment may be reallocated between activities annually. Both the Department and County must agree to any adjustments to allocations between activities. Acceptable adjustment parameters are described in the definition section for each activity. If a major acreage change (2% of the total County Forest acreage) occurs on the County Forest prior to the conclusion of the five years, the base hours may be recalculated.

Time standards hours will be reported monthly to both County and DNR staff on a statewide level. In addition, a breakdown of hours for each County, by name and activity code, will be generated by DNR Central Office and routed by the County Forest & Public Lands Specialist.

The manner in which time standard hours are accomplished on a given County Forest should reflect the worksheet calculations, the annual work plan & partnership meetings, and should represent quality time/accomplishments as determined jointly by the County Forest Administrators, DNR Liaison, and DNR Team Leader. Liaisons, Administrators, and Team Leaders shall confer to discuss County Forest work which is assigned to non-local DNR staff to meet time standards commitments.

Liaisons, Administrators, and Team Leaders shall confer and agree to acceptable amounts of travel time for nonlocal DNR staff to code to County time standards. Liaisons, Administrators, and Team Leaders shall discuss the distribution of time standard hours provided to a County Forest throughout the course of the year to try to identify the optimal distribution for accomplishing the work goals of the County Forest and the DNR.

The Time Standards Grant, which allow Counties to increase or decrease, within certain constraints, the amount of technical assistance (time standard hours) that they would receive from the Division of Forestry for a set period of time. In exchange the County would receive a corresponding decrease or increase in grant funding which is to be used to accomplish some of the sustainable forestry tasks that have traditionally been accomplished in part via DNR technical assistance. Wisconsin County Forest Association voted and approved a motion that no County would utilize the Time Standards Grant as no additional specific funding source was allocated for this grant. The funding comes from the Administration/Sustainable Forestry Grant account.

Time Standards Annual Adjustments (Additions or Subtractions)

Annual adjustments in the total number of hours committed to each County Forest may warrant additions or subtractions of total base hours, as a result of short-term projects or staff shortages. These hours are negotiated annually between the Liaison, Team Leader and County Forest Administrators and represent special, unanticipated or short-term projects or staff shortages not addressed in Activities #1 - 24. These adjustments become part of the time standards for that particular year. Approval by the district Forester (or designee) is required for DNR.

If no agreement for an annual adjustment can be reached between the two entities, then the hours totaled on Line 26 Column F in the worksheet will continue to represent the time standard hours for the year, unless there are Time Standards Grant Adjustments on Line 27. Although annual adjustments may be re-calculated annually, the minimum *base* time standard hours remain in effect for FY 20-22.

The annual time standard commitment may be adjusted annually at the partnership meeting or at other times throughout the year based on unforeseen changes in circumstances. The reasoning behind the changes and the number of hours to increase/decrease must be documented in the Annual Partnership Meeting minutes or in a letter/memo to be routed through channels to the County Forest & Public Lands Specialist. For additions, the specific project and hours dedicated to it must be identified. Examples of an appropriate project may be found under the time standards definitions section for Activity #28.

In the event that all annual work activities identified and agreed upon by the County Forest Administrators and the DNR Liaison Forester have been completed for a particular year, but County Forest time standards hours have not been met in that County, the County Forest Administrators may excuse the DNR from their commitment to complete the remaining time standards hours in their County for that year.

In addition, if during a particular year DNR anticipates falling short of meeting the time standards in an individual County due to team vacancies, forest fire suppression responsibilities, or other extenuating circumstances, the County Forest Administrators and DNR Team Leader will have the flexibility upon mutual agreement to excuse the DNR from meeting the full commitment for time standards hours in that County for that fiscal year. This mutual agreement will be documented and signed by both the DNR Team Leader and the County Forest Administrators. If a reduction in time standards hours is to occur, the DNR Team Leader will develop a written plan that outlines the mutually agreed upon adjusted time standards commitment for that fiscal year and will work with the County Forest Administrators to assign any remaining DNR adjusted hours to priority activities on the County Forest. This written plan, with signatures from both the local DNR Team Leader and the County Forest Administrators, will be routed through the area and district forestry leaders to the County Forest Specialist & Public Lands Specialist to update the statewide County Forest time standards tracking worksheet.

If dismissal of unachieved hours is not mutually acceptable, then the DNR Team Leader and the County Forest Administrators are encouraged to consider a compromise between the County and DNR which includes some form of averaging or tracking total hours provided over a period longer than one year such as in the following example:

The agreed upon hours from the annual partnership meetings would be used to calculate a 3-year running annual average DNR time commitment. A 3-year running annual average of actual DNR hours provided would also be calculated. The annual average hours provided would meet or exceed the annual average time standards for that same period.

Time Standards Activity Definitions

When completing the County Forest Time Standards Worksheet, it is imperative accurate RECON data is used. Use data from WisFIRS in which Planning has been run *and accepted* within the last year. These definitions document how the formulas were derived or further explain the activity. The letters (A, B, etc.) refer to the columns on the Time Standards Worksheet. Explanations for simple calculations, self-explanatory activities, or instructions already provided on the worksheet are omitted here.

Column A describes the technical assistance activity provided by the Liaison and local forestry team as well as data base used by all County Forests to consistently calculate the level of technical assistance to be provided.

Column B identifies the number of units pertinent to the specific activity for both County and department staff.

Column C provides instructions to determine the level of involvement by the Liaison and local forestry team for each activity.

Column D represents the units of activities that the Liaison and the local forestry team should be involved with.

Column E provides instructions for converting the base work units listed in Column D into hours. These factors may not be altered when calculating the base hours for each activity.

Column F lists the base hours for each activity that the Liaison and the local forestry team would provide to meet the minimum commitment of technical assistance to the County Forest. The Department and the County Forests can jointly agree, within the constraints set in the table below, to adjust the hours within the categories. This provides flexibility to focus DNR time where local needs warrant. The actual allocation of time between activities can vary significantly annually based on a variety of factors and agreement between the County Forest Administrators and Liaison Forester. If a County participates in the Time Standards Grant, any adjustment in hours shall be prorated across all activities in the worksheet for which DNR is not solely responsible. Annual variations and time standard grant adjustments may not result in DNR doing less than 25% of activity 1 and 50% of activity 3.

Remaining hours may be shifted to another activity if annual needs dictate and there is local agreement.

<u>Recon</u>

Activity #1 & 2 – Recon & Planning (Assumes Department does 50%)

- A. Use the acres of all forested (Line #1) or non-forested (Line #2) types on the County Forest. Use WisFIRS Report #101.
- B. 5% represents updating $1/20^{\text{th}}$ of the forested forest types annually thereby allowing each stand to be updated at least once during the 20-year period. DNR is responsible for 50% of this, resulting in total annual updates independent of management activity = 2.50% (e.g. 50% of .05 = 0.250). This updating does not include recon updating completed as part of timber sale closeouts, reforestation practices or other cultural activities.
- C. Calculation of Columns B & C.
- D. Calculation of Columns D & E to determine base hours.

Timber Sales

Activity #3 – Timber Sale Establishment & Administration – Planning

- B. Use Report 28A to determine the **annual** average number of timber sales established (A-noticed) during the previous five (5) calendar years.
- F. Calculation of Columns B & C to determine base hours.

Activity #4 – Timber Sale Establishment & Administration - Pre-Establishment

Joint discussions on silvicultural prescriptions and other management issues prior to sale establishment are encouraged to reduce problems between the Department and County after the sale has been established.

- B. Use the *accepted* long-term harvest goal (15-year annual average) from WisFIRS Report #201.
- C. The Department should be involved in planning at least half (50%) of the timber sales on the forest to maintain knowledge of the property and to ensure silvicultural proficiency. 50% implies a shared responsibility between the Department and County. This time enables the Liaison to maintain proficiency and a working knowledge of the property.
- D. Calculation of Columns B & C.
- E. 0.2 hours per acre includes field, travel, and office time. This number was derived from experience and consensus from the time standards ad hoc committee.
- F. Calculation of Columns D & E to determine base hours.

Activity #5 – Timber Sale Establishment & Administration – Field Establishment

- A. Calculate the total average annual acres established by averaging the <u>accepted</u> long term harvest goal (15-year annual average) from WisFIRS Report #201 with the average annual number of A-notice acres established during the previous five (5) calendar years (WisFIRS Report 301). [(Ave. of previous 5 year's Annual A-notice acres) + (Long term harvest goal)]/2 = Average total acres.
- B. Determine the percent (%) of the Average Total Acres calculated in Column A that are even-aged harvests and uneven-aged / thinning harvests. Even-aged acres entered here include coppice, clearcut, overstory removal, and seed tree harvests (acreage where you are not marking individual trees). *If there is concern that acreage on some sales was not entered in the proper column on Form 2460-001 and there is agreement that local information is more accurate, local information may be used in this determination. Take the percent of even-aged harvests and the percent of uneven-aged / thinning harvests and multiply it by the Average Total Acres in Column A to determine the breakdown to enter in Column B.
- C. Department involvement on 25% of the timber sales resulted from a 1992-1994 agreement between the County Forest Association and the Department. The assumption was that the Department Forester(s) would set up a quarter of the timber sales or be involved in 100 percent of the sales as one of four Foresters.
- E. Time standards of 0.65 hours per acre for even-aged harvests and 1.65 hours per acre for selection harvests are based on a consensus decision by a time standards ad hoc committee in 2018 using information collected from Department and County Foresters. Currently considered a routine part of sale establishment, time considerations for BMPs, endangered species, permits, landings, etc. have been incorporated into these factors.
- F. Calculation of Columns D & E to determine base hours.

Activity #6 - Timber Sale Establishment & Administration – Paperwork

- A. Includes office time (excludes field time) to prepare Form <u>2460-001</u>, develop maps, update recon, prepare prospectuses, and complete the narrative for sales established by the Department.
- B. Use the **annual** average number of *all* timber sales established (A-noticed) during the previous five (5) calendar years (Report 28A).
- C. All sales are included because the Liaison is involved with some aspect of the paperwork on all timber sales.
- D. Calculation of Columns B & C.

- E. 8.0 hours per sale was derived from experience and consensus of the time standards ad hoc committees.
- F. Calculation of Columns D & E to determine base hours. No adjustment limitation allowed.

Activity #7 - Timber Sale Establishment & Administration – Paperwork and Approval

- A. Includes office time (excludes field time) to review Form <u>2460-001</u>, maps, recon updates related to timber sale establishment, prospectuses, and narratives for sales established by the County.
- B. Use the **annual** average number of *all* timber sales established (A-noticed) during the previous five (5) calendar years (Report 28A).
- C. All sales (100%) are included because the Liaison is involved with some aspect of the paperwork on all timber sales.
- D. Calculation of Columns B & C.
- E. 2.0 hours per sales was derived from experience and consensus of the time standards ad hoc committees.
- F. Calculation of Columns D & E to determine base hours. No adjustment limitation allowed.

Activity #8 – Timber Sale Establishment & Administration – Field Inspections

- A. Inspections should evaluate proper implementation of the prescribed silvicultural treatment, assess wood utilization, and evaluate contract compliance. The County has the lead on timber sale administration activities, but Department staff may be asked periodically to perform some of these activities. The level of administrative involvement will be determined between the Administrators and the Liaison. Post-sale updates of recon at the time of sale closure and field scaling activities are <u>not</u> included here (see Activities #10 & #11).
- B. Use Report 28A to determine the **annual** average number of all sales *closed* during the previous five (5) calendar years. Closed sales are those with the final Cutting Report (Form <u>2460-001</u>) filed and approved by the Department.
- C. On average, the DNR Forester may inspect sales approximately two (2) times during the course of harvesting activities. Sales on which a DNR Forester has been assigned primary sale administration authority would require significantly more inspections and conversely lower on sales which are primarily administered by County staff.
- D. Calculation of Columns B & C.
- E. Two (2) hours per visit is an average that takes into account sale size and associated travel time to the site.
- F. Calculation of Columns D & E to determine base hours.

Activity #9 – Timber Sale Establishment & Administration – Sale Closeout

- A. Includes review and WisFIRS data entry of completed timber sales (Form <u>2460-001</u>). Post-sale updates of recon at the time of sale closure are <u>not</u> included here (see Activity #10).
- B. Use Report 28A to determine the **annual** average number of all sales *closed* during the previous five (5) calendar years. Closed sales are those with the final Cutting Report (Form <u>2460-001</u>) filed and approved by the Department.

F. Calculation of Columns B & E to determine base hours.

Activity #10 – Timber Sale Establishment & Administration – Post-Sale Recon Update

- A. Includes field data collection and WisFIRS data entry or modification (both tabular and spatial) in stands of completed timber sales (Form <u>2460-001</u>).
- B. Use Report 28A to determine the **annual** average number of all sales *closed* during the previous five (5) calendar years. Closed sales are those with the final Cutting Report (Form <u>2460-001</u>) filed and approved by the Department.
- D. Calculation of Columns B & C.
- F. Calculation of Columns D & E to determine base hours.

Activity #11 – Timber Sale Establishment & Administration – Administration of Cut Volume (Scaling)

- A. Although most Counties currently use the mill ticket system, Department Foresters may periodically be asked to scale wood products in the field.
- B. Use Report 32A to determine the average number of cords and MBF per year from the previous five (5) calendar years of closed timber sales. Closed sales are those with the final Cutting Report (Form <u>2460-001</u>) filed and approved by the Department.
- D. Calculation of Columns B & C (two lines one for cords, one for MBF).
- F. Calculation of Columns D & E to determine base hours for both cords and MBF.

Artificial Regeneration

Activity #12 – Artificial Regeneration Planting & Site Prep – Reforestation Planning

- B. Pre-establishment inspections for artificial regeneration plantings. Stands scheduled for forced type regeneration are used in this calculation. Use the **estimated average number of stands to be planted annually for the next five (5) calendar years.** This information can be obtained from accomplishment reports and local records.
- C. Previous ad hoc time standard teams determined this is a shared responsibility between the County and the Department. Therefore, it is reasonable for Department forestry staff to be involved in half (50%) of the stand visits.
- D. Calculation of Columns B & C.
- F. Calculation of Columns D & E to determine base hours.

Activity #13 – Artificial Regeneration Planting & Site Prep – Field Establishment

A. Activities associated with field establishment **prior to and during planting.** Includes delineation of the area and carrying out the reforestation plan for pre- or post-harvest planting treatments (e.g. meeting to help a contractor get started, flagging the planting site, conducting treatments for site prep). Also includes time required to inspect proper planting techniques such as seedling depth, spacing, and seedling handling and storage.

- B. Use the estimated average number of stands to be planted annually for the next five (5) calendar years. This information can be obtained from accomplishment reports and local records.
- C. Previous ad hoc time standard teams determined this is a shared responsibility between the County and the Department. Therefore, it is reasonable for Department forestry staff to be involved in half (50%) of the workload.
- D. Calculation of Columns B & C.
- F. Calculation of Columns D & E to determine base hours.

Activity #14 – Artificial Regeneration Planting & Site Prep – Survival Monitoring

- A. Time required to inspect artificial regeneration sites and maintain records for survival monitoring. At a minimum, this includes one-, three-, and five-year survival counts on artificial regeneration sites.
- B. Use the **annual average of acres planted from the previous five (5) calendar years.** This information can be obtained from accomplishment reports and local records.
- C. Previous ad hoc time standard teams determined this is a shared responsibility between the County and the Department. Therefore, it is reasonable for Department forestry staff to be involved in half (50%) of the workload.
- D. Calculation of Columns B & C.
- E. Three plots per acre was derived by figuring one plot would be taken per acre at three different times (one-, three-, and five-year survival checks).
- F. Calculation of Columns D & E to determine base hours.

Natural Regeneration

Activity #15 – Natural Regeneration Planting & Site Preparation – Planning for Site Preparation

- A. Stands which have questionable natural regeneration requiring subsequent planning for site prep to promote natural regeneration are used in this calculation. Typically, this would involve **even-aged types** and harvests (RE harvest prescription in WisFIRS) including PJ, PW, O, NH (shelterwoods), BW, MC, C, and SH. Planning for prescribed burning activities associated with site preparation are <u>not</u> included here (see Activity #20).
- B. Use the **annual average number of sites from the previous five (5) calendar years**. This information can be obtained from accomplishment reports and local records.
- C. Previous ad hoc time standard teams determined this is a shared responsibility between the County and the Department. Therefore, it is reasonable for Department forestry staff to be involved in half (50%) of the site visits.
- D. Calculation of Columns B & C.
- F. Calculation of Columns D & E to determine base hours.

Activity #16 – Natural Regeneration Planting & Site Prep – Field Establishment

A. Activities associated with field establishment **prior to, concurrent with, or following harvesting.** Includes delineation of the area and carrying out the reforestation plan for pre- or post-harvest treatments that promote natural regeneration. (e.g. meeting to help a contractor get started, flagging the site, time spent conducting or inspecting scarification). Prescribed burning activities used for site preparation are <u>not</u> included here (see Activity #21).

- B. Use the **average number of acres established annually during the previous five (5) calendar years.** This information can be obtained from accomplishment reports and local records. Sites where natural regeneration is not in question are not to be included in the acreage.
- C. Previous ad hoc time standard teams determined this is a shared responsibility between the County and the Department. Therefore, it is reasonable for Department forestry staff to be involved in half (50%) of the workload.
- D. Calculation of Columns B & C.
- F. Calculation of Columns D & E to determine base hours.

Activity #17 – Natural Regeneration Planting & Site Prep – Evaluation & Monitoring

- A. Time required to evaluate success of ALL treatments designed to promote natural regeneration when the success of natural regeneration is questionable (HM code in WisFIRS). Sites can include both RE or RA harvest prescriptions that have received treatment via timber harvest to promote regeneration (e.g. oak shelterwood, jack pine natural regeneration, northern hardwood single tree or group selection with gaps), and stands that have received supplemental treatments as described under Activities #15 & #16. Also included here are Forest Regeneration Monitoring (FRM) surveys above and beyond regular natural regeneration (HM code) monitoring.
- B. Use the **annual average number of acres scheduled for regeneration monitoring during the previous five (5) calendar years.** Use WisFIRS Report #205 with report parameter "Habitat Management (Non-Commerial)" under Treatment Type. If stands have not been coded in WisFIRS for regeneration monitoring, information based on other local records (historic 5-year average) or a best estimate of the number acres monitored annually should be used.
- C. Previous ad hoc time standard teams determined this is a shared responsibility between the County and the Department. Therefore, it is reasonable for Department forestry staff to be involved in half (50%) of the workload. Two plots per acre was derived by figuring one plot would be taken per acre at two different times (three- and five-year survival checks).
- D. Calculation of Columns B & C.
- F. Calculation of Columns D & E to determine base hours.

Cultural Activities

Cultural Activities include, but are not limited to, forest management activities such as pruning, invasive species control, non-commercial thinning, and release from competing vegetation. Prescribed burning (Activities #20 & 21) and chemical or mechanical treatments to promote natural regeneration (Activities #15-17) should <u>not</u> be included here.

Activity #18 – Cultural Activities – Planting & Site Prep – Planning

E. The range of 8 - 40 hours accommodates the range in property sizes. The hours selected must reflect the actual need for this activity by the County.

Activity #19 - Cultural Activities - Planting & Site Prep - Field Establishment

- B. Use the previous five (5) year historic average of the number of acres established per year. This information can be obtained from accomplishment reports and local records.
- C. Previous ad hoc time standard teams determined this is a shared responsibility between the County and the Department. Therefore, it is reasonable for Department forestry staff to be involved in half (50%) of the workload.
- D. Calculation of Columns B & C.
- E. The multiplier of 3.0 hours per acre represents a statewide average to perform the task.
- F. Calculation of Columns D & E to determine base hours.

Activity #19A – Cultural Activities – Planting & Site Prep – Invasive Control

- B. Use the historic average of number acres inspected and/or treated per year. This information can be obtained from accomplishment reports and local records.
- C. Previous ad hoc time standard teams determined this is a shared responsibility between the County and the Department. Therefore, it is reasonable for Department forestry staff to be involved in half (50%) of the workload.
- D. Calculation of Columns B & C.
- E. The multiplier of 1.0 hours per acre represents a statewide average to perform the task.
- F. Calculation of Columns D & E to determine base hours.

Prescribed Burning

Prescribed burning activities included below are those intended for silviculture or other High Priority Habitat management.

Activity #20 – Prescribed Burning – Planting & Site Prep – Cultural – Planning

- A. Includes activities such as prescribed burn proposals, plan preparations, approvals, and evaluations, and silviculture and/or habitat treatments related directly to the implementation of the prescribed burn (e.g. mowing or installing additional fire breaks, herbicide treatments, mechanical treatments).
- B. Use the historic average number of burn plans per year. This information can be obtained from accomplishment reports and local records.
- E. The multiplier of 14 hours per plan represents a statewide average to perform the task.
- F. Calculation of Columns B & E to determine base hours.

Activity #21 – Prescribed Burning – Planting & Site Prep – Cultural – Field Establishment

- A. Includes activities associated directly with the prescribed burn implementation (e.g. igniting and extinguishing the burn).
- B. Use the historic average number of acres burned per year. This information can be obtained from accomplishment reports and local records.

- E. The multiplier of 3 hours per acre represents a statewide average to perform the task.
- F. Calculation of Columns B & E to determine base hours.

Infrastructure

Activity #22 – Infrastructure – Planning, Establishment, & Maintenance

- A. Includes time planning, establishing, or maintaining County Forest infrastructure that is consistent with the County's Comprehensive Land Use Plan and promotes sustainable forest management and/or recreational opportunities. Activities may include maintenance of trails, roads, fire breaks, berms, and similar projects.
- C. Previous ad hoc time standards teams determined this is primarily a County responsibility, but that the Department is uniquely positioned to provide assistance in these efforts via qualified equipment operators. Some Counties may rely on Department staff to plan, establish, and/or maintain these infrastructure elements because they lack the equipment and/or expertise. Operating equipment also helps Department staff maintain proficiencies with the equipment.
- E. The range of 0-100 hours reflects variability among the Counties. The hours selected must reflect the actual need for this activity by the County.

Administration

Activity #23 – Admin, Meetings, & Audits – Meetings and Bid Opening Attendance

- A. Time allotted includes Department time *attending* bid openings and meetings important to the County Forest program including but not limited to: County Forestry, Recreation, and/or Advisory Committees meetings, Wisconsin County Forest Association meetings, Annual Partnership meetings, annual work planning meetings, Comprehensive Land Use Plan modification discussions, timber sale bid openings, County Forest entry or withdrawal discussions, and assistance with grant application preparations. Timber sale pre-bid opening work or prospectus development is <u>not</u> included here (see Activities #6 & #7). Time may include other Department forestry personnel, in addition to the Liaison, who also may attend the meetings.
- E. The range of 25 120 hours reflects variability in the Counties. The hours selected must reflect the actual need for this activity by the County.

Activity #24 – Admin, Meetings, & Audits – Forest Certification

- A. Includes the attendance and preparation for Forest Certification audits (e.g. preparing site packets, logistics, research). Also includes time directly related to policy development addressing corrective actions resulting from Forest Certification audits and internal certification monitoring. Hours associated with *activities* addressing corrective actions identified in Forest Certification audits should be accounted for under their respective categories (e.g. improve recon frequency account for under RECON Activity #1). This category is intended to reflect <u>only</u> Department Liaison time and does not include time from other Department staff.
- E. Select 40 hours for certified (FSC, FSI) Counties or 20 hours for non-certified Counties.

Activity #25 – Preliminary Base Hour Commitment for Department Forestry Staff

F. The total of Activities #1 through #24.

Adjustmemts

Activity #26- Base Hour commitment calculation

DNR & the Wisconsin County Forests Association (WCFA) agreed to a statewide base hour commitment of 46,000 hours for FY 2014 – FY 2018. The preliminary base hours from the worksheet (Line 25) for each individual County will be added together and compared against the 46,000 hour figure by the County Forest Specialist. This will be used to establish the pro-rate figure (Line 26 Column E) that will then be multiplied by each County's worksheet hours to arrive at the **base hour** commitment for each County (Line 26 Column F). The annual time standard commitment may be adjusted annually (see Activity #28 below).

Activity # 27 – Time Standards Grant Adjustments

At the time that the FY 2014-2018 time standards revision was being calculated, there was concurrently a draft administrative rule being developed to provide Counties a greater degree of flexibility to select among an array of resources that best meet their individual needs. The proposed rule would create a new grant, which is referred to as the Time Standards Grant, which would allow Counties to increase or decrease, within certain constraints, the amount of technical assistance (time standard hours) that they would receive from the Division of Forestry for a set period of time. In exchange, the County would receive a corresponding decrease or increase in grant funding which is to be used to accomplish some of the sustainable forestry tasks that have traditionally been accomplished in part via DNR technical assistance. Any change to the time standard commitment to an individual County Forest as a result of the Time Standards Grant should be reflected on line #27 of the time standards worksheet. Any adjustment in hours shall be prorated evenly across all activities in the worksheet for which DNR is not solely responsible (e.g. timber sale approval process, processing withdrawals, etc.).

Activity #28 – Adjustments – Annual Additions or Subtractions

Additions or subtractions of hours involving short-term projects or staff shortages not listed above may be included here.

These hours are negotiated annually between the Liaison, Team Leader and County Forest Administrators and represent special, unanticipated or short-term projects or staff shortages not addressed in Activities #1 - 24. The annual time standard commitment may be adjusted annually at the partnership meeting or at other times throughout the year based on unforeseen changes in circumstances. These adjustments become part of the time standards for that particular year. Approval by the district Forester (or designee) is required for DNR.

The reasoning behind the changes and the increase/decrease in hours must be documented in the Annual Partnership Meeting minutes or in a letter/memo to be routed through channels to the County Forest Specialist in the Central Office. For additions, the specific project and hours dedicated to it must be identified. Examples of an appropriate project may include:

- Dealing with storm damage or significant pest out-breaks (NOTE: a certain percentage of this workload would be compensated for in the routine timber sale establishment hours in Activity #4)
- Initial GIS start-up
- Vacancies (accounting for travel time from an adjacent property to assist with the workload)
- Endangered resource surveys
- Assistance with property line establishment. The County must be the lead in this project
- Significant recon updating if the County's data is considerably poor or outdated
- Land purchases or trades (initial recon, timber appraisals, etc.)
- Assistance in administering the County Forest Law (i.e. garbage dumping problems, ATV traffic enforcement, etc.)
- Trespass onto or by the County Forest
- Implementation of the road access plan
- Inspection of County natural areas

- Substantial changes to the number of acres "scheduled" for management as a result of broad-scale evaluation
- Focused efforts at invasives inventory/control
- Intensive efforts at regeneration and cultural activities unique to your County (and not accounted for under in #8-#16.

Activity #29 – Total Department Contributions

This column represents the total department contributions dedicated to the County Forest time standards for all activities in a particular year.

Comment Section

Indicate anticipated non-local workload here.

Signatures

The time standards worksheet is to be signed by the Department Liaison, Department Forestry Team Leader and the County Forest Administrators. If one approval authority refuses to sign the worksheet, then the calculation will proceed through an arbitration process involving the Department's area forestry supervisor and the County Forestry Committee.

County Forest Time Standards	Worksheet Template
-------------------------------------	--------------------

	DNR Time Code	Activity Technical Assistance	Units	Number of Units	Base Work Units	Time Factors	Base Hours
		Column A	Column B	Column C	Column D	Column E	Column F
	RECON	1	1	1	r	1	
1.	(Recon & Planning)	Recon update conducted independent of timber sale or cultural activities. *Report #101.	# of acres of forested types in the County Forest.	Multiply Column B by 2.50% (.0250) *DNR doing 1/2 of the 5% to be accomplished each year		Multiply Column D by .067 hours per acre	hours
2.	(Recon & Planning)	Recon Update- Non- Forest Cover Types *Report #101.	# of acres of non-forested types in the County Forest.	Multiply Column B by 2.50% (.0250) *DNR doing 1/2 of the 5% to be accomplished each year		Multipl y Column D by .01 hours per acre	hours
	TIMBER SALES		ſ	Γ		r	
3.	(Establishment TS & TS Admin)	Planning – Annual office planning of timber sales including researching recon, pull compartment files, GIS queries, meetings on annual goals, identifying sale areas. Work planning. *Report 28A: Established	Ave. # sales over last 5 years	Multiply Column B by 2.5			hours
4.	(Establishment TS & TS Admin) (Establishment	Pre-establishment field inspections of timber stands to determine if they are ready for a timber sale *Use the <i>accepted</i> long term harvest goal (15 yr. annual ave) – WisFIRS Report #201 Timber Sale Field	Average acres per year	Multiply Column B by 50% Multiply		Multiply Column D by 0.2 hours per acre. (5 acres per hour) Multiply	hours

	DNR Time Code	Activity Technical Assistance	Units	Number of Units	Base Work Units	Time Factors	Base Hours
	TS & TS Admin)	Column A Establishment * Use the following to determine the average total acres: [(Ave. of previous 5 year's A-notice acres <i>Report 303-</i> <i>Established ac</i>) +	Column B Average acres per year harvested even-aged	Column C Column B by 25% (DNR Contribution)	Column D	Column E Column D by 0.65 hours per acre (26 hours to set-up a 40 acre sale)	Column F hours
		(Accepted long term harvest goal- <i>Report</i> 201)] / 2	Average acres per year harvested as uneven-aged or thinnings incl. Shelterwood in handbook	Multiply Column B by 25% (DNR Contribution)		Multiply Column D by 1.65 hours per acre (66 hours to set-up a 40 acre sale)	hours
6.	(Establishment TS & TS Admin)	Timber Sale Establishment Paperwork (preparation- DNR WRITE UP) * Use the 5-year average of timber sales established – * Report 28A	Average # of sales per year*	Multiply Column B by 25% (DNR Contribution)		Multiply Column D by 8.0 hours per sale.	hours
7.	(Establishment TS & TS Admin)	Timber Sale Establishment Paperwork and Approval (review of the 2460- 1 by the DNR) DNR REVIEW ONLY * Use the 5-year average of timber sales established * Report 28A	Average # of sales per year*	Multiply Column B by 100%		Multiply Column D by 2.0 hours per sale.	hours

	DNR Time Code	Activity Technical Assistance	Units	Number of Units	Base Work Units	Time Factors	Base Hours
		Column A	Column B	Column C	Column D	Column E	Column F
8.	(Establishment TS & TS	Administration - Timber Sale Field	of sales #	Multiply Column B by		Multiply Column D	
	Admin)	Inspections -including final inspection * Use the 5-year average of sales	closed per year*	100%, then Multiply by 2 visits per sale		by the hours selected. Select 2 hours/visit.	hours
		closed (Final notice) * Report 28A					
9.	(Establishment TS& TS Admin)	Administration- Sale Closeout (2460) *Report 28A	df sales closed per year*			Multiply Column B by 1.0 hour/sale	hours
10.	(Establishment TS & TS Admin)	Administration- Post-Sale Recon Update *Report 28A	of Acres closed per year*	Multiply Column B by 50%, then		Multiply Column D by .067 hours per acre	hours
11.	(Establishment TS & TS Admin)	Administration of Cut Volume * Use previous 5- year average of total volume billing	Average cords per year*	Multiply Column B by 5%		Multiply Column D by 0.03 hours per cord.	hours
		*Report 32A, bottom of report					
	ARTIFICIAL RE	GENERATION				•	
12.	(Planting & Site Prep)	Reforestation Planning Pre-establishment inspections for artificial regeneration * Estimate future 5 year planting.	Average # of annual stands to be planted	Multiply Column B by 50%		Multiply Column D by 2.0 hours per stand.	hours
13.	(Planting & Site Prep)	Field Establishment – Pre or post harvest treatments required <i>prior</i> to planting and Planting compliance * Estimate future 5 year planting.	Average # of acres planted per year*	Multiply Column B by 50%		Multiply Column D by 0.6 hours per acre.	hours

	DNR Time Code	Activity Technical Assistance	Units	Number of Units	Base Work Units	Time Factors	Base Hours
14.	(Planting & Site Prep)	Column A 1-3-5 yr survival monitoring (and	$\frac{\text{Column B}}{\text{Average }\# \text{ of }}$	Column C Multiply Column B by	Column D	Column E Multiply Column D	Column F
		record-keeping *Inspections for conducting survival counts on artificial regeneration sites * Use the previous 5 year average.	Average # of acres planted per year	50%		by 0.3 hours per acre (3 plots/acre = 1 plot / acre at 1, 3 & 5 yr. survival checks)	hours
1.5	NATURAL REG		[N 1.º 1	1	N 1: 1	
15.	(Planting & Site Prep)	Natural Regeneration- Planning for Site Prep Pre-establishment planning for site preparation on sites with questionable natural regeneration	Average # of annual sites	Multiply Column B by 50%		Multiply Column D by 2.0 hours per site	hours
		* Average previous5 year number of stands.					
16.	(Planting & Site Prep)	Natural Regeneration - Field Establishment Pre or post-harvest treatments required to promote natural regeneration * Average previous	Average # of acres per year	Multiply Column B by 50%		Multiply Column D by 1.5 hours per acre	hours
		5 year number of acres					
17.	(Planting & Site	acres. ALL Natural	A	Multiply			<u> </u>
	Prep)	Regeneration - Monitoring (HM Code)- All harvests with an RE or RA. In addition, include acres you are doing FRM on, above the HM coded stand acres. *Report #205 or local records (previous 5-yr avg).	Average # of acres per year	Column B by 100% *DNR doing ½ of 2 plots/ac.			hours

	DNR Time Code	Activity Technical Assistance	Units	Number of Units	Base Work Units	Time Factors	Base Hours
	FRM	Column A Average # of acres per year	Column B Divide Column B by 5 (1 plot per 5 acres)	Column C Divide Column B by 5 (1 plot per 5 acres)	Column D	Column E	Column F
	CULTURAL AC	TIVITIES	1			<u> </u>	
18.	(Planting & Site Prep)	Cultural – Planning (hand release, pruning, invasive control, aspen maintenance, non- commercial thinning)				Select 0-40 hours	hours
19.	(Planting & Site Prep)	Cultural –Field Establishment- (hand release, pruning, aspen maintenance, non- commercial thinning, TSI) * Use the 5-year historic average	Average # of acres per year	Multiply Column B by 50%		Multiply Column D by 3.0 hours per acre	hours
19 A.	(Planting & Site Prep)	Invasive Control, (total acres covered, including treated acres)	Average # of acres per year	Multiply Column B by 50%		Multiply Column D by 1.0 hours per acre	hours
		URNING- Silviculture	and other Hig	h Priority Habita	it manageme		
20	(Planting & Site Prep)	Cultural – Planning (prescribed burn plan utilized for silvicultural treatments/habitat work- preparation and approvals)	Average # of burn-plans per year			Multiply Column B by 14 hours/plan	hours
21	(Planting & Site Prep)	Cultural – Field Establishment- (Actual prescribed burning) * Use the 5-year historic average	Average # of acres per year	Multiply Column B by 50%		Multiply Column D by 3.0 hours per acre	hours
	INFRASTRUCTU						
22	(Infrastructure)	Infrastructure – Planning, Establishment & Maintenance (trails, roads, fire breaks, berms, etc				Select 0 – 100 hours	hours

	DNR Time Code	Activity Technical Assistance	Units	Number of Units	Base Work Units	Time Factors	Base Hours
		Column A	Column B	Column C	Column D	Column E	Column F
		that are consistent with comprehensive plan and promote sustainable forestry or forest recreation)					
	ADMINISTRAT	ION				-	-
23	(Admin, Mtgs & Audits)	Meeting and Bid Opening Attendance (DNR Attendance only) *Attendance at bid openings, forestry committee, advisory committee, access planning, and recreation meetings, entry/withdraw discussions				Select 25- 120 hours	hours
24	(Admin, Mtgs & Audits)	Forest Certification- Liaison Only Audit preparation and attendance and any time directly related to policy development and implementation from Forest Certification findings. Includes time spent on internal certification monitoring.				40 hours (Certified Counties) 20 hours (Non- Certified Counties)	hours
25		Preliminary Base					
		Hour Commitment Subtotal of Activities 1 – 24					hours
06	ADJUSTMENTS					3 6 1.1 1	
26		Base Hour Commitment for Department forestry staff *Pro-rate of worksheet hours 2019-2022 Time Std. revision resulted in agreement on a		Enter preliminary Base Hours from Line 25, Column F		Multiply Column C by *PRO- RATE FIGURE	hours

	DNR Time Code	Activity Technical Assistance	Units	Number of Units	Base Work Units	Time Factors	Base Hours
		Column A statewide total of 45,572 hrs. See pg. 210-50.	Column B	Column C	Column D	Column E	Column F
27		Time Standards Grant Adjustments – Additions or subtractions of time standard hours provided by the Time Standards Grant should be reflected here. Any adjustment shall be prorated evenly across all activities in the worksheet for which DNR is not solely responsible.		(+)			
28		Annual Adjustments –Additions or subtractions involving short-term projects not listed above (15 Year Plan development, KBB, endangered resources, special use area, GIS startup, vacancies) *Requires District Forestry Ldr. (or designee) approval		(+)			
29		Total department contributions dedicated to County Forest time standards for the year of (Add Activities #26 + #27 + #28)		hours			

The Time Standards Summary for FY20-22, with a 0.87885 pro-rate (46000hrs/52341), is found on the next five pages.

Activity	Ashland	Barron	Bayfield	Burnett	Chippewa	Clark
1. Recon- Forested	61	21.79	268	159	41.46	184
2. Recon- Non-Forested	1	0.78	2	4	1.95	6
3. TS Planning	25	14	143	80	38	140
4.TS Pre-est.	128	54.4	483	291	98.3	328
5a.TS Even-age	62	43.17	460	177	43.3	255
5b.TS Uneven/Thin/Shelter	297	141.48	753	675	222.83	701
6. TS- 2460 Write-up, DNR	20	10	114	64	30	112
7. TS- 2460 Review- Approval	20	10	114	64	30	112
8. TS Admin-Field Inspection	36	10	114	140	56	204
9. TS- 2460 Sale Closeout	9	3.8	57	35	14	51
10. TS- Post Sale Recon	36	20	148	95	7.3	98
11a TS Admin-Field Scaling- pulp	2	0	1	60	14.6	57
11b. TS Admin-Field Scaling-MBF	10	0	74	6	18.9	70
12. Reforestation- Planning	0	0	11	5	0	9
13. Reforestation-Est	0	0	166	36	0	50
14. Survival Monitoring	0	0	83	18	0	25
15. Nat. Regen- Planning	3	2	7	8	10	51
16. Nat. Regen- Est	8	22.5	100	225	77.3	171
17. Nat. Regen-Monitoring	12	20	237	150	53.6	74
18. Cultural- Planning	0	20	40	30	8	40
19. Cultural-Est.	180	20	0	168	0	311
19.A Cultural-Invasives	40	20	13	0	38	56
20. Rx Burn-Planning	0	0	28	0	14	28
21. Rx Burn- Est	0	0	486	0	60	26
22. Infrastructure	25	30	100	0	60	80
23. Gen. Admin- meetings	25	40	100	80	90	120
24. Forest Certification	40	40	40	40	40	40
FY20-22 Preliminary Base Hours	1040	544	4142	2610	1068	3399
FY20-22 Hours (w/Pro-Rate of .87885)	914	478	3640	2294	938	2987

Activity	Douglas	Eau Claire	Florence	Forest	Iron	Jackson
1. Recon- Forested	371	73.56	54	23	250.8	163.1
2. Recon- Non-Forested	14	1.79	0.7	0	5.5	6.2
3. TS Planning	138	52.5	28	14	95	75.5
4.TS Pre-est.	574	118.3	75.7	56	536	252.4
5a.TS Even-age	502	118.23	70	13	397.8	202.7
5b.TS Uneven/Thin/Shelter	1043	163.69	174	156	1197.7	297.5
6. TS- 2460 Write-up, DNR	110	42	22.4	11	76	60.4
7. TS- 2460 Review- Approval	110	42	22.4	11	76	60.4
8. TS Admin-Field Inspection	204	73.6	50.4	23	133.8	132
9. TS- 2460 Sale Closeout	51	18.4	12.6	6	44.6	33
10. TS- Post Sale Recon	152	23.87	30.1	11	145.5	52.1
11a TS Admin-Field Scaling- pulp	153	19.93	26.4	7	102.5	36.7
11b. TS Admin-Field Scaling-MBF	0	21.94	12.1	3	30	26.2
12. Reforestation- Planning	10	2	2	1	1	2
13. Reforestation-Est	165	12	16.6	4	1.8	27.9
14. Survival Monitoring	83	3.45	12.8	2	0.9	14
15. Nat. Regen- Planning	2	10	7	1	1	2
16. Nat. Regen- Est	23	33.15	245.5	23	4.5	15
17. Nat. Regen-Monitoring	386	76.22	88.4	38	3.5	41.8
18. Cultural- Planning	40	40	40	20	8	18
19. Cultural-Est.	137	5.4	0	15	6	22.5
19.A Cultural-Invasives	0	2.5	20	5	0	25
20. Rx Burn-Planning	28	28	0	0	0	14
21. Rx Burn- Est	53	43.5	0	0	0	120
22. Infrastructure	100	100	100	40	75	10
23. Gen. Admin- meetings	120	120	100	90	50	60
24. Forest Certification	40	40	40	40	40	40
FY20-22 Preliminary Base Hours	4609	1286.03	1251	613	3283	1810.4
FY20-22 Hours (w/Pro-Rate of .87885)	4051	1130	1100	539	2885	1591

Activity	Juneau	Langlade	Lincoln	Marathon	Marinette	Monroe
1. Recon- Forested	25.7	190	139	38	337	11
2. Recon- Non-Forested	0.6	5	4	2	7	1
3. TS Planning	15	122	90	25	118	12
4.TS Pre-est.	43.6	398	262	70	639	27
5a.TS Even-age	68.41	162	151	56	552	24
5b.TS Uneven/Thin/Shelter	97.8	1059	606	137	721	36
6. TS- 2460 Write-up, DNR	12	98	72	20	94	10
7. TS- 2460 Review- Approval	12	98	72	20	94	10
8. TS Admin-Field Inspection	16	172	140	28	152	19
9. TS- 2460 Sale Closeout	4	43	35	7	38	4
10. TS- Post Sale Recon	14.4	84	68	13	96	6
11a TS Admin-Field Scaling- pulp	9.15	54	57	11	77	4
11b. TS Admin-Field Scaling-MBF	0	37	23	4	23	4
12. Reforestation- Planning	2	3	1	1	6	1
13. Reforestation-Est	25.5	12	12	4	60	5
14. Survival Monitoring	12.75	3	4	1	29	2
15. Nat. Regen- Planning	2	3	1	2	5	2
16. Nat. Regen- Est	30	15	6	15	53	30
17. Nat. Regen-Monitoring	8	75	20	2	5	18
18. Cultural- Planning	40	16	35	20	4	20
19. Cultural-Est.	0	45	24	60	0	30
19.A Cultural-Invasives	40	455	250	10	30	40
20. Rx Burn-Planning	2.8	0	0	14	14	0
21. Rx Burn- Est	24	0	0	15	93	3
22. Infrastructure	32	75	50	40	30	15
23. Gen. Admin- meetings	30	50	80	78	60	50
24. Forest Certification	40	40	40	40	40	20
FY20-22 Preliminary Base Hours	608	3314	2242	733	3377	404
FY20-22 Hours (w/Pro-Rate of .87885)	534	2913	1970	644	2968	355

Activity	Oconto	Oneida	Polk	Price	Rusk	Sawyer
1. Recon- Forested	58	112	27	120	133	161
2. Recon- Non-Forested	2	4	0.2	5	2	5
3. TS Planning	47.5	63	21	60	70	85
4.TS Pre-est.	108	187	44	229	296	383
5a.TS Even-age	64.5	166	48	246	104	198
5b.TS Uneven/Thin/Shelter	196	363	78	307	984	853
6. TS- 2460 Write-up, DNR	38	50	18	48	56	68
7. TS- 2460 Review- Approval	38	50	18	48	56	68
8. TS Admin-Field Inspection	88	90	19	96	100	130
9. TS- 2460 Sale Closeout	22	22	8	24	25	32
10. TS- Post Sale Recon	28	57	15	76	82	78
11a TS Admin-Field Scaling- pulp	20.5	46	8	53	37	14
11b. TS Admin-Field Scaling-MBF	11	17	5	14	43	21
12. Reforestation- Planning	2	1	3	1	1	1
13. Reforestation-Est	36	6	19	11	0	1
14. Survival Monitoring	0	3	9	6	0	1
15. Nat. Regen- Planning	3	1	3	0	4	2
16. Nat. Regen- Est	30	8	23	0	30	38
17. Nat. Regen-Monitoring	51	7	29	7	25	5
18. Cultural- Planning	40	40	30	10	40	8
19. Cultural-Est.	15	0	15	0	15	15
19.A Cultural-Invasives	140	10	5	5	10	1
20. Rx Burn-Planning	6	14	0	0	14	28
21. Rx Burn- Est	13	30	0	0	30	90
22. Infrastructure	40	100	20	100	80	75
23. Gen. Admin- meetings	80	120	45	50	100	90
24. Forest Certification	40	40	40	40	40	40
FY20-22 Preliminary Base Hours	1218	1607	550	1556	2377	2491
FY20-22 Hours (w/Pro-Rate of .87885)	1070	1412	484	1367	2089	2189

Activity	Taylor	Vernon	Vilas	Washburn	Wood	All Counties
1. Recon- Forested	26	2.5	60	210	48	3368.91
2. Recon- Non-Forested	0.6	0.1	1	6	3	92.42
3. TS Planning	21.3	5	35	78	48	1758.8
4.TS Pre-est.	52.9	4	106	442	80	6366.6
5a.TS Even-age	36.1	3.25	66	237	74	4600.46
5b.TS Uneven/Thin/Shelter	146.5	8.25	202	875	145	12636.75
6. TS- 2460 Write-up, DNR	17	4	28	62	12	1378.8
7. TS- 2460 Review-Approval	17	4	28	62	24	1390.8
8. TS Admin-Field Inspection	34	4	44	120	52	2480.8
9. TS- 2460 Sale Closeout	8.5	2	11	30	13	663.9
10. TS- Post Sale Recon	16.1	1.34	18	74	130	1675.71
11a TS Admin-Field Scaling- pulp	11	0.01	12	63	19	975.79
11b. TS Admin-Field Scaling- MBF	7	2	8	38	10	539.14
12. Reforestation- Planning	3	2	1	4	2	78
13. Reforestation-Est	4.5	3	13	30	11	732.3
14. Survival Monitoring	2.3	1.5	7	12	5	340.7
15. Nat. Regen- Planning	5	2	4	8	2	153
16. Nat. Regen- Est	11.3	30	86	165	8	1526.25
17. Nat. Regen-Monitoring	191.3	0.3	63	165	12	1864.12
18. Cultural- Planning	20	10	15	40	23	715
19. Cultural-Est.	15	15	11	136	15	1275.9
19.A Cultural-Invasives	1.5	10	3	17	5	1252
20. Rx Burn-Planning	14	14	0	28	14	302.8
21. Rx Burn- Est	37.5	30	0	30	38	1222
22. Infrastructure	60	30	40	100	50	1657
23. Gen. Admin- meetings	80	25	70	100	70	2173
24. Forest Certification	40	20	40	40	40	1120
FY20-22 Preliminary Base Hours	879	233	972	3172	953	52341
FY20-22 Hours (w/Pro-Rate of .87885)	773	205	854	2788	838	46000

ANNUAL MEETING TO EVALUATE COUNTY/DEPARTMENT PARTNERSHIP

Annually, a meeting will be held between the County Forest Administrators, the Department Liaison Forester, the forestry Team Leader, the area forestry supervisor and other Department functions as deemed appropriate. The purpose of the meeting will be to evaluate the degree to which both parties have met their partnership obligations. A written report of the meeting, prepared by the Department, will be sent through channels to the State Forester by September 30 of each year. Specifically, the following subjects (as a minimum) will be addressed:

- 1. The amount of time spent on the County Forest by the Department Liaison Forester and staff, relative to the standards on the previous two pages of this section. Both the total amount of time and the amount of time spent in each major duty identified on the Time Standards Worksheet will be discussed in the context of the roles of each partner listed in this chapter. Any annual adjustments to the time standards should be discussed, documented and included in the report for routing to the County Forest Specialist. If goals are established for Department accomplishments other than time commitment hours (e.g. in terms of acres, number of sales, percentage of work activities, specific projects, etc.) these may be documented and reviewed at subsequent partnership meetings.
- 2. Department compliance with any applicable annual adjustments and any modifications that may be appropriate.
- 3. The amount and type of delegation of major duties made by the Department Liaison Forester to other staff members and how it complied with criteria in this Handbook.
- 4. The amount of non-Liaison specialist assistance provided to the County Forest by the Department over the course of the year and any unmet needs identified.
- 5. County compliance with parameters established by the County Forest comprehensive land use plan, statutes, and administration rules.
- 6. County assistance in meeting goals of the County Forest work plan.
- 7. County compliance and progress with forest certification principles and standards. The Forestry Team Leader should lead a discussion to check-in on the County's progress on corrective actions identified through recent forest certification audits. A list of certification corrective actions (CARs) and opportunities for improvement (OFI) is available through the DNR County Forest specialist.

WISCONSIN COUNTY FORESTS ASSOCIATION, INC

The Wisconsin County Forests Association, Inc. (WCFA) was incorporated in 1968 under Chapter 181 of the Wisconsin Statutes, without stock and not for profit.

The primary purpose of this corporation is to provide a forum for the consideration of problems and policies of concern to the committee of the County Board of each County in the state responsible for forestry programs of the County, including those programs carried out under s. 28.10 and Chapter 77 of the Wisconsin Statutes.

Additional purposes are to:

- 1. Provide leadership and counsel to County Forestry committees in relation to forestry policies and programs, including, but not limited to, the following:
 - a. Administration
 - b. Cooperation with state and federal agencies
 - c. Development and protection of the forests of Wisconsin.
- 2. Encourage local County and County Board participation in forestry programs.

- 3. Provide leadership in obtaining financial support for forestry programs and work.
- 4. Facilitate communication between Counties and County Forestry committees with respect to various forestry programs and policies.
- 5. Provide leadership on proposed forestry legislation and other legislative matters affecting forestry and forest land use in Wisconsin.
- 6. Act as a Liaison between State and County legislative representatives and other public officials with respect to proposed and existing forestry programs.
- 7. Work with private groups and public agencies toward the goal of strengthening forestry and forest related programs in Wisconsin.

The office of WCFA is located at: 801 N. Sales Street, Suite 107, Merrill, WI 54452. The Executive Director is the registered agent of the corporation.

A seventeen-member board of directors governs WCFA. The annual meeting is held each year on the last Friday of September. Directors elected to two-year terms in even numbered years. The directors in turn elect a president, vice-president, and treasurer. For purposes of election to the board of directors, the State of Wisconsin is divided into five areas described below:

- Area 1 Consisting of Marinette, Forest, Oconto, Florence and Langlade Counties
- Area 2 Consisting of Vilas, Taylor, Oneida, Price and Lincoln Counties
- Area 3 Consisting of Iron, Bayfield, Ashland and Douglas Counties
- Area 4 Consisting of Sawyer, Polk, Washburn, Barron, Burnett and Rusk Counties
- Area 5 Consisting of Adams, Clark, Marathon, Eau Claire, Juneau, Jackson, Chippewa, Wood, Vernon and Monroe Counties

Special meetings of the board of directors may be called for any purpose at any time by the president and upon request of any three directors. Regular meetings of the board of directors take place three times each year.

An executive director is hired by the board of directors to assist in carrying out the purpose of the organization. The executive director has custody of all records of the association.

Each County having a County Forest employs a County Forest Administrators whose job it is to oversee the County Forest. These individuals must be highly motivated personnel, with a strong forestry background. Most have a degree in forestry or a related field. Others have gained experience through years of forestry-related work. All are of great assistance to the WCFA.

The County Forest Administrators meet annually in the spring to review areas of concern and present speakers on topics of general interest. This meeting, like the WCFA annual meeting, is attended by many other interested persons, including the WCFA board of directors, forestry committee members, County Board chairs, legislators, industry personnel, and Department representatives.

County Forest personnel serve on Department statewide committees that deal with areas of mutual concern. Others serve on WCFA standing committees that were established to provide advice and assistance to the WCFA board of directors on the many problems facing forestry today. Three standing committees are the Executive, Personnel and Legislative / Certification committees.

WCFA today is a strong organization, working together, providing leadership, uniting interests, and using the talents of its many members to promote sustainable forestry and the forest industries of the State of Wisconsin.

COUNTY FOREST FINANCIAL ASSISTANCE

County Forests may be eligible for a variety of Federal, State, or private funding in the form of grants, loans, and cost-sharing programs. This funding can be highly variable from year to year with regards to the programs and funds available. Timeliness and following financial program procedures are essential in obtaining funding.

State-Funded Grant & Loan Programs (Department Administered)

The Division of Forestry administers the following State-funded financial programs (unless otherwise designated) that provide direct financial assistance to County Forests. The County shall establish an account known as the County Forestry Aid Fund, which shall be segregated and non-lapsing.

GRANT PROGRAMS

1. County Forest Administration Grant Program (s. 28.11(5m) Wis. Stats. & NR 47.70, Wis. Adm. Code)

Each County is eligible for a grant up to 50% funding of the salary and 50% of the fringe benefit costs of a Society of American Foresters (SAF) accredited degreed forester in the position of administrator or assistant County Forest Administrator. Fringe benefit costs must not exceed 40% of the total salary. The grant-funded position must be a County employee. The payment of any grant will require Department and County approval of an annual plan of work.

2. <u>Sustainable Forestry Grant Program</u> (NR 47.75, Wis. Adm. Code)

Counties are eligible to apply for grants (no match required) to be used for special, short term or unanticipated projects that promote sustainable forestry. Grants are awarded on a fiscal year basis. Projects can not include land acquisition, surveying, paying of permanent staff or upgrades of existing computer software or hardware.

Sustainable Forestry Grant Guidelines

Eligibility:	Counties with land enrolled in County Forest Law s. <u>28.11</u> Wis. Stats. Adherence to County Forest Comprehensive Land Use Plan. Compliance with County Forest audit recommendations.
Appropriation:	Under s. 20.370(5)(bw), Wis. Stats., from the forestry SEG account.
Rate of Funding:	Up to 100 percent of the costs of a project. Up to 50% advance payment is possible.
Eligible Projects:	Projects shall promote sustainable forestry on the County Forest. Projects shall be suitable for short term and unanticipated workload items as identified in the annual adjustment category of the County Forest time standards. Project length is 2 years. If additional time is necessary to complete the project, a request for extension must be submitted to the County Forest & Public Lands Specialist. Minimum project cost is \$1000.00. Grants shall not be used to fund work required of the Department as part of its minimum core hours under the County Forest time standards.
Application Deadline:	August 15 for first round selection and December 1 for the second round. First come / first serve basis thereafter for project approvals. No less than 25% of the annual funds shall be kept available for the second application period. A County may have no more than 2 projects open at one time.
Awarding of Loans:	Notification by the 30 th day following application.
Selection criteria:	Project proposal requests will be divided into two preference categories as follows

Public Forest Lands Handbook

	<u>1st Preference</u> Storm – related projects Hiring of temporary staff to address short-term workload projects Infrastructure road improvements to access summer/fall timber sales
	 <u>2nd Preference</u> Invasive species inventories/control Drones for reconnaissance Timber mats All other eligible projects (contact County Forest & Public Lands Specialist for details)
	Within a preference category, projects in Counties that have received grants the most recently shall be given the lowest priority.
Application materials:	 County Forestry Committee approval to apply Project specifications: maps, short narrative, estimated cost breakdown Signature and approval of specifications by DNR Liaison Forester and County Forest Administrator. Other material as the Department feels necessary.
Accountability:	Projects will be audited in conjunction with regular Departmental review. A short accomplishment narrative shall be required with final project completion.

3. <u>County Forest Time Standards Program</u> (<u>NR 47.65</u>, Wis. Adm. Code)

Allows Counties to increase or decrease, within certain constraints, the amount of technical assistance (time standard hours) that they would receive from the Division of Forestry for a set period of time. In exchange the County would receive a corresponding decrease or increase in grant funding which is to be used to accomplish some of the sustainable forestry tasks that have traditionally been accomplished in part via DNR technical assistance.

4. <u>Knowles-Nelson Stewardship Grant Program</u> (<u>s. 23.0917</u>, Wis. Stats.)

Annual bonded funding made available in the form of grants to assist Counties in purchasing additional lands to add to the County Forest land base, usually funded at 50% of the DNR approved appraisal price. Grant applications are evaluated jointly by a ranking panel consisting of staff from DNR Forestry and the Wisconsin County Forests Association (WCFA), and selected for funding based on ranking criteria and priorities set forth in <u>NR 51.960</u>, Wis. Adm. Code . Parcels that best provide for nature-based outdoor recreation and the betterment of conservation in Wisconsin will rank highest. Stewardship grant property is protected in perpetuity for public benefit.

5. <u>Forest Wildlife Habitat Improvement Program</u> – "Nickel-An-Acre" Grants (<u>s. 23.09 (17m)</u>, Wis. Stats.) *Administered by DNR Bureau of Wildlife

Legislation in 1995 amended s. 23.09(17m), Wis. Stats., changing the "Nickel-an-Acre" grant program to a direct partnership with those cooperating Counties who have County lands entered under s. 28.11 Wis. Stats. Legislation in 2009 decreased this from \$.10/acre back to \$.05/acre.

The intent of the amended law is: 1) "to improve the natural environment for wildlife"; 2) decreased funding from 10 cents to 5 cents per acre; 3) establish a County Wildlife Management Fund; and 4) identify the comprehensive County Forest Land Use Plan as the cornerstone of the program.

These funds are used to finance a County Forest wildlife habitat management program with primary emphasis on forest wildlife habitat improvement, inventories and wildlife education. DNR contact with the Counties will be made through the County Liaison officer (usually a DNR Liaison Forester assigned to the County). Recreation development on County Forests is aided by other programs (see M.C. <u>8719.5</u> and M.C. <u>8718</u>).

Department Wildlife Biologists are in the best position to ensure success of this habitat improvement program. The local Wildlife Biologist is responsible for the program and will work closely with the Department Liaison Forester and the County Forest Administrator through the initial planning, implementation, and final reporting.

Environmental analysis requirements must be met in accordance with <u>NR 150</u>, Wis. Adm. Code In general, any proposed action, activity, or project, which has been previously identified in an approved property master/management plan or County Forest Comprehensive Land Use Plan, does not require any further environmental analysis. Consult with your district environment analysis and review staff if you have questions.

Procedures

Liaison Forester	1.	In September/October, notifies wildlife manager of annual County Forest budget and planning meeting with County Forest Administrator. Coordinates planning needs and works with Wildlife Biologist in developing wildlife habitat improvement projects. Funded projects must be identified in the County's annual work plan.				
Wildlife Biologist		Develops and is responsible for wildlife projects with input and approval from Liaison Forester, County Forest Administrator, and County Forestry Committee. Provides technical expertise in project design, implementation and completion.				
Bureau of Wildlife Management 3.	3.	Obtains updated County Forest acreage from County Forest & Public Lands Specialist in Division of Forestry and vouchers calendar year payment. Payments should be made payable to the County Treasurer and sent care of the County Forest Administrator.				
	4.	Makes payment to the County's wildlife management fund account of those respective Counties who have an approved comprehensive County Forest Land Use Plan prepared under <u>s. 28.11</u> that identifies interest in this wildlife habitat improvement program.				
County	5.	Upon completion of project, maintains records for audit purposes.				
Wildlife Biologist	6.	Submits annual planning and accomplishment reports through functional channels.				
Area Forestry Staff Specialist & Financial Specialists	7.	Conducts review of County records as part of the normal County Forest and audit/program review.				
District Wildlife Staff	8.	Conducts periodic functional audits of program through review and approval of activities and practices incorporated into the annual planning and accomplishment reports submitted by Wildlife Biologist.				
udelines						

Guidelines

"Wildlife management operations shall be limited to approved projects designed to benefit wildlife and the natural environment", as Stated in s. 23.09(17m)(c), Wis. Stats. All projects of <u>critical</u> importance in improving and/or

enhancing wildlife - wildlife populations, wildlife habitat, and public understanding of wildlife on the County Forests, are possible under this program.

Funded projects must be generally identified in the approved County Forest Comprehensive Land Use Plan. Caution must be exercised by the local Wildlife Biologist who is responsible for the program (in cooperation with the Liaison Forester, County Forest Administrator and County Forestry Committee) to assure that approved projects benefit wildlife habitat and wildlife populations.

With nearly three decades of active wildlife management programs on County Forests, much has been learned about the benefits and effects of various wildlife practices. With this background, specific practices and guidelines follow. No attempt is made to identify all possible activities or to list projects by priority. They are grouped by funding frequency as follows:

- 1. **SINGLE FUNDING** These are projects funded once on a designated unit and/or location of the forest during the duration of the County Forest Comprehensive Land Use Plan:
 - a. <u>Openings Development and Renovation</u> The opening sites, locations, and amounts should comply with criteria established under M.C. <u>2112</u> and M.C. <u>2112.1</u>.
 - b. <u>Trail Development and Renovation</u> Habitat projects would include hunter access trails, gating, and berming.

Important note: A County Forest access management plan that identifies long term needs, maintenance schedules and County Forest policy will be required with the next County Forest Comprehensive Land Use Plan.

- c. <u>Acquisition</u> Sites must have critical wildlife habitat value. For example, "blocking" of properties might be important to protect wildlife values and secure access; however, these funds should not be used to acquire random tracts.
- d. <u>Capital Purchase</u> Purchases should be only for those specialized tools that are attached to existing equipment (i.e. Rotary mowers, ATV trail seeders, compatible computer software, etc.) and/or machines that have specific application for, and a direct benefit to wildlife habitat and/or wildlife population improvement.
- e. <u>Timber Sale Design</u> Projects should be for specific activities that enhance wildlife and wildlife habitat on timber sales, especially within shade intolerant forest types such as aspen, oak and jack pine.
- f. <u>Site Preparation and Planting</u> Funding is available to assist in the perpetuation of important shade intolerant forest types such as jack pine and oak, and/or unique brush-prairie and grassland communities.
- g. <u>Snag, Den, Nest and/or Rendezvous Sites</u> Projects could include various aspects in the identification, selection and management of these unique and important sites.
- h. <u>Aspen Maintenance</u> This practice, normally handled as part of standard timber sale administration, is acceptable on sites with an average of more than 20 square feet and less than 70 square feet of residual basal area.
- 2. **PERIODIC FUNDING** These are projects that may require recurrent activity on the same site through the duration of the comprehensive land use plan:
 - a. <u>Trail Mowing, Openings Maintenance and Access Management</u> These practices should only occur as

part of an existing or planned access management program, and at an interval not less than once every four to eight years on any specific site.

Important notes:

- i. A County Forest access management plan will be required with the next County Forest Comprehensive Land Use Plan.
- ii. Annual recreational trail maintenance, which goes beyond practical wildlife habitat management, should utilize other funding sources.
- b. <u>Wildlife and Wildlife Habitat Inventories</u> Funding is available for projects that focus on specific species (Karner blue butterfly, ruffed grouse, etc.) or special needs (aspen management, jack pine management, etc.). Field surveys, aerial photography and satellite imagery are included under this category. Costs associated with general-purpose activities (i.e. ordered or traditional surveys, and forest-wide aerial photos) are not allowed.
- c. <u>Wetlands Maintenance</u> Funds are only to be used for existing projects where wildlife management has a prior obligation with the Counties. These funds are to be used for dike and structure maintenance, repair, or removal, depending upon local decisions.
- d. <u>Education</u> Only projects or materials that focus on wildlife education (habitat management, protection, research and/or enhancement) are allowed.
- e. <u>Endangered and Threatened Species</u> Projects, for endangered and threatened wildlife, that enhance habitat through management are top priority. Access management, artificial structures, and habitat surveys are also allowed.

General Instructions

- 1. To meet requirements of the law, a County must have an approved comprehensive County Forest Land Use Plan that indicates its desire to "improve the natural environment for wildlife on County lands".
- 2. As Stated in s. <u>23.09(17m)(h) and (hg)</u>, Wis. Stats., funds will be allotted on a calendar year basis, with a carryover not to exceed the sum total of three years' allotment. Funds exceeding this amount or any that remain unused after five years, may, by demand, be returned to the Department.
- 3. All wildlife habitat improvement moneys must be deposited in a segregated non-lapsing account. Any unused funds will automatically be carried over to the next year, except as Stated in Item 2 above.
- 4. Indirect costs, donated labor, materials, land, etc., which do not result in an actual expenditure by the County are not allowable in force account projects.
- 5. Actual costs incurred by the County for labor of its personnel and use of its equipment is allowable. Equipment rental should not exceed the State Department of Transportation rates. Materials and accomplishments are to be in measurable items, i.e. cubic feet, board feet of lumber, aerial photos, miles, acres. etc.
- 6. All projects will have a designated beginning and ending date, with projects not to exceed three years.
- 7. No allotment will be made prior to approval of the comprehensive County Forest land use plan. All expenditures must be within the agreed-upon project period.
- 8. Projects must be identified in the annual plan of work prepared by the County. If a project cannot be completed or a project is postponed, a substitution may be made by the Wildlife Biologist with approval of the forestry committee.

- 9. The district forestry and financial staff will provide program audits, and the Bureau of Wildlife Management will provide functional audits.
- Chapter <u>NR 50</u>, Wis. Adm. Code; s. <u>23.09</u>, Wis. Stats.; and the <u>Wildlife Management Program Operations</u> <u>Manual</u> should be used as a reference for other procedures not specifically addressed. County partners should work with liaisons or Wildlife Biologists to access this manual.

LOAN PROGRAMS

1. <u>Variable Acreage Share Loans</u> (s. 28.11(8)(b)(1), Wis. Stats.)

The County may request, by County board resolution, up to 50 cents per acre (regular class County Forest acres only) of County Forest land to be received as a loan. County requests shall be made by <u>December 31</u> for the following year. Loan amounts will be based upon acreage figures as of the preceding June 30. Loan payments will be made on or before <u>March 31</u> of each year. If the balance in the Department's County Forestry fund account is not sufficient to cover the requested loan amounts, payments to the Counties will be prorated.

2. <u>County Forest Project Loans</u> (s. 28.11(8)(b)(2), Wis. Stats. & <u>NR 47.60</u>, Wis. Adm. Code)

Additional money may be received by a County from the Department's County Forestry fund account in the form of an interest free loan on a project basis when funds are available. These "project loans" may be used for productive forestry operations, including land acquisition, but may not be used for recreational facilities, fish management, endangered resources management or wildlife management projects. The State will determine if submitted applications for the project(s) are meritorious, desirable, and consistent with the comprehensive plan. The project loans will also be debited to the County's forestry fund account and repayment will be the same as with the acreage share payment through timber sale severance share of a minimum of 20%.

Project Loan Guidelines

Eligibility:	Counties with lands enrolled under the County Forest law.
Appropriation:	Under ss. $20.370(5)(bt)$ and (bu), Wis. Stats., and, when a surplus is available, ss. $20.370(5)(bq)$ and (bs), Wis. Stats., from the forestry SEG account.
Rate of Funding:	Up to 100 percent of the costs of a project. Up to 75% advance payment is possible, with the remaining 25% upon project completion.
Eligible Projects:	"Meritorious and economically productive forestry operations, including land acquisition." "may not be used for the construction of recreational facilities or for fish and game management projects." Project proposal requests will be prioritized. See <u>NR 47.60</u> for selection criteria.
Application Deadline:	August 15 for first round selection and December 1 for the second round and on a first come/first serve basis thereafter for project approvals.
Awarding of Loans:	Notification by the 20th day following the first and second selection rounds and within 20 days on first come/first serve projects also.
<u>Multi Year Loans</u> :	A multi year loan (up to 2 years maximum per application) for a single purpose. Each year of a multi year loan will be limited to 25% of the available funds but may exceed this limit up to 100% of available funds not used by other applications.

Application Materials:	 County board resolution Project specifications: maps, short narrative, estimated cost breakdown including any County contributions
	 Letter of compliance with County Forest Comprehensive Land Use Plan from the Department Liaison Forester Other material as the Department feels necessary
Accountability Review:	Projects will be audited in conjunction with regular Departmental program review.

Repayment of Loans

Repayment of all non-interest-bearing loans will be made as timber is harvested. All timber harvested from County Forest land shall pay a severance share of not less than 20% of the actual stumpage value. A higher rate of payment may be applied when agreed upon between the State and County. When the County does cutting and timber is not sold, or timber is sold as cut forest products, the severance share shall be 20% of the severance schedule under s. <u>77.06(2)</u>, Wis. Stats. All severance payments are credited to the forestry fund account of the County. No severance payment is required if there is no balance due in the forestry fund account of the County, or when the wood is removed for energy conservation projects (e.g. firewood for the general public).

OTHER FUNDING SOURCES

Numerous federal, State, and local grants may be available to government and non-profit conservation organization sponsors. More information on these programs, as well as other potential funding opportunities, and assistance with grants and/or loans can be found on the <u>DNR Financial Assistance website</u>. Federal funding options are listed below.

Federal Cost Sharing Programs

This section identifies the federal cost sharing programs that are available to the County Forests. The Department's Liaison Forester is the primary contact for all of the programs unless otherwise specified.

1. Endangered Species Funds

Federal cost sharing and grants for management and surveys of federally listed threatened and endangered species is available through the federal Endangered Species Act. Section 6 of the federal Endangered Species Act specifies a cost-sharing rate of 75% for projects within one State, and 90% for projects that involve a cooperative agreement between two or more States. Section 15 provides for grants where 100% of the cost is federally funded. Projects for both Section 6 and Section 15 funding can include surveys for threatened and endangered species, management programs that conserve a threatened or endangered species, or monitoring the status of a candidate or a recovered species. Contact the Bureau of Endangered Resources for more information on these programs and assistance in completing the required applications.

2. Sport Fish Restoration Act (Dingel-Johnson Funds (DJ))

This fund also referred to as Dingel-Johnson funds (DJ) are utilized to improve sport fishing. The program is funded by an excise tax collected from the manufacturer or importer of fishing tackle, motor boat fuels, electronic trolling motors, fish finders and other products. Counties are eligible to apply for many types of sport fisheries projects including water access. The local fisheries biologist should be contacted for specific details on these funds.

TOWN REVENUES

Townships that contain County Forest lands receive two sources of revenue as Stated in s. 28.11(8)(a) and 28.11(9)(d), Wis. Stats.

1. Acreage Payments

Reference s. 28.11(8)(a), Wis. Stats. This section of the statues requires the Department to pay each town \$0.30 per acre based on the acreage of County Forest located in that township as of the proceeding June 30. The Division of Forestry makes this payment on or around April 20 of each year.

2. <u>Towns Timber Sales Revenue</u>

Reference s. 28.11(9)(d), Wis. Stats. This section of the statues requires each County to pay 10 percent of their timber sales revenue annually to Townships having County Forest lands in them based on the acreage of such lands as of June 30 of the preceding year. Acreage from both special-use and regular class County Forest land is used in making this distribution.

This payment should be made by January 31. With County board approval, a County may pay more than 10 percent of its timber sales revenues to the Townships annually.

Acreage by Town Printouts

The Division of Forestry provides an annual acreage by town report to assist Counties with making annual payments to towns that contain County Forest lands. This report should be used to ensure that Townships with County Forest lands in them receive the minimum of the 10% of the timber sales revenue due to them under s. 28.11(9)(d), Wis. Stats., for County Forest lands.

COUNTY FOREST FINANCIAL ASSISTANCE SUMMARY

Financial assistance is an important part of the State's role in the County/State partnership. The following average summary shows only those monetary forms of assistance provided through the Division of Forestry. All values shown are rounded to nearest \$100.

	As of 8-31-20
1. Administration/Sustainable Forestry Program	\$1,613,900
2. Variable Share and Project Loans	\$1,500,000 ⁽¹⁾
3. State Nursery Stock Discount	\$19,800 ⁽²⁾
4. Aid to Towns	\$720,700
5. Forest Certification	\$29,000 ⁽³⁾
6. Wildlife Habitat Grant	\$112,200
Subtotal	\$3,995,600
Severance payments (credit)	\$ 408,800 ⁽⁴⁾
Net Financial Assistance	\$8,400,000 (5)

⁽¹⁾ These loans are repaid by each County at a rate of 20% of their timber sales receipts. This represents only the base appropriation each year. Additional funds are available from severance payments during the year.

⁽²⁾ This figure is taken from FY19, due to significant State nursery stock cancellations in FY20 on account of the COVID-19 pandemic

⁽³⁾ This is a five year average of the County Forest share of the forest certification contract.

⁽⁴⁾ This is a three year average of FY18, FY19, and FY20.

⁽⁵⁾ This is Division of Forestry financial assistance only and does not include costs of any technical assistance.

COUNTY FOREST COMPREHENSIVE LAND USE PLAN

A County Forest Comprehensive Land Use Plan, also called the County Forest Plan or 15-Year Plan, shall be prepared for a 15 year period by the Forestry Committee with assistance of technical personnel from the Department and other interested agencies as required by s. <u>28.11(5)</u>, Wis. Stats. The County Board and the Department shall approve the plan.

This plan shall be the official record of all County Forest policies, pertinent county regulations and planning documents. It shall also provide for a schedule of needs and action for the current planning period.

The objectives of the plan are to specify operating policies and procedures which the counties will follow in administering the County Forest, and to provide readers of the plan with background information regarding the County Forest.

Current plans are in effect from 2021 to 2035. Revisions to plans may be added as changing conditions require. The plans shall be revised upon expiration.

The County Forest Plan shall include land use designations, land acquisition, forest protection, access management, annual allowable timber harvests, recreational developments, fisheries, endangered resources and wildlife management activities, roads, silvicultural operations and operating policies and procedures. Also included shall be a complete inventory of the County Forest documented with maps, records and priorities showing in detail the various projects to be undertaken during the plan period.

Specific chapters of the County Forest Plan are traditionally as follows, although some counties may have a different numbering sequence:

100-Background	800-Integrated Resource Management
200-General Administration	900-Recreation
300-Description of Forest and Management Planning	1000- Appendix
400-County Forest Ownership	2000- Planning, Reports, & Budget
500-County Forest Administration	3000-Integrated Resource Management Units
600-Protection	4000-Public Comment Process of 15-Year
700-Roads and Access	Plan/Future Amendment List

Once a preliminary draft of the revised County Forest Plan is completed, it is open to public review. In addition, public informational meetings are to be held to receive comment on the plan. The Department Liaison Forester should ensure involvement of Department staff in this process.

The plan is then presented to the County Board for their approval. Following approval the plan is forwarded to the Division of Forestry through the local Department Liaison Forester for approval by the Department. Department approval authority for approving County Forest Plans has been delegated to the Division of Forestry Administrator.

When conditions require, necessary changes in policy and procedure are to be incorporated into the plan by amendment. Amendments to the plan require approval by both the County Board and the Department. Department approval authority for approving amendments to County Forest Plans has been delegated to the Forestry Field Operations Director within the Division of Forestry.

As soon as they are available, and no later than <u>June 30</u> of each year, the County Forest Administrator will distribute to each official plan copyholder any approved amendments, an annual accomplishment report, and an annual Work Plans and budget. The accomplishment report, Work Plans, and budget shall be placed in the plan's appendix but do not require approval by the Department as plan amendments.

The annual Work Plans and budget are based upon the County Forest Plan. The annual Work Plans shall include a

schedule of annual harvest goals and a listing by location of management projects where appropriate. The annual budget, including lists of estimated expenditures for work projects, administration, and protection of the forest, shall accompany the annual Work Plans. Both are recommended to be submitted to the County Board for approval at the November meeting. The annual Work Plans must be submitted to the Department for approval, as required by 28.11(5m)(b), Wis. Stats. as part of the County Forest Administration Grant application. Department approval authority for approving annual County Forest Work Plans has been delegated to the County Forest & Public Lands Specialist. Approval will be granted via the County Forest Administration Grant award letter distributed with grant checks annually.

Official updated copies of the County Forest plan are to be held by the following:

- 1. County Forest Administrator
- 2. Department Liaison Forester (6 copies)*
- 3. Executive Director, Wisconsin County Forests Association

* Department Liaison Forester copies are distributed to the District Forestry Leader, Area Forestry Leader, County Forest & Public Lands Specialist, Forestry Team Leader, the Liaison Forester, and the local Wildlife Biologist.

If at any time it appears that County Forest lands are not being managed in accordance with s. 28.11, Wis. Stats., and the County Forest Plan, the Department must bring it to the attention of the Forestry Committee and the County Clerk. If the noncompliance persists, the Department may proceed against the persons responsible pursuant to s. 28.11(12), Wis. Stats.

LAND ACQUISITION

County Forests include all county owned lands entered under the County Forest Law, <u>s. 28.11</u>, Wis. Stats. The county may appropriate funds for the purchase, development, protection and maintenance of the forest and to exchange other county owned lands for the purpose of consolidating and/or "<u>blocking the boundary</u>" of the forest, in order to facilitate overall resource management. Acquisition of additional land may be by outright purchase or trade (based on competent appraisal of the values involved), by gift, bequest or action to foreclose tax liens. The County Forest Administrator may be the agent of the County Forestry Committee and County Board in making first contacts with potential sellers and in carrying on acquisition activities. However, firm offers must have committee approval and final approval of purchase is subject to action by the County Board.

Financing of land acquisition, either inside the forest boundary or special-use lands outside the boundary, may come from funds available in a segregated land acquisition fund, state forestry aid loan, or other suitable account providing transfer of funds is approved.

Acquisition of Private Land Enrolled in a Forest Tax Law Program

Per <u>s. 77.10(2)(c)</u> Wis. Stats., private forest tax law lands sold or transferred to a county may be withdrawn without penalty if the land will be used for a public road, railroad, utility right-of-way, park, recreational trail, wildlife or fish habitat area, or as a public forest. Forest tax law lands include properties enrolled in either the Managed Forest Law or Forest Crop Law programs. A Declaration of Withdrawal – Exempt Forest Tax Law (Form 2450-162) must be filed with the Department to withdraw such lands. Counties may then apply to enter the lands into County Forest Law using the County Forest Law Entry Application (Form 2453-001) either simultaneously to or following the withdrawal.

Acquisition of Lands by Department Personnel

Manual Code <u>9103.11</u> places restrictions on Department personnel before they may acquire land or timber from lands located within a County Forest boundary.

Entry of County Forest Lands

The Department Liaison Forester and County Forest Administrator will work together on all entries into the County Forest program. Through the forestry committee, the county will purchase lands to be entered into the program. State grants and loans may be used for the purchase. Application for entry (Form 2453-1) will be prepared with the assistance of the Department Liaison Forester. Applications for entry are mailed to the County Forest & Public Lands Specialist. There are two types of lands entered under the law: regular and special use lands.

Regular Class:

Per <u>s. 28.11(4)(b)</u> Wis. Stats., these are lands that are primarily for the production of forest products.

Special Use:

Per <u>s. 28.11(4)(c)</u> Wis. Stats., lands may be designated as County Forest specific 'Special Use Land' if these lands have a unique or special use. Lands not suited primarily for timber production, but which are suitable for scenic value, outdoor recreation, public hunting and fishing, water conservation and other multiple-use activities may qualify for this designation.

Department approval authority for approving County Forest entries has been delegated to the County Forest & Public Lands Specialist, within the Division of Forestry.

Acreage Printouts

County Forest acreage printouts are sent from the Division of Forestry every July. These lists are the exact legal description and acreage that is on file with the Department. Any errors in these printouts should be sent to the County Forest & Public Lands Specialist along with appropriate documentation.

County Forest Withdrawal

The legal means by which counties may apply for withdrawal of lands from County Forests is provided by s. <u>28.11(11)</u>, Wis. Stats. Initially, the County Forest Administrator notifies the Department Liaison Forester of the County Forestry Committee meeting at which the proposed withdrawal will be considered. At that meeting, Department personnel and the county discuss the proposed withdrawal and, if approved by the County Forestry Committee, the committee will recommend the withdrawal by resolution to the County Board. If approved by the board by the necessary 2/3 majority, the application is prepared by the county and submitted to the appropriate Department Area Forestry Staff Specialist. The Department may ask for additional information from the county. If the Department deems advisable or at the written request of the County, the Department will hold a public informational hearing. If the application is denied, the county may appeal under s. <u>28.11(11)(a)4</u>., Wis. Stats.

County Forest Withdrawal Procedure

The purpose of this procedure is to provide general information in formulating and processing applications for withdrawal of County Forest lands under s. 28.11(11) and ch. NR 48, Wis. Adm. Code.

The legal means by which counties may apply for withdrawal of lands from County Forests is provided by section $\frac{28.11(11)(a)}{28.11(11)(a)}$. This section states in part: "The County Board shall first refer the resolution to the County Forestry Committee which shall consult with an authorized representative of the department in formulating its withdrawal proposal."

Section 28.11(11)(a) also states: "The County Board shall not take final action thereon until 90 days after such referral or until the report thereon of the forest committee has been filed with the board."

Consequently, if the County Board takes final action on a withdrawal application without referring it to the County Forestry Committee, the application is not valid. On the other hand, if the County Forestry Committee does not report to the County Board within 90 days after receipt of the referral, the board may act upon the application without a committee recommendation.

The County Forest & Public Lands Specialist is designated as the authorized representative of the Department who shall consult with the County Forest Administrator and Forestry Committees in discussing withdrawal proposals. All Department communications concerning withdrawal of County Forest lands shall be coordinated through the Area Forestry Staff Specialist. The final decision for requests for withdrawal presently rests with the Department's Division of Forestry Administrator.

County Forest Administrator

1. Notifies Department Liaison forester to the County Forest of the date and place of the County Forestry Committee meeting at which time the proposed withdrawal will be considered for formulation of a withdrawal application. Such notice shall include pertinent details of the withdrawal proposal including legal description of the lands involved and purpose of the withdrawal.

NOTE: In the event a withdrawal exchange proposal is involved, it is very important that the county postpones final financial negotiations with the owner of the land involved in the exchange until the Department has made a final decision on the withdrawal application.

Public Forest Lands Handbook

Department Liaison Forester	2.	Advises supervisor(s) and consults with the County Forest & Public Lands Specialist immediately on the proposed withdrawal and committee meeting date.
	3.	Attends County Forestry Committee meeting and consults with the committee on the proposed withdrawal.
County Forestry Committee	4.	At committee meeting held to evaluate proposal and to consult with Department Liaison Forester and/or County Forest & Public Lands Specialist, either:
		a. Undertakes further study of the proposal; or
		b. Rejects applicant's request for withdrawal, or
		c. Prepares resolution for County Board action recommending approval or disapproval of application.
County Board of Supervisors	5.	Upon receipt of the recommendation of the County Forestry Committee, or 90 days after referral to the committee, whichever is first, acts on resolution to approve, disapprove or modify the withdrawal application, or refer it back to the County Forestry Committee for further study.
	6.	If approval for withdrawal given by two-thirds vote of membership, authorizes and directs County Clerk and County Forest Administrator to prepare and submit the County Forest Withdrawal Application (Form 2453-3) for withdrawal to appropriate Department Area Forestry Staff Specialist.
Area Forestry Staff Specialist	7.	Upon receipt of County Forest withdrawal application (Form 2453-3), acknowledges receipt of the application to the County Administrator, with copies to the Department Liaison Forester, Team Leader, Area Leader, District Leader and County Forest & Public Lands Specialist. Requests additional information from the county as necessary to provide adequate detail for Department processing of the application. Requests for additional information must be sent to the county within 60 days as identified in s. <u>NR 48.03(2)</u> .
	8.	Consults with County Forest & Public Lands Specialist regarding specifics of the proposal.
Area Forestry Staff Specialist	9.	Prepares a 'DRAFT' decision including Findings of Fact, Conclusions of Law and Order and Notification of Appeal Rights and sends draft to the County Forest & Public Lands Specialist. The draft shall, at the minimum, cover the items identified in s. <u>NR 48.04</u> . Note: This draft is NOT a public record. It may not be released to the public upon request.
County Forest & Public Lands Specialist	10.	Reviews and modifies draft documents as necessary. Upon completion of Department investigation of the withdrawal application, prepares in conjunction with Bureau of Legal Services a final draft decision including Findings of Fact, Conclusions of Law and Order and Notification of Appeal Rights, for the Administrator, Division of Forestry. Note: This

draft is NOT a public record. It may not be released to the public upon request.

Administrator, Division of Forestry	11.	Issues	the	final	decision	on	the	withdrawal	application.	Department
		approv	val a	uthori	ty for app	prov	ing	County Fore	est withdrawa	als has been
		delega	ted t	o the I	Division o	f Fo	restr	y Administra	itor.	

If a withdrawal decision is appealed to the review committee by a County pursuant to s. 28.11(11)(a):

Division of Forestry

12. Keeps the Division Administrator's and Secretary's office informed of all developments in the appeal process.

Adverse Possession

The Adverse Possession statute is found in s. <u>893.29</u>, Wis. Stats. (Laws of 1998). The definition of Adverse Possession is found in s. <u>893.25 (2)</u>, which says "Real estate is possessed adversely under this section only if the person possessing it, in connection with his or her predecessors in interest, is in actual continued occupation under claim of title, exclusive of any other right, and only to the extent that it is actually occupied and protected by a substantial enclosure or usually cultivated or improved."

1997 WI Act 108, published April 28, 1998, revised s. <u>893.29</u>, Wis. Stats., to <u>prohibit the transfer of</u> title by adverse possession to any public lands "unless the adverse possession, prescription or user continues uninterruptedly for more than 20 years and is based upon a continuously maintained fence line which has been mutually agreed upon by the current landowners." This statute revision applies to those claims which have not "ripened" as of April 28, 1998. Ripened means that the claim has met the 20 or 40 year requirement before the published date of Act 108, whether or not the claim has been established in court.

Ripened Claims

Any legal action to establish title by adverse possession to public lands owned by the state, county, city, village, or town or political subdivision thereof, which has met the required statutory period of 40 years is considered a ripened claim. However, such statute of limitation changed to only 20 years, effective July 1, 1980. Legally, the application of such statute of limitations is prospective; therefore, the 40-year period would still apply if the adverse period is commenced prior to July 2, 1980, and the 20-year adverse period would apply thereafter.

Adverse Prescriptive Rights

State statutes also provide for the commencement of a legal action to establish prescriptive rights to land, other than quieting of title, after a period of 20 years. When a public utility is commencing such legal action, the statutory period is reduced to 10 years.

To establish prescriptive rights, the adverse use of land must also be open, notorious, hostile and continued without interruption during the statutory period of limitation.

A typical example would be the continuous and uninterrupted use of an access roadway over the land of another; however, there is a statutory presumption under s. <u>893.28 (3)</u> Wis. Stats., that mere use of a way over unenclosed land of another owner is presumed to be permissive rather than adverse.

Adverse Claim Establishment

Establishing a claim for adverse possession or prescriptive rights is done through a legal action, where the claimant must prove their claim for adverse possession or prescriptive rights in court.

A person claiming adverse possession can rely on the legal principle of "tacking", wherein any accrued uninterrupted and continuous occupation or use of land is transferable, or may be "tacked" onto by the succeeding party's period of use. Adverse occupation upon a seasonal basis is also legally sufficient to establish continuity.

The appropriate County Corporation Counsel should also be consulted when dealing with this subject.

TIMBER SALES

The timber sale is a valuable tool the county forest uses to meet many of its objectives and intended purposes identified in s. <u>28.11(1)</u>, Wis. Stats. Harvests are planned in accordance with the county forest comprehensive land use plan. This plan, developed with multi-source input, is designed to promote management practices which assure preservation of soil and water values while achieving multiple forest land management objectives. Such practices should consider: an accurate land inventory procedure, shoreline protection, efficient road/trail layout and timber sale design, topography, silvicultural requirements, recreational opportunities, wildlife habitat, threatened and endangered species sites, watershed protection, and stabilization of steam flow. Detailed procedures for conducting timber sales on County Forest land are documented in the Timber Sale Handbook.

Authority for timber harvesting is found in s. <u>28.11(6)</u>, Wis. Stats. The County Forestry Committee is authorized to sell merchantable timber and other forest products. Volumes of timber or products harvested are determined by tree scale, measure or count; the Scribner Decimal C log rule is used in log scaling. Only trees designated for cutting by qualified personnel recognized by the Department may be harvested. (See s. <u>28.11(6)(a) and s. 28.11(6)(b)</u>, Wis. Stats.)

Before forest products are harvested from county forests, an official cutting notice (Form 2460-1) must be submitted to the Department through the appropriate channels. Approvals are required at the various levels identified in the Timber Sale Handbook. (See s. 28.11(6)(b)3., Wis. Stats.)

County Forests must pay to the Department a severance share for timber harvested from the county forest. Townships also receive annual payments based on timber harvested. Please see Chapter 220 for details.

Penalties

If the county harvests trees without Department approval, the Department will assess a penalty equal to double the stumpage value of the cut products. (See s. 28.11(6)(b)3., Wis. Stats.) The penalty is not considered a severance tax and, therefore, cannot be credited to a county's indebtedness to the forestry fund account.

TIMBER THEFT

Per 26.05(2) Wis. Stats., no person may cut, remove or transport raw forest products or direct the cutting, removal or transportation of raw forest products without the consent of the owner. Raw forest products are defined in s. 26.05(1) as forest products not altered by a manufacturing process off the land from which they are taken. This includes seedlings, saplings, shrubs, whole tree chips, boughs, logs, pilings, posts, poles, cordwood products, pulp wood, fuel wood and Christmas trees.

All cases of alleged timber theft on County Forests should be investigated and resolved promptly. In all cases, especially criminal cases, the County District Attorney's office must be contacted for guidance to ensure adherence to County timber theft policies. These policies are also contained in Chapter 500 of the respective County Forest Comprehensive Land Use Plan.

County officials may obtain assistance with timber theft investigation from their Sheriff and Deputies. If requested by the County or Sheriff's Department, Conservation Wardens or non-sworn Forest Rangers may assist or take the investigative lead depending on availability, workload, and supervisory approval. The Department's participation in a case of timber theft on County Forest land will vary depending on the policy of the individual County (see "Law Enforcement" section in Chapter 210).

An investigation of timber theft on County Forest land may include the following:

- 1. Following standard investigative techniques; viewing the site, taking photographs, determination of land ownership and obtaining statements from County officials, complainant and witnesses.
- 2. Collection of physical evidence; an estimate of volumes and values by species of all forest products cut or removed. Saw timber stumps should be numerically identified in a semi-permanent manner and should be listed individually on a report including tree number, stump diameter, DBH, estimated height, estimated volume, and defect allowance.

Public Forest Lands Handbook

The report should document any tables or charts used. Pulpwood sized material may be estimated on a per tree or area method. All pulp trees in a predominantly saw timber area should be individually tallied. Aesthetic value should be considered as well as fisheries and wildlife values. Individual County policy should be followed if a legal survey is needed to establish property lines.

- 3. Locating all cut forest products and identifying them as originating from the theft area by matching species and butt logs to the stumps.
- 4. Seizing and holding for evidence all identified cut products at all locations by attaching proper seizure records and confiscation tags.
- 5. Interviewing the person(s) alleged to have committed the theft and obtaining statement(s).
- 6. Consultation with the District Attorney and initiation of the appropriate enforcement action (citation, criminal complaint, negotiation).
- 7. Reference <u>Timber Sale Handbook</u> (72-1 to 72-3) for further information on timber sale inspections and seizure procedures.

An allegation of theft by cutting, removing, or transporting raw forest products from the County Forest does not alleviate the County from payment under s. 28.11(9) Wis. Stats. The County will collect damages pursuant to s. 26.05 Wis. Stats. and may also pursue criminal charges under s. 943.20 Wis. Stats. and/or seek civil damages.

Additional details on timber theft enforcement, damage, and penalties can be found in 26.05, 26.06, 26.09 and 26.97, Wis. Stats.

RECREATION

Recreation is a vital part of the County Forest program. The Forestry Committee may designate recreation areas, facilities and allowable activities within the County Forest. Consult the County Forest comprehensive land use plan and applicable County outdoor recreation plan for specific information on recreational inventory, policies, recommendations and planning considerations. Information regarding Department aid for recreational facilities can be found in Wis. Stat. 23.09(11) and on the DNR Financial Assistance website.

County Forests may have County Forest Outdoor Recreation Plans specific to individual forests. These plans are developed to outline the addition and maintenance of outdoor recreation opportunities on a specific County Forest. It is recommended that land managers consult with their specific County regarding these plans and the impact that projects may have on outdoor recreation.

Some County Forests contain recreational trails that are heavily used by the public. Many of these trails are motorized, allowing seasonal use of off-highway vehicles (OHV). Please refer to Manual Code <u>2112.3</u> for more information regarding trails, routing, and impact avoidance.

WILDLIFE MANAGEMENT

A primary focus of wildlife management is the understanding and application of basic ecological principles that affect wildlife populations. It also involves a close look at the impacts to species and habitat today and in the future.

Establishing and maintaining quality wildlife habitat is an important consideration when determining management on County Forest lands. The large, diverse blocks of County Forest typically serve as excellent wildlife habitat.

Much emphasis has been focused on maintaining healthy populations of select game species such as the white-tailed deer, black bear, ruffed grouse, wild turkey and snowshoe hare. These very important species have generated considerable attention from the public for their hunting and wildlife viewing values. Wildlife management has generated considerable study toward perpetuating these species. Research recommends a continued, aggressive management of shade intolerant forest types for these species, and numerous other game and non-game species that rely on early successional habitat.

Alternately, numerous other wildlife species rely on late successional forest cover types. Maintaining larger blocks of hardwood forests – especially older forests and/or larger size classes – can be considerably valuable for a number of non-game, rare, and threatened or endangered species. Guidelines for both early and late successional species management have been developed and can be found in the <u>Silviculture and Forest Aesthetics Handbook</u>.

Prior to implementation, project and/or timber sale areas must be screened for potential impacts to rare and threatened wildlife, as outlined in the <u>Timber Sale Handbook</u>. It is *strongly recommended* to work with local Wildlife Biologists and Ecologists when considering projects impacting wildlife habitat (e.g. timber sale or project reviews, habitat mitigation, stand conversions for habitat purposes). Collaboration at the beginning of a project can minimize potential issues or management conflicts as the project progresses.

Wisconsin Wildlife Action Plan

Initially developed as requirement to obtain federal grant funding, <u>Wisconsin's Wildlife Action Plan (WWAP</u>) contains a comprehensive inventory of the nature and status of rare and declining species, as well as natural communities and ecological landscapes within the state. Over time, WWAP has become a guiding document to help resource managers identify and implement conservation actions to promote the health and wellbeing of these species and the communities they depend on.

Natural Communities & Habitats

Natural communities are assemblages of different plant and animal species, living together in a particular area, at a particular time, in a specific habitat. Generally, County Forests are a mixture of six larger communities: Northern Forests, Southern Forests, Barrens and Savannas, Prairies, Wetlands, and Aquatic. The size, age, composition structure, and position of these communities in relation to each other and the County Forest's neighborhood (other surrounding natural communities) is important in determining wildlife priorities. The <u>Wisconsin's Natural Communities</u> website and the <u>Ecological Landscapes of Wisconsin</u> publication can provide additional details about these communities and the rare plants and animals that depend on them.

Funding and Additional Resources

Funding for wildlife management has been almost exclusively from hunters, fishers, and trappers. In spite of this, much has been done toward habitat management of nongame, endangered and threatened species. This has occurred through the use of federal programs such as the PR (Pittman-Robertson) Program, Wisconsin non-game tax check-off efforts, hunting and fishing license fees, and a broadening of the philosophical intent of wildlife management. Incorporated into forest management prescriptions are practices that perpetuate and improve conditions for such species as bald eagles, herons, woodpeckers, reptiles, amphibians and songbirds. A few key references are listed below.

- Manual Code <u>1753.1</u> provides information on management concerns surrounding endangered resources.
- M.C. <u>2112</u> (Guidelines For Defining Forest-Wildlife Habitat Management Priorities) has been the cornerstone of forest-wildlife management with intense interest on deer. It provides land managers with a prescription for optimizing forest diversity with emphasis on the maintenance of intolerant types.
- M.C. <u>2112.1</u> (Forest Opening Maintenance and Construction) gives special attention to the management of small scattered herbaceous openings. These openings are focal points for numerous wildlife, including game species and several nongame as well.
- Natural Heritage Inventory (NHI) provides known occurrences of threatened and endangered species and communities.
- <u>Silviculture and Forest Aesthetics Handbook gives direction on management of timber types for wildlife</u> diversity.

The Department offers grants to counties for the development of wildlife habitat on County Forests. Refer to the *County Forest Assistance* chapter (Ch. 220), and <u>23.09(17m)</u> Wis. Stats. for information on how to receive funding. Additional information on aid for County fish and game projects can be found in s. <u>23.09(12)</u> Wis. Stats. Outside funding through external partners (e.g. Ruffed Grouse Society, Wild Turkey Federation), may be available to counties for wildlife management projects. Additionally, federal funding may be available for implementing habitat projects on County Forest lands. Consult with local Wildlife Biologists when seeking funding opportunities as type and amount of funding may vary over time.

ENDANGERED RESOURCES

Protection of endangered, threatened, and nongame species in Wisconsin is administered through both federal and state statutes and regulations. Federal laws include the Federal Endangered Species Act, the Lacey Act, the Migratory Bird Act, and the Bald Eagle Protection Act. Wisconsin laws include s. <u>29.604</u>, Wis. Stats., and ch. <u>NR</u> <u>27</u>, Wis. Adm. Code.

The Department is required by law to implement conservation programs for federal and state listed endangered and threatened species. This involves conducting research and developing programs directed at conserving, protecting, managing for and restoring certain endangered and threatened species to the extent practical.

The <u>Bureau of Natural Heritage Conservation</u> (NHC) implements and coordinates the Department's endangered species program by identifying, protecting, and managing native plant and animal species, natural communities, and other natural features; enhancing and restoring populations and habitats of rare and endangered species; and by promoting knowledge, appreciation, and stewardship of Wisconsin's native species and ecosystems. To accomplish this mission, the Bureau of NHC conducts inventories, maintains a statewide database of rare species and habitats, purchases and manages high quality natural areas, and implements species recovery programs. Prior to any management operations, a check for rare and endangered species needs to be conducted through the NHC online portal.

Federal Laws for Endangered Resources

1. Federal Endangered Species Act

Under the Federal Endangered Species Act, it is illegal to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect any threatened or federally endangered fish and wildlife species. In addition, it is illegal to import or export, transport, sell, remove, reduce to possession, cut, dig up, or damage any federally listed plant species from areas under Federal jurisdiction.

Under this Act all federal agencies must seek to conserve and recover federally listed species. Therefore, the government may develop protective regulations such as critical habitat designation: cooperate with the states on inventory, conservation, and recovery efforts; and acquire land as necessary. All federal agencies must consult with the U.S. Fish and Wildlife Service if any federal project would result in a direct or incidental take of any federally listed species. In addition, any state projects that could affect a federally listed species and that are funded in whole or in part by federal funds require consultation with the U.S. Fish and Wildlife Service.

In order to take, transport, possess, process or sell any federally listed species an endangered species permit must be obtained from the U.S. Fish and Wildlife Service.

2. Federal Lacey Act

The Lacey Act regulates the importation, exportation, receiving, acquiring, purchasing, or interstate transportation of any fish, wildlife, or plant species.

3. Federal Migratory Bird Act

The Federal Migratory Bird Act protects all migratory birds and their parts (feathers, eggs, nests) from being killed, taken, transported or possessed without a valid federal permit.

4. <u>Bald Eagle Protection Act</u>

The Bald Eagle Protection Act prohibits the taking, possession, sale, purchase or barter, transport, export or import of any bald eagle, or golden eagle, alive or dead, including any part of the bird and the nest or eggs, unless allowed by a federal permit.

State Laws for Endangered Resources

According to s. 29, Wis. Stats., and <u>NR 27</u>, Wis. Adm. Code, it is illegal to take, transport, possess, process or sell any wild animal that is included on the Wisconsin Endangered and Threatened Species List. In addition, it is illegal to remove, transport, carry away, cut, root up, sever, injure or destroy a wild plant on the Wisconsin Endangered and Threatened Species List on public lands. Silvicultural practices typically are exempted from the incidental take prohibitions of listed plant species.

The Department may issue permits, under specified terms and conditions, to take, transport, or possess endangered and threatened species. A scientific permit may be issued for zoological, educational or scientific purposes. An incidental take permit or authorization may be issued for a taking that will be incidental to the carrying out of an otherwise lawful activity. The proposed activity must minimize take to the maximum extent practicable, not jeopardize the continued existence and recovery of the species, and provide benefit to public health, safety or welfare.

Any activities the Department conducts, funds or approves with the potential to have a material impact on lands, wetlands, or water-bodies that are likely to support endangered resources should undergo an endangered resources screening. The DNR Endangered Resources Screening Guidance provides background information and process for DNR staff to conduct activity screening. County Forest programs may obtain access to the data through a license agreement.

Consult with local Ecologists on projects that may impact threatened or endangered species. More information regarding threatened and endangered species can be found at <u>http://intranet.dnr.state.wi.us/fwp/nhc/</u>.

WATER REGULATIONS AND WETLAND PROTECTION

State and County Forestry activities may require County, state, or federal permits for activities in or near navigable waters, including wetlands. These permit regulations exist for many reasons, among them the protection of water quality and fish and wildlife habitat, and preservation of shore cover and natural beauty. Persons unfamiliar with these regulations should contact the appropriate office or person as described below in the gray boxes.

Best Management Practices for Water Quality

All management activities, including but not limited to timber harvesting, road construction, and site preparation must refer to <u>Wisconsin's Forestry Best Management Practices for Water Quality Field Manual</u> (PUB FR-093 2010) for specific guidelines along waterways, including non-navigable waterways and wetlands. BMPs are mandatory on all state-owned lands and those County Forests that are members of a forest certification group or where referenced in their County Forest comprehensive land use plan.

State of Wisconsin Water Regulations

Since 1787 when the Northwest Ordinance was adopted to govern Wisconsin Territory, the state's navigable waterways have been considered public -- for the use of all citizens. Over the years, the courts and the state legislature have developed laws and rules for protecting the rights of the public. The Department has been charged with carrying out these laws. Many of the activities affecting navigable waters, such as grading and other soil disturbing activities, pond construction, bridge and culvert construction, placement of sand, rip-rap or fish cribs, dam construction and maintenance require permits or approvals from the Department.

The state legislature and the courts have defined **navigable waters** as waterways that have bed and banks, in which it is possible to float in a canoe at some time of the year - even if only during spring floods. **CAUTION**: Even small unmapped ponds and waterways may meet the test of navigability.

Consult with the Division of Forestry's Forest Hydrologist prior to implementing any project containing wetlands that may require mitigation or permitting with management practices, as silvicultural practices may allow for certain exemptions.

If the project is located in or near wetlands, and a Department permit is required, the Department will also be involved in a review of the project to see if it can meet wetland water quality standards (ch. <u>NR 103</u>, Wis. Adm. Code). The steps involved are determining 1) if the project will affect a wetland, 2) if the proposed activity is wetland dependent, 3) if a practicable alternative exists, and 4) if the project will have significant adverse impacts on wetland functional values. If water quality certification standards are not met, a permit will not be granted.

Work with the Forest Hydrologist to contact the appropriate Department water regulation and zoning specialist for information on permits that may be required for work in or near navigable waters. A Waterway and Wetland information line is available for DNR staff and the public by phone at (608) 267-3125 or by e-mail at DNRWMSPublicInquiry@wisconsin.gov.

In 2004 new Storm Water regulations were enacted (ch. <u>NR 216</u>, Wis. Adm. Code). If a construction project disturbs more than one acre of land and is not used exclusively for silviculture it may require a storm permit.

Work with the Forest Hydrologist to contact the appropriate Department storm water specialist for information on permits that may be required for non-silvicultural projects disturbing more than one acre of land. A Waterway and Wetland information line is available for DNR staff and the public by phone at (608) 267-3125 or by e-mail at DNRWMSPublicInquiry@wisconsin.gov.

County Zoning Regulations in the Shoreland Zone

Section <u>59.692</u>, Wis. Stats., requires counties to adopt and administer regulations to control development along the shorelands of lakes and streams. Regulations apply to lands within the "shoreland": lands within 1000 feet from the ordinary high water mark (OHWM) of a navigable lake, pond or flowage, or within 300 feet from the OHWM of a navigable river or stream or to the landward side of the floodplain, whichever is greater. The OHWM is the demarcation line between watercourse and upland. More specifically, it is the "point on bank or shore up to which the presence and action of the water is so continuous as to leave a distinct mark..." Those marks can be stains, erosion marks, vegetation, or soil mottling. Section <u>87.30</u>, Wis. Stats., also requires counties to adopt and administer regulations to control development in floodplains (see "County, City and Village Floodplain Zoning" below).

Under County shoreland zoning (s. <u>59.692</u>, Wis. Stats., and ch. <u>NR 115</u>, Wis. Adm. Code), counties regulate a variety of activities in the shoreland zone. Provisions in County shoreland ordinances most likely applicable to County Forestry projects are tree and shrubbery cutting, filling and grading, and structure setbacks.

- <u>Cutting of Trees and Shrubbery</u>. At a minimum, County ordinances require that in the strip of land 35 feet wide inland from the OHWM, no more than 30 feet in any 100 feet shall be clear cut. For land greater than 35 feet inland, any tree and shrub cutting must be governed by sound forestry and soil conservation practices, and with consideration of its effect on water quality. These provisions do <u>not</u> apply to removal of dead, diseased or dying trees or shrubbery.
- 2. <u>Filling, grading, lagooning, dredging, ditching and excavating.</u> At a minimum, County ordinances state that these may be permitted only in accordance with provisions of shoreland/wetland regulations; if they meet requirements of ch. <u>30</u>, Wis. Stats., and other state and federal laws; and if they are done in manner to minimize erosion, sedimentation, and impairment of fish and wildlife habitat.
- 3. <u>Structure setbacks</u>. At a minimum, County ordinances require that there is 75 feet from the OHWM to the nearest part of building or structure, except for piers, boathouses, and boat hoists.

Check with the local County zoning office before beginning your project. In addition to the state minimums described above, counties may have more restrictive requirements.

County, City and Village Wetland Regulation in the Shoreland Zone

County, city and village wetland zoning requirements apply to wetlands (state definition is found in s. <u>23.32(1)</u>, Wis. Stats.) greater than 2 acres in size, in the shoreland zone, and on the Wisconsin Wetland Inventory map. Under these ordinances, silviculture is a permitted use in shoreland wetlands, **as long as no filling, flooding, draining, dredging, ditching, tiling or excavating is done** except in limited circumstances involving road construction and maintenance and temporary water level stabilization.

Check with the local County, city or village zoning office before you begin your project.

County, City and Village Floodplain Zoning

Under s. <u>87.30</u>, Wis. Stats., and ch. <u>NR 116</u>, Wis. Adm. Code, lands subject to hazards from the 100-year flood (also called the one percent chance flood or regional flood) are mapped and regulated under municipal zoning ordinances. Floodplain ordinances regulate the land use, site design, and structural design of buildings and other features of development. For example, in the "floodway district" (land necessary to convey flood flows without obstruction; generally associated with moving water), it is illegal to store logs and logging debris because it would be an obstruction to flood flow.

Check with the local County, city or village zoning office before you begin your project.

Federal Regulations

Section <u>404</u> of the Federal Clean Water Act regulates discharges to waters of the United States, including wetlands. Permits must be obtained from the U.S. Army Corps of Engineers for wetland fill. The Corps cannot issue a permit if water quality certification has been denied under the authority of section <u>401</u> of the Clean Water Act, using procedures and criteria found in ch. <u>NR 299</u>, Wis. Adm. Code. Denial of water quality certification advises the Corps that projects are inconsistent with state water quality standards for wetlands (ch. <u>NR 103</u>, Wis. Adm. Code). (Refer to "State of Wisconsin Water Regulations" section above.)

Many, but not all, silvicultural practices are exempt from these Federal regulations.

Before you begin your project, work with the Forest Hydrologist to contact the appropriate Department water regulation and zoning specialist and the U.S. Army Corps of Engineers district office for more detailed information. Department water regulations specialists can be contacted through the Waterway and Wetland information line at (608)-267-3125 or by e-mail at DNRWMSPublicInquiry@wisconsin.gov.

WILDERNESS, SCIENTIFIC, AND NATURAL AREAS

Areas designated as wilderness, scientific, or natural areas should be identified in the County Forest comprehensive land use plan. Since designation definitions may vary from County to County, site specific objectives and management goals should be identified in the plan.

Each area holding these designations will be evaluated individually. Evaluation criteria may include educational, scientific, recreational, or biological diversity values. Some areas holding these designations may have certain entry or management restrictions. Consult with Department staff when conducting management within these areas. Contacting local Wildlife Biologists or staff with the Bureau of Natural Heritage Conservation is recommended prior to the implementation of any management activities.

CHIPPEWA TREATY RIGHTS

American Indian treaty rights, and specifically Lake Superior Bands of Chippewa Indians (who more commonly refer to themselves as Ojibwe), were granted reserved rights to hunt, fish and gather on all ceded lands in eastern Minnesota and northwest Wisconsin as part of treaties in 1837 and 1842. Federal courts have determined that these bands retain those rights to this day.

In a February 21, 1991 decision, U.S. District Court Judge Barbara Crabb determined that the Chippewa's rights do *not* include the right to harvest the commercial timber resource. When the Chippewa entered into the treaties, they ceded to the United States government their rights to the timber forever. It was determined that commercial timber harvesting within the ceded territory was not among the Chippewa's usual and customary activities at the time the treaties were signed. Besides hunting and fishing rights, the Chippewa *did* retain the right to gather miscellaneous forest products in the ceded territory including firewood, boughs, tree bark, lodge poles, marsh hay, and maple syrup. This type of gathering was determined to be usual and customary activities of the Chippewa at the time the treaties were signed.

The counties retain the right to regulate any forest product gathering conducted on county-owned lands under the 1837 and 1842 treaties in order to protect the natural resources of public ownership. County Forests in ceded territories generally have special permit forms for gathering miscellaneous forest products. Depending on specific county policies, permit forms must be obtained from individual County Forests prior to any gathering activities. Counties shall respond to the gathering permit request no later than 14 days after the receipt of the request.

Permit information often includes the following:

- 1. Property name and address
- 2. Applicant name, address and telephone number
- 3. Tribal identification card number
- 4. Type of forest product to be gathered
- 5. Amount or volume of forest product to be gathered
- 6. Location description and map
- 7. Conservation, public health, and safety items
- 8. Permit time frame
- 9. Signatures of permittee and property representative

Counties may not deny a request to gather miscellaneous forest products on their property unless the gathering is inconsistent with the comprehensive land use plan for the property, the gathering will conflict with the pre-existing rights of a permittee or other person possessing an approval to conduct an activity on the property (including a contractor of the county), or is inconsistent with conservation, public health, or safety.

No permit is necessary for fruits, seeds, wild rice, or berries unless specified by County Ordinance.

Gathering of forest products listed on the Department's threatened and endangered species list (including fruits, seeds, berries, or plants) is not permitted.

Products gathered are for subsistence purposes and may not be sold commercially.

Additional details about gathering rights on public lands can be found in Wis. Admin Code NR 13, Subchapter IV.

<u>ROADS</u>

A County Forest road system is important for forest management and outdoor recreation on the County Forest. Each County Forest will set its own policy on density and maintenance of roads. Roads and trails are essential for management, protection and recreation of the forest. Road density has been identified as an important issue in management considerations for some wildlife species, recreational activities, invasive species control and others. County Forests are encouraged to develop an access management plan that addresses these considerations.

The Department of Transportation has established the County Forest Road Aid program, realizing that a network of forest roads is necessary for forest management and outdoor recreation. As part of the County Forest Comprehensive Land Use Plan (Chapter 700), the current and future County Forest roads are documented and used as a guide for entry into the County Forest Road Aid program. These roads must meet minimum road standards, as defined by s. <u>86.315(4)(a)</u> and <u>86.315(3)</u> Wis. Stats. Annual payments are made to County Forest programs to compensate for maintenance of these roadways. The County Forest & Public Lands Specialist has responsibilities of the Annual Forest Road Certification process within the Department. County Forest road maps are reviewed for consistency with the individual County Forest Comprehensive Land Use Plan.

Note: Construction of any road encompassing over 1 acre of area for a use other than exclusive silviculture purposes may require stormwater permitting under ch. <u>NR 216</u>, Wis. Adm. Code or other water regulation permitting under ch. <u>NR 30</u>, Wis. Adm. Code. Refer to Wetland Regulations chapter of this handbook (260-5 to 260-7) and contact the Division of Forestry Forest Hydrologist for further information.

TREE PLANTING STOCK SOURCES

The Department operates three nurseries in Wisconsin – Hayward State Nursery in Hayward, Griffith State Nursery in Wisconsin Rapids, and F.G. Wilson State Nursery in Boscobel. Seedling stock production is currently limited to the Wilson State Nursery under provisions of ss. <u>28.06</u> and <u>28.11(3)(f)</u>, Wis. Stats., and s. <u>NR 1.20</u>, Wis. Adm. Code. These nurseries can provide the County Forests the following assistance with regeneration efforts occurring on County Forest lands:

- 1. Supply of bare root conifer and hardwood seedlings for hand or machine planting
- 2. Supply of bare root wildlife shrub seedlings
- 3. Tested and treated seed from native tree species for direct seeding operations
- 4. Production of specialized seedlings from selected seed sources or pre-arranged nursery culture
- 5. Reforestation advice and other special needs
- 6. Development nursery stock

The Department is capable of producing up to 10 million tree and shrub seedlings annually at the Wilson State Nursery in Boscobel. The Hayward and Griffith State Nurseries are not currently in production, but still maintain the capacity and infrastructure to produce seedlings and could begin to produce seedlings again if conditions warrant.

Seedling orders are placed starting the first Monday in October using the Tree and Shrub Application (Form <u>2420-</u> <u>31</u>) or its online equivalent. Orders are processed by staff at the Griffith State Nursery on a first come, first serve basis. Seedling delivery occurs in the spring following ordering. Counties should work with Reforestation Program staff and/or their Department Liaison Forester to plan and arrange transportation of seedlings.

Several benefits are extended to the counties as a result of the cooperative relationship between the County Forests and the Department. All County Forests qualify for a 50% discount from the established price for State-produced seedlings and development stock for use on lands enrolled in County Forest Law. (Note: The discounted costs not paid by the counties are paid through the Department's forestry account.) Seedling stock prices are approved annually by the Department leadership and vary based on the cost of production.

Tree seed for direct seeding efforts may also be purchased from the Reforestation Program. Seed for selected species must be ordered in advance. Seed is tested for items such as germination viability and seeds per pound, with all information available to the purchaser. The Reforestation Program determines the prices and availability of seed annually.

The Reforestation Program may produce special nursery stock for County Forest regeneration efforts or may obtain it from other appropriate public nurseries. Production of seedlings from specific seed sources, with special age or size requests or other cultural requests should be coordinated through Department Liaison Foresters and the Reforestation Program Team Leader. Other reforestation advice is available by consultation with Reforestation Program staff or other Department Specialists.

EQUIPMENT RENTALS

Procedure, types of equipment, and rates for the rental of forestry site preparation equipment from the Department is discussed in the Forestry Operations Handbook (2420.5). Rental rates for heavy equipment are found in Chapter 60 of the Fleet Management Handbook (9210.5). Requests shall be submitted through the Department Liaison Forester using Form 2400-072 and sent to the Superintendent of the LeMay Forestry Center in Tomahawk. Rates, availability and inventory may change, contacting the LeMay Forestry Center is recommended in advance of any planned project.

PEST MANAGEMENT

Forest Pests & Pathogens

Damage to forest resources caused by insects, other pests, and diseases can adversely affect management of the forest. Prevention, detection, and control of insects and diseases is an ongoing process conducted throughout the year by County and Department personnel. Significant and/or unusual outbreaks should be reported to a Department District Forest Health Specialist. The Forest Health Specialist, in conjunction with County and other Department staff, may conduct appraisals of pest population, hazard areas, damage, and forest reconnaissance to determine if active control measures are necessary.

Losses to resource values impacted by forest pests can be minimized through Integrated Pest Management (IPM) methods. Emphasis will be placed on silvicultural prescriptions (e.g. timber sales), but control methods may also include biological and/or chemical control. The least invasive control method should have priority. Evaluation before and after control methods will be conducted by County and/or Department staff to measure effectiveness of control operations.

More information on forest pests, detection, and control methods can be found in Chapter 600 of the County Forest Comprehensive Land Use Plan.

Invasive Plant Species

<u>Chapter 23.22 Wis. Stats.</u> defines invasive species as "nonindigenous species whose introduction causes or is likely to cause economic or environmental harm or harm to human health." Invasive plants can cause significant negative impacts to the forest by displacing native plants and hindering forest regeneration efforts. Preventing invasive species from dominating habitats is critical to the long-term health of the forest. <u>Best Management Practices</u> have been developed to help forest managers with efforts to prevent the introduction and spread of invasive species during management activities.

There are a number of invasive plant species in varying densities on County Forests. These species should be documented with treatment plans identified. Some invasive plants warrant immediate and continual treatment efforts while others may be allowed to remain due to extent and financial ability to control them. Chapter 600 of the County Forest Comprehensive Land Use Plan contains more details regarding invasive species present on the forest and control options for those plants.

County Land and Water Conservation staff, UW-Extension agents, and <u>Wisconsin Cooperative Invasive Species</u> <u>Management Areas (CISMAs)</u> may provide local partnership opportunities and technical assistance with invasive plant treatment plans and control measures.

Grant opportunities for invasive species control funding can be found on the <u>Wisconsin Invasive Species Council -</u> <u>Financial Assistance</u> webpage. The number of grants for local governments and County Forests is limited, especially for terrestrial invasive plant control. However, other Department grants, such as the Turkey Stamp Program, might support invasive plant control as part of larger efforts to promote certain outcomes. More information on Department grants can be found on the <u>DNR Financial Assistance</u> webpage and coordinated through the Department County Liaison Forester.

SPECIAL USES

Military Maneuvers

Some County Forests are entering into agreements, leases, etc., which allow the military to conduct exercises or maneuvers on County Forests. If approached by the military for this purpose, check your County Forest comprehensive land use plan and with Corporation Counsel for present policy. The Department Liaison Forester should check with the County Forest & Public Lands Specialist and the Bureau of Legal Services.

If no policy has been set, a preliminary meeting should be held with the County, military, and Department representatives to determine the needs. After the needs have been determined, the Forestry and Parks Committee should be advised, the site field checked, Department approval sought, township officials involved, and a public informational hearing held. This information should be gathered before a legal agreement is drafted. All involved parties and the public should have input into the agreement before presentation to the County Board.

One of the key items in the agreement is having a military chain of command to contact when problems arise with the agreement. Personnel changes are continual in the military so positions with phone numbers should be indicated. Only one position should be indicated as the contact. Any maneuvers held should abide by this agreement.

Rifle Ranges

Rifle ranges are a permitted use of County Forest lands. A County should have a land use agreement with any organization managing the range. This agreement must allow for a reasonable time period for use of the facility by the general public.

Land Use Agreements/Easements

Activities, events, or uses that are not consistent with s. 28.11(1), Wis. Stats., should be covered by a land use agreement between the County and the applicant. The use agreement should be for a specific period of time and may be renewable.

Counties should only use land use agreements. Easements are not encouraged since by judicial case history they are viewed as being permanent and transferable to all future owners or parties. However; in the event that an easement is the only option for a particular issue impacting the County Forest (e.g. public utility lines, pipelines) the following should be considered:

There are specific exceptions to the prohibition on leases and easements as follows:

- 1. Leases for exploration, prospecting and extraction of ore, minerals, gas or oil.
- 2. Easements for forest protection, including fire lookout towers, telephone lines, fire lanes or forest protection structures.
- 3. Easements for the construction of high-voltage transmission lines for which a certificate of public convenience and necessity has been received by an electric utility.

Based on an Attorney General Opinion (OAG 08-10), other easements could be allowed where <u>all</u> of the following are met:

- 1. The easement does not conflict with s. <u>28.11</u> Wis. Stats.
- 2. The easement helps to achieve the purposes of s. 28.11(1) Wis. Stats.
- The easement is approved under the County Forest comprehensive management plan under s. <u>28.11(5)</u> Wis. Stats.

It is not enough that easements merely do not conflict with the County Forest Law purposes. They must also be consistent with (e.g. help to achieve) the purposes of s. 28.11(1) Wis. Stats., and must be included in an approved County Forest Comprehensive Land Use Plan. For example, any easements or leases for a private purpose would not

be consistent with the "maximum public benefit" language in. s. 28.11(1) Wis. Stats . This is consistent with the Department's past interpretations rejecting a host of different types of leases and easements (cabin leases, road/access leases, private gun club leases, etc.) that directly conflict with the purpose of the County Forest Law, and notes those types of activities are inconsistent and must therefore be specifically exempted in current law.

Cabin Leases / Permits

Privately owned cabins erected and maintained on County Forests are inconsistent with the public use requirement required under s. <u>28.11</u>, Wis. Stats. and are not permitted.

Mineral Exploration, Prospecting, Mining

The County Board has the power as described in s. <u>28.11(3)(i)</u>, Wis. Stats., to enter into leases or agreements to explore and prospect for ore, minerals, gas or oil upon any County Forest lands. The policy of the individual County for mineral exploration, prospecting and mining is contained in Chapter 500 of the County Forest Comprehensive Land Use Plan.

The Department is required by s. <u>28.11(3)(i)</u> Wis. Stats., to review and approve prospecting agreements between counties and private companies. To aid in this review, a model exploration-prospecting agreement has been developed which contains basic provisions and language necessary to carry out the Department's responsibilities. Contact the County Forest & Public Lands Specialist for details.

The Department's chief concern is that the agreements provide for environmental protection and restoration during the exploration-prospecting agreement period. A site by site evaluation will be conducted to assess and determine if special protective measures need to be taken.

The County Board has the power as described in s. 28.11(3)(j), Wis. Stats., to enter into leases for the extraction of deposits of ore, minerals, gas or oil upon any County Forest land. The extraction may occur on County Forest land if it can be accomplished without permanently affecting the surface of the land. Approval of this lease by the Department is required. If extraction cannot be accomplished without permanently affecting the land surface, the extraction may not begin until the land is withdrawn as County Forest land.

An environmental assessment/impact statement may be required at the time of processing a request for withdrawal of County Forest lands to accommodate actual mining. This assessment/impact is covered in M.C. <u>2712.1</u>, *Mineral Exploration-Prospecting: County Forest*.

Sand and Gravel

Gravel and sandpits located on County Forests may be used only by units of government or contractors performing public works. Use of existing pits and the opening of new pits by other than the County Forestry Department will require committee approval and be authorized by permit only. The conditions of such permits may include, but not be limited to, requiring the pit and its access road to be screened from view from any public highway, severing trees from the stump, disposition of brush, disposing of dirt spoil by leveling or hauling away, sloping to prevent steep banks and filing with the forestry office an annual written report of gravel and sand removed. Other conditions may be set at the discretion of the committee or County Forest Administrator.

The Nonmetallic Mining Reclamation Program, ch. <u>NR 135</u>, Wis. Adm. Code, effective starting in 1999, impacts all active, nonmetallic sites **greater** than one acre in size. Highway or building construction projects are also exempted, however, this only applies for road building conducted by WisDOT for state projects when conducted in accordance with WisDOT standards and specifications. (This is NOT applicable to County or local road projects). <u>NR 135</u> does cover those mining operations conducted on County Forests but provides special provisions for these. Uniform standards and guidelines for a locally administered permit program are included in <u>NR 135</u>. County Forestry departments should work with their local permit coordinators (often County or local zoning office) in obtaining the necessary permits for nonmetallic mining operations.

Telecommunication Towers

•

Siting of telecommunications towers on County Forest land is inconsistent with the purposes set forth in s. <u>28.11</u>, Wis. Stats. Any proposals to locate such structures on County Forest land will first require the filing of an application to withdraw as outlined in <u>250-50</u> of this handbook, ch. <u>NR 48</u>, Wis. Adm. Code and s. <u>28.11.(11)</u>, Wis. Stats. Any proposals for tower siting should involve early notification of the Department Liaison as well as the County Forest and Public Lands Specialist. See also M.C. <u>2222.1</u>.

STATE OWNED LANDS MANAGEMENT

In the interest of uniformity in timber sale procedures and of full utilization of specialized professional training, DNR Foresters are assigned responsibility for establishing forest management practices, including timber sales, on all Department-owned lands. Close cooperation and integration must exist between staff from the Forestry Division, the Fish, Wildlife, and Parks Division, and the Bureau of Law Enforcement to maximize the success of a timber sale program. Specific property assignments will be made by the first line forestry supervisor or designee.

Management Assistance to other State and Local Agencies

Occasionally, requests for management assistance are received from other State and local government agencies. Examples typically include the sale of timber associated with Department of Transportation (DOT) or local highway or other public works construction or maintenance projects; or the sale of timber from forest management projects on lands that are not part of the County Forest or Community Forest programs. Such requests shall be handled in a similar fashion to inquiries from a private landowner. A DNR Forester can evaluate the timber land or timber resource involved and provide basic recommendations (e.g. advice on sale methods, competitive bidding process, provide example contracts, etc). However, a DNR Forester **shall not act as an agent** for another government entity unless a specific, formal agreement is in place, and approved by Department leadership. Rather, other agencies should be encouraged to retain the services of a Cooperating Consulting Forester who can act as their agent in establishing and administering the contractual and financial obligations related to the sale of timber.

Forest Management Planning

Property Master Planning is a process that is used to determine how a property will be managed and developed. The development of Master Plans is governed by <u>ch. NR 44</u> Wis. Adm. Code. This rule defines Master Planning, sets forth its purposes, specifies the general planning process, and the content of a Master Plan. This rule also establishes a uniform land management classification system to be applied in the Master Plan.

All state owned lands that do not have an NR 44 compliant Master Plan must develop an **Interim Forest Management Plan (IFMP)** prior to advertising and selling timber sales. This includes properties with older Master Plans (defined as pre-NR 44 – 1996) and those that have no Master Plan. It is the responsibility of the Property Manager and associated program to facilitate the development, review and approval of an IFMP.

An IFMP should not be developed for a property that is <u>actively engaged</u> in a property planning process. Forest management planning must be integrated into the broader property planning effort. If a property is scheduled to begin a property planning process soon (within about a year) evaluate whether to complete an IFMP or wait for the planning process. If an IFMP is developed for a property that is about to begin a planning process, any prescribed management actions should not foreclose future management options for consideration in the upcoming property planning process.

Early in a Master Planning process, opportunities for conserving biological diversity at a given property or group of properties are typically determined by completing either a "Biotic Inventory" or an "Ecological Assessment," depending on the assigned planning tier. This analysis may result in the identification of deferral and or consultation sites, as described in <u>Manual Code 1750.15</u>. Implementation of management activities on deferral or consultation sites in the time period between identification of such sites and final approval of a property Master Plan should only proceed pursuant to <u>Manual Code 1750.15</u>.

DNR Foresters provide the following key services to management planning, including assisting planning teams in developing NR44 Master Plans and Interim Forest Management Plans (IFMP).

1. Forest RECON

Foresters are responsible for updating and maintaining forested habitat reconnaissance. The Habitat Manager is responsible for non-forested habitat reconnaissance. Foresters and Habitat Managers should provide and interpret recon to the property manager. Key elements include cover types, age class, size class, and successional stage.

2. Landscape Considerations

Foresters and Habitat Managers can provide additional knowledge about the "area", the ecological landscape considerations, and how the property fits in with the broader landscape, particularly in a forest context (including linkages with the Wildlife Action Plan, Conservation Opportunity Areas) to support information developed by Natural Heritage Conservation District Ecologists.

3. <u>Management Objectives and Options</u>

Foresters and Habitat Managers should provide property managers with the range of feasible options for managing the variety of cover types on each property. Foresters and Habitat Managers are well versed in developing management objectives reflecting property goals and future desired conditions. Foresters and Habitat Managers should offer expertise to craft or assist in writing management objectives for properties and cover types as well as the range of management prescriptions possible to meet the identified objectives. Treatments should be scheduled in WisFIRS based on stand conditions, property goals as described in the management plan, and based on discussions at APIMs.

4. <u>Plan Implementation - Annual Allowable Harvest Goals</u>

Foresters schedule treatments and facilitate or directly implement, scheduled forest management practices (e.g. timber sales). Identifying and scheduling treatments to meet future desired conditions provides predictability to managers and the public to generate a grounded annual allowable harvest goal.

5. <u>Annual Property Master Plan Monitoring Reports</u>

The goal of this annual monitoring is to share significant completed treatments designed to implement the Master Plan objectives with our staff, partners, and the public on each department owned property. Monitoring reports will fall into one of two categories:

a. <u>Basic Monitoring Report</u>

These are system generated reports showing the significant completed treatments of habitat projects from data entered within the WisFIRS database. This report will show all completed treatments for a 3-year period.

b. Expanded Monitoring Report

These will be generated by the Property Manager for large and/or complex properties of significant public interest. The report will contain all completed projects found in the basic reports plus all additional habitat, recreation, or development projects not available in WisFIRS along with supporting details and explanations. Examples could include work completed by volunteers and partners or those that have the potential to be controversial and require detailed explanations. All Northern State Forests will complete the expanded monitoring report.

See section 2.7 of the <u>Property Managers Guidance</u>, for additional information on Master Plans. See the <u>IFMP guidance documents</u> on the DNR intranet site for more information on IFMP development.

Annual Property Implementation Plans

1. Purpose

In 2018, Annual Property Implementation Plan (APIPs) were developed as a new method for Property Managers and resource staff from across the Department to discuss and complete integrated project planning for Department-owned lands using a systems-based approach. This process was designed as a tool to help assist in identifying the annual work needs, reach agreement upon who is responsible for

individual tasks, and serve as a method to hold each administrative program accountable for meeting their property's management goals. The overall goal of the planning process is to promote and encourage upfront discussions between Property Managers, Foresters and Habitat Managers to ensure that land management activities are being accomplished effectively and consistently within the guidance of the Master Plan or IFMP. APIPs are developed and published for review in March to allow for feedback from other staff, partners, and the public.

2. <u>Basic APIP</u>

These are system-generated lists of all major habitat, recreation, and development projects planned for each department property that has qualifying project listed in WisFIRS and DPS. Table 1 lists management projects that which will be listed and those that are considered routine and not listed.

3. Expanded APIP

Large or complex properties of significant public interest have the option to develop expanded APIPs which contain all of the information contained within the basic APIP plus additional habitat, recreational, or development projects not available within WisFIRS and DPS or require additional details and explanations. A template for an expanded APIP can be found within the <u>Public Lands Toolkit</u>.

The following are examples of significant projects that must be included in APIPs and discussed at APIMs and those that are deemed routine do not need to be included in this process. This should not be considered an all-inclusive list but guidance to determine whether a project is significant or routine.

a. <u>Significant/Noticeable Management Activities</u>

- Prescribed burning
- New farming agreements
- New construction: Recreational/Infrastructure development
- Renovation/restoration/expansion: Recreational/Infrastructure development
- Habitat type conversions (e.g. afforestation, row crop to prairie)
- Pesticide use: Individual approvals per M.C. <u>4230.1</u>
- Timber management activities (harvests, establishment, site preparation, etc.)
- Large-scale hazard tree removal in developed areas
- New food plots or wildlife openings
- New fish stocking projects
- Brushing/forestry mowing to restore natural habitat/communities
- Mineral & non-mineral extraction
- Other Habitat restoration projects
- Hydrologic manipulations

b. <u>Routine Activities</u>

- Designated use and infrastructure maintenance (mowing trails/parking lot areas)
- Continuing farming agreements (row crops, grazing, etc.)
- Boundary posting, placing and/or replacing property signage
- Property attendance numbers, budgets
- Routine law enforcement activities
- Pesticide use: general approvals per M.C. <u>4230.1</u>
- Routine small-scale hazard tree removal
- Maintaining existing food plots, fields, or wildlife openings
- Continuing (routine) fish stocking

4. Public Notification

Both basic and expanded APIPs are reviewed internally by staff prior to being shared externally with our partners and the general public. APIPs can be viewed at: <u>https://dnr.wi.gov/</u> keyword APIP. They are searchable by county, property name, property type, and other key fields.

Annual Property Implementation Meetings

Annual Property Management Meetings (APIMs) provide a structured venue for Department resource professionals from the Divisions of Fish, Wildlife & Parks and Forestry, as well as other Department programs (e.g., water quality, law enforcement, & real estate) to discuss property management in a holistic, integrated fashion. The meetings accomplish multiple objectives including:

- Discussion of significant management projects planned for the upcoming growing and construction seasons
- Identification of future management projects (1-3 years out) that will require cross-program coordination
- Assessing progress toward completion of Master Plan goals & objectives

It is understood that APIMs are not necessary or appropriate for every Department property. A list containing all Department properties that are required to hold an APIM and the administrative program that is responsible can be found within the APIP/APIM Implementation Guidance document found on the <u>Public Lands Toolkit</u>. APIMs will follow the timeline in Table 1 and be completed by Jan. 31st of each calendar year.

APIMs are used to discuss property specific APIPs and other significant projects scheduled to occur on the property within the next growing/construction season and to begin discussions on additional projects planned in the next 2-3 years. APIMs are especially important where Property Managers and Habitat Managers are new and if adequate field integration is not occurring between programmatic functions.

1. Conflict Resolution

In rare instances when a Property Manager, Habitat Manager, Forester, or other program staff are unable to reach an agreement on a treatment, development, or recreation project the following procedure will be followed:

- a. Review and share the stand, compartment, or property's management goals, objectives, and prescriptions listed within its Master Plan, property plan, or IFMP for clarity.
- b. Field staff should schedule meeting or field visit to discuss and review the project and include the appropriate first-line supervisors from all involved programs and any additional resource management experts as necessary.
- c. If agreement still cannot be reached, refer project to the next level of supervision within the chain of command until an agreeable solution is reached.

	Field recon updated, treatments reviewed and scheduled in WisFIRS (focus is on next 1-3
July 1 - Jan 31	calendar years) for all major habitat projects. Inter-program proposals discussed between Property Managers,
	Habitat Managers, Foresters, etc. (e.g. field integration).
By Dec. 15	Annual property planning guidance released to property management programs and staff.
By Jan. 31	Annual Property Implementation Meetings (APIMs) or functional equivalent held for all properties
	listed in Appendix 1 of Implementation Guidance document

Table 1. Annual Property Planning Process Timeline

Feb. 1-15	Treatments finalized and entered into WisFIRS; basic Annual Property Implementation Plans (APIPs) generated and expanded APIPs developed by Feb 15th
Feb. 15-28	APIPs shared with Property Managers & Habitat Managers (share with interested internals as a final integration check).
By March 7	Appropriate staff (Property Managers, Habitat Managers, Foresters) make any necessary changes to planned treatments based on comments received from internal review of APIPs.
March 10 - 24	APIPs (both basic and expanded) posted for initial public review and comment on web.
March 24 - 30	Public comments addressed by programs/Property Managers; WisFIRS, DPS and APIPs updated as needed.
March 31	Deadline to run and accept final harvest schedule.
April 1	Post final APIPs (both basic and expanded) on external website(s).

The Role of Foresters in the APIP and APIM Processes

Foresters play an important role in the APIP and APIM process by identifying any proposed forest management activities for each property. They are expected to provide updates to the Property Manager with the status of the following forest management activities:

- Forested cover type reconnaissance*
- Sold and unsold timber sales
- Sales established and potential sales to establish in the next 2-3 calendar years
- Property boundary location identification needs for potential timber sales and other forest management activities
- Properties that may need an Interim Forest Management Plan (IFMP)
- Invasive species management needs (problems, proposed projects, partners, funding sources)
- Other cultural forest management practices that may be needed (e.g. site prep, seeding, planting, release, TSI, etc.)
- Status and needs for any permits/authorizations required for planned forest management activities
- * Following the APIM, the planned treatments (both timber sale and cultural practices) entered in WisFIRS should be updated to reflect the decisions made during the APIM.

See implementation guidance within the <u>Public Lands Toolkit</u> for additional information on APIP/APIM processes and the expectations of all involved staff.

Timber Sale Establishment

Foresters are assigned responsibility for conducting timber sales on all Department lands. Timber sale establishment should proceed in agreement with the property Master Plan or IFMP and after general agreement at the Annual Property Management Meeting.

Timber Sale Establishment and Approval Procedures

Timber sale establishment and approval procedures, including specific responsibilities of Foresters and Property Managers, can be found in Chapter 33 of the <u>Timber Sale Handbook</u>.

Forest Products Permits

The administration and issuance of forest products permits for firewood and other forest products is the responsibility of the Property Manager. Foresters may assist with remittances and annual forest products permit reporting, as outlined in Chapter 57 of the <u>Timber Sale Handbook</u>.

FOREST REGENERATION PROJECTS ON STATE OWNED (DNR) LANDS

DNR Foresters are encouraged to collaborate with local DNR property managers and establish forest regeneration projects and on-the-ground management in concert with Master Plan or Interim Forest Management Plan (IFMP) direction. Foresters shall participate in Annual Property Implementation Plans (APIPs) to facilitate this and to discuss and present scheduled practices for the upcoming year. All the information found in this chapter on regeneration projects is located on the <u>Forest Regeneration</u> Intranet site located in the <u>Public Lands Toolkit</u> on the <u>Forestry</u> Intranet site.

There are two types of funding for regeneration work on state owned lands:

1. <u>Regeneration Projects Associated with a Timber Sale</u>

The source of funds to complete regeneration projects in accordance with NR <u>1.27</u>, Wis. Admin. Code, shall be from an allocation of a portion of timber sale proceeds from Department properties from the account in which timber sale revenue is deposited (e.g. Forestry Account, Fish and Wildlife Account, Parks Account). Regeneration projects must meet all eligibility requirements specified in this handbook under the section entitled: *Contracting with Cooperating Foresters and Private Forestry Contractors for Regeneration Services*. Regeneration project costs tied to a timber harvest can only be used for contract work and not to fund DNR supply and service costs (e.g. chargebacks or LTE costs).

The Department shall make periodic requests to the DOA for allocations of funding to the appropriation, <u>s.</u> <u>20.370 (2)(cy)</u>, Wis. Stats. The size of the requested allocation shall be based on outstanding purchase requisitions and expenditures for the contracted regeneration assistance. Payments for services will not come directly from the individual timber sale that is associated with the regeneration project. The source of funds to complete regeneration projects, **associated with a timber sale**, shall be selected based on the property type and the appropriate budget code can be found in the section below titled: *Contracting with Cooperating Foresters and Private Forestry Contractors for Regeneration Services*. More information can be found on the Forest Regeneration Intranet site.

2. <u>Regeneration projects NOT Associated with a Timber Sale</u>

Priorities for Funding:

- 1. Afforestation approved by property goals or master plan.
- 2. Reforestation efforts not eligible for funding via NR <u>1.27</u>, Wis. Admin. Code.
- 3. LTE support for regeneration project development, administration, and monitoring.
- 4. Equipment purchases or rentals limited to reforestation items only.
- 5. Non-commercial treatments to remove undesirable tree species to recruit and retain desirable tree species.

The source of funds to complete regeneration projects **not associated with a timber sale** shall be selected based on the project details and confirmed by the forest regeneration fund administrator, as designated by the Forestry Field Operations Bureau Director and the appropriate budget code will be used.

For <u>all</u> regeneration projects a Forest Regeneration Project Application, a georeferenced pdf project map, and a Forest Regeneration Project Closeout Report are required.

Applications and a georeferenced pdf project map should be submitted as soon as possible after the project is identified and should be saved and sent via e-mail to <u>DNRForestryRegenFund@Wisconsin.gov</u> with the subject "Regeneration Funding Request".

Forest Regeneration Project Application Review

All projects will be reviewed by the forest regeneration fund administrator, as designated by the Forestry Field Operations Bureau Director, in consultation with technical experts.

Preparing a Forest Regeneration Project Application

The Forest Regeneration Project Application can be found on the Forest Regeneration Intranet site. The application is considered complete when the following is provided:

1. Project Title

Provide an accurate title of the work to be performed and property type for the application.

2. Applicant Information

Include both an assigned forester listed as the Applicant Name and the assigned Property Manager.

3. Project Location and Information

List the Property Name, Type (PR, WM, FM etc.), County, Forestry/WisFIRS Property Code, Total Project Acres, Compartment and Stand numbers, and identify if the treatment is consistent with the Property Master Plan or IFMP (if one is completed), and if the treatment is listed in WisFIRS.

4. <u>Project Type</u>

Select at least one activity and provide a Timber Sale Tract # if this is part of a planned or completed timber sale. List estimated acres for each activity and estimated number of seedlings or amount of seed to be planted.

5. Project Description

Be as descriptive as possible to thoroughly describe the work that will be undertaken and the goals and objectives the work will accomplish. Identify the different practices that will be employed and the timing windows. Identify how the work will be completed. Consistency with the funding mechanism is paramount; projects associated with a timber sale must be done by contractor(s) only. Department operations cannot be funded with regeneration funds.

Example project description: "this stand will be mechanically mowed through a private contractor during fall of 2013 and any sprouting treated with herbicides (foliar spray) through a private contractor in summer 2014. Following a timber harvest in the stand during fall and winter 2014/2015, contractors will plant 800 oak seedlings per acre in spring 2015."

6. Detailed Budget

Provide a detailed budget by fiscal year and by activity for the entire project. Identify if any additional funding sources being utilized in association with this request. The estimate provided should be as reflective of anticipated costs as possible. Contact other foresters in your area who have completed similar projects, or consult with contractors for estimated costs.

7. Project Approvals

Identify Property Manager and forward request through them for submission.

8. Project Map

Provide a georeferenced .pdf file of the project map that can be used to assist in bidding out and tracking the project. Submit project map file with application.

Submitting a Forest Regeneration Project Closeout Form

The Forest Regeneration Project Closeout Form can be found under the Completing Your Forest Regeneration Project subpage on the Forest Regeneration Intranet site.

Closeout forms should be submitted as soon as possible after the work is completed or no later than September 1st for all work done during the previous fiscal year under the approved Forest Regeneration Project Application. Even if the project is not completed, report on the work done during that fiscal year. This is also a good time to amend your projects if there are expected changes to the work to be done or the timing.

1. Project Information

The Project title, Applicant Name, and Property Code can be collected from the Project Application. The fiscal year the project was funded is the year(s) it was approved for. Total Acres, Seedlings, Contractor, Start Date, and Completion Date are specific to the fiscal year in which the work was completed. *If multiple contractors are used during the fiscal year, please submit separate closeout forms for each contractor.*

2. <u>Timber Sale Information</u>

Identify if the project was associated with a timber sale and if the completed treatment was entered in WisFIRS.

3. Project Information

Identify the practice(s) completed and the acres affected.

4. <u>Budget</u>

Identify the actual costs for the practice(s) completed by the fiscal year. The information entered will provide average project costs that can be used by others to estimate future planned projects.

5. Project Completion Narrative

Describe how the project was completed in relation to how it was planned, identify contractor success, issues or concerns, timing, any work completed or not completed as planned, costs per unit and acres accomplished. This information will help other foresters develop proposals or contract language, identify contractors for bidding, or estimate costs.

Contracting with Cooperating Foresters and Private Forestry Contractors for Regeneration Services

The Property Manager and DNR Forester must jointly agree on which regeneration tasks need contracting for individual timber sales. DNR Foresters are responsible for monitoring cooperating forester or private contractor performance.

1. Tasks eligible for contracting

- Site preparation
- Invasive species control (only if necessary, for regeneration success)
- Tree planting
- Release
- Project inspection, auditing of sub-contracted work, and inventory

2. Tasks ineligible for contracting

• Selecting areas to regenerate

- Bidding and awarding of contracts
- Preparation of regeneration reports
- Invasive species control not required for regeneration success
- Monitoring of cooperating forester and private contactor performance.
- Road/access improvements to the area or property
- Boundary line establishment

Process for Contracting with a Cooperating Forester or Private Contractor

All projects must follow Department purchasing guidelines and procedures found on the Bureau of Finance Intranet site under <u>*How to Purchase Goods and Services.*</u> Staff should utilize competitive pricing no matter the value of the services. All services provided require the use of a Department contract.

The Department shall select areas to regenerate, determine regenerations systems to be applied, and define any additional procedures or precautions necessary to achieve objectives in approved master plans or other Department guidance. The Department shall monitor the performance of cooperating foresters and private contractors to ensure quality of service and conformance to Department standards.

Cooperating foresters and private contractors shall be compensated at the local DNR's choice of a rate per hour, acre or project as established by bids for individual projects. When a need for regeneration project assistance is identified, the forester shall issue a project specific request for bids to cooperating foresters and private contractors that are experienced in the desired type of work, as required by s. NR 1.27, Wis. Adm. Code. Eligible cooperating foresters can be found from the Forestry Assistance Locator or the Directory of Foresters. Additionally, contractors can be found on the Wisconsin DNR internet site by searching *"Tree Planting and Site Preparation Vendors"*. The total bid must include labor, travel, equipment and any supplies not identified as provided by the Department that a private contractor would need to do the work. Worker's compensation, automobile, and liability insurance are required. Contract awards shall be determined on price alone unless additional evaluation criteria such as specialized training or experience are included in the request for bids.

The standard Department contract shall be used for projects \$5,000 or greater and can be found on the Bureau of Finance intranet site. Sample contracts and performance expectations, along with a simplified services contract for projects less than \$5,000 can all be found on the Forest Regeneration intranet site. The DNR Secretary or those assigned shall sign the contracts for the Department, regardless of the dollar amount.

Contracted services are not to be funded from the local expense budget. For regeneration services **not associated** with a timber sale, the forest regeneration fund administrator will provide staff a budget code to utilize along with project approval notice.

For regeneration services **associated with a timber sale**, please use the proper conservation fund account (found on the Forest Regeneration intranet site) from which to draw the funds. Payment for services does not come directly from the individual timber sale a contractor may be working on.

REGENERATION MONITORING

Successful regeneration of harvested sites is paramount for sustainable forestry. Most stands are successfully regenerated naturally, however monitoring ensures that future stocking goals can be achieved and identifies when additional follow-up treatments may be necessary to reach them. Identification of regeneration failures are best recognized early within a rotation as competing and/or unwanted vegetation can quickly impact a stand and make follow-up treatments more costly if not impractical to accomplish. Documentation of successes and failures also helps to guide future management activities to ensure proper management of the forest resource.

WisFIRS provides an easy, consistent approach to regeneration monitoring for both natural and artificial regeneration. This system can be used for planning as well as monitoring and reporting. Scheduling regeneration checks for an individual stand requires the user to create a planned treatment and utilize the HM-8 code. **Regeneration checks shall be scheduled and conducted for all regeneration harvests across all timber types.** Regeneration harvests include all variations of coppice, clear cut, seed tree, overstory removal, shelterwood, and selection harvests. Chapter 21 of the <u>Silvicultural Handbook</u> provides suggested time periods following harvesting to commence a regeneration check for different forest cover types. It is at the discretion of the local forester to decide the timing and intensity of monitoring for individual stands, except where minimum monitoring standards are noted for State Lands below. Local experience may dictate when more or less monitoring is necessary.

Regeneration checks should be scheduled after the management activity (usually a timber sale) has occurred and the stand post-sale recon data has been collected and entered into the WisFIRS database. This is because it is often unknown at the time of sale establishment exactly when a stand will be harvested by the logger. The success of other reforestation activities such as direct seeding and plantation survival counts can also be scheduled. Note: It is recommended that the stand recon information be updated to reflect the anticipated species regeneration for the site, even if you plan to schedule future regeneration checks. This will minimize data changes needed after a site inspection is completed, if regeneration is successful.

Information and explanations on the size, density, and distribution of regeneration necessary can be found in the individual cover type chapters of the <u>Silvicultural Handbook</u>, as well as in Table 21.2 of Chapter 21.

Once a stand has been field checked for adequate regeneration, the WisFIRS system must be updated to reflect the fact that the monitoring has been completed. This removes the scheduled monitoring treatment from the stand and places it in the Completed Treatment list for the property. In addition, any planting needs as a result of the monitoring can also be scheduled at this time.

Forest Regeneration Monitoring

The Forest Regeneration Monitoring program began in 2018 to better assess the status of natural regeneration across the state. The need for more detailed regeneration and deer browse impact data was evident and had been requested by the County Deer Advisory Councils (CDACs), the Natural Resources Board (NRB), Forestry and Wildlife staff, resource managers, and researchers. Monitoring is largely focused on the regeneration of oak-hickory, maple-birchbeech, and pine forests with a smaller effort in elm-ash-cottonwood, fir-spruce, and aspen-birch forest types. Federal, state, county, and private lands are being assessed in order to identify the effects of management differences and histories between the ownership groups.

The program utilizes a standardized regeneration monitoring methodology called Forest Regeneration Metric (FRM). FRM is a 1/300th acre (6'10" radius) plot-based assessment of seedling and sapling densities by species and height class. Additional variables such as deer browse severity by species, overstory condition, and understory plant competition are also assessed. Stand-level information on cover type, management history, county, and ownership group are also recorded. The Forest Regeneration Monitoring Program collects data using FRM to provide County-level data on regeneration by forest type.

Information gathered from FRM allows better tracking of long-term changes to our forests and helps to create forestry policies and guidelines to ensure the long-term sustainability of the forest resource. Making regeneration monitoring a standardized, data-driven process on public lands alongside the statewide FRM efforts will enable land managers to make well-informed property and stand-level decisions.

County Lands

The use of FRM is highly encouraged, but optional.

State Lands

Foresters shall conduct at a minimum a low intensity (1plot/5acres) FRM survey on all-natural regeneration harvests in Oak-Hickory, Red-White-Jack Pine, and Maple-Birch-Beech forest types. This will translate to stands with the objective to regenerate or convert to a primary cover type of Oak, Central Hardwoods, Northern Hardwoods, Red Maple, White Pine, Red Pine, and Jack Pine following harvest. Foresters are encouraged to use their professional judgement to determine if a higher sampling intensity is needed, with the overall objective to collect enough plots to make sound stand-level management decisions. In all other forest types, regeneration monitoring will be required, however there is no required minimum number of FRM plots and foresters can continue to use their professional judgement to determine the level of monitoring necessary. More information on FRM and conducting stand-level regeneration monitoring can be found in Chapter 21 of the <u>Silviculture Handbook</u>.

Monitoring will need to be scheduled within a 3-5 year regeneration period depending on the forest type, as outlined in the <u>Silvicultural Handbook</u>, Chapter 21. If results from assessment do not clearly demonstrate adequate and established regeneration, then additional follow up treatments and/or monitoring must be scheduled within WisFIRS.

The <u>Public Lands Toolkit</u> contains instructions on steps necessary to complete an FRM plot, utilizing Forest Metrix to conduct surveys, and instructions to export and submit collected data.

Foresters shall submit FRM data to the statewide regeneration database annually. Data should be in the form of Forest Metrix FRM Excel exports or the alternative of scanned paper datasheets. Data should be placed within the folder on the shared Forestry Central drive at: <u>\central\forestry\FR_FORESTRY\FRM Data Dropbox</u> or sent via email to the FRM data inbox at: <u>DNRFRRegenerationMonitoring@wisconsin.gov</u>. Foresters may contact the FRM program specialist at this address with any questions on data submissions or collecting FRM. Additional resources can be found on the FRM webpage at <u>dnr.wi.gov</u> keyword: FRM.

PUBLIC LAND TIMBER SALE, PROGRAMMATIC & FISCAL REVIEW

Purpose

The Department's Division of Forestry recognizes the importance of conducting timber sales in an accurate, transparent, and accountable manner and consequently will periodically review the timber sale files for both Department-owned lands and County Forest lands. Much of the review process will be identical between the County and State, however in some instances differences do exist and will be outlined in this chapter. Deficiencies noted during the review process will be used to make improvements to the timber sale program which might include developing policies/guidance for staff and the recommedation of training in specific topic areas.

A. State

The timber sales review is both a fiscal and programmatic review to ensure compliance with the Department's policies for the sale of timber. Additionally the review will increase staff awareness of Department policies and procedures and identification of potential timber sale process improvements, while implementing the best forest practices to ensure sustainable forestry.

Timber sales on Department-owned land should be conducted in accordance with the management plan for the property involved and consistent with management objectives for that property. Department timber management, silvicultural practices, best management practices for water quality, and other applicable guidance should be applied. Projects involving harvest of merchantable-sized timber (>5" diameter) shall be completed and reported in accordance with the Timber Sale Handbook (HB <u>2461</u>). Timber sales must be sold pursuant to s. <u>28.05</u>, Wis. Stats. Collection and remittance of timber sale money should follow Manual Code <u>9341.1</u>.

A high level of accuracy and integrity is required of those involved in timber sale activities. Cruise estimates and marked timber volume estimates should attain the necessary level of accuracy. Timber sale scaling, invoicing, and remittances should be conducted in a precise and transparent manner that is consistent with the guidance in this handbook and the Timber Sale Handbook. The guidelines contained within the Timber Sale Handbook have been developed out of many years of experience and should be used unless sound judgment by the party responsible for the sale determines otherwise. In such cases, the file should contain justification for that course of action. Timber sales often involve large sums of public money, as well as the ethics of good forest management, and as such those who are delegated authority to establish, conduct and approve timber sales have a legal and moral responsibility to the public to establish the best forest practices possible while trying to obtain financial return from forest land.

Reviews will be conducted once every five years for each of the seven Division of Forestry Areas and four large Northern State Forests. Reviews will incorporate timber sales on all Department managed lands within each Forestry Division's Area, except for the four large northern State Forests. The Brule River, Black River, Flambeau River, and Northern Highland – American Legion State Forests will be reviewed independently once every five years, utilizing the same procedures as other Department-owned lands. A schedule of all reviews will be maintained and provided to Area Leaders by the County Forest & Public Lands Specialist to be used in the work planning and scheduling of involved staff.

B. County

The County timber sales review is not only a fiscal review, but also a way to strengthen the partnership between the Department of Natural Resources and the Wisconsin County Forests, to provide for the best forest practices and ensures sustainable forestry. The State's goal is to "enable and encourage the planned development and management of the County Forests for optimum production of forest products together with recreational opportunities, wildlife, watershed protection and stabilization of stream flow, giving full recognition to the concept of multiple-use to assure maximum public benefits; to protect the public rights,

interests and investments in such lands; and to compensate the counties for the public uses, benefits and privileges these lands provide; all in a manner which will provide a reasonable revenue to the towns in which such lands lie" (s. <u>28.11(1)</u>, Wis. Stats).

Timber sales on County Forest land shall be conducted in accordance with the applicable 15 Year Comprehensive Land Use Plan, the management objectives for that property, and s. <u>28.11</u>, Wis. Stats. Timber sales often involve large sums of public money as well as the ethics of good forest management. Those who are delegated authority to establish, conduct, and approve timber sales have a legal responsibility to the public to establish the best forest practices possible for the sustainability of Wisconsin forests. The Department of Natural Resources provides grants to counties for a portion of the salaries of County Forest Administrators, short-term sustainable forestry projects, and wildlife habitat projects. The Department also provides loans to the counties that are to be paid back out of timber sale revenue. The County's administrative efforts determine the degree of control and accountability over its timber sales program.

In addition to its statutory role of providing oversight of the County Forest program, the Department is also the group manager of the Wisconsin County Forest Certification Group for both the *Sustainable Forestry Initiative®* (*SFI®*) and *Forest Stewardship Council®* (*FSC®*). The County Forests are eligible, but not required, to participate. The Department is responsible for coordinating and ensuring compliance with the certification principles and standards amongst members of the group(s). County Forest audits, annual partnership meetings, and the Wisconsin County Forests Association (WCFA) Certification / Legislative Committee all assist in this effort.

To satisfy its oversight responsibilities under s. <u>28.11</u>, Wis. Stats., and in its role of County Forest Certification Group Manager, DNR's Division of Forestry will review each County Forest at least once every five years.

Participation

The Area Forestry Staff Specialists (AFSS) and Financial Specialists will conduct reviews jointly on both state and county lands. Additional Department staff may be asked to assist as necessary. Staff present at the review may include the AFSS, Financial Specialist, field forestry staff, Team/Area Leaders, County Forest Administrator, County Forestry office managers, and others as deemed appropriate.

Preparing for the Audit – Area Forestry Staff Specialist Roles

In order to be efficient with time spent in person with forestry/county staff, the following best practices could be utilized in preparation for each audit:

- 1. Review findings and recommendations from the last review.
- 2. Acquire and review list of closed timber sales from WisFIRS for the review period.
- 3. Review Recon Status Report, (WisFIRS Report #114)
- 4. Review County and State online advertisements.
- 5. Review past County partnership meeting minutes.
- 6. Review new policy, guidance and directives published since last review.

Determining Sales to Review

A representative sample of closed sale folders will be chosen to be reviewed for the respective seven Forestry Areas, four large Northern State Forests, and each of the thirty County Forests. This sample should include different sized sales, contractors, sale types, etc. It should be understood that the most recent sales would have a higher likelihood of incorporating changes/recommendations made from previous reviews. Selection of sales to be reviewed will follow the listed guidance:

- 1. <u>County/State Forest</u> 10% of closed sales, but no less than 2 per year
- Other Department Lands 10% of closed sales but must include minimum of 2 sales per Team per year. Selection from each Area would ideally also include sales from each property type: Fish, Wildlife, Parks, & NHC. It is understood that this is not always possible within each Forestry Area during every review cycle.

Note: findings of significant shortcomings during the review period will have the potential to alter future scheduling frequency and prompt a more thorough evaluation upon the property type, Forestry Area, Team, County Forest, etc. The County Forest & Public Lands Specialist and Bureau Director will retain the authority to adjust this review schedule to maintain the integrity of the timber sale program in promoting sustainable forestry in the State of Wisconsin.

Notifications

A. <u>State lands</u>

Notification shall be made to the following individuals within the Forestry Area/State Forest being reviewed:

- 1. Field Forestry Staff
- 2. Forestry Supervisors (Team, Area, District Leaders)
- 3. Supervisors of cooperating programs (Fish, Wildlife, Parks, NHC)
- 4. County Forest & Public Lands Specialist

Notification should include the following:

- 1. Purpose/objective for the review
- 2. The sales which have been selected
- 3. Information that needs to be provided for the review
- 4. Date, time, location of the review or alternate method of providing timber sale files to AFSS as indicated,

solication for staff to provide comments regarding management of the properties and any local timber sale procedures.

B. <u>County Lands</u>

Notification shall be made to the following individuals within the County Forest being reviewed:

- 1. County Forest Administrator
- 2. County Clerk
- 3. Chair of County Forestry Committee
- 4. Forestry Supervisors (Team, Area, District Leaders)
- 5. County Forest Liaison
- 6. County Forest & Public Lands Specialist

Notifications should include all of the above items listed for state lands, plus county specific items. A sample notification letter can be viewed within the <u>Public Lands Toolkit</u> and will highlight the specific needs for the county review.

Preparing for the Audit - Financial Specialist

The Financial Specialist will contact the County Forest & Public Lands Specialist to obtain the following for the review period:

- 1. County Forest Tax Acreage by Towns (WisFIRS Report 51A)
- 2. County Forest Ledger Account Detail (WisFIRS Report 53B)
- 3. Sustainable Forestry Grant
- 4. Wildlife Habitat Grant distributions
- 5. County Forest Administrator Grant distributions
- 6. Variable Acreage Share Loan distributions
- 7. Project Loan distributions

Pre-Review Conference (State & County)

Briefly explain forthcoming review procedures to participating staff prior to conducting the review. A discussion of the findings from the previous review should be had with evaluation if suggested recommendations were implemented during the last review cycle. This pre-review conference should also be utilized to document progress towards remedying certification Corrective Action Requests (CARS). Document this discussion within the new review report.

Review Checklist

All items checked below, if applicable, shall be available for the review process and will be reviewed to ensure compliance with Department and/or county policies for the sale and administration of timber sales. Some items audited at the County level will be reviewed for its presence within the timber sale file, however if requested a more detailed look into its usage may be undertaken. These items are indicated in the optional column below and only apply to County Forest lands. Any items chosen by the County to be evaluated more thoroughly will be reviewed to the same level as state lands. Chapter 91 of the Timber Sale Handbook outlines which documents are to be retained following the completion of the auditing process. The forms numbers listed are applicable to timber sales on State lands, however County Forest programs may have their own forms which meet the same objectives.

Item	<u>Form #</u>	<u>State</u> Lands	County Forest	Optional(County)
Timber Sale Notice and Cutting Report	2460-001	X	X	
& Narrative	2100 001	24		
Stand Examination Tally Sheet	2400-032	Х		Х
NHI Documentation		Х	X	
Timber Sale map		Х	Х	
Contract/Addendums/Extensions		Х	Х	
Pre-Sale Meeting documentation	2460-009	Х	Х	
Timber Sale Harvest inspection forms	2460-002	Х		Х
All Coorespondence		Х		Х
Timber Sale Bid Advertisement		Х	Х	
Opening of Bids/Timber Sale	2400-006	Х	Х	
Award/Summary of all bids				
Scale Sheets	2400-063	Х	Х	
Lock Box tickets		Х	Х	
Mill Scale slips		Х	Х	
Certificate of Insurance		Х		Х
SFI Training Standard Certificate		Х		Х
Performance Bond		Х	Х	
Timber Sale Transactions - Invoices,		Х	Х	
Ledger, Journal				
Timber Sale Close-out Transaction	2460-004	Х	Х	
Timber Sale Close-out checklist	2460-013	Х		Х
Property Boundary documents		Х		Х

Forest Reconnasiance Updates		Х		Х
Sale Modification Documents	2400-	Х	Х	
	005E,			
	2460-007			
County Forest Administration Grant			Х	
County Forest Sustainable Grant			Х	
Wildlife Habitat Grant			Х	
County Forest Project Loans			Х	
County Forest Variable Acreage Share			Х	
Loans				
Annual Financial Statement from			Х	
County				
Severance to Towns			Х	
Severance to the State			Х	
Forest Certification Checklist			Х	

The above documents listed in the auditing checklist will be used to ensure compliance with Department and/or County policies for the sale and administration of timber sales. Listed below is additional information for the forms and areas of the timber sale process that will be used to establish the basis for review and where documentation verifying compliance or lack thereof may be found.

Timber Sale Cutting Notice And Report

- 1. Ensure that cutting reports exist in the timber sale folders. Cutting reports should include the narrative. Verify that the narrative has been completed and that all relevant fields have been addressed, including checks of NHI & cultural / historical databases and other considerations. This portion of the audit shall not include a field audit to document compliance, but rather it is meant to be a cursory review of timber sale file documents to determine general implementation and compliance with various types of program guidance.
- 2. Verify the accuracy of scale slips / billings with what is reported on Form <u>2460-001</u>.
- 3. Verify that relevant fields in the Narrative (Form <u>2460-001A</u>) are completed addressing management concerns. (e.g. NHI mitigation measures, cultural concerns, insects/disease concerns, and others that present challenges to the harvesting of timber).
- 4. Questions to consider:
 - a. Are final reported sale volumes greater than +/-20% different from estimated volumes justified in comment section?
 - b. Are all required approvals included?

Stand Examination Tally Sheet (Form 2400-032 or a similar sheet documenting the cruise)

- 1. Is the cruise information available in the sale file?
- 2. **Optional** additional review state and county: check the cruise information, including number of plots, numbers matching, rounding guides followed, etc.

NHI Documentation

1. Verify that a NHI search was conducted for harvest areas and that appropriate mitigation measures were incorporated into sale and harvesting considerations.

2. If greater than 1 year between search and sale being sold (bid opening), a new NHI search should have been conducted to document any new findings.

Timber Sale Map

- 1. Does the timber sale file contain the timber sale map?
- 2. The map should accurately reflect the area harvested and contain necessary information such as RMZ buffers, seasonal restrictions, boundary markers, etc.
- 3. Ensure that there is no certification logo on the map.

Contract/Addendums/Extensions

- 1. Verify that sale extensions were applied consistently in accordance with established policy and in the best interest of the public.
- 2. Stumpage increases should be charged for not completing the sale within the original time period unless extenuating circumstances occurred.
- Extensions shall include stumpage increases that align with contract provisions and the appropriate timber sale extension policy. A Timber Sale Contract Amendment Form (Form <u>2400-005E</u>) shall be used to document the extension and any increases in stumpage prices, and should be accompanied by a Timber Sale Contract Amendment Approval Form (Form <u>2460-007</u>); or equivalent form for the County.
- 4. Questions to consider:
 - a. Did the contract and associated extensions cover the entire time frame of the timber sale to ensure that the best interests of state and county are protected?
 - b. Was the proper signature authority used?

Pre-Sale Meeting Form

- 1. A pre-sale meeting with the logging contractor should be conducted to address sale specifications and concerns.
- 2. State Sales: Contractor Pre-Sale Meeting (Form 2460-009) form completed and included in the sale file?
- 3. County Sales: documentation of meeting with contractor prior to sale start-up.

Timber Sale Inspection Form

- 1. A log of timber sale inspections should be maintained in the timber sale folder as a record of the progress of the sale and the inspections conducted. This should be completed on the Timber Sale Inspection (Form 2460-002) or other similar type of documentation for county sales.
- 2. Are non-compliance issues documented on the form?
- 3. Are regular checks conducted during periods of active harvesting to ensure compliance with contract specifications?

<u>All Correspondence and Communications</u> (letters, emails, documented phone calls, etc.)

1. Verify that copies of all correspondence with contract holder are included in sale folder.

Bidding Procedures

- 1. Opening of Bids/Timber Sale Award (Form <u>2400-006</u>), Timber Sale Bid Advertisement, and summary of all contractor bids will be used to verify that competitive bidding is conducted according to State statute, fairly, and without bias.
- 2. After establishment and the appropriate approvals recieved a timber sale is to be sold. Except for salvage sales as a result of fire, snow, hail, ice, insects, disease, or wind (s. <u>28.11(6)(c)</u>, and s. <u>26.22</u>, Wis. Stats.), all sales with an appraised value of \$3,000 must be advertised at least once by a classified advertisement in a newspaper having general circulation in the county in which the timber sale is located.
- 3. A copy of the advertisement and a summary of all bids shall be available for review. It is particularly important to see the advertisement if there was only one bidder for the timber sale, to ensure that preference was not shown to one contractor.
- 4. A summary of all bids shall be available for review. Ensure the highest bidder was awarded the contract or justification as to why not. Bidding requirements shall apply to all bidders equally. Requirements for bid bonds, worker's compensation, and contractor training should be included if required per state or county policy.

Scale Sheets/Lock Box Tickets/Mill Scale Slips

- 1. Questions to consider:
 - a. Are scale sheets and/or mill scale slips available in the sale file in order to verify accuracy of stumpage invoicing?
 - b. Were invoices sent to contractors within 30 days of products leaving sale?
 - c. Do haul slips contain the appropriate certification language?
 - d. Did conversation factors follow Department listed weights or other listed within the contract/prospectus?
 - e. Was the volume adjusted according to contract for peeled products?

Certificate of Insurance

- 1. Verify that certificates of insurance are used consistently and in accordance with County or Department policy. Copies should be maintained in the sale folder or in a separate file readily accessible.
- 2. Questions to consider:
 - a. Was there a certificate on file and did it cover the entire time period of the sale?
 - b. Was the certificate adequate based on county policy?
 - c. Was worker's comp required, liability, the proper coverage limits?
 - d. Was there a worker's comp certificate on file and did it cover the entire time period of the sale?
 - e. Was the certificate adequate based on Department policy?
 - f. If a certificate was not included because of a contractor's status as a sole proprietor independent contractor, was an affidavit and/or other documentation included in the file of such a determination?
 - g. Was other insurance required (e.g. liability) if required by additional provisions in the prospectus or contract?

Wisconsin SFI Training Standard (FISTA) Certificates

1. Are copies of the FISTA training certificates or web printouts documenting fulfillment of the SFI training standard for the active harvest period of the sale included in the sale folder, or a central file at the field station, for the timber sale?

Performance Bonds

- 1. Verify that bonds are used consistently for all contractors and provide coverage against risk of loss whether it be to the County or State for the entire contract period. Ledgers should indicate when bonds were received and when they were returned to the purchaser. Bid and Performance Bonds may include the following and must be consistent with the respective policy:
 - a. Cash
 - b. Personal check
 - c. Certified check/cashier check/bank money order
 - d. Irrevocable letter of credit
 - e. Assurance bond
 - f. Certificate of Deposit
 - g. Assignment of savings account

<u>Timber Sale Transactations - Invoicing - Timber Sale Ledger - Timber Sale Journal</u>

- 1. Questions to consider:
 - a. Is there documentation of invoicing and payments made within allotted timeframes?
 - b. Do stumpage invoices match scaled volumes and reflect the correct price per unit?
 - c. Were collections and remittances processed in accordance with Manual Code <u>9341.1</u> and s. <u>20.906</u> Wis. Stats.? (For example: transactions should be processed at least once each week and if receipts total \$10,000.00 or more, proceeds should be deposited that day and remitted immediately, pursuant to this code.)
 - d. Do amounts contained on the ledger/journal match what is recorded on Form <u>2460-001</u>?
 - e. Is late payment policy applied in a consistent fashion?

Close-Out Transaction/Checklist

- 1. A completed copy of a Timber Sale Close-Out Transaction (Form <u>2460-4</u>) and the Timber Sale Close-Out Checklist (Form <u>2460-013</u>) should be in the sale folder as a record indicating final disposition of performance bonds and/or excess stumpage payments.
- 2. Questions to consider:
 - a. Is completed Timber Sale Close-Out Transaction (Form <u>2460-4</u>) included in the sale file?
 - b. Is a completed Timber Sale Close-Out Checklist (Form 2460-013) included in the sale file?

Property Boundary Documents

1. Any applicable documentation concerning boundary establishment (e.g. surveys, cutting line agreements, etc.) should be maintained within the timber sale file. This is a requirement for State sales, but is optional for Counties.

Forest Reconnaissance Updates

- 1. Questions to consider:
 - a. Has the WisFIRS stand recon data for harvested stands been updated following timber sale closeout, including the scheduling of follow-up and future treatments?
 - b. Have harvest treatments been logged as completed treatments, both tabular and spatial data?

Sale Modifications

- 1. Responsibility To ensure that sales are cut according to sound silviculture, not in excess of the \$3,000 direct sale limit, and approved as stipulated in s. <u>28.11(6)(b)</u>, Wis. Stats. Volume, other than that damaged by fire, snow, hail, ice, insects, disease, or wind, may be added through negotiation either from the sale area or from adjacent area if the appraised value is less than \$3,000, the legal limit requiring advertising.
- 2. On County sales, modifications that add acreage or change the silvicultural prescription on a sale must be approved by the Department Liaison Forester and noted in the file on Form <u>2460-001</u>.
- On State sales, modifications to the sale area, the silvicultural prescription, or contract terms on a sale must be approved by the Property Manager and documented on a Timber Sale Contract Amendment (Form <u>2400-005E</u>) and should be accompanied by a Timber Sale Contract Amendment Approval (Form <u>2460-007</u>).

Additional Department Policies & Procedures

- Responsibility To ensure that sales are established, harvested, and administered according to all Department and Division of Forestry guidelines and policies, including directives which are not incorporated into other formal guidance documents. This portion of the audit does not require a field audit to document compliance, but rather it is meant to be a cursory review of timber sale file documents to determine general implementation and compliance with various types of program guidance.
- References for these items may be found in the timber sale prospectus, timber sale contract, timber sale contract amendments, timber sale map, Timber Sale Handbook (<u>HB 2461</u>), and other Department or Division directives regarding temporary and permanent timber sale policies that would apply to the audited sales. The <u>Public Lands Toolkit</u> will house Department guidance not yet incorporated into Handbook language.

County Forest Administration Grant

- Responsibility To ensure that the grant was used for the Administrator or Assistant Administrator's salary. The grant covers 50% of the salary and 50% of the fringe benefits (total fringe benefits not to exceed 40%). The County Finance Department 's general ledger should show what the Administrator / Assistant Administrator's salary was for the year.
- 2. If the entire grant was not spent because of a vacancy, the excess shall be deducted from the succeeding year's grant. The County Forest & Public Lands Specialist shall make this adjustment but this shall be noted in the audit and the succeeding years Administrator Grant checked for the adjustment.
- 3. This grant is paid on the anticipated salary / benefits for the forthcoming year. Small differences in the actual vs. anticipated salary may occur. The County Forest & Public Lands Specialist verifies the submission of the annual work plan and salary /benefit package as required by s. <u>NR 47.70</u>, Wis. Admin. Code, each year prior to distributing the annual grants.
- 4. References s. <u>28.11(5m)</u>, Wis. Stats, <u>NR 47.70</u>, Wis. Adm. Code, Administrator Grant summary (provided by County Forest & Public Lands Specialist)
- 5. Questions for consideration:
 - a. Was the grant properly deposited in the county's State Aid Forestry Account?
 - b. Does the amount match the Administrator Grant summary sheet provided by the County Forest & Public Lands Specialist?
 - c. Was there a vacancy for all or a portion of the year or unspent funds in the account?

County Forest Sustainable Forestry Grant

- 1. Responsibility The County Forest & Public Lands Specialist ensures that the grant was used for project costs only. The audit team shall verify that grant funds were properly deposited in the county's State Aid Forestry Account. This grant is used for short term projects that promote sustainable forestry.
- 2. Grants are available for two years unless extended.
- 3. Counties submit accomplishments and summaries of expenditures to the County Forest & Public Lands Specialist to receive final payment. If requested, 50% advance payments are available.
- 4. References s. <u>28.11(5r)</u>, Wis. Stats., NR <u>47.75</u>, Wis. Adm. Code).
- 5. Questions for consideration:
 - a. Do the amounts in the county's state aid forestry account match the Sustainable Grant spreadsheet provided by the County Forest & Public Lands Specialist?
 - b. Was the grant deposited in the State Aid Forestry Account?
 - c. Were recommendations for statutory provisions in the last audit implemented so as to maintain eligibility for future County Forest Sustainable Grants?

Wildlife Habitat Grant

- 1. Responsibility Verify that the funds are being deposited in a segregated, non-lapsing wildlife habitat account and the balance is no more than the sum of the allocations for the three previous years. Discuss with the local Wildlife Biologist to ensure that funding has been used for the agreed upon projects.
- 2. This grant provides a \$.05 an-acre grant for wildlife habitat projects on County Forest land. These funds are non-lapsing and can be carried for 3 years. Each year must be viewed individually for carryover. If funds are not spent, they should be returned to the state unless requesting and granted an extention by the County Forest & Public Lands Specialist.
- 3. Ensure that the funds are being spent. A separate ledger should itemize the grant and the expenditures.
- 4. Grant projects need to be identified in each County's 15 Year County Forest Comprehensive Land Use Plan. These projects are agreed upon with the local Department Wildlife Biologist, approved by the County Forest Administrator, and revisited each year at the Annual Partnership / Annual Work Planning Meeting.
- 5. References s. <u>23.09(17m)</u>, Wis. Stats, and the Annual Partnership Meeting minutes.
- 6. Questions for consideration:
 - a. Is the balance of the grant equal to or less than the sum of the allocations from the three previous years (s. <u>23.09(17m)(h)1</u>, Wis. Stats., interest excluded).
 - b. Are the expenditures being made for projects approved by Department Wildlife Biologist and County Forest Administrator and included in the County Forest Comprehensive Land Use Plan?
 - c. Do the deposits in the county's segregated account match that provided by the County Forest & Public Lands Specialist?
 - d. Are funds being deposited in the segregated, non-lapsing account?
 - e. Is there documentation of discussion and approval for projects in the Annual Partnership/Planning Meeting minutes?

Note: If lands withdrawn from County Forest include acreage on which \$.05/acre funds were expended, and if those lands are being transferred to a private party, then a reimbursement of funds is due to the Department. The County Forest & Public Lands Specialist will ascertain that at time of withdrawal application. A debit may show up in the account balance for that reason.

County Forest Project Loans

- Responsibility The County Forest & Public Lands Specialist ensures that the loan was used for project costs only. The Financial Specialist shall verify that loan amounts match those provided by the County Forest & Public Lands Specialist and were properly deposited / dispensed from the County's State Aid Forestry Account.
- 2. Project loans may be used for "meritorious and economically productive forestry operations" on, or benefiting, the County Forest. However, "construction of recreational facilities" and "fish and game management projects" is not permitted.
- 3. Project loans are typically used only for special projects, rather than the annual Variable Acreage Share Loans (below).
- 4. Project loans are for two years unless extended. Counties submit accomplishments and loan expenditures to the County Forest & Public Lands Specialist to receive final payment. If requested and approved, advance payments of 75% are available.
- 5. References s. <u>28.11(8)(b)2</u>, Wis. Stats, <u>NR 47.60</u>, Wis. Adm. Code, and County State Aid Account ledger
- 6. Questions for consideration:
 - a. Are loan funds deposited in the County State Aid Account?
 - b. Does the loan amount match that provided by the County Forest & Public Lands Specialist?

County Forest Variable Acreage Loans

- 1. Responsibility The Financial Specialist shall verify that loan funds were properly deposited, and dispensed from the County's State Aid Forestry Account.
- 2. Variable Acreage Share Loans may be used for "*the purchase, development, preservation and maintenance of the County Forest lands*". There is no requirement to submit expenditures or accomplishments on this loan. The County Forest & Public Lands Specialist distributes loans in full in the spring of each year.
- 3. References s. 28.11(8)(b)1, Wis. Stats., and County State Aid Account ledger
- 4. Questions for consideration:
 - a. Are loan funds deposited in the County State Aid Account?
 - b. Does the loan amount match that provided by the County Forest & Public Lands Specialist?

Review the Annual Financial Statement from the County Contracted CPA Firm

1. Review the annual statement for any references to the County Forest program. There may or may not be anything listed.

Severance to Towns

1. Responsibility- To verify that towns received their statutory share of gross timber sale receipts. In some case Counties have elected to distribute additional funds to the towns. This is permissible but a minimum

of 10% must be dispersed. County Forest Tax Acreage by Towns (Report 51A) is provided by the County Forest & Public Lands Specialist to identify what percentage of acreage is in each township.

- 2. References s. <u>28.11(9)(d)</u> Wis. Stats., and Report 51A- County Forest Tax Acreage by Towns, and County ledgers
- 3. Questions for consideration:
 - a. Does the percentage severance distribution to each town match the acreage percentage listed in Report 51A?
 - b. Were payments to the town made at approximately the same time each year? (This should be done by January 31st of each year).

Severance to the State

- 1. Verify that 20% of the stumpage value from closed timber sales has been paid to the state. This only pertains to counties that have an outstanding loan balance. Counties are billed the 20% severance by Department Central Office when they submit timber sale partials or closeouts. The County Forest Loan Ledger Account Detail provided by the County Forest & Public Lands Specialist can be used to determine timeliness of payments.
- 2. References s. <u>28.11(6)(b)4</u>, Wis. Stats., County Forest Loan Ledger Account Detail, and County ledgers
- 3. Questions for consideration:
 - a. Were severance invoices paid within 30 days of receipt (timeliness)?
 - b. Were partial reports filed for sales > 2 years old (as compared to the "Sold" date of the Department Liaison Forester)? Counties are required by the statute to submit partial reports and are liable for severance on these. When partial reports are filed a severance invoice is generated from Central Office for volume values reported).

County Forest Certification

Starting in 2004, many of the County Forests elected to participate in forest certification through either the *Sustainable Forestry Initiative*[®] (*SFI*[®]) or *Forest Stewardship Council*[®] (*FSC*[®]). The individual County Forests are members in a group certification format whereby the Department is the Group Manager and certificate holder. While each member county is periodically audited by third-party auditors, it is the Department's responsibility to establish internal control mechanisms to ensure group member compliance to the certification principles and standards. The regularly scheduled (5-year) Department reviews will be used to document progress on certification issues for participating counties.

Prior to the internal review, the Department reviewer will send the County Forest Internal Certification Review document to be completed by the County Forest Administrator. The Department reviewer and the County Forest Administrator will discuss the document to ensure completeness, and discuss any recent CARs.

The Department's role as Group Certification manager is also assessed during this process. Use the County Forest Internal Certification Review document to briefly document compliance with the certification standards. County Forest policies and procedures are interwoven into the checklists, aligning certification indicators with existing County Forest policies. Where non-conformances are found, the Lead Auditor shall fully document the rationale for the non conformity on an Internal CAR form. It is expected that prior to the issuance of any internal CAR there will be communication between the County Forest Administrator with cc's to the Liaison, Department Forestry Team Leader, Department Group Certification Manager, Chair of the respective County Forest Committee, and the WCFA Executive Director. The Group Manager and Department Certification Coordinator shall be responsible for monitoring follow-through on Internal CARs issued by Department Lead Auditors.

Exit Conference

The exit conference should discuss preliminary findings with those present for the review process and also used to gather more information pertaining to noted items. Respective parties should be notified of the timeframe and deliverly of the review report as indicated below.

Audit Report

An audit report template for both State and County forest lands is available from the County Forest & Public Lands Specialist.

A. County

A draft report of the review shall be delivered to the County Forest Administrator within a 45 day timeframe.

The initial draft of the audit report shall be provided to the County Forest & Public Lands Specialist, Department Liaison Forester, County Forest Administrator, and other pertinent program staff members as needed for review and input. Ways to improve the administration of the program should be identified as well as commendations for the county program.

Upon receipt of the draft report, a 15 day review/comment period will be provided. Comments and additional information provided will be incorporated into the development of the final report.

Upon the close of the comment period, the final report will be developed and forwarded to the County Forest & Public Lands Specialist within 15 days. The final audit report will be addressed to the County Forestry Committee Chairman. The Director of the Bureau of Forestry Field Operations will review and sign the report.

Copies will be sent to the County Forest Administrator, the Department Liaison Forester, Forestry Team Leader, Area Forestry Leader, District Forestry Leader, and County Forest & Public Lands Specialist.

The Department may audit other grants and aids as part of the normal project close-out procedure.

B. State

The draft report of the review shall be sent electronically to the administrating Forester(s), Forestry Team Leader(s), and Property Manager(s) for review and input within 45 days. The report should recommended ways to improve the administration of the timber sale program as well as commendations for the particularly well implemented portions of the program.

A 15-day review/comment period be provided for the draft report where staff will have the ability to comment on findings.

The lead reviewer will send the final audit report electronically to the administrating Forester(s), Forestry Team Leader(s), Property Manager(s), Area Forestry Leader (AFL), District Forester, and the County Forest & Public Lands Specialist within 15 days of the completion of the comment period. The lead reviewer will also submit a summary of the audit report, which will consist only of the recommendation (Section 1) and the commendations (Section 2), to be included in the Division of Forestry newsletter, so that staff around the state will have an opportunity to review and learn from the audit findings.

Any significant findings shall be addressed the Team Leader and AFL with their staff. If necessary, the responsible AFL shall present a brief review of the complete audit findings at the next scheduled Forestry Operations Team meeting. Any significant Department or Division policy recommendations or training needs identified during the audit should be submitted by the affected AFL to the Forestry Operations Team. The Forestry Operations Team will assess recommendations, and if necessary, assign the issue to the Division of Forestry's Public Lands Specialist Team or other team/ Department staff as needed.

STATE LANDS FOREST CERTIFICATION

Background

Department-owned state lands are those administered by the Divisions of Forestry and Fish, Wildlife and Parks (FWP). Certified lands include all lands that are designated as state forests, wildlife areas, state parks, fisheries areas, state natural areas, and all other lands where sustainable forest management and timber production is compatible with the purpose of ownership. Leased lands are also included where the Department has the responsibility and authority for resource management including sustainable forestry.

State forests were assessed by third-party auditors and found to be in conformance with sustainable forestry standards of both the *Sustainable Forestry Initiative*[®] (*SFI*[®]) and *Forest Stewardship Council*TM (*FSC*[®]) with certificates issued in 2005. In 2009, approximately 1 million additional acres of State lands were added to the certificates. The principles and standards for the certification programs can be found at: www.us.fsc.org (FSC) and www.sfiprogram.org (SFI).

State lands where intensive non-forest use is the purpose of the state property are excluded from the certificates. Examples of lands that are excluded from the certificates include: all share cropped agricultural lands, fish hatcheries, state tree nurseries, administrative sites, access easements, and other lands owned, leased or eased for intensive non-forest use. Some facilities within certified units are also excised, for example, the Peninsula State Park golf course and the swimming pool at Blue Mound State Park.

This chapter outlines the procedures used to administer the state lands certificates.

Authority and Purpose

Under authority in s. 23.11, 28.01, 28.07, 28.11 and 77.80 Wis. Stats., the Department may enter into voluntary agreements with the American Tree Farm System[®] (ATFS[®]) a program of the American Forest Foundation, FSC and SFI certification to advance the agency's mission. The first such declaration for State Forests was authorized by the Natural Resources Board April 28, 2004. Other agreements for County Forests, the Managed Forest Law program, and additional Department lands were subsequently approved by the Secretary with broad stakeholder support. Funding in the State Budget for third-party forest certification audits was explicitly allotted starting in 2004.

Commitment to Forest Certification

The Department will execute conformance to approved third-party forest certification standards, including ATFS, FSC and SFI, as a means for continuous quality improvement to accomplish our mission. Forest certification is a process by which the Department can assure stakeholders that our land management is consistent with state policies and internationally recognized principles of sustainability. The Department's participation in third-party forest certification also provides a supply of verified, responsibly produced raw materials to the State's manufacturing sector, promoting economic stability and growth. Our response to certification audits and our future actions should reflect these responsibilities. Any conflicts between laws, regulations or Department policies and certification standards shall be brought to the attention of Department Administrators and the certifiers for evaluation on a case by case basis.

Roles & Responsibilities

A process for inter-divisional coordination is established under a three-part framework:

- 1. Leadership within the Divisions of Forestry and FWP, through regular and periodic joint meetings, shall approve policies related to common management issues, develop and approve joint budget initiatives or reallocation plans to address mutual needs, and review accomplishment and monitoring reports associated with DNR certification conformance.
- 2. An Integrated Certification Implementation Team (ICIT) shall advise the divisons and assist the Certification Coordinator, per Manual Code <u>2406.1</u>. The ICIT, composed of staff appointed by the divisions to represent the bureaus and programs with land and water management responsibilities, has four functions:
 - a. Develop strategic alternatives to address Corrective Action Requests (CAR) that come out of certification reviews;

- b. Translate policies approved by the Divisions into operations;
- c. Conduct an annual internal audit of department planning and management of certified lands and compile internal accomplishment and monitoring reports needed to document conformance to certification indicators;
- d. Conduct an annual certification review with senior management of the Forestry and FWP Divisions. The ICIT may be assisted by ad hoc working groups or other standing teams as needed.
- 3. The Forestry Division Certification Coordinator shall facilitate forest certification audits, lead the ICIT and work with others to leverage certification for benefits related to the Department's mission. The Certification Coordinator should be connected within the organizational hierarchy to stay informed of issues affecting certification and to develop and maintain effective relationships.

Internal Review & Monitoring

The ICIT will conduct periodic internal review and monitoring of the Department's policies and procedures for conformance to the respective certification standards. A report of ICIT's findings will be communicated to each Division and program. If the ICIT finds non-conformances it may issue internal corrective action requests to the responsible program. The ICIT program representative will coordinate a program response that will bring the Department back into conformance.

Senior Management Review

Annually, the ICIT will prepare a summary report of the Department's response to the previous year's external audit CARs, Observations, and Opportunities for Improvement; the response to the previous year's internal CARs and observations; and the results of the findings from the current year's internal monitoring. The ICIT will meet with senior management, typically division administrators and other members of division leadership to discuss the status of forest certification, the annual summary report, and issues that require future consideration or action.

Chain of Custody

FSC and SFI certification provide an opportunity to differentiate responsibly harvested wood in the marketplace. Ultimately, when finished goods are produced from raw materials that originate from certified lands, these certification systems allow the use of on-product logos. FSC and SFI have specific on-product logos that can be used to identify wood sourced from certified lands.

Chain-of-Custody (COC) documentation allows for the tracking and tracing of a product through every step from the forest to finished goods. The FSC and SFI standards include specific requirements in the form of indicators or performance measures and associated chain of custody policies that the department must show conformance to that allows forest industry to claim certification credits.

On State and County Forest timber sales the certified chain of custody is maintained by the State or County up to the forest gate, the point at which the ownership of the forest product changes. The forest gate in most cases is the stump with the authorized harvest being the transfer of ownership. The purchaser is responsible for maintaining COC after leaving the sale area. This can be achieved by supplying suitable documentation to allow a contractor to maintain the COC until delivered at a certified mill. The contractor must also be COC certified or covered under a COC certificate from the destination mill. This documentation begins with timber sale documentation including scale or lock box tickets and invoices, which all contain the certification information required by the applicable certification standard.

To satisfy chain of custody standards timber sale documents must contain the following:

- 1. Name and contact details of the organization
- 2. Name and address of the customer
- 3. Date when the document was issued
- 4. Description of the product
- 5. Quantity of the products sold
- 6. The organization's FSC and/or SFI Forest Management (FM/COC) code
- 7. A clear indication of the product claim "FSC 100%" and/or "SFI 100%"

Public Forest Lands Handbook

If separate transport documents are issued (e.g. haul tickets for mill scale sales or for COC documentation), information sufficient to link the sales documents and related transport documentation to each other must be included, such as property name and sale number.

In the case of mill scaled sales, the shipping documents (haul tickets) contain the required information to maintain chain of custody documentation to the receiving mill.

In the case of field scaled sales or lump sum sales, where haul tickets are not issued to track timber volumes delivered to mills, haul tickets may be issued to provide COC documentation if a purchaser requests them. Haul tickets may be issued as shipping documentation to help a contractor maintain the COC. Tickets should be handled as they would for receiving mill scaled volumes as described under the Mill Scale Ticket System section of the <u>Timber Sale Handbook</u>. Contractors shall be responsible for the tickets they are issued with a record of ticket numbers issued being maintained and unused tickets returned at the close-out of a sale.

Purchasers wishing to maintain COC documentation should deposit copies of tickets in a lock box before leaving the sale site only for any products which will be delivered as certified and require shipping documentation as requested by the purchaser. Subsequently, the receiving certified mill should send actual scaled volumes back to the timber sale administrator or manager to be reconciled with the tickets left in the drop box. This process is identical to the process for mill scaling products, and is required to account for the tickets used and products claimed as certified products being hauled from a particular timber sale.

When timber is harvested on either County or State lands that is not included within the forest certification certificate it is necessary to keep these products separate from any certified products. Both timber sale and shipping documents in these instances must not include any certification numbers, codes, or product claim.

COUNTY FOREST LAW CERTIFICATION

Background

The Wisconsin County Forest Program, as administered by the Wisconsin Department of Natural Resources (DNR), includes thirty County Forests that are managed by county staff, through county board-appointed forestry committees, with technical assistance and oversight provided by DNR. Twenty-seven of the thirty County Forests participate in forest certification through a multi-site format. They were assessed by third-party auditors starting in 2004, and found to be in conformance with sustainable forestry standards of either the *Sustainable Forestry Initiative*[®] (*SFI*[®]) and/or *Forest Stewardship Council*[®] (*FSC*[®]). The principles and standards for the programs can be found at: www.fscus.org/principles_criteria/ (FSC) and SFI Program Standards (SFI). This chapter outlines the procedures used to administer the multi-site certificates.

Authority and Purpose

The DNR entered into the County Forest certification agreement under authority in s. 28.01, 28.07, and 28.11, Wis. Stats.

The County Forest certification group is intended to:

- Retain our vital Wisconsin forest industries and the thousands of jobs they represent by building a credible supply of certified raw materials
- Improve the DNR and County Forest's organizational management, efficiency, and consistency
- Provide a cost-effective way for individual counties to participate in forest certification
- Assure the public that the counties and DNR are fulfilling their statutory mandate in managing the County Forests sustainably
- Maintain the ecological integrity and functionality of the forest
- Sustainably provide the ecological, social and economic benefits of the forest
- Provide assurance of sustainable management to the public

<u>History</u>

The Department of Natural Resources and the County Forests have been in partnership promoting sustainable forest management since 1929. What originally started as a program to provide fire protection, access, and other services for tax delinquent land, has evolved into the largest public land program in the state. The current partnership framework of the County Forest program had its origins in 1963. The counties direct management of the forests through their county board-appointed forestry committees. DNR provides technical expertise, additional funding, and oversight. The structure of this partnership is detailed in s. <u>28.11</u>, Wis. Stats., and in this handbook. This unique relationship provided the opportunity for group certification. In 2003, it became apparent that forest certification was a necessity if Wisconsin was going to address the increasing interest in certified forest products in the world-wide forest products industry. The County Forest program underwent a broad, scoping assessment in the fall of 2003 to see if the program was well positioned to progress with a full certification audit followed in the fall of 2004 under the principles of the FSC and SFI.

FSC had its origins in 1992. It was created to change the dialogue about, and the practice of, sustainable forestry worldwide. The principles, criteria, and standards in this certification program span economic, social, and environmental concerns. It is an international certification system now being applied in over 89 countries (FSC Facts and Figures, August 2020). In 1995 FSC-US was established as a national organization of FSC. FSC certification is widely accepted worldwide.

SFI was adopted by the American Forest and Paper Association (AF&PA) in 1994 as a means of demonstrating the association's strong commitment to the goal of sustainable forestry. SFI is now an independent certification system built on a comprehensive system of principles, objectives and performance measures developed by professional foresters, conservationists and scientists, that combines the perpetual growing and harvesting of trees with the long-term protection of wildlife, plants, soil and water quality. It is based on the premise that responsible environmental practices and sound business practice can be integrated to the benefit of landowners, customers, and the people they serve. It is the most popular certification program in North America and one of the largest worldwide.

Roles & Responsibilities

Group Organization

The Wisconsin Department of Natural Resources is the organization that maintains all aspects of both the FSC and SFI multisite certificates. DNR administration of the program includes the Division of Forestry, the supervisory hierarchy of the DNR districts, DNR Liaison Foresters, and Technicians. As such, the DNR is the custodian of both the FSC and SFI certificates and other official documents. The Department determines eligibility and membership requirements for individual counties as outlined in this handbook. The DNR is also responsible for fees associated with participation in the certification programs.

Certificate Manager

The DNR's Division of Forestry - County Forest & Public Lands Specialist is designated as the certificate manager who administers the affairs of the Wisconsin County Forest Certification Group. The certificate manager works with district and field staff in that role and may delegate responsibilities through normal supervisory channels. The certificate manager:

- Maintains the records of the group organization.
- Coordinates the selection of accredited certification firm(s) to conduct audits with the Sustainable Forestry Certification Coordinator.
- Coordinates group member participation on issues and activities pertaining to certification.
- Serves as a conduit for information on FSC and SFI certification to group members.
- Processes applications for membership to both the FSC and SFI groups.
- Coordinates ongoing monitoring of conformance of the group members with FSC and SFI standards.
- Represents the group organization throughout the audit process, including attending all field audits.
- Ensures that public or group member claims about the certification are accurate, truthful, and consistent with truth in advertising guidelines. (Use of FSC and SFI logos should be in accordance with FSC and SFI logo use guidelines.)
- Is responsible for timely reporting.
- Works with group member counties in identifying and providing appropriate training.
- Communicates audit findings to group members.
- Works with group member counties and group organization staff to coordinate corrective action plans in response to audit findings.
- Functions as the primary contact for FSC and SFI auditors.

Membership

The group members are the selected County Forests in the Wisconsin County Forest Program as provided for in s. <u>28.10</u>, Wis. Stats. County Forestry staff, the respective County Forestry Committee that is appointed by county board, and the lands they administer, comprise each County Forest. All of the County Forest lands in a member county are included in the certification. Group members voluntarily choose to participate in the certification group(s). If a county chooses to undergo certification, they may elect to participate in one or both of the certification program groups. Those choosing to participate can include their lands in the multi-site certificate(s) and share in the benefits, privileges, and responsibilities of being a certificate(s).

Group members are responsible for implementing management consistent with the principles and standards of the certification program(s) they participate in. They are also responsible for any costs of implementing changes needed to align their management with the certification standards. Communication of certification information within the group(s) is done through electronic mail, Wisconsin County Forests Association (WCFA) meetings, training sessions, and discussions/minutes of the WCFA's Certification/Legislative Committee. WCFA is a non-profit organization that provides leadership, and a forum for consideration of problems and policies that are common to all County Forests. WCFA also provides training, education and advocacy member counties. The WCFA Certification/Legislative committee is comprised primarily of County Forest administrators and serves as the primary link between the certificate manager and group members.

Fees

The Department of Natural Resources will pay all mandatory fees related to participation in the FSC and SFI County Forest Group certification program. Mandatory fees include the contract cost of the third-party certification audits (initial & full certification), the annual accreditation administration fee (FSC), the Statewide Implementation Committee fee (SFI), and the annual program maintenance fee (SFI). In addition, DNR will bear responsibility for all costs associated with its role as the certificate manager. The group member counties will be responsible for costs associated with implementing the certification principles and standards on their County Forest and for incidental costs of third-party audits (i.e. lunches, etc.).

Entry and Departure from the Group Organization(s)

General Eligibility

The Wisconsin County Forest Group Certification - FSC and Wisconsin County Forest Group Certification -SFI will be available on a voluntary basis to all counties having land enrolled in the County Forest program as provided in s. <u>28.10</u>, Wis. Stats., and administered in s. <u>28.11</u>, Wis. Stats.

Entry Application

Eligible counties interested in participating in group certification, or group member counties under one standard that wish to be added to an additional group, shall submit a request to the certificate manager. The application for entry shall be in resolution form, include a commitment to the principles and standards of the certification group they wish to participate in, and be approved by a majority of the County Board.

Voluntary Departure from Group

Group members may elect to depart from the FSC or SFI certification groups at any time without prejudice to continued Wisconsin County Forest Program status. Member counties that wish to be removed from the FSC and/or SFI certification groups shall submit a request to the certificate manager. The withdrawal request shall be in resolution form and be approved majority by the County Board. The certificate manager will be responsible for communicating the change to SFI or FSC and the third-party auditors. Re-enrollment of a county in a certification group will be at the discretion of the certificate manager. A county will need to apply for entry (see above) and demonstrate a commitment to the principles and standards of that particular certification program prior to being allowed to reenter.

Involuntary Departure from Group

A group member found to be consistently out of compliance with the principles and standards of certification as implemented by the group(s), shall be removed from the certification group(s) if their continued participation, in the findings of the third party auditors, certificate manager, and other group members, jeopardize the group's certification status. In the event of a finding specific to only one group member, that county shall first be made aware of the finding and provided a 60 day time frame for major findings or a 12 month time frame for Minor findings in which to initiate and complete corrective action. If that is unsuccessful, a written warning is to be issued from the certificate manager documenting the measures needed to bring that county into conformance and providing for a one year time frame to implement necessary changes. A group member will only be removed after these initial steps and after consultation and majority concurrence with the other members of that group. A county removed from a group(s) may appeal the decision through a county board resolution submitted to a review committee. The committee shall consist of the certificate manager, the WCFA Executive Director, the DNR Chief State Forester or designee, and the County Forest administrators of the other member counties. The review committee shall have 60 days after receipt of the appeal resolution to render a decision for removal or continued participation. A county may be removed from a group certification and still remain in the Wisconsin County Forest program. However, sections in the County Forest Comprehensive Land Use Plan referencing certification will need to be amended accordingly. Investigations into non-compliance with the Wisconsin County Forest Law (s. 28.11, Wis. Stats) shall be independent of any investigation into removal of a member county from a certification group.

GROUP ADMINISTRATION

Communication

Communication of certification information within the group(s) is done through electronic mail, WCFA meetings, training sessions, and discussions/minutes of the WCFA's Certification/Legislative committee.

Interpretation and Application of FSC and SFI Standards

The certificate manager, WCFA Certification/Legislative committee, and DNR Sustainable Forestry Certification Coordinator will be responsible for interpreting and applying the FSC and SFI principles and standards in the context of the Wisconsin County Forest program (s. <u>28.11</u>, Wis. Stats.). The certificate manager and WCFA Certification/Legislative committee will jointly function to clearly explain the requirements to the group members. These considerations are addressed through the Public Forest Lands Handbook (<u>2460.5</u>), the Timber Sale Handbook (<u>2461</u>), and the Silviculture and Forest Aesthetics Handbook (<u>2431.5</u>). Group members shall include management, and considerations for certification, in their County Forest Comprehensive Land Use Plan.

Member Commitment to the Certified Group Standards

A county must commit to the principles and standards of the certification group they participate in. This is a requirement for entry into the group (see Entry Application). This commitment should also be included in their County Forest Comprehensive Land Use Plan.

Designation of New Group Members

The certificate manager will ensure that any new group members are added to membership and mailing lists, receive appropriate information from SFI and/or FSC, and take care of any other administrative details. A database of group member counties will be posted on the DNR website, <u>http://dnr.wi.gov/org/land/forestry/certification/county.html</u>, so that prospective buyers of forest products can determine which counties are certified.

Training and Education

The certificate manager (through team, area and district forestry supervisors) and WCFA Certification/Legislative committee will evaluate training needs of the group organization and group members to ensure sufficient knowledge to implement and achieve the FSC and/or SFI standards. The Department will work cooperatively with group members and other organizations/partners to offer training applicable to the certification standards. The group members will be responsible for ensuring that their staff attends sufficient training to provide for certification and to ensure proficient resource management.

Maintaining Group Records

The certificate manager is responsible for maintaining all group organization records and documents. The County Forest certification group records include:

- Lists and acreages of FSC and SFI group members
- Copies of audit findings and reports
- Group organization corrective action requests (CARs)
- Documentation of corrective actions taken in response to CARs
- Entry applications and departure notifications from group members
- Internal review and monitoring
- Other relevant documents and records

Internal Review & Monitoring

A five-phased approach will be used by the Department to monitor group member compliance to the certification standards. Each County Forest has a Department "Liaison Forester" assigned to it. Liaison Foresters have regular contact with county staff, often working jointly on timber sales or other land management practices. The Liaison Forester has responsibility for local DNR oversight of the County Forest and has hands-on knowledge on the local forest. DNR has approvals of all timber sales and typically either the Liaison or DNR Forestry Team Leader are the responsible individual. Liaisons participate in County Forestry Committee meetings, and assist in formulation of Annual Work Plans to ensure that the County Forestry operations meet the County Forest law (s. 28.11 Wis. Stats) and forest certification standards. Management that deviates from the law or certification standards is addressed initially at the local level and if not resolved progresses through DNR supervisory channels and Internal CAR process (see below).

Annual partnership meetings are held to evaluate the partnership between the DNR and county on that particular forest. As part of those meetings, the local Liaison will lead a discussion on that county's compliance and progress towards certification findings and corrective actions. This discussion is to be documented in the minutes of the meeting which are forwarded to the group manager annually.

The third phase includes a certification component in the regularly scheduled DNR audits of the County Forests, as described in Chapter 330 of this handbook. These will be completed on a rotating basis so that each county is audited at a minimum of once every 5 years. Each district will be responsible for assigning personnel to complete these audits. The certification facet of the audit will verify and document compliance with corrective actions and ensure overall management consistent with certification standards. Format for the audit will follow that outlined in Chapter 330. Audits are reviewed by the DNR County Forest & Public Lands Specialist (certificate manager) and approved by the Director, DNR Bureau of Forestry Field Operations.

The fourth phase includes the County Forest Comprehensive Land Use Plans that statutorily govern the long-term management for each forest will address compliance to certification and document management that is aligned with the certification standards. The Department and local County Boards must approve these plans.

Lastly, WCFA, particularly the Legislative/Certification Committee, is continually monitoring external audits and issues that arise regarding certification.

External (3rd party) Corrective Action Requests (CARs)

The Wisconsin County Forests Association (WCFA) Certification / Legislative Committee works with the Certificate Manager to formulate responses to corrective actions and also serves as a main conduit for communicating forest certification information and maintaining consistency within the County Forest group(s). Minutes from those meetings are shared with all County and DNR Liaison / Team leaders. In addition, training on certification issues is routinely incorporated into regular meetings of WCFA. WCFA meets in general session three times annually.

Internal Corrective Action Requests (CARs)

For deviations from the forest certification standards, an Internal Corrective Action Request (CAR) may be issued. Internal CARs are documented on an Internal CAR form. and may be issued by DNR Team Leaders, Internal DNR Auditors, the Certificate manager, or the DNR Sustainable Forestry Certification Coordinator. It is expected that prior to the issuance of any internal CAR there will be communication between the County Forest Administrator, Liaison Forester, Team Leader and Certificate Manager. Internal CARs shall be submitted to the County Forest Administrator with CC's to the Liaison Forester, Team Leader, Group Manager, Chair of the respective County Forest committee, and the WCFA Executive Director. The County Forest Administrator will be responsible for addressing any internal CARs on behalf of the Group Member county. Internal CARs will be brought forth to the WCFA Certification / Legislative Committee for discussion. The Certificate Manager shall be responsible for monitoring follow-through on Internal CARs. Should the DNR Certificate Manager be found out of compliance in its coordination role for the Group, the DNR Sustainable Forestry Certification Coordinator shall monitor follow through.

STATE-OWNED ISLANDS MANAGEMENT

The purpose of this chapter is to assign specific responsibility for the periodic examination of state-owned islands, to establish a standard system of examination reporting and signing, and to provide guidelines in the management and/or preservation of their aesthetic qualities. A history of how and why these islands were granted to the State of Wisconsin by the federal government in 1912 is incorporated into this chapter as background information.

<u>History</u>

In the year 1911, the Honorable Elmer A. Morse, a member of Congress from the State of Wisconsin, introduced House Bill No. 13417, which read as follows:

A BILL granting unsurveyed and unattached islands to the State of Wisconsin for forestry purposes. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that the unsurveyed and unattached islands in inland lakes north of the township line between townships thirty-three and thirty-four north, fourth principal meridian be and the same are hereby granted to the State of Wisconsin as additions to the forest reserves only, and should the State of Wisconsin abandon the use of said islands for such purpose, alienate or attempt to alienate or use the same or any part thereof for purposes other than that for which granted, the same shall revert to the United States.

Note: In 1938 the federal act of 1912 was amended to authorize the sale or exchange of islands that are not available for forestry; the proceeds received or lands acquired in the sale or exchange to be devoted to state forestry.

Mr. Morse, in introducing the bill to the House Committee, had the following to say: "We want to include them (the islands) within our forest reserve. One of the great reasons for wanting to get title is this: We are creating there in northern Wisconsin, in the lake region, a magnificent forest reserve. We have passed a bill whereby the State is damming up the outlet of the lakes and using the water for water-power purposes; that is, letting it back up during high water and letting it out during low water. That is one reason why we want them, but the main reason is this: If those islands go into private ownership, as they have in some instances, people get possession of them, establish saloons and houses of ill repute on the islands, and in this way practically ruin our great forest reserve."

Mr. Morse's reasons for introducing this bill were further stressed by Mr. Griffith, then State Forester of Wisconsin, appearing before the House Committee: "A few years ago we found that certain parties, particularly some men from Chicago, were taking up these islands by scrip. These are little rock knolls, averaging only about 2 acres to the island. Most of them are not a half or a quarter of an acre. They are very beautiful, and many of them are covered with pine or hemlock. These men would go in and strip the timber off in the winter time, and then they would sell them to almost anybody they could get to purchase. There is a great inclination while lumber men are up in this country to locate saloons or get people in there who are very undesirable. Consequently Present Van Hise, of the University of Wisconsin, who is chairman of the board, and myself took the matter up with Mr. Garfield, then Secretary of the Interior, and explained the matter. After the matter was investigated somewhat Mr. Garfield withdrew those lands from entry, pending final consideration of Congressman Morse's bill. There was no action taken upon the bill at that time. That action was continued under Secretary Ballinger until toward the end of his administration, and then those islands were again placed upon the market, and some 8 or 10 of the best of them were quickly snapped up. They are being surveyed slowly. We have again taken the matter up with Secretary Fisher and Congressman Morse, who introduced the bill, and that is the reason we are so extremely anxious to get this bill passed so we can protect these islands.

"We are leasing land around these lakes and such islands as we own for people who want them for summer camps – not only people of Wisconsin, but of the whole Mississippi Valley. People come there from as far south as New Orleans, and many of them from Kansas City, Chicago, and St. Louis. We are leasing upon reasonable terms and with certain restrictions any particular land around our lakes. We would, of course, handle these islands in exactly the same way. This is not a question, gentlemen, of giving us any amount of land for the timber that is on it, but the improvement of those islands from the aesthetic point of view.

"In connection with the control of those reservoirs, there are established monuments on the shoreline of the lake. We have a hydraulic engineer who takes those matters up with all of the resort owners, and of course we have to fix a

Public Forest Lands Handbook

mean that will suit the storage men. The storage men would like to draw that water down as low as they can and fill the lakes as high as they can. The resort owner would like to get a fluctuation of not more than 10 inches. That keeps down the thoroughfares between those lakes which you can go through by launch or canoe. If these islands are taken up by private individuals, it will interfere very largely with the joint handling of those lakes both for reservoir purposes and for resort purposes as well."

On August 22, 1912, Congress conveyed the unsurveyed and unattached natural islands in meandered inland lakes north of township 33 to the State of Wisconsin. At that time there were only 216 known islands with a total combined acreage of 476. Since then some of the islands have been sold to settle land disputes, some were awarded to private individuals by court action, and some have become sunken islands due to rising water levels or erosion. On the other hand, many more islands were located that were also covered by the grant. At this present time there are some 617 islands covered by this grant. This figure will change periodically as there are court cases contesting state ownership, as well as the fact that some islands covered by this grant are not now on the list.

The Conservation Commission in 1920 issued a publication listing some 600 islands available for lease. The leasing of islands for cottages or campsites was encouraged at that time to promote greater use of the resource.

Philosophies changed. The State Legislature in 1925 enacted into law what is now <u>s. 28.02(6)</u>, <u>Wis. Stats</u>. This law prohibited issuing new leases and provided for renewal of existing leases only where improvements had been made or to charitable and similar nonprofit groups.

In keeping with Conservation Commission policy, the number of leases renewed was reduced throughout the years.

Surveys were conducted to locate additional state-owned islands and to determine possible trespass. Legal actions often resulted in disputed ownerships.

Island examinations in recent years have been concerned with land trespass, recording of public use, posting of signs declaring ownership and permitted uses, and scheduling cleanup of the more heavily used islands.

Statutes and Codes Governing State-Owned Islands

The following Wisconsin Statutes and Wisconsin Administrative Codes relate to the administration of island responsibility:

1. <u>Section 28.02(1), Wis. Stats.</u>

This section defines state-owned islands as state forest lands.

2. <u>Section 28.02(4)</u>, Wis. Stats.

The sale of state-owned islands is subject to the same restrictions as the sale of state forest lands.

3. <u>Section 28.02(6)</u>, Wis. Stats.

This section prohibits leases on state-owned islands after June 25, 1925, except existing leases to charitable and nonprofit organizations and where improvements had been made.

4. <u>Section 29.327, Wis. Stats.</u>

This section governs the construction, identification and removal of waterfowl blinds on state lands.

5. Chapter NR 45, Wis. Adm. Code

Code 45 pertains to the conduct of visitors to state parks, state forests, and all state-owned islands.

6. Section NR 1.31, Wis. Adm. Code

The department shall maintain state-owned islands in natural and undisturbed condition consistent with controlled public use on islands suited for recreational purposes. Each state-owned island shall be classified for its most desirable use such as camping or picnicking, or to be maintained in a natural condition. Preference shall be given to aesthetic management and every effort shall be made to maintain forest growth and ground vegetation in as near a natural state consistent with other desirable uses.

The Department maintains state-owned islands in as natural and undisturbed condition as possible while permitting limited public use on islands suited for water route camping or day use.

7. Section NR 1.48, Wis. Adm. Code

This section of Chapter NR 1 further provides that no leases for private use shall be executed, extended, or renewed, except if the Secretary determines that the lease will serve a public benefit or provide for public use.

State-Owned Islands

The federal grant of 1912 conveyed unsurveyed and unattached islands in meandered inland lakes north of the township line between townships thirty-three and thirty-four north, fourth principal meridian, to the State of Wisconsin as additions to the forest reserves.

Since the original land survey, water levels may have increased or decreased. What was once part of the mainland may now be an island. In this case the new island that is formed is the property of the party, whether government or private, who held title to that parcel of the mainland before it was flooded and the island created.

In the case of decreasing water levels, what was once an island may become part of the adjacent mainland. If this island was originally state-owned, it is still state-owned even though it is attached to the mainland. The title to the land was conveyed to the state. Riparian rights of the adjacent government lot landowners do not extend to include the island even though it becomes a part of the mainland by falling water levels or by accretion.

Note the words "unsurveyed" and "meandered" in the act of 1912. These identify the islands involved in the grant:

1. Unsurveyed

During the original land survey of Wisconsin, islands were rarely surveyed, with the following exceptions:

- a. Occasionally a surveyor would include and survey an island dependent on the values involved. This shows in the field notes and on the original GLO plat.
- b. A few islands were surveyed in subsequent federal resurveys prior to the act of 1912 upon request of individuals who were interested in acquiring title.

Federal patents were not issued on unsurveyed islands because where were no means to identify the land involved. These are the unallotted islands that were conveyed to the State of Wisconsin.

If a federal patent was issued on surveyed islands, title then passed to private ownership. A tracing of land records will disclose this original transfer from federal ownership.

2. <u>Meandered Inland Lakes</u>

Only the unsurveyed, unallotted islands in <u>meandered inland lakes</u> were conveyed. Original survey notes or GLO plats indicate what lakes were meandered.

3. Nonmeandered Lakes

Islands in nonmeandered lakes are owned by the party holding title to the description the island falls in, whether it is private or government and regardless of the location in the state.

4. Flowages

Islands in flowages are private except in the following examples:

a. A meandered lake contains an unsurveyed, unallotted island. The lake level is raised by a dam. The island is still present but smaller in size. This is still a state-owned island in the flowage.

The flowage probably contains newly created islands that are privately owned. To investigate if an island might be state-owned, consult the Lake Survey maps. The depth of water between the island and the present shoreline should be greater than the head of water carried on the dam, providing the dam is on the original stream bed.

- b. The Department of Natural Resources may have owned a description of land that, when flooded, left some land as an island.
- c. A privately owned island within a flowage may have been purchased or acquired by the Department of Natural Resources.

5. <u>Rivers</u>

Islands in rivers, meandered and unmeandered, were not granted to the state in the federal act of 1912 but may have been acquired at a later date. Management of islands acquired as a part of a DNR property is governed by the master plan of that property.

6. Other

Islands purchased by the state (or acquired by other means) regardless of their location in the state, are stateowned.

Responsibilities of the Department of Natural Resources

The Department of Natural Resources, Division of Forestry administers the state-owned islands defined in this handbook. It is responsible for the management, protection and preservation of this public resource. against private trespass and abuse. Islands will be classified as to present use and as to potential use and needs, and the individual islands will be managed accordingly.

Assignment of Property and Personnel

The primary responsibility for state-owned islands in lakes is with the Forestry Team Leader. Duties required by this assignment may be delegated to members of their staff. Islands are organized by County as Forestry Districts, Areas and Teams may change over time The Forestry Team Leader will be the designated property manager for State -owned Islands by default but may delegate to staff.

<u>WisFIRs</u>

- 1. State owned islands have a Forestry property code that is organized by County. *Example: Florence County State-Owned islands = FR property code = 1920.*
- 2. Each lake, having one or multiple islands, should have a unique "compartment".

- 3. Lakes with multiple islands can be have each island as an individual stand or multiple islands as one stand depending on the cover type similarity.
- 4. If islands have different evaluation time frames, they must be unique stands to schedule an examination treatment date.
- 5. DNR managed lands database has an additional real estate property code that is unique to each state owned island. This code can be used in the custom field within WisFIRS for additional tracking
- 6. "Local" or unique names also exist for islands. These names can be added in the stand comments field in WisFIRS. Island names and locations are shown in the appendix.

County	Number of Lakes	Number of	County	Number of Lakes	Number of	County	Number of Lakes	Number of
		Islands			Islands			Islands
Ashland	3	3	Iron (NHAL)	2	3	Price	11	18
Bayfield	16	32	Iron	22	35	Rusk	2	8
Barron	11	32	Langlade	6	8	Sawyer	14	40
Burnett	23	43	Lincoln	1	5	Vilas	68	139
Douglas	5	9	Marinette	4	6	Washburn	23	72
Florence	6	12	Oneida	65	121			
Forest	10	18	Polk	12	36			

Island Examinations Procedures

Definitions

1. Examination

An examination is a regularly scheduled investigation of an island to determine its use, post signs, conduct necessary maintenance, and to check for trespass, followed by submission of all necessary formal reports.

2. <u>Inspection</u>

An inspection is not a scheduled investigation of an island. In the course of normal work, the opportunity may arise to stop at a state-owned island and check for trespass, use, etc. No formal reports are necessary unless signs of trespass, etc., are found which were not reported in the previous examination.

Follow-Up

If signs of trespass or other illegal activity is found during the course of either examination or inspection, immediate follow-up in resolving the condition is expected. The island inspector finding such conditions should gather all pertinent information and submit it to the forestry team leader.

The forestry team leader should proceed to resolve the condition. If Department policy is involved and the trespass involves an ownership dispute, should consult with Facilities and Lands Real Estate section and Bureau of Legal Services staff to develop a resolution approach.

Schedule of Examinations

Island responsibilities are best fulfilled by a regularly scheduled examination of each island. This does not mean that the island cannot be inspected in the normal course of work.

1. Determining the interval between examinations

Public Forest Lands Handbook

A seven-year interval between examinations of each lake containing state-owned islands is required. However, the actual interval is to be determined by the assigned personnel and forestry team leader, based upon the need for examination. Factors to consider are the amount of recreational use, need for determining possible trespass, and the need for signing or other maintenance work. Those islands which are little more than rocks with limited possibilities for trespass or other illegal use may be scheduled every seventh year.

The schedule for re-examination of all islands should be set up after the first examination of the island. This schedule may be adjusted over the years to meet changes in use and improve operational efficiency. Schedule changes should be noted on the records.

If an island has a designated use area such as a developed canoe campsite, the island should be posted, maintained and examined according to the instructions in M.C. <u>2527.2</u>.

2. <u>Scheduling the year of examination</u>

It is suggested a proportional number of the total examinations be scheduled in any one year. This will distribute the workload rather than provide for a one-year examination program. However, if the number of islands assigned for examination is small, assigned personnel may schedule all examinations for one year. The exception would be for those islands that may need examination at more frequent intervals.

WisFIRS Examination Scheduling

Island examinations should be scheduled in WisFIRS as a treatment. Treatments are only available to schedule by stand. Each island could be a separate stand OR if there are multiple islands on the same lake that are of similar forest type, a stand may consist of multiple islands. Use the WisFIRS treatment code "I" Island inspection.

1. <u>Recording the scheduled year of examination</u>

After an examination interval has been determined, the years the examination are to be made should be listed in the lake file. The island examination schedule should be prepared jointly by the examiner and the Forestry Team Leader.

Formal Examination Reports

When an island has been re-examined, submit the Island Re-Survey Report, Form 2800-2 to the Forestry Team leader.

Island examinations should be entered as a completed treatment in WisFIRS by stand. Upload the completed re-survey report document in the completed treatments section in the treatment detail page. Name the uploaded file with: Examination Year_County_Lake_Island name. Example 2021_Bayfield_BigLake_Island1

Islands scheduled for periodic cleanup several times during the summer will require only one Island Re-Survey Report for the year.

The original of all reports pertaining to state-owned islands is retained by the assigned inspector. Lake files should include, a map of the lake with landing access indicated, information on the kind of boat needed, photos of the islands, past examination records, GPS coordinates of the landing sites if not obvious and the landowners name and telephone number. GPS coordinates of the locations of the signs on the islands and notes about their location can be helpful.

Island Classification and Management

In keeping with the management objectives of state-owned islands, each island will be evaluated and classified as to its most desirable use. No island will be classified for public use if it is within 300 feet of privately developed land. Other factors to consider in evaluating and classifying islands are the size, shape, elevation, rockiness, cover and screening. For example, a small round island of one-half acre in size with proper cover and screening may be more desirable for camping than a larger narrow island lacking proper cover and screening. The presence of wildlife nesting

Public Forest Lands Handbook

sites for eagles, osprey, and loons may also be cause of use restrictions. Elevation is important in lakes that are subject to fluctuations in water levels.

Islands will be classified as follows:

- 1. Islands available for regulated primitive camping (lakes within DNR properties)
 - a. Definition
 - Islands must be one-half acre or larger with suitable cover and screening.
 - Islands that are prone to erosion and degradation through repeated use should not be classified for camping
 - A need for primitive camping must exist either by demonstrated previous use or lack of camping opportunities on the mainland. Islands will be placed in this group only with the approval of the Forestry Team Leader.
 - b. <u>Management and use</u>

On islands located within the boundaries of a state forest or where controls may be necessary to maintain the resource, camping shall be by permit only.

Development may include a fire ring or fireplace, a picnic table, a primitive type toilet, and a facility or instructions for disposing of refuse. Approvals for development will be the same as required for state forest improvements. Cleanup shall be done on a schedule.

Sign No. 1 (Open for Camping and Public Use) along with sign No. 5 (Camping Permit Required) shall be used to post this type of island.

- 2. Islands available for unregulated primitive camping (lakes outside of DNR properties)
 - a. Definition

Islands must be one-half acre or larger with suitable cover and screening. Islands that are prone to erosion and degradation through repeated use should not be classified for camping.

b. <u>Management and use</u>

Same as 1 above except that no permit or fee is required. The degree of development may not be as great as 1. Subject to the approval of the Forestry Team Leader, personnel assigned island responsibilities will determine to what extent camping may be unrestricted and designate suitable camping sites.

Sign No.1 (Open for Camping and Public Use) along with sign No.6 (Camping Limited to _____ Days) may be used to post this type of island. The maximum time allowed for occupation of an individual camping site is limited to a maximum of 3 days, per <u>Wis. Admin. Code 45.10(n)</u>.

3. Islands located on heavily traveled water trails.

Development may include a fireplace or fire ring, a picnic table, a primitive type toilet, and a facility or instructions for disposing of refuse. Approvals for development will be the same as required for state forest improvements. Island cleanup shall be done on a schedule or as often as needed.

Sign No. 2 (Camping Limited to One Night Only) along with a canoe route campsite sign shall be used to post this type of island.

4. <u>Islands located on lightly traveled water routes (may or may not be on a designated route)</u>

No development of any type will be made. Island cleanup will be done at least once each season or as often as needed.

Sign No. 2 (Camping Limited to One Night Only) will be used to post this type of island.

- 5. Islands available for one-night camping (not on a designated water route)
 - a. Definition

Islands must be one-half acre or larger with suitable cover and screening. Islands that are prone to erosion and degradation through repeated use should not be classified for camping.

b. Management and use

The degree of development may not be as great as 1. Subject to the approval of the Forestry Team Leader, personnel assigned island responsibilities will determine to what extent camping may be unrestricted and designate suitable camping sites.

Sign No.1 (Open for Camping and Public Use) along with sign No.6 (Camping Limited to _____ Days) may be used to post this type of island. The maximum time allowed for occupation of an individual camping site is limited to 3 days or less, per <u>Wis. Admin. Code 45.10(n)</u>.

- 6. Islands available for day use only
 - a. Definition
 - Island must be .03 acre or larger.
 - Island must be suitable for swimming or picnicking.
 - Personnel assigned island examination responsibilities will approve islands to be placed in this group.
 - b. <u>Management and use</u>

No improvements shall be made on islands in this group. Cleanup shall be made at least once each season on the heavily used islands and at the time of regular inspection on the remainder.

Sign No. 3 (No Camping-Day Use Only) shall be used to post islands in this group.

- 7. <u>Islands not available for public use</u>
 - a. <u>Definition</u>
 - Islands less than .03 acre.
 - Islands within 300 feet of privately developed land.
 - Islands unsuited for recreational use, i.e., bog, swamp, rock, etc.
 - Islands with unusual wildlife potential such as nesting sites. If wildlife nesting sites are involved, consultation with the local wildlife manager is needed to determine if a complete or seasonal closure is needed.
 - Islands which may be eroded and lost due to public use.
 - Islands may be placed in this group by the designated inspector with the approval of the Forestry Team Leader.

b. Management

The primary values of these islands are aesthetics, wildlife habitat and emergency landing sites. Every effort shall be made to preserve the natural appearance of these islands.

Sign No. 4 (Camping, Picnicking, and Swimming Prohibited) shall be used to post islands in this group.

Minimum Island Signage

Islands that are little more than a small rock pile with little vegetation present but are listed as a state owned island may be signed with sign No. 7 (State Owned). Islands that are listed but are completely under water should not be signed.

Size limitations on the above classifications are to be considered simply as guidelines. Classification of all islands should be done in consultation with any existing lake associations or shore land owners, especially if most or all of the lake shore is owned by a single entity. Agreements with lake shore associations or other groups for annual island maintenance may be pursued by the local inspector and approved by the Forestry Team Leader. (See Friends Groups NR 1.71) These agreements should be renewed at each inspection cycle or at least once every five years.

Aesthetic Management

Every effort shall be made to preserve all islands in as near natural state as possible. Forest growth and ground vegetation will be managed solely for aesthetic purposes. Islands may be closed temporarily to public use should overuse threaten destruction of the resource. Plans for aesthetic management shall be reviewed with the Forestry Team Leader.

1. <u>Cutting</u>

Trees and shrubs may be cut or trimmed only for aesthetics, salvage or safety purposes. The property superintendent or employee assigned maintenance have complete discretion to determine if trees or shrubs are in need of cutting. All slash and debris will be removed from use areas, scattered, and lopped within 12" of the ground. (An exception may be limited cutting of shrubs and small trees to provide air circulation around a campsite.)

2. <u>Planting</u>

Planting will be authorized to enhance aesthetics, to maintain the shoreline, and to heal fire damage and areas damaged by public use.

Posting of Islands

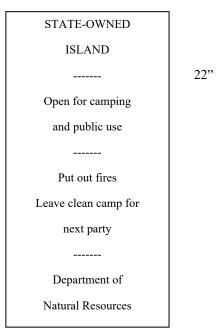
The type of "state-owned island" sign to post on an island will be left up to the discretion of the examiner and in accordance with the island's classification.

All signs designating state-owned islands should be standard metal regulatory signs and should be ordered from the Badger State Industries. The signs should be mounted on six-foot steel posts driven into the ground to an approximate depth of 2 to 2.5 feet. (The ends of the mounting screws may be peened over after securing the nut to prevent easy dismantling.)

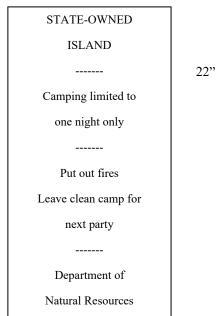
On extremely rocky islands where it is impossible to drive a post, the sign may be mounted on a tree.

Sign Types

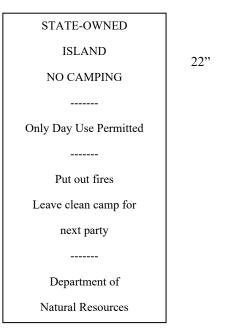
1. Sign type No. 1, white on brown



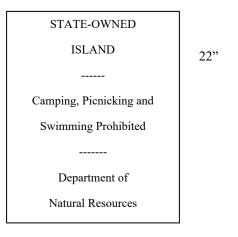
2. Sign type No. 2, white on brown



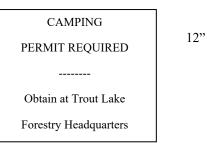
3. Sign type No. 3, black on yellow



4. Sign type No. 4, black on yellow

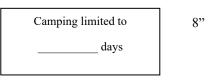


5. Sign type No. 5 – special order, white on brown



The location of the permit source will have to be lettered for each issuing station.

6. Sign type No. 6 – special order, white on brown



The number of days will be in accordance with the policy established for a particular property.

7. Sign type No. 7 – special order, white on brown



Sign No. 7 may be used in situations simply to declare State ownership and where the placement of a larger sign would be too conspicuous. It may also be used as a supplemental sign where needed.

For the first examination of an island it may be necessary to carry several types of signs, unless it can be determined what type of sign to use from the previous island survey report. After the initial examination and classification of the island, the type of sign erected should be shown on the island re-survey report. (On islands where sign vandalism and loss are frequent, cardboard signs mounted on a masonite back may be considered.)

Signs should be posted in areas where access to the island is available, and in a conspicuous place not hidden by brush or trees. GPS coordinates for sign locations are helpful for relocating signs during later inspections. It is also desirable to have a sign at the use areas. Consider aesthetics. Do not place a sign directly opposite a summer home on the mainland.

One sign is sufficient on islands one or two acres in size that are seldom used. However, on islands of this size that receive heavy use, two signs may be considered.

On islands larger than two acres, two signs should be usually be erected. More may be necessary if the island is receiving heavy use by the public in two or three different areas. In this case on sign should be posted at each use area.

These are guidelines for the number of signs that may be required on various types of islands. However, one sign shall be erected on each state-owned island (unless it is underwater or very small and completely barren of vegetation) and the examiner shall decide how many more should be erected

No state island signs shall be erected on islands where recreational leases are in effect

Inspection Records

There are many historical hard copy "island folders" organized by County and Lake. There is useful information included in the island files, including access, landowner contacts, past inspection records, etc. These remain important A file will be maintained by the person assigned field responsibility, and the Forestry Team Leader.

- 1. Setting up the file
 - a. <u>Lake folders.</u> The name of the lake, the USGS map covering the lake and the years to be examined are to be typed on a label. If there are two names, the second name is to be shown in parentheses adjacent to the preferred name.

The individual lake folder will contain correspondence and examination reports of all state-owned islands within the particular lake.

b. <u>File dividers.</u> A standard file divider will be used for each county and also one for "State-Owned Island General".

Lake folders will be filed alphabetically behind the respective county divider.

c. <u>Master listing</u>. Each person assigned island examination responsibilities shall maintain a master listing in the "General" file, showing by county all the lakes and islands to be examined and the year of examination.

This list should be referred to prior to the start of the annual island examination. As the islands are examined and reports filed, the year of examination should be crossed off the master list and the lake folder tab.

2. <u>Plat books</u>

All state-owned islands will be identified with red pencil in a plat book and the name of the island written next to it. If insufficient space does not permit writing in the name of the island, the island is given a number and the number and name written in the margin of the page.

Public access points should be marked in brown pencil and the letters "P.A." printed next to them.

The plat book serves as a quick reference for finding the location of the state-owned islands and public access points, and determining ownership. The plat book need not be a specific part of the file since it can also be used for other purposes.

3. <u>USGS quadrangle maps and aerial photographs</u>

USGS quadrangle maps covering all of the state-owned islands assigned for examination can be ordered.

The islands and public access points will be recorded on the quadrangle map ion the same manner as on the plat book. (Islands colored red and labeled, public access points labeled in brown.) The quadrangles serve as a more detailed map than the plat book, giving a better idea of the size and location of the islands in the lake. They also provide a more detailed description of the road network for access purposes.

Where no public access is available, the examiner will indicate through what property access can be achieved by writing the name of the landowner and identifying the location on the map.

The quadrangles are filed alphabetically behind the county divider. They are not to be duplicated where they lap over into another county – simply filed under one county or the other.

Aerial photographs of lakes to be examined will be very helpful, particularly for the initial examination, as they can be used in locating islands and determining their size, shape, and distances from the mainland

4. County maps

If county maps can provide sufficient information as to location and access, they may be substituted for quadrangles.

Equipment and Supplies

The following is a list of equipment necessary for posting and examining state-owned islands.

1. Boat and motor

Remember, all boating regulations must be followed. See Wisconsin Boating Regulations and <u>Manual</u> <u>Code 9182.5</u> on Water Safety. Follow all Boat, Gear, and Equipment Decontamination and Disinfection Protocol as defined in Manual Code 9183.1

2. <u>Signs</u>

A sufficient number of signs of the type required for each lake to be examined should be carried. It is better to have a few too many signs than not enough. A return trip to a lake should never have to be made because of insufficient materials to post the islands in the lake.

Signs can be obtained from Badger State Industries. Orders should be made once each year. A sufficient number should be ordered to meet all of the needs. Funding for signs and travel may be available through the Regional Forestry Leader.

Signs should be ordered with 3/8" holes drilled near the top and the bottom for center mounting. The distance between the two holes <u>must</u> be exactly in even inches so as to match the holes in the steel posts.

3. <u>Sign posts</u>

Posts will be of channel steel, six feet long, and may be ordered from the same source. Specify U or Channel Post No. 40 which has 3/8" holes on 1" centers.

4. Bolts, nuts, lock washers and wrenches

Galvanized machine bolts, $2^{\circ} \times 3/8^{\circ}$, with nuts and lock washers to fit, will be used to attach the sign to the post. Two 8° crescent wrenches are needed to tighten the bolts. A ball-peen hammer may be used to secure the nut.

5. <u>Post driver</u>

This is the most desirable tool for driving steel posts. A driver larger than is used for standard "T" posts is needed to fit over the specified steel post. If your field station does not have one available, one can be obtained at either the Hayward Nursery or the Trout Lake Forestry Headquarters.

- 6. Other equipment
 - a. USGS quadrangle map, or aerial photograph of the lake.
 - b. Lake folder with island information.
 - c. Plat book of county where lake is located.
 - d. Clipboard.
 - e. Pencil or pen.
 - f. Camera, if available.
 - g. GPS unit

Miscellaneous

1. Islands not under grant

There may be other state-owned islands in assigned counties that were purchased. If a decision by the Forestry Team Leader in consultation with the property manager is made to put them under normal island inspection and maintenance, the same examination procedure used for islands covered by the original grant will be followed.

2. Communications

Where information or backing is needed on any particular problem or situation, the Forestry Team Leader is to be contacted. Document all of the information concerning the problem. If a decision is required of the Madison staff, the District Forestry Leader will contact them.

3. Trespass

Where trespass is found, a <u>thorough</u> examination of the case will be made by the examiner. He will interview landowners and obtain all possible information while in the area. Pictures must accompany the narrative report on the trespass. This report is to be sent to the Forestry Team Leader.

Examples of reportable unauthorized trespass would be a fill or other type of bridge built to an island, a cabin nor other permanent structure constructed on an island, or the cutting of live trees on a large scale.

Adding and Deleting Islands

New Islands

As time permits, a careful examination should be made of aerial photographs to locate islands that do not appear in the listing of state-owned islands and which the Department of Natural Resources should claim. Older aerial photographs are particularly helpful in determining if what are islands now may at one time have been connected to the mainland. This would more likely be true in lakes where the water level has been raised by dams than in others.

Where new islands are located in such flowages, it will be necessary to make soundings to determine the depth between the islands and the mainland. By comparing these depths with the height of the head of water at the dam, it can be determined if the islands were or were not connected to the mainland before the dam was constructed.

A thorough investigation should be made on the scene and of the courthouse records to determine if a particular island is claimed by an adjacent property owner. If after a thorough investigation it is determined that the Department of Natural Resources should claim ownership, the appropriate reports, including a detailed narrative, should be submitted. The Forestry Team Leader will follow up and may request additional information. The Forestry Team Leader will be notified if the Bureau of Legal Services determines that the Department of Natural Resources has a legitimate claim and that the island has been placed on the state-owned listing.

As new islands are located, their inspection will be worked into the regular schedule of examination.

Deleting Islands

On occasion, disputes may arise challenging state ownership of particular islands. When state ownership is challenged, the island examiner and Forestry Team Leader will collect all available correspondence and other pertinent information and make a complete investigation and review of the case. The Forestry Team Leader will then discuss the facts with the Area and District Forestry Leader. The region will summarize the circumstances and make a recommendation to the Administrator, Division of Forestry, with copies of correspondence and other information attached.

The Division of Forestry will review the file with the Bureau of Legal Services after which they will make a recommendation to the Secretary for his approval. The Administrator will advise the region as to the disposition of the ownership claim.

Islands will not be removed from the Public Forest Lands Handbook listing as the result of ownership disputes or other unusual circumstances unless approved in writing by the Administrator, Division of Forestry.

APPENDIX A - MAPPING & MAPPING SYMBOLS

<u>Mapping</u>

When creating a map for a timber sale, or for other natural resource management purposes, include the following statement: "This map is not a survey of the actual boundary of any property this map depicts." This inclusion is a requirement under s. <u>443.14(16)</u> Wis. Stats., which applies to people who performs services related to natural resources management, including creating any map prepared as a part of those services.

WisFIRS Link: https://dnrintranetmaps.enterprise.wistate.us/wisfirspublicgisv5/assets/pdf/WisFIRSr2_Legend.pdf

Hand Drawn Mapping Symbols

94	Interstate Highways		Rivers
12	Federal Highways		Creeks and Streams
73	State Highways	—…—… 	Intermittent Streams
M	County Highways		Ditch
	Town Roads		Dike
	Unimproved Roads		Dam
	Trails		Bridges
	Single Track Railroads		Lakes
+ + + + + + + + - + - +	Multiple Track Railroads	-+	Definitely located
	Abandoned Railroads		section corner
<u>e</u> _e_e_e_e	Powerlines		Approximately located section corner
* * * * *	All fence lines		

FOREST TYPE LINES:



Natural forest types

PWR

Plantations

Land Type Association	Minor Civil Division City Township Village Passive Mgmt Area	QQ Section Section Soil Unit	State (24K/100K) * State Natural Arểa	Tax Law (MFL/FCL)	Township * Wetland (WWI)* * Non-exportable layer.
County Forest	County (100K) DNR Managed Land DNR Owned DNR Cowned DNR Cowned DNR Leased Land DNR Leased Land	DNR Region Federal Land Department of Defense - Air National Guard Department of Defense - U.S. Army National Park Service National Park Service U.S. Army Corps of Engineers	U.S. Fish and Wildlife Service USDA Forest Service Lake (100K /2M)	Lake (24K)* Land Mgmt Class (NR44) Forest Production	Native Community Recreational Management Scenic Management Special Management Wild Resource
Base Layers Boat Landing Dam	Section Corner + County Road Gas Pipeline*	Local Road Local Road Major Highway US Hwy State Hwy	Railroad 	Stream (2M) Stream (24K/100K) Intermitent	Transmission Line *
Completed Trtmt - All Active Inactive COMPLETED TRTMT - STAGE	ESTABLISHED TRTMT ESTABLISHED TRTMT Treatment 1 Treatment 2 Treatment 3 Treatment 5 Treatment 6	Treatment o Treatment 7 Treatment 8 ESTABLISHED TRTMT - STAGE Treatment 1 Treatment 2 Treatment 3	Treatment 4 Treatment 5 Treatment 6 Treatment 7	Treatment 9 STAND STAND - STAGE	WISFIRS MGMT BND
WisFIRS Layers ANCILLARY POINT ▲ Campground ★ Gate/Berm ⊕ Invasive Species	Point of Interest CRUISE POINT + WET WET MAT ANCILLARY LINE	Blue Line Campground Road LILL Dike * * * Fence Line = = Green Line = Intermittent Stream Line of Interest	Other Paint Line Other Paint Line Perennial Stream Ned Line Other Paint Line Other Paint Line Other Paint Line Other Paint Line	ANCILLARY POLYGON Buffer Zone Lake Lake Polygon of Interest	Compartment COMPLETED TRTMT

Public Forest Lands Handbook

WisFIRS Mapping Symbols

APPENDIX B - COMPLETING A TALLY SHEET

- 1. <u>Header Information</u> Complete all areas of the header to ensure data is appropriately accounted for.
- 2. <u>Pulpwood Tally</u> For trees between 5" and 11" DBH (hardwood) and between 5" and 9" DBH (softwood).
 - A. Record species codes at the top of columns.
 - B. Tally each tree by number of 8' sticks in appropriate species column.
 - C. Calculate cords per acre for each species using the sticks + trees method. (Sticks + Trees) / 2.
 - a. Count the number of trees recorded for each point, by species. *Example: 5 red oak recorded on Point No. 1*
 - b. Add all sticks recorded to determine the total number of sticks on each Point, by species. *Example:* 20 sticks of red oak recorded on Point No. 1
 - c. Add the number of trees recorded to the total number of sticks for each Point by species, and divide the total by 2 to calculate cords per acre. *Example:* 5 + 20 = 25, 25/2 = 12.5 cd/ac red oak on *Point No. 1*
 - D. Record cords per acre by species for each point (circled number).
 - E. Determine total cords by adding the species columns from top to bottom (Cords Total/Acre by species) and by adding point rows to the right (Total Cords per point).
 - F. Divide totals by number of points sampled to obtain volumes per acre.
- 3. <u>Sawtimber Tally</u> Both the small sawtimber and large sawtimber categories are cumulative tally sheets. The small saw portion is for trees between 11 and 15 inches DBH (hardwoods) and 9 and 15 inches DBH (softwoods). The large saw portion is for trees over 15 inches DBH.
 - A. List species code in Species column.
 - B. For each sawtimber size tree tallied, strike out (/) a number in the appropriate size and species category. (Example: a 14" DBH red oak containing 1 log would be tallied by striking out 6 in the vertical column labeled "1".) At the same time, a dot must be placed in the correct saw-timber total basal area tally for that point. The next small sawtimber size red oak containing 1 log should be tallied by striking out 12, the next by striking out 18, etc. The same process is followed for other species and other size classes.
 - C. Total the board foot volume by adding <u>the last numbers struck in each log category</u> for each species. (Example: Small sawtimber red oak in above example: add 3 + 12 = 15). The 15 represents hundreds of board feet per acre, so two zeros ("00") must be added to the 15. Total the "Board Feet" column for both small and large sawtimber categories and divide that by the number of points sampled in the stand to determine the average total board feet per acre.
- 4. <u>Site Index Tally</u> Measure the age and height of at least three dominant or co-dominant trees for each stand.
 - A. For even-aged stands, measure and record the age and height of the primary species to determine site index.
 - B. Record species of trees sampled under 'Species'.
 - C. Record total age of trees sampled under 'Age'.
 - D. Record total height of trees sampled under 'Height'.
- 5. <u>Tree Diameters and Calculation of the Quadratic Mean Stand Diameter</u> Randomly measure one tree per plot *Examples: first tree in north cardinal direction or third tree in the plot*. On large stands measure one tree for every other or every third plot. The individual diameters will be entered into the calculator on the WisFIRS Stand Detail screen during data entry, and be automatically calculated.
- 6. <u>Basal Area Tally</u> Tally 1 dot for each tree tallied in sapling, poletimber, and sawtimber categories: Each dot = 10 sq. ft. BA/acre if using a BAF 10 factor cruising tool. The basal area will also need to be averaged by both the stand total and by species for all size classes.

A. Point and Stand Basal Area Tally

- a. Tally the number of poletimber category trees per point by counting the total number of poletimber size trees recorded on each point and entering that sum in the right column for basal area by Point total. *Example: Point 1: 5 OR + 3 MR + 3 OB = 11 trees for a total 110 BA/acre of pole-timber.*
- b. Tally the number of sawtimber trees in each size category per point by counting the total number of small and large sawtimber trees recorded on each point and entering that sum in the appropriate right column. *Example: Point 1: 1 small sawtimber sized tree recorded with a dot for a total small sawtimber basal area of 10 for that Point.*
- c. Total the basal area for each point by adding the basal area entered for poletimber, small sawtimber, and large sawtimber categories. *Example: 110 BA pulpwood + 10 BA small sawtimber = 120 Total BA for Point 1.*
- d. Average the basal area for the stand by adding the Total Basal Area (far right column) for each Point sampled and dividing by the total number of points sampled for the stand. *Example: Point 1, 120 BA* + *Point 2, 90 BA* + *3, 90 BA* + *4, 80 BA* + *5, 90 BA* + *6, 110 BA,* + *7, 80 BA* = *660 BA. 660 BA / 7 points sampled* = *94 average Total BA/acre for the stand.*
- B. <u>Species Basal Area Tally</u>
 - a. <u>Poletimber</u>
 - i. Add the total number of trees entered by species for each point in the Basal Area Total/Acre row above the sawtimber tally section. *Example: For Red Oak, 5 trees in Point 1 + 5 trees Point 2 + 4 trees Point 3 + 6 trees Point 4 + 5 trees Point 5 + 1 tree Point 6 + 3 trees Point 7 = 29 trees, 29 trees x 10 BA = 290.* You can see this value is entered under the P column within the red oak species column.
 - ii. Average this value by dividing by the total number of plots taken for that stand and enter that value below the total BA. *Example: 290 BA for red oak / 7 points sampled = 41 BA/Acre rounded for red oak pole-timber.*
 - b. Small and Large Sawtimber
 - i. Add the total numbers of trees tallied by species for small sawtimber and large sawtimber. This can be done by adding the number of strike-outs (/) for each species by sawtimber category. *Example: 3 strike-outs for red oak small sawtimber x 10 BA = 30 entered in the SS column listed in the red oak species column.*
 - ii. Average this value by dividing by the total number of plots taken for that stand and enter that value below the total BA. *Example: 30 BA red oak small sawtimber / 7 points sampled = 4 BA (rounded).*
 - c. <u>Average Total BA by Species</u> Calculate by adding the BA /acre by species for each size category and entering the value it in the Total BA row under each species column. *Example: For red oak, 41 BA/Acre poletimber + 4 BA/Acre small sawtimber + 0 BA/Acre large sawtimber = 45 BA Total BA/Acre for Red Oak.*
 - d. <u>Double check BA values</u>. The average Total BA by species should be added to the right and equal the Total Stand BA/Acre calculated in the bottom of the right column.
- 7. <u>Remarks</u> Determine and record appropriate management recommendations. Include all treatment recommendations. Mention small inclusions under remarks if they are not given a stand number.

epart epart nr.wi.	ment	consin of Natural F	Resourc	05					5	sheet _	of			D	R/	A Dames	orin 240				Tall
rope	rty/Co	mp No. or I					-	1			S	tand N			stimate	>r		0-032	(15 5/07	Date	
		KNO			SIF	-		Con		1		3		5	n	JALL	15			5	Alo
20		Town 36	Range 20		1/4 1/4	EN		Primar	× c	113			Secon	dary	25-	.,1	Und	erstory			
~		20	20	M	2	CN		Specie		11		_		MI	< 5-	11	_	-	Total Ba	and Arr	
oint to		OR	1	MR	2	1	OB		-	PW						Total	Trees/Acr Seed/Sag	1 10	SS	LS	
	3.4.	5,4,4	4,3		<u>`</u>	2,4			-	, , ,	-		-	-		Cords	3000/385	5-9/11	8/11-15	15+	Tot
1	1	(12.5)	1.000		D			6								25.5		110	10		120
2	3,3,6	,4,5	5			2,3,	2	0								0.		0			0
-	5,5,1	(13	4,4		C	2		5			_					21		90			90
3	2,2,3	0.5	1.000		5	P		0								17		70	20		90
	5.3.	3,3,2,5			0	2.2	8	2	1		+		-	-	_	1.1		10	~	-	10
4		(13.5	5					3								16.5		80			80
5	4,3,3	3,5,5	4,3,	2												000		0			0
	5	(12.5)	2		0	-			-	_	_	_		_		18.5		80	10		90
6	5	3		4.6,2		3,3		0	5		_					27		110			112
	4,2,5		2,2		Ð	3,2,	1	Ð	1		32					21		110			116
7		T			3			(45)								14.5		80			80
8																<u> </u>					
-		_						_													
9																					
	-		-	_	-	-			-					-				-	+ +	-	_
0																					
indis	71.	5/	41		/	24	5	/	3	/			/		/			-			
cre	1	10.2	1	5.9	9	1	3	.5	2	.4		/	8	/		20					94
	P	SS LS	P	55	1.5	P	-88	LS	P	88 1	9 8	58	LS	P 83	LS	Tree Dia	ameters	I			
rea Mal/	290	30	180			140	10		10												
	41	4	26			20	1	-	1			-		-	-						
tal			~~			~	-	<u> </u>	(-	-	_			_						
A		45	-	26		o. of 1	21	t lage	DAE	1					_						
Sp	1/2		1				1/2	S. 199	· · · · ·	2			2 1/2	3		loard Feel	So	ecies	Site Ind Age	ex	Ht
OR	13 1		8 24 30 60 66 7			17 26 78 87			And and Address of the Owner, which the	21 32 43	115 13		26 39 65 78	15 30 45 6	0 1.	500	_	R	82		65
06		10 6 12 1 7 48 54	8 24 30 60 66 7) 36 4 2 78 8	2 9 34 70	17 26 3 78 87				21 32 42		13	26 39 65 78	15 30	0	300	0	R	80		60
_	37	a second part of the second	8 24 30		_	17 26 3				32 42	the state of the state of the state	the second s	26 39	and south the state	2		0	R	72		68
-	37	of some processing of the local division of								32 42			26 39		_		-			-	
_	37	and a state of the	second a prior of the local second	And in case of the local division of the loc	and the second sec	and the second se	and the second second	COLUMN AND ADDRESS	and the second	32 42					_			1	78		64
	3 7		8 24 30							32 42 32 42	the state of the s		26 39	other precision space			Inva	sive S	pecies /		806
Sp	4.8	7 14 20 1	9 19 29	1/2 38 47	7 57	12 25 3	2 37 49	62 74	15 29	2 1/2	4 17 3	3	31	2 4	3						
-	12 16	27 34 41								44 59 7				77 65 8	6	_		Buckthorn - 2:			
_	12 16	27 34 41	67 77 8	85 95	105 8	56 98 1	111, 12	23 135	88 10	3 118 13	2 85	102 11	9.58	77 65 8	6		_~	Leafy spurge - «			
-	the second s	7 14 20 1	and the second second			contraction of the local data	and the second second	the second s	distant sectors in the	and a second second second					-		_				
_	4.8	7 14 20 1	9 19 29	38 47	7 57 1	12 25 3	37 49	62 74	15 29	44 59 7	4 17 3	4 51 6	38 19 3	38 21 4	3		_				
I Ty		7 14 20 1 abitat Type		38 47	57	12 25 3	37 49	62 74	15 28	44 59 7	4 17 3	4 51 6	193	38 21 4 Tota	<u></u>	600	-				
-	SA	NOY	LOA	M		10	Af	2				- ł	Avera	ge / Acr	. /	257	-				
mari	(S)	10 1				0		· ·				-		0	-	~ /					
/	40	sthet	ic Z	ong	. 1	001	94	ali	3 -	ORK	wi	IT	-								
		sthet	Vera	E E	01	MIX	u	nth	ſź	seri	les										
		CLCT.	-2	000	8			0		1	6 01		1	1.	. ,	2	~				
	-	CLET. Treat Repl	5	nhà.	11 8	nuc	Et	101	1.P	atch	wi	th,	her	bici	de-	200	8				
		Kepi	ant	u	リセ	hP	RI	Ph	n	TIK (lost	- Ne	rv	est							

B-3

Code	Description	Code	Description
А	Aesthetic Zone	Ν	Designated State Natural Area
В	Camping	0	Old Growth
С	Extended Rotation	Р	Plantations
D	Deer Yard	Q	Oak Woodland
Е	Dog Trial/Training (Class 1)	R	Designated Wild River Zone +
F	Food Plot	S	Species & Communities of Special Concern
G	Consultation/Deferral Areas*	Т	Oak Opening
Η	Mgt. Objective Not Yet Determined**	U	County Forest Special Use class lands
Ι	Dove Field	V	Silvicultural concerns
J	Oak/Pine Barrens	W	Wild Area
Κ	Wildlife Opening - Treated	Х	Non-productive Forest Type (<20 ft3 /ac./yr.growth)
L	Lake or River Zones	Y	Designated Wilderness Area +
М	Wild Rice	Ζ	Other stand to be omitted from mgt. schedule +, ***

Appendix C – WISFIRS STAND PREFIX CODES

+ Designates omission from management schedules

* G Consultation / Deferral areas (G-consultation & GZ-deferral)

NOTE: This code should only be utilized when stands have been identified as part of either consultation or deferral areas as part of the master planning process for a property, as described in Manual Code 1750.15. Consultation areas may receive treatments after discussion by an interdisciplinary team; consequently, such stands in these areas should have a G-prefix assigned and should not be accompanied by a Z-prefix. Areas identified for deferral may not receive management treatments until after NRB approval of the master plan; consequently, such stands in these areas should have a G-prefix assigned and should also have a Z-prefix assigned (to remove them from the harvest schedule).

** H Management objective not yet determined

NOTE: This code may be used if no master plan exists, for properties with pre-NR44 master plans where management objectives and/or prescriptions are not well defined, or if there is a temporary failure to agree on objectives when developing an Interim Forest Management Plan. Not to be used on properties that have an NR44 compliant master plan, are currently undergoing NR44 master planning, or have a pre-NR44 master plan with clear land management objectives, unless the property manager and forester agree that the master plan objectives should be reconsidered as it relates to vegetation management and will pursue a plan amendment or variance. If clear master plan objectives for passive management exist but there is agreement that they should be reconsidered, this prefix should be used in combination with the Z-prefix (to remove them from the harvest schedule), but only until such time as a decision is reached on whether the stand will be actively or passively managed. The H-prefix should not be used for stands if properties have a Deferral/Consultation Agreement in place (use G-prefix). All attempts shall be made to minimize use of the H-prefix by determining management objectives. When utilized, it should be for only a brief period and removed as soon as possible (e.g. stands that have been H-prefixed, perhaps because of unclear master plan objectives, management options should be discussed at the annual integrated property management meeting and the H-prefix should be removed or changed to a more appropriate code prior to the next integrated property management meeting, which may require development of an IFMP or pursuit of a master plan amendment or variance).

*** Z Other stands to be omitted from the management schedule for some reason –explain in remarks

NOTE: This code should be utilized to omit stands from the harvest schedule for some reason other than designation as a wild river zone or wilderness area (R or Y-prefix, which also removes stand from harvest schedule). Stands prefixed by the letter Z require explanation for removal from the harvest schedule under remarks section of the stand detail page. If the current master plan prevents active forest management as determined by the appropriate managing program Bureau, then those stands should also be coded "Z". Another example for use of a code "Z" is a cedar stand that is associated with numerous springs, is located along a trout stream, and has extremely difficult access.

Code	Description	Code	Description
А	Aesthetic Zone	N	Designated State Natural Area
В	Camping	0	Old Growth
С	Extended Rotation	Р	Plantations
D	Deer Yard	Q	Oak Woodland
Е	Dog Trial/Training (Class 1)	R	Designated Wild River Zone +
F	Food Plot	S	Species & Communities of Special Concern
G	Consultation/Deferral Areas*	Т	Oak Opening
Н	Mgt. Objective Not Yet Determined**	U	County Forest Special Use class lands
Ι	Dove Field	V	Silvicultural concerns
J	Oak/Pine Barrens	W	Wild Area
Κ	Wildlife Opening - Treated	Х	Non-productive Forest Type (<20 ft3 /ac./yr.growth)
L	Lake or River Zones	Y	Designated Wilderness Area +
М	Wild Rice	Z	Other stand to be omitted from mgt. schedule +, ***

Appendix C – WISFIRS STAND PREFIX CODES

+ Designates omission from management schedules

* G Consultation / Deferral areas (G-consultation & GZ-deferral)

NOTE: This code should only be utilized when stands have been identified as part of either consultation or deferral areas as part of the master planning process for a property, as described in Manual Code 1750.15. Consultation areas may receive treatments after discussion by an interdisciplinary team; consequently, such stands in these areas should have a G-prefix assigned and should not be accompanied by a Z-prefix. Areas identified for deferral may not receive management treatments until after NRB approval of the master plan; consequently, such stands in these areas should have a G-prefix assigned and should also have a Z-prefix assigned (to remove them from the harvest schedule).

** H Management objective not yet determined

NOTE: This code may be used if no master plan exists, for properties with pre-NR44 master plans where management objectives and/or prescriptions are not well defined, or if there is a temporary failure to agree on objectives when developing an Interim Forest Management Plan. Not to be used on properties that have an NR44 compliant master plan, are currently undergoing NR44 master planning, or have a pre-NR44 master plan with clear land management objectives, unless the property manager and forester agree that the master plan objectives should be reconsidered as it relates to vegetation management and will pursue a plan amendment or variance. If clear master plan objectives for passive management exist but there is agreement that they should be reconsidered, this prefix should be used in combination with the Z-prefix (to remove them from the harvest schedule), but only until such time as a decision is reached on whether the stand will be actively or passively managed. The H-prefix should not be used for stands if properties have a Deferral/Consultation Agreement in place (use G-prefix). All attempts shall be made to minimize use of the H-prefix by determining management objectives. When utilized, it should be for only a brief period and removed as soon as possible (e.g. stands that have been H-prefixed, perhaps because of unclear master plan objectives, management options should be discussed at the annual integrated property management meeting and the H-prefix should be removed or changed to a more appropriate code prior to the next integrated property management meeting, which may require development of an IFMP or pursuit of a master plan amendment or variance).

*** Z Other stands to be omitted from the management schedule for some reason –explain in remarks

NOTE: This code should be utilized to omit stands from the harvest schedule for some reason other than designation as a wild river zone or wilderness area (R or Y-prefix, which also removes stand from harvest schedule). Stands prefixed by the letter Z require explanation for removal from the harvest schedule under remarks section of the stand detail page. If the current master plan prevents active forest management as determined by the appropriate managing program Bureau, then those stands should also be coded "Z". Another example for use of a code "Z" is a cedar stand that is associated with numerous springs, is located along a trout stream, and has extremely difficult access.

APPENDIX D - COVER TYPE, SIZE, & DENSITY CLASSIFICATIONS AND STAND CLASSIFICATION PROCEDURE

Cover Type Classification

Cover Type – A contiguous group of plants sufficiently uniform in species composition, structure, and age-class growing on a site of sufficiently uniform quality. Forested Habitat (FH) types are characterized by the predominance of one or more key species which make up 50 percent or more of the basal area of sawtimber and poletimber stands, or by the number of trees per acre in seedlings and saplings. Non-Forested Habitat (NFH) types generally contain less than 10 percent stocking of commercial tree species and are classified by predominant vegetation, landforms, or use.

The table below contains a list of Forested and Non-Forested Habitat type codes and descriptions found in WisFIRS.

Note: Forest cover type codes FS (Fir-Spruce) and SC (Swamp Conifer) are no longer available for use but will remain in the WisFIRS database until they are updated. Significant changes also occurred in 2019 to non-forest habitat cover types. WisFIRS requires utilization of these new cover type codes when recon is updated.

WisFIRS Cover Type Codes & Descriptions

Cover Type	Code	Description
Farmland – NI	FH (Non-]	Forest Habitat)
Farmland	F	Sites actively used to produce field crops including, but not limited to, grains, livestock forage, fruits, vegetables, and wildlife food plots. Examples include corn, soybeans, alfalfa, and mixed species hay. Alfalfa/hay is only considered agricultural land if part of a crop rotation, permanent hay is considered cool season grass. Common species include: Corn, Soybeans, Sunflowers, Hay/Cover Crops, Winter Wheat, Sorghum, Alfalfa
Forest – FH (F	orested H	abitat)
Aspen	А	Aspen comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands.
Bottomland Hardwoods	BH	Any combination of silver maple, green ash, swamp white oak, American elm, river birch, and cottonwood comprising 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. Hardwood-dominated forests occurring on floodplains and some terraces.
White Birch	BW	White Birch comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands.
White Cedar	С	White cedar comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. In mixed swamp conifer stands, white cedar is predominant.
Central Hardwoods	СН	Any combination of oaks, hickories, elms, black cherry, hackberry, red maple, white ash, green ash, basswood, and sugar maple, which does not satisfy the defining criteria for NH, MR, or O cover types. The CH type occurs only on uplands within and south

		of the Tension Zone (southern Wisconsin).
Balsam Fir	FB	Balsam fir comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. In mixed swamp conifer stands, balsam fir is predominant.
Hemlock	Н	Hemlock comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands.
Miscellaneous Conifers	MC	Conifer forests dominated by uncommon or exotic species; e.g. Eastern red cedar, Scotch pine, Norway spruce, European Larch.
Miscellaneous Deciduous	MD	Hardwood forests dominated by uncommon or exotic species; e.g. box elder, honey locust, black locust, Norway maple.
Red Maple	MR	Red Maple comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. If soil is poorly drained, then swamp hardwood.
Northern Hardwoods	NH	Any combination of sugar maple, beech, basswood, white ash, and yellow birch comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands.
Oak	О	Oak comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. Generally used for fair- to excellent-quality stands with a site index of greater than 50.
Scrub Oak	OX	Oak comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. Generally used for poor- quality stands containing northern pin or black oak with a site index of less than 50.
Jack Pine	PJ	Jack pine comprises 50% or more of the basal area in sawtimber and Poletimber stands, or 50% or more of the stems in sapling and seedling stands. In mixed pine stands, jack pine is predominant.
Red Pine	PR	Red pine comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. In mixed pine stands, red pine is predominant.
White Pine	PW	White pine comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. In mixed pine stands, white pine is predominant.
Black Spruce	SB	Black spruce comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. In mixed swamp conifer stands, black spruce is predominant.
Swamp Hardwoods	SH	Any combination of black ash, green ash, red maple, silver maple, swamp white oak, and American elm comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. This type occurs on wetlands characterized by periodic inundation (fluctuating water table

		near or above the soil surface) and nearly permanent subsurface water flow.
White Spruce	SW	White spruce comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands.
Tamarack	Т	Tamarack comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands. In mixed swamp conifer stands, tamarack is predominant.
Black Walnut	W	Black walnut comprises 50% or more of the basal area in sawtimber and poletimber stands, or 50% or more of the stems in sapling and seedling stands.
Grasslands – N	IFH (Non	-Forest Habitat)
Bracken Grasslands	BK	Open upland sites in northern Wisconsin occurring on infertile sandy soils. Some sites have variable coverages of low shrubs. Common species include: Bracken Fern, Penn Sedge, Canada Bluegrass, Poverty-Oat Grass, Gray Goldenrod, Common Strawberry, Blueberries, Sweet Fern, Prairie Willow, Hazelnuts
Cool Season Grass	CSG	Upland sites dominated by non-native cool season grass species. May include some native or non-native forbs or legumes (e.g. clover) and would include permanent or semi-permanent planted pasture and hay fields. Common species include: Smooth Brome, Timothy, Orchard Grass, Reed Canary Grass, Clover
Planted Prairie/Warm Season Grass	PP	 Planted sites dominated by native warm season grasses that may contain a native forb component and are generally less than 10% stocked with trees. Soil types can range from wet-mesic to dry with a wide range of native grasses and forbs associated with each soil and moisture regime. Common species include: Big Bluestem, Little Bluestem, Indian Grass, Switch Grass, Yellow Coneflower, Purple Coneflower, Asters sp., Bergamot
Remnant Prairie	RP	Non planted sites of unplowed sod dominated by characteristic native grasses, sedges and forbs. They occur on a wide variety of topography, soil types and moisture regimes. Prairies are located mostly in the southern and western parts of the state and are divided into six different types. Prairies are characterized by a lack of trees and tall shrubs, but will succeed to woody species over time without frequent fires. Common species include: Heath and Smooth Aster, Silky Aster, Bee-Balm, Little Bluestem, Big Bluestem, Purple Prairie Clover, Round-Headed Bush Clover, Prairie Coneflower, Cylindrical Blazing-Star, False Heather, Field Sage-Wort, Frostweed, Gray Goldenrod, Stiff Goldenrod, Hairy Grama, Indian Grass, June Grass, Needle Grass, Panic Grass, Poverty-Oat Grass, Side-Oats Grass, Lead Plant, Long-Beard Hawkweed, Prairie Coreopsis, Prairie Dock, Prairie Dropseed, Rattlesnake-Master, Sand Cress, Spiderwort, Flowering Spurge, Prairie Sunflower, Western Sunflower, Western Ragweed

Remnant Prairie - Dry	RPD	Non-planted sites, usually occurring on steep south or west facing slopes or at the summits of river bluffs with sandstone or dolomite bedrock near the surface. Most remnants are distributed in southern and western Wisconsin. Dominated by short to medium-sized prairie grasses. Common species include: Little Bluestem, Side-Oats Grama, Hairy Grama, Prairie Dropseed, Lead Plant, Silky Aster, Flowering Spurge, Purple Prairie-Clover, Cylindrical Blazing-Star, Gray Goldenrod
Remnant Prairie – Dry-Mesic	RPDM	Non-planted sites distributed in southern Wisconsin occurring on slightly less droughty sites than dry prairie in soils that are somewhat sandy; either loamy sands or sandy loams. Dry-mesic prairie has many of the same grasses as dry prairie, but is dominated by taller grass species such as big bluestem and Indian grass. Needle grass and prairie drop-seed may also be present. The herb component is more diverse than in dry prairies, as it may include many species that occur in both dry and mesic prairies. Composites and legumes are particularly well-represented in relatively undisturbed stands. Common species include: Big Bluestem, Little Bluestem, Indian grass, Needle grass, Prairie Dropseed, Prairie dock, Lead Plant, Heath and Smooth Asters, Prairie Coreopsis, Prairie Sunflower, Rattlesnake-Master, Flowering Spurge, Bee-Balm,
		Prairie Coneflower, Spiderwort, Silky Aster, Flowering Spurge, Purple Prairie-Clover, Cylindrical Blazing-Star, Gray Goldenrod Also commonly called tallgrass prairie. Non-planted sites, occurring on rich, moist,
Remnant Prairie -	RPM	Also commonly called tangrass prairie. Non-planted sites, occurring on rich, moist, well-drained sites, usually on level or gently rolling glacial topography, mostly distributed in southern and western Wisconsin. The forb layer is diverse in the number, size, and physiognomy of the species.
Mesic		Common species include: Big Bluestem, Little Bluestem, Indian grass, Needle grass, Prairie Dropseed, Prairie Dock, Lead Plant, Heath and Smooth Asters, Prairie Coreopsis, Prairie Sunflower, Rattlesnake-Master, Flowering Spurge, Bee-Balm, Prairie Coneflower, Spiderwort
Durant		Non-planted dry upland grassland community dominated by grasses such Drought- adapted fungi, lichens, and mosses are significant components of sand prairie communities.
Remnant Sand Prairie	RPS	Common species include: Little Bluestem, June Grass, Panic Grass, Poverty-Oat Grass, Sand Cress, Field Sage-Wort, Western Ragweed, Flowering Spurge, Frostweed, Round-Headed Bush Clover, Western Sunflower, False Heather, Long- Beard Hawkweed, Stiff Goldenrod, Spiderwort
Great Lakes –	NFH (No	n-Forest Habitat)
Alvar	AL	Rare sites of thin discontinuous soil overlying horizontal beds of limestone or dolomite in the vicinity of Great Lakes shorelines. Characterized by relatively low tree cover and a distinctive biota which includes elements of rock pavement, prairie, savanna and boreal forest communities. Small coniferous and deciduous trees (cedar, fir, pine, oak, aspen, birch) are scattered among an assemblage of species that can
L		

		include big bluestem, little bluestem, Indian-grass, and wood lily, as well as shorelineplants such as silverweed and dwarf lake iris.Common species include: Cedar, Fir, Pine, Oak, Aspen, Birch, Big Bluestem, LittleBluestem, Indian Grass, Wood Lily, Silverweed, Dwarf Lake Iris
Great Lakes Beach	GLB	Sites that occur at the interface of land and water along the margins of Lakes Michigan and Superior, often in association with sparsely vegetated, semi-stabilized dune systems. Are extremely dynamic features, strongly influenced by water level changes and storms. The beach flora is typically sparse due to the scouring action of waves and ice. However, following several years of low water with few major storm events, the vegetation of the upper beach zone can become quite dense. The beaches along Lake Superior are mostly un-vegetated. Common species include: (associated with L. Michigan) Seaside Spurge, American Sea-Rocket, Silverweed, Baltic Rush, Water Horehound
Great Lakes Dune	GLD	Sites that are the more interior of the beach. Among the relatively few plants that successfully colonize active, un-vegetated dunes are several drought resistant perennial grasses. Common species include: Dune Grass, Sand Reed, Sand-Dune Wheatgrass, Crinkled Hair Grass, Canada Wild Rye, Beach Pea, Field Sage-Wort, Common Evening- Primrose, Common Milkweed
Great Lakes Alkaline Rockshore	GLR	Creviced, wave-splashed, horizontal or gently sloping exposures of dolomite bedrock that dip toward Lake Michigan and occur only along the Lake Michigan shoreline of the northern Door Peninsula. The extent of the exposed rock is dependent on Lake Michigan water levels. Common species include: Ninebark, Shrubby Cinquefoil, Silverweed, Birds-Eye Primrose, Grass-Leaved Goldenrod, Kalm's Lobelia, Gentians, Grasses-of-Parnassus, Indian Paint-Brush, Low Calamint
Great Lakes Ridges and Swales	GLRS	Associated closely with Great Lakes shorelines. Series of narrow sandy ridges alternate with low swales, parallel to the lakeshore. The vegetation on the dry ridges can vary from open herbaceous or shrub communities on the semi-stabilized dunes closest to the shoreline, to dry forests dominated by pines and oaks farther inland, to mixed mesophytic forests of northern hardwoods or hemlock-hardwoods farthest from the shore. Water depth is a controlling factor in the swales, which are typically deeper and more open near the shoreline, supporting marsh or sedge meadow communities. Farther away from the lake, an alder-dominated shrub community may develop, and still farther inland forested wetlands of swamp hardwoods, bog conifers, or northern white cedar may be present. Best developed along Lake Michigan with a few on the Lake Superior coast. Common species include: Pine, Oak, Dune Grass, Sand Reed, Sand-Dune Wheatgrass, Crinkled Hair Grass, Canada Wild Rye, Beach pea, Field sage-wort, Common Evening Primrose, Common Milkweed, Alder, Reed Canary Grass, Aster sp., Joe-Pye Weed, Meadowsweet, Goldenrod (Solidago sp.), Sedge (Carex sp.),

r		
		Canada Bluejoint Grass, Cattails (Typha sp.), Smartweeds, Bulrushes, Giant Bur- Reed, Bidens sp., Arrowhead, Phragmites, Water Hemlock, Rice Cut Grass, Purple Loosestrife, Swamp Milkweed, Redtop, Wool Grass, Marsh Milkweed, Sunflower (Helianthus sp.), Boneset, Nettles, Jewelweed, Manna Grass, Mint, Meadowrue, Glossy Buckthorn, Common Buckthorn, Honeysuckle, Dogwood, Willow (Salix sp.), Elderberry, Lake Sedge, Woolly Sedge
Great Lakes Interdunal	GLW	Wind-created hollows that intersect the water table within active dune fields along the Great Lakes shores. They may also occur where moving sand encroaches on nearby wetlands, surrounding and isolating all or portions of them.
Wetland		Common species include: Twig-Rush, Little Green Sedge, Baltic Rush, Silverweed, Seven-Angled Pipewort, Spike-Rushes, Ladies-Tress Orchids, Bladderworts
Miscellaneous	– FH & N	FH (Forest Habitat & Non-Forest Habitat)
Developed Use	D	General developed use
Parking Area	IA	An area which is used for parking in conjunction with a recreational facility such as a beach, picnic area, observation tower, public hunting area, etc.
Campground	ICG	Areas designated for either family camping (tent and trailer), group tent camping or indoor group camps
Picnic Area	IP	Maintained day use areas containing picnic tables, toilets, etc., for picnickers
Nature or Hiking Trail	ITH	Trails used strictly for hiking, skiing, or nature interpretation
Motorized Vehicle Trail	ITM	Trails used by motorized vehicles (mini-bikes, trail bikes, four-wheel drive vehicles, and all-terrain vehicles-ATVs) excluding snowmobiles
Snowmobile and/or Horse Trail	ITS	Trails used for snowmobiling and horseback riding
Water	L	Lakes, ponds and flowages in excess of 40 acres in area, or rivers in excess of 1/8 mile in width
Minor Lake	LM	Water less than 40 acres in area, excluding rivers less than 1/8 mile in width
Minor Stream	LMS	Streams less than 1/8 mile in width
Recreational	R	An area developed for general recreation use
Right of Way	ROW	Improved roads, railroads or right-of-way for gas, power or telephone lines
Rock Outcrops	Z	Rock outcrops more than 1 acre in extent. They are generally associated with cliffs, which are geologic features moreso than plant communities. Plant composition on such sites is highly influenced by rock type, exposure, surrounding land cover (plant communities), and other environmental factors. These factors lend to two distinct

		types of rock outcrops, or cliffs; Dry Cliffs and Moist Cliffs.
		Common species on Dry Cliffs include: Pine, Oak, Cedar, Honeysuckle, Huckleberry, Rock Polypody Fern, Smooth Cliff Brake Fern, Rusty Woodsia Fern, Northern Fragile Fern, Wild Columbine, Harebell, Sand Cress, Sleepy Catchfly, Pale Corydalis, Rock- Spike Moss, Crustose Lichens
		Common species on Moist Cliffs include: Fragile fern, Wood Fern, Rattlesnake-Root, Wild Sarsaparilla, Lichens, Mosses
Non-Forested	Wetlands	– NFH (Non-Forest Habitat)
Emergent		Permanent or semi-permanent wetlands dominated by non-woody hydrophytes, excluding deep marshes, bogs and fens. Water depths may vary from a temporarily saturated soil condition during part of the year, to permanent inundation of water above the soil surface up to 6 inches deep. Emergent wetlands encompass numerous community types, such as shallow marshes, wet prairie, sedge meadows, and wet meadows.
Emergent Wetland	EW	Common species include: Cattails (Typha sp.), Canada Bluejoint Grass, Smartweeds, Bulrushes, Sedges, Aster sp., Giant Bur-Reed, Bidens sp., Arrowhead, Phragmites, Reed Canary Grass, Water Hemlock, Rice Cut-Grass, Purple Loosestrife, Swamp Milkweed, Redtop, Woolgrass, Marsh Milkweed, Sunflower, Goldenrod (Solidago sp.), Boneset, Joe-pye weed, Nettles, Jewelweed, Manna Grass, Mint, Meadowrue, Glossy Buckthorn, Common Buckthorn, Honeysuckle, Alder, Dogwood, Willow (Salix sp.), Elderberry
Wet Prairie	EWP	Prairies occurring in wetland complexes with sedge meadows, emergent marshes and calcareous fens. In southern and western Wisconsin occur on level or gently rolling glacial moraine or outwash landforms where there were few natural barriers to wild fire. Each type is dominated by tall grasses.
		Common species include: Canada Bluejoint Grass, Prairie Cordgrass, Canada Wild- Rye, Timothy, Sedge (Carex sp.), Prairie Dock, Saw-Tooth Sunflower, Prairie Blazing Star, Culver's-Root, Yellow Star Grass, Cowbane, New England Aster
Sedge	EWS	Open wetlands dominated by sedges with some grasses. The northern and southern types differ somewhat in species composition. Northern sedge meadows occur in depressions in outwash or ground moraine landforms in which there is groundwater movement and internal drainage, on the shores of some drainage lakes and on the margins of streams and large rivers. Southern sedge meadows are most common in glaciated landscapes, where they often border streams or drainage lakes.
Meadow		Common species (north and south) include: Tussock Sedge, Canada Bluejoint Grass, Blue Flag Iris, Marsh Fern, Panicled Aster, Joe Pye-Weed. Common northern species also include: Lake Sedge, Woolly Sedge, Manna Grasses
		Common southern species also include: Marsh Wild-Timothy, American Water Horehound, Swamp Aster, Swamp Milkweed

Fen	FN	Open peatlands mainly are found from central Wisconsin north. The most common types (central poor fen, poor fen) are acidic and nutrient poor. The rarer types (Great Lakes shore fen, boreal rich fen) are weakly acidic to alkaline more nutrient availability than the poor fens. Sedges are dominant. Floristic diversity and species composition varies with pH and nutrient availability. Common species include: Sedge (Carex sp.), Wool Grass, Pitcher Plant, Bog Bean, Cotton Grass, Orchids, Sphagnum Moss
Calcareous Fen	FNC	Open wetlands that occur mostly in southern Wisconsin on sites that are fed by carbonate-enriched groundwater at the bases of morainal slopes, on sloping deposits of glacial outwash, in the headwaters regions of spring runs and small streams and on the shores of alkaline drainage lakes. Most cover no more than a few acres, and are often associated with more widespread southern sedge meadow, wet and wet-mesic prairie, shrub-carr, emergent marsh and southern tamarack swamp. An accumulation of peat due to groundwater upwelling can raise the fen surface to a height of several meters above the adjoining lands. The diverse flora is distinctive, containing many calciphiles of restricted distribution. Many calcareous fens have a significant number of prairie or sedge meadow components, and some contain plants often associated with bogs, such as tamarack, bog birch and pitcher-plant. Common species include: Sedge (Carex sp.), Marsh Fern, Shrubby Cinquefoil, Shrubby St. John's-Wort, Ohio Goldenrod, Grass-of-Parnassus, Brook Lobelia,
		Boneset, Swamp Thistle, Tamarack, Birch, Pitcher-Plant Acidic, low nutrient peatlands dominated by Sphagnum mosses. Trees are absent or
Muskeg-Bog	KB	scattered and stunted. Common species include: Sphagnum Moss, Black Spruce, Tamarack, Cotton Grass, Leatherleaf, Cranberry, Labrador Tea
Shallow Lake/Deep Marsh	SL	Wetlands with water depths that are on average no deeper than 6 ft. during the growing season. These habitats contain an interspersion of floating, submergent, and emergent vegetation with open water.Common species include: Wild Rice, Cattail (Typha sp.), Hard-Stem Bulrush,
		Pondweed, Lesser Duckweed, Water Lily, Pickerelweed, Giant Bur-Reed, Phragmites, Water Shield, Coontail, Eurasian Water Milfoil, Manna Grass, and Lotus
Wetland Shrub	WS	 Wetland sites less than 10% stocked with trees but having 50% or more of the area stocked with a mix of persistent shrubs. Use one of the following codes for alder or dogwood dominated sites. Common species include: Glossy Buckthorn, Common Buckthorn, Honeysuckle, Alder, Dogwood, Willow (Salix sp.), Elderberry, Reed Canary Grass, Aster sp., Joe-Pye Weed, Meadowsweet, Goldenrod (Solidago sp.), Milkweed, Sedge (Carex sp.), Canada Bluejoint
Wetland Shrub – Alder	WSA	Wetland shrub sites with more than 50% alder (Primary). Common species include: Alder, Reed Canary Grass, Aster sp., Joe-Pye Weed,

		Meadowsweet, Goldenrod (Solidago sp.), Milkweed, Sedge (Carex sp.), Canada Bluejoint
Wetland Shrub - Dogwood	WSD	Wetland shrub sites with more than 50% red or silky dogwood. Common species include: Red dogwood, silky dogwood, Reed Canary Grass, Aster sp., Joe-Pye Weed, Meadowsweet, Goldenrod (Solidago sp.), Milkweed, Sedge (Carex sp.), Canada Bluejoint

Savanna/Barrens – NFH (Non-Forest Habitat) *The oak/pine barrens and oak openings categories should be typed as Oak (or Jack Pine) and identified using the prefix dropdown menu in stands that are "forested". Oak barrens and oak openings stands that are "non-forested" may be typed as non-forested.

		1
Oak/Pine Barrens	BOP	Sites occurring on sandy soils that are dominated by grasses, low shrubs, small trees, and scattered large trees. Barrens have a dynamic nature with variability in structural types and species composition. Depending on the type of barrens, common trees include jack pine, black oak, and Hill's oak. The understory is composed of grasses, sedges, and forbs, many of them associated with dry prairies. Plants of the heath family, such as blueberries and bearberry, and shrubs such as prairie willow, hazelnut and redroot are often prominent members of the barrens flora. Pine/oak barrens (BOP) or oak opening (OVS) should be captured under "Forested" stand type when >=10% are stocked with commercial tree species and may use harvesting as a restoration tool (stands must be in "Forested" if they are to possibly have a harvest). BOP and OVS will be available as non-forested primary cover types when less than 10% forested and they won't be managed with timber sales.
Oak Opening	OVS	Found in southern and western Wisconsin with greatest abundance in the following ecological landscapes: Western Coulee and Ridges, Southwest Savanna, and Southeast Glacial Plains. Most remnants are on moderate to steep south- and west-facing slopes or gravelly morainal ridges. Generally comprised of <50% canopy coverage, with characteristic open-grown tree structure. The herb layer is potentially diverse, including some members of the prairie and oak forest communities, but also featuring grasses, legumes, composites and other forbs that are adapted to light conditions of filtered shade. Representative and characteristic herb species can be found in Chapter 7 of the Ecological Landscapes of Wisconsin (Handbook 1805). Pine/oak barrens (BOP) or oak opening (OVS) should be captured under "Forested" stand type when >=10% are stocked with commercial tree species and may use harvesting as a restoration tool (stands must be in "Forested" if they are to possibly have a harvest). BOP and OVS will be available as non-forested primary cover types when less than 10% forested and they won't be managed with timber sales.
Stand Prefix Only Oak		* The Oak Woodlands should be typed as Oak and identified using the prefix drop down menu for Oak Woodland in stands that are "forested". Oak barrens and oak opening stands that are "non-forested" may be typed as non-forested. *
Woodland		Oak stands that are intermediate between oak opening and oak forest. Found in southern and western Wisconsin with greatest abundance in the following ecological landscapes: Western Coulee and Ridges, Southwest Savanna, and Southeast Glacial

		 Plains. Canopy closure is 50-95% and is dominated by white oak having more of a forest-grown architecture. There are lesser amounts of bur and black oak, sometimes with red oak, shagbark hickory, hackberry, and black cherry. Oak woodland has a more open sub-canopy and understory than oak forest, and the ground layer herbs are more prominent than tall shrubs or saplings due to historically frequent low intensity fires. This habitat includes prairie, oak opening, and oak forest flora; it features herbs that are best adapted to highly filtered sunlight such as rattlesnake fern, poke milkweed, pointed-leaved tick-trefoil, and elm-leaved goldenrod. Spring ephemerals may be present but are far less frequent than those found in the denser shade of oak forests. Representative and characteristic herb species can be found in Chapter 7 of the Ecological Landscapes of Wisconsin (Handbook 1805). Additionally, topography will help facilitate proper identification of oak woodlands on the landscape. Most remnants are on moderate to steep south- and west-facing slopes or sites with thin or coarsely-textured soils. Common species include: White oak, Bur oak, Black oak, Red oak, Shagbark hickory, black cherry, Hackberry, American hazelnut, Upland boneset, violet bush-clover, Virginia bush-clover, Culver's root, rough-leaved sunflower, eastern shooting star, Short's aster, yellow-pimpernel, bottlebrush grass, silky wild-rye, bracted tick-trefoil, Rattlesnake fern, Poke milkweed, Pointed-leaved tick-trefoil, and Elm-leaved goldenrod Buckthorn, Honeysuckle, Garlic mustard.
Upland Shrubs	s – NFH (1	Non-Forest Habitat)
Upland Shrub	US	Upland sites less than 10% stocked with tree species but having 50% or more of the area stocked with taller growing, persistent shrubs. Common Species include: Hazelnut, Gray Dogwood, Juneberry, Sumac, Ninebark, Prickly Ash, Willow
Upland Shrub - Alder	USA	Alder sites occurring on upland soils, commonly occurring in abandoned pastures and along wetland fringes. Common species include: Alder

Forest Stand Size Classification

Size classes - The size class designation for a forested cover type is assigned according to the following size class chart:

<u>Symbol</u>	WisFIRS Code	<u>Class</u>	<u>DBH</u>
0 – 5	0005	Seedling and Sapling	0 - 5″
5 - 9	0509	Softwood Poletimber	5 - 9″
5 – 11	0511	Hardwood Poletimber	5 – 11"
9 – 15	0915	Softwood Small Sawtimber	9 – 15"
11 – 15	1115	Hardwood Small Sawtimber	11 - 15″
15+	1500	Large Sawtimber	15"+

Sawtimber stands - Stands typed as saw-timber within the primary cover type having a minimum net basal area of 10 sq. ft./acre. Saw-timber trees are 9.0 inches DBH or larger for softwood species and of 11.0 inches DBH and larger for hardwood species (including aspen).

Large sawtimber stands (15+" DBH) - Sawtimber stands typed as large sawtimber within the primary cover type based on the basal area size class distribution of saw timber trees 15.0 inches DBH and larger.

Small sawtimber stands (Softwoods 9-15" DBH, Hardwoods 11-15" DBH) - Sawtimber stands typed as small sawtimber within the primary cover type based on the basal area size class distribution of sawtimber trees less than 15.0 inches DBH.

Poletimber stands (Softwoods 5-9" DBH, Hardwoods 5-11" DBH) - Stands typed as poletimber within the primary cover type having a minimum net basal area of 10 sq. ft./acre. Poletimber trees are trees of softwood species 5.0 - 8.9 inches DBH or hardwood species (including aspen) 5.0 - 10.9 inches DBH.

Seedling and sapling stands (0-5") - Forest stands typed as seedlings and saplings within the primary cover type having a minimum of 200 seedlings or 100 saplings per acre. Seedlings are trees smaller than 1 inch DBH. Saplings are trees larger than a seedling but smaller than a poletimber tree, ranging from 1 to 4.9 inches DBH. For reconnaissance and mapping purposes, seedlings and saplings should be combined into a reproduction (restocking) class 0-5.

Forest Stand Stocking Density Classification

Stocking classes - Forest stand stocking density classification is based on basal area or number of trees as shown in the following table.

Size Class	Units Per Acre	Density Classes ³				
		1	2	3	4	5
Seedlings ^{1,2} (0-0.9)" DBH	Trees	200 - 600	601 – 1,500	1,501+		
Saplings ^{1,2} (1-4.9)" DBH	Trees	100 - 300	301 - 900	901+		

Stand size and Density Classification

Pole-timber a Saw-timber	nd Basal area (sq. ft./acre)	10 - 30	31-70	71 - 110	111 - 150	150+
(5+)" DBH						
 Seedlings and saplings should be combined into a reproduction (restocking) class 0-5. Stocking levels considered adequate to regenerate a stand vary by cover type – see Silviculture Handbook (2431.5) for details. 						
3/ Minimu	Minimum "medium" density stocking for tax law eligibility differs slightly and can be found in NR 46.02 (24m).					

Forest Stand Type Classification Procedure

Each distinctive stand (cover type) will be assigned a cover type classification. Each forest stand will be given a type classification showing cover type, size class, and density. The primary cover type will be required in all cases. If a secondary and /or understory type(s) are present they may also be recorded. For mapping purposes, the primary type classification, including size and density for forest stands, shall always be shown. If a secondary and/or understory type is shown, the primary type will be placed first, followed by a slash and then the secondary and/or understory type(s) on the type maps for ready identification. For example: A $5-11^4$ / NH $5-11^2$ / PW $0-5^2$.

The goal of stand typing is to best describe the condition of a stand and some subjectivity may be involved. When determining the primary cover type and size class, if it is unclear as to what type to assign to a stand (e.g. 50 ft² of aspen & 50 ft² of oak) the forester should make a determination based on what they think best represents the current and/or anticipated near term stand condition. The cover types as defined in this Appendix typically have a threshold of 50% stocking of a given species, or suite of species, and at times the forester will have to choose the best cover type without meeting these requirements.

Choose only one primary type, one secondary type and one understory type based on basal area (poles & saw timber) or stems / acre (seedlings & saplings). Always try to record a secondary and/or understory type because they provide insight into the species composition of the primary type, and the next successional stage most likely to occur. The secondary and/or understory type data is valuable when reviewing the data in the office. For example:

Primary Type	A 5-11 ⁴
Secondary Type	NH 5-11 ²
Understory Type	PW 0-5 ²

NOTE: Density is written in numeric characters.

In typing a stand using basal area, use the following procedure to determine the primary type.

- 1. Determine the cover type based on the highest distribution by basal area of all merchantable trees in a forest type. For seedling and sapling stands, determine the cover type based on the number of seedlings and saplings by forest type. In some cases no one timber type will reach 50% and you will have to choose the type that best represents the stand.
- 2. Determine the size class based upon the basal area size class distribution of all merchantable trees within the primary cover type determined above. For seedling / sapling stands use 0-5.
- 3. Determine the density code based on the basal area of <u>all</u> merchantable trees in the primary product class (saw timber or pole timber). For seedling and sapling stands use the number of trees in the stand.

Secondary and understory types should be identified when present. These cover types typically provide additional clarity as to the species mix and structure present in a stand. Secondary types should be selected based on the size class or density of those trees not used in the primary type. The primary type density symbol reflects the total basal area of all species in that product class (poles or sawtimber). Use only the basal area of the secondary type to determine the density of the secondary type. For seedling/sapling stands it should reflect the total stems/acre in that size class.

Example 1				
Stand Basal Area	15 sq. ft. of large sawtimber oak			
	15 sq.	ft. of large sawtimber northern hardwoods		
	45 sq.	ft. of small sawtimber northern hardwoods		
	25 sq.	ft. of northern hardwood pole timber		
	10 sq.	ft. of aspen pole timber		
Primary Cover Type:	NH	85 sq. ft. northern hardwoods, 15 sq. ft. oak, 10 sq. ft. aspen		
Size Class:	11-15	The majority of the northern hardwoods basal area is small saw timber size.		
Density:	3	Total of 75 sq. ft. in saw timber product class (combine large and small)		
Secondary Cover Type:	NH	40 sq. ft. northern hardwoods (45 BA small saw from primary type excluded), 15 sq. ft. oak, 10 sq. ft. aspen		
Size Class:	5-11	Majority of remaining northern hardwood basal area is pole timber size.		
Density:	1	25 sq. ft. in secondary type (NH) and size class (5-11).		
Primary Type: Secondary Type:	NI NI	H 11-15 ³ H 5-11 ¹		

Example 2

Example 2					
Stand Basal Area – All merchantable trees are pole timber size (5-11"),					
	90 sq. ft. of aspen				
	15 sq. ft. o	of red maple			
	10 sq. ft. o	of hard maple			
	15 sq. ft. o	of red oak			
	1	of white ash			
	1	ngs & saplings of white pine			
Primary Cover Type:	А	>50% aspen by basal area (90 out of 140 sq. ft.) All			
Size Class:	5-11	aspen are in the 5-11" size class.			
Density:	4	140 sq. ft. in the pole timber product class.			
Secondary Cover Type:	NH	35 sq. ft northern hardwoods (red maple, hard maple, white ash) and 15 sq. ft of oak remaining after removing the primary aspen type			
Size Class:	5-11	Northern hardwood species are in the 5-11" size class.			
Density:	2	35 sq. ft. of northern hardwood pole timber			
<u>Understory Cover Type:</u> <u>Size Class:</u> Density:	PW 0-5 2	600 seedlings and saplings of white pine			
Density:	4				

Primary Type:	A 5-11 ⁴
Secondary Type:	NH 5-11 ²
Understory Type:	PW 0-5 ²

The cover type from the example on the previous page, $A 5-11^4$ / NH $5-11^2$ /PW $0-5^2$, should be recorded on the Stand Detail screen in WisFIRS as follows:

	Forest Cover	Size	Density
Primary Type	А	0511	4
Secondary Type	NH	0511	2
Understory Type	PW	0005	2

For mapping purposes the appropriate type designation would be: A $5-11^4$ / NH $5-11^2$ /PW $0-5^2$.

APPENDIX E - WisFIRS FOREST HABITAT TYPE CODES

The Forest Habitat Type Classification System is described in the <u>Chapter 12 of the Silviculture Handbook</u>. Detailed descriptions of individual habitat types listed here can be found in *A Guide to Forest Communities and Habitat Types of Northern Wisconsin,* second edition (Kotar, Kovach, & Burger, 2002), *A Guide to Forest Communities and Habitat Types of Central and Southern Wisconsin* (Kotar & Burger, 1996), and *Wetland Forest Habitat Type Classification System for Northern Wisconsin* (Kotar & Burger, 2017).

-	
<u>Code</u>	Habitat Type
AArL	Acer-Acer/Lysimachia
AArVb	Acer-Acer/Viburnum
AAs	Acer/Arisaema
AAt	Acer/Athyrium
AAtRp	Acer/Athyrium Rubus
AbFnThIx	Abies-Fraxinus-Thuja/Ilex
AbFnThOs	Abies-Fraxinus-Thuja/Osmunda
AbThArAsp	Abies-Thuja-Acer rubrum/Acer spicatum
ACaCi	Acer/Caulophylium-Circaea
ACaI	Acer/Caulophylum-Impatiens
ACl	Acer/Clintonia
AFAd	Acer-Fagus/Adiantum
AFAI	Acer-Fagus/Allium
AFAs	Acer-Fagus/Arisaema
AFAs-O	Acer-Fagus/Arisaema Osmorhiza Variant
AFH	Acer-Fagus/Hydrophyllum
	Acer-Frazinus /Desmodium
AFrDe	
AFrDe(Vb)	Acer-Fraxinus/Desmodium Viburnum Phase
AFrDeO	Acer-Fraxinus/Desmodium Osmorhiza
AFTD	Acer-Fagus-Tsuga/Dryopteris
AFVb	Acer-Fagus/Viburnum
AH	Acer-/Hydrophyllum
AHI	Acer/Hydrophyllum-Impatiens
AHVb	Acer/Hydrophyllum-Viburnum
AOCa	Acer/Osmorhiza-Caulophyllum
AQVb-Gr	Acer-Quercus/Viburnum Geranium variant
ArAbCo	Acer-Abies/Cornus
ArAbSn	Acer-Abies/Sanicula
ArAbVC	Acer-Abies/Vaccinium-Coptis
ArAbVCo	Acer-Abies/Vaccinium-Cornus
ArCi	Acer/Circaea
ArCi-Ph	Acer/Circaea-Phryma variant
ArDe	Acer/Desmodium
ArDe-V	Acer/Desmodium-Vaccinium variant
ArFnRh	Acer rubrum-Fraxinus nigra/Rubus hispidus
ArVRp	Acer/Vaccinium-Rubus
ASal	Acer/Sanguinaria-Impatiens
ASnMi	Acer/Sanicula-Mitchella
ATAtOn	Acer-Tsuga/Athyrium-Onoclea
ATD	Acer-Tsuga/Dryopteris
ATDH	Acer-Tsuga/Dryopteris-Hydrophyllum
ATFD	Acer-Tsuga-Fagus/Dryopteris
ATFPo	Acer-Tsuga-Fagus/Polygonatum
ATFSt	Acer-Tsuga-Fagus/Streptopus
ATiAs(De)	Acer-Tilia/Arisaema Desmodium Phase
ATiCa	Acer-Tilia/Caulophyllum
ATiCa-Al	Acer-Tilia/Caulophyllum Allium variant
ATiCa-La	Acer-Tilia/Caulophyllum-Laportea variant
ATiCa-La ATiCr(As)	Acer-Tilia/Cornus Arisaema Phase
ATiCr(As) ATiCr(O)	Acer-Tilia/Cornus Arisaema Phase
ATICI(U)	ACG-THIA/COTHUS OSHIOTHIZA FHASC

<u>Code</u>	Habitat Type
ATiDe	Acer-Tilia/Desmodium
ATiDe(Pr)	
	Acer-Tilia/Desmodium Arisaema variant
ATiDe-Ha	Acer-Tilia/Desmodium Hamamelis variant
ATiFrCa	Acer-Tilia-Fraxinus/Caulophyllum
ATiFrCa(O)	Acer-Tilia-Fraxinus/Caulophyllum Osmorhiza
()	phase
ATiFrCi	Acer-Tilia-Fraxinus/Circaea
ATiFrVb	Acer-Tilia-Fraxinus/Viburnum
ATiFrVb(Cr)Acer-Tilia-Fraxinus/Viburnum Cornus ph.
ATiH	Acer-Tilia/Hydrophyllum
ATiSa	Acer-Tilia/Sanguinaria
ATiSa-De	Acer-Tilia/Sanguinaria-Desmodium Variant
ATM	Acer-Tsuga/Maianthemum
ATTr	Acer-Tsuga/Trientalis
AVb	Acer/Viburnum
AVb-V	Acer/Viburnum-Vaccinium variant
AVCl	Acer/Vaccinium-Clintonia
AVDe	Acer/Vaccinium-Desmodium
AVVb	Acer/Vaccinium-Viburnum
FnAbArOn	Fraxinus-Abies-Acer rubrum/Onoclea
FnAbI	Fraxinus-Abies/Impatiens
FnArI	Fraxinus-Acer rubrum/Impatiens
FnArI-Ix	Fraxinus nigra-Acer rubrum/Impatiens capensis-
	Ilex verticillata variant
FnOn	Fraxinus nigra/Onoclea sensibilis
FnThAbAt	Fraxinus nigra-Thuja-Abies/Athyrium filix-
	Femina
FnUB	Fraxinus nigra-Ulmus rubra/Boehmeria cylindrica
HYDME	Hydromesic site – wet mesic south
HYDRI	Hydric site – wet forest lowland
LArIx	Larix laricina-Acer rubrum/Ilex verticillata
PArGy	Pinus strobus-Acer rubrum/Gaylussacia baccata
PArV	Pinus-Acer/Vaccinium
PArV-U	Pinus-Acer/Vaccinium, Uvularia variant
	Pinus-Acer/VacciniumAralia
	Pinus-Acer/VaccAralia, Polygonatum variant
	Pinus-Acer/VaccAralia, Viburnum variant
PArVAm	Pinus-Acer/Vaccinium-Amphicarpa
PArVAo	Pinus-Acer/Vaccinium-Apocynum
PArVHa	Pinus-Acer/Vaccinium-Hamamelis
PArVPo	Pinus-Acer/Vaccinium-Polygonatum
PArVRh	Pinus-Acer/Vaccinium-Rubus
PEu	Pinus-Euphorbia
PmLLe	Picea mariana-Larix/Ledum groenlandicum
PmLLe-An	Picea mariana-Larix larcina/Ledum
	groenlandicum-Aronia melanocarpa variant
PmLNe	Picea mariana-Larix/Nemopanthus mucronatus
PQE	Pinus-Quercus/Epigaea
PQG	Pinus-Quercus/Gaultheria
	×

	1 4011
<u>Code</u>	<u>Habitat Type</u>
PQGCe	Pinus-Quercus/Gaultheria-Ceanothus
PVCr	Pinus/Vaccinium-Cornus
PVG	Pinus/Vaccinium-Gaultheria
PVGy	Pinus/Vaccinium-Gaylussacia
PVHa	Pinus/Vaccinium-Hamamelis
PVRh	Pinus/Vaccinium-Rubus
QAp	Quercus/Amorpha
TFĀa	Tsuga-Fagus/Aralia
ThAbFnC	Thuja-Abies-Fraxinus/Coptis groenlandica
ThAbFnIx	Thuja-Abies-Fraxinus/Ilex
TMC	Tsuga/Maianthemum-Coptis

APPENDIX F - WISFIRS ACCEPTED SPECIES CODES

Accepted Species Codes are for use ONLY when listing major tree species within a stand, or as product codes on Line 16 of Form 2460-001. For cover type classification codes, see Appendix D.

Code	Species	Code	Species	Code	Species	Code	Species
AS**	Ash	CR	Cedar, Red	LB	Locust, Black	OW*	Oak, White
AB	Ash, Black	CB*	Cherry, Black	LH	Locust, Honey	PA	Pine, Austrian
AG	Ash, Green	СР	Cherry, Pin	MN	Maple, Norway	PJ*	Pine, Jack
AW*	Ash, White	CW	Cottonwood	MO	Maple, Other	PR*	Pine, Red
A*	Aspen	CX	Mixed Conifer**	MR*	Maple, Red	PS	Pine, Scots
AQ*	Aspen, Quaking	E	Elm	MS	Maple, Silver	PW*	Pine, White
AY*	Aspen, Big-toothed	EA*	Elm, American	MH*	Maple, Sugar	S**	Spruce
BG	Balm of Gilead	EC	Elm, Chinese	MX**	Mixed Hardwoods	SB*	Spruce, Black
FB*	Balsam Fir	ER	Elm, Rock	MA	Mountain Ash	SN	Spruce, Norway
BA*	Basswood	ES	Elm, Slippery	MV	Mulberry	SW*	Spruce, White
BE*	Beech	HB	Hackberry	OB	Oak, Black	SY	Sycamore
BR	Birch, River	Н	Hemlock	OM	Oak, Bur	T*	Tamarack
BW*	Birch, White	HI	Hickory, Bitternut	Ol	Oak, Northern Pin	W	Walnut
BY*	Birch, Yellow	HS	Hickory, Shagbark	OP	Oak, Southern Pin	WI	Willow (includes black)
BS	Box Elder	IR	Ironwood	00**	Oak, Other	PY	Yellow Poplar (tulip)
BN	Butternut	KC	Kentucky Coffee Tree	OR*	Oak, Red	XX**	Mixed Species (all)
C*	Cedar, Northern white	L	Larch	OS	Oak, Swamp White		

*Indicates species with site index curves in database

**Forest Product Codes Only

WisFIRS NURSERY STOCK CODES

- SS Shrub Species
- SCP Crabapple, Prairie
- SCC Cherry, Choke
- SHC Cranberry, American Highbush
- SDG Dogwood, Gray SDO Dogwood, Red Osier
- SDS Dogwood, Silky
- SEB Elderberry
- SHW Hawthorne
- SHZ Hazelnut, American
- SJB Juneberry
- SPL Plum, American
- SCWB Winterberry
- SNB Ninebark

WisFIRS INVASIVE LEVEL CODES

- Code Description
- 30 Present
- 31 Not Present
- 32 Not Evaluated (not trained)
- 33 Not Evaluated (off season)

WisFIRS BROWSE LEVEL CODES

- 1 No Browse Evidence
- 2 Low (1-25% Stems Browsed)
- 3 Medium (26-50% Stems Browsed)
- 4 High (51-75% Stems Browsed)
- 5 Very High (>75% Stems Browsed)
- 6 No Woody Palatable Vegetation Present

WisFIRS INVASIVE DENSITY CODES

VVIDI II	
Code	Description
1	< 5%
2	5 - 20 %
3	20 - 35%
4	35 - 50%
5	>50%

WisFIRS INVASIVE SPECIES CODES

CodeSpeciesAUOLAutumn OliveBLLOBlack LocustBRBJBarberry, JapaneseBTCOBuckthorn, CommonBTGLBuckthorn, GlossyBTSOBittersweet, OrientalDAMRDame's rocketGRSRGrass, Reed Canary	<u>Code</u> HNYS KNJA KWSP MUFR MUGA OTHR RUOL SPUL	Species Honeysuckle spp. Knotweed, Japanese Knapweed, Spotted Multiflora Rose Mustard, Garlic Other Russian Olive Spurge, Leafy
---	---	---

APPENDIX G - WISFIRS MANAGEMENT OBJECTIVES CODES & DESCRIPTIONS

Non-Foreste	d (NF	H
Maintain	M	To keep a stand in its "current state" condition. Maintaining a stand WILL NOT change the
		habitat classification. To intentionally alter the vegetative species composition of a stand from its "current state" to
Restore	Ν	a condition similar to its pre-settlement vegetation regime. Restoring a stand MAY OR
Restore	IN	MAY NOT change the habitat classification.
		To intentionally change a stand from one cover type (habitat classification) to another; for
Conversion	Р	example, planting prairie in a former agricultural field, or utilizing a timber harvest to change
conversion	1	an oak woodlot to a savanna. Conversion of a stand WILL change the habitat classification.
		To modify the "current state" condition of a stand through intentional enrichment of desirable
		species (increasing the density of existing species and/or introducing species not already
Enhance	Q	present); for example, interseeding a diverse forb mix into a prairie to increase pollinator and
		brood rearing habitat, or spreading wild rice in a wetland where little/none previously
		existed. A stand enhancement WILL NOT change the habitat classification.
		To intentionally allow a stand to transition from one habitat classification to another over
Succession	Y	time; for example, allowing a forest opening to convert back to trees. Succession of a stand
Succession	1	WILL change the habitat classification at a point in time when a new classification is more
		suitable for the stand than the original classification.
Forested (FH	1	
Natural Type	Main	
NTM	Α	Natural maintenance or regeneration
	1	ersion (after cutting or treatment)
NTC	В	To Spruce or Fir (natural or previously planted)
NTC	С	To White Pine (natural or previously planted)
NTC	D	To Red Pine (natural or previously planted)
NTC	Е	To Jack Pine (natural or previously planted)
NTC	F	To Northern Hardwoods
NTC	G	To Red Maple
NTC	Н	To Aspen
NTC	Ι	To Central Hardwoods
NTC	J	To White Birch
NTC	K	To Oak
NTC	L	To other forest or non-forest species
	1	enance (artificial regeneration)
FTM	0	
		ersion (artificial regeneration)
FTC	R	To Spruce or Fir after cutting or treatment
FTC	S	To White Pine after cutting or treatment
FTC	Т	To Red Pine after cutting or treatment
FTC	U	To Jack Pine after cutting or treatment
FTC	V	To Northern Hardwoods after cutting or treatment
FTC	W	To Oak after cutting or treatment
FTC	Х	To other forest or non-forest species after cutting or treatment

APPENDIX H - PLANNED TREATMENTS

Treatment Type	Code	Treatment/Method	Description
			Aquatic Habitat Management
AQ	1	Streambank Brushing	Removal of undesirable woody vegetation near streams that is negatively affecting in-stream or riparian habitat. Some examples may be box elder, tag alder and invasive species removal etc.
AQ	2	Streambank Mowing	Cutting herbaceous species to maintain the stream corridor in a grassy or other desirable condition in an effort to limit succession of woody vegetation in the riparian zone.
AQ	3	Streambank Restoration	Grading, sloping and/or stabilizing the streambank using rock, wood or other structures. Some examples may be integrated bank treatment, rock rip/rap, toe wood, bio-log, bank re-sloping etc.
AQ	4	Streambank Stabilization	Grading/sloping, seeding, or other material placement and/or tree/debris removal along the banks and periphery of a river or stream with the purpose of maintaining the stream corridor and minimizing erosion.
AQ	5	In-Stream Habitat Restoration	Intentional placement of rocks, boulders, logs, or other materials within a stream channel to manipulate or maintain fish habitat and flow patterns within the channel.
			Biological Application
BA	1	Biological Application	The use of animals, fungi or diseases to control invasive populations. Control organisms usually come from the native range of the target species, and require a period of study to ensure that they will remain specific to the target population, and will not harm native species, crops, or other ornamental species. This does not include grazing.
			Drawdown
DR	1	Drawdown	Water purposely temporarily removed from a wetland for management purposes including maintenance work, vegetation management, or other purposes.
			Discing
DS	1	Discing	Discing is the cutting and loosening of natural ground or layer of soil and mixing same with a; plow, disc, OR rotovator. Not for use in conjunction with Farming/planting etc. where discing is presumed to happen as PART OF the treatment process. When used this is a single treatment. Ex. may be utilized to plow/disc idle for control/reduction of willow brush, or cattails.
			Grazing
GZ	1	Intensive	12 to 24-hour movement between paddocks
GZ	2	Rotational	2 to 4-day movement between paddocks
GZ	3	Controlled	7 days or longer with movement between paddocks
GZ	4	Continuous	No movement between paddocks
GZ	5	Mob Stocking	High density for shrub removal
			Hay Cutting
НС	1	Hay Cutting	Harvesting of upland and or Lowland grass hay. This may include improved planted fields of alfalfa/clover etc. OR general upland or low- land (e.g., reed canary) grass.

Treatment Type	Code	Treatment/Method	Description
		Habitat Mana	agement (Non-Commercial)
HM	8	Survival Check of Planting/Seeding/Natural Regen	Conduct a follow-up field survey to determine the success of regeneration in a stand.
HM	9	Animal Damage Control (H	Bud, Cap, Tube, Repel, Etc.)
HM	10	Certification of Adequate I	Regeneration Stocking
HM	11	Release - Regeneration (via	a Mechanical)
HM	12	Invasive Plant Control (Via	a Hand Pull)
	Inspe	ections/Examinations-not r	elated to other habitat manipulation activities
Ι	1	Island Inspection	Regular scheduled examination of state-owned islands to determine use, post signage, and check for trespass
		Μ	low Herbaceous
МН	1	Mow Herbaceous	Mowing/cutting of herbaceous, NON-WOODY, vegetation. Presumably for species control or release of desired species. E.g.,. mowing wild parsnip before seed dispersal, mowing common goldenrod to reduce seed dispersal/prevalence, etc.
		Planting (Artificial Regeneration)
PL	1	Hand Plant (Seedling)	Plant tree seedlings by hand.
PL	2	Machine Plant	Plant trees or seeds using machinery.
PL	3	Direct Plant/Seed (Grass/Forbes, Trees)	Non-Forest: Plant to permanent cover or inter-seed an area for increased forbs and biodiversity. Examples include seeding a field to warm or cool season grass after sharecropping, seeding a berm after a wetland restoration, or inter-seeding after a prescribed burn.
PL	5-16	Species Recommended for	Planting
PL	20-32	Planting Rate/Diversity	
			Pruning
PR	1	Pruning	
			Pesticide
PS	1	Herbicide (Invasive Control)	Use of chemical pesticide to control undesirable vegetation. Typical methods/applications include foliar, basal bark, cut stump, wick, boom spray.
PS	2	Herbicide (Tree Release)	Use of chemical herbicides to control undesirable vegetation negatively competing with desired seedlings/sapling. Typical methods/applications include foliar, basal bark, cut stump, wick, boom spray.
PS	3	Insecticide/Fungicide	Use of chemical pesticide to control undesirable insects/fungus causing negative effects on desired cover types.

Treatment Type	Code	Treatment/Method	Description		
		Harvest M	lethod for All-Aged Stand		
RA	6	Group Selection	Harvest to create canopy group openings from 75 feet (1/10 acre) to 160 feet (1/2 acre) in diameter.		
RA	7	Single Tree Selection	Harvest individual trees of various size and age classes.		
RA	9	Patch Selection Harvest	Harvest to create even-aged patches from ½ to 2 acres in size		
RA	12	Partial Cut (Uneven- Aged)	Harvest single trees or groups of trees of various sizes and ages.		
RA	16	Conversion from Even- Age to Uneven-Age	Combination of thinning and canopy gap formation techniques to develop uneven-aged stand conditions.		
			Rowcrop		
RC	1	Rowcrop	The use of traditional row-crop farming methods for the purpose of keeping land open or preparing for a site conversion; or the annual establishment of wildlife food plots or dove fields, which may remain on the landscape through winter.		
		Harvest Me	ethod for Even Aged Stand		
RE	1	Coppice (e.g. Aspen Regen. Cuts)	Cutting all trees except designated reserved trees allowing trees to regenerate from root and/or stump sprouts after harvest.		
RE	2	Clearcut (Relying on Regeneration by Seed)	Cutting all trees except designated reserved trees, allowing trees to regenerate naturally from seed produced by adjacent stands or trees cut in the harvest operation.		
RE	3	Seed Tree Harvest	Remove all seed trees except for designated reserve trees.		
RE	4	Shelterwood Harvest	Conduct the final harvest to remove all overstory trees except for designated reserve trees.		
RE	5	Overstory Removal	Harvest all overstory trees in this stand except designated reserve trees to allow full sunlight to reach established seedlings and saplings.		
RE	8	Other			
RE	10	Clearcut (Relying on Planting or Direct Seeding)	Cut all trees except designated reserve trees allowing full sunlight to reach the young trees planted or directly seeded into the opening.		
RE	11	Partial Cut (Even-Aged)	Harvest single trees or groups of trees of various sizes.		
		Р	rescribed Burns		
RX	1	Prescribed Burns	Intentional application of fire to accomplish management objectives.		
		S	Site Preparation		
SP	1	Seedbed preparation for na	1		
SP	2	Preparation for planting			
SP	3	Treatment to stimulate cop	ppice or root suckering		
SP	4	Slash Treatment			
SP	5	Motorized or mechanical e			
SP	6	Mechanical treatment with	hand tools		
SP	7	Prescribed fire			
SP	8	Chemical treatment			
SP	9	Other - Specify in remarks			

Treatment Type	Code	Treatment/Method	Description
		Intermediat	e Treatment - Commercial
Т	1	Harvest Scattered Mature of	or Overmature Trees
Т	2	Thinning or Improvement Cutting	Reduce stand density by removing trees to improve tree growth, enhance forest health or recover potential mortality. Thin to reduce stocking and concentrate growth on trees that are more desirable.
Т	3	Salvage or Sanitation Cutting	Remove trees damaged by natural events (wind, fire, etc.), or trees infected by or highly susceptible to insect damage or disease to keep the rest of the stand healthy.
		Non-C	ommercial Thinning
TN	1	Thinning, Improvement Cut or Crop Tree Release	Reduce stand density by removing trees to improve tree growth, enhance forest health or recover potential mortality.
TN	2	Cull Tree Removal (Includes Girdling)	Remove, girdle or kill trees that are poor in quality due to disease, injury, insect infestation or poor form.
TN	3	Insect or Disease Control (Sanitation Cutting)	Remove trees damaged by natural events (wind, fire, etc.), or trees infected by or highly susceptible to insect damage or disease to keep the rest of the stand healthy.
		We	tland Restoration
WR	1	Scrape	An excavated area intended to pool water and provide wetland habitat.
WR	2	Berm/Dike Installation	A mounded line of material across a water drainage intended to back water over an area to provide wetland habitat.
WR	3	Tile Removal	Drainage tile removed to restore wetland hydrology and habitat.
WR	4	Culvert/Water Control Structure installation	Installation of a device designed to regulate water elevation while passing water through the drainage flow of a wetland.
WR	5	Ditch Plug	Filling an area of a dug ditch that drains a wetland to restore the wetland hydrology and habitat.
		Woo	ody Shrub Control
WS	1	Cut/Mow/Brush	Using any type of mechanical means to set back/reinvigorate vegetation. Examples include FECON, shearing with bulldozer, rotary mower, rollerchopping, boom mower, etc.

APPENDIX I – STAND EXAMINATION DATA SHEET (WISFIRS) EXAMPLE

2. Update X Compartment No: 6 A 1 Exam Date-S1 and B.A measured 0 3 / 1 4 / 2 0 1 3 Primary Type / Size / Density N.H 1 5 + 2 Primary Type / Size / Density N.H 0 5 1 1 2 2 Understory Type / Size / Density N.H 0 5 1 1 2 2 Valuer Story Type / Size / Density N.H 0 0 5 3 3 Habitat Type Size / Density N.H 0 0 0 5 3 Habitat Type Size / Density N.H 0 0 0 5 3 Year of Origin		2025	RA	7			
3. Delete	Planned Treatments:	Year					
Stand Prefix(s) & No: A 1 Exam Date-S.I and B.A measured 0 $3/1$ $4/2$ 0 1.3 Primary Type / Size / Density $N.H$ 0.5 1.1 2 Secondary Type / Size / Density $N.H$ 0.5 1.1 2 Understory Type / Size / Density $N.H$ 0.5 1.1 2 Understory Type / Size / Density $N.H$ 0.5 1.1 2 Understory Type / Size / Density $N.H$ 0.5 1.1 2 Understory Type / Size / Density $N.H$ 0.5 1.1 2 Habitat Type $N.H$ 0.5 1.1 2 Variable Structure 1.2 $N.H$ 0.5 1.1 2 Variable Structure 1.2 $Stein dex Stein dex Stein dex Stein dex Stein dex Number of Crop Trees/Acre 5.1 7 Total Volume - Cords / Acre 1.7 Total Volume - Stein Growing Stock 3.3 3.1 1.1 1.1 1.1 1.2 3.0 1.1 1.2 $	Last Changed Date						
X Y Y <thy< th=""> <thy< th=""> <thy< th=""></thy<></thy<></thy<>	Secondary Objective						
X Y Y <thy< th=""> <thy< th=""> <thy< th=""></thy<></thy<></thy<>	Primary Objective	Α					
3. Delete Stand Prefix(s) & No.: A 1 Exam Date-S.I and B.A measured 0 3 / 1 4 / 2 0 1 Primary Type / Size / Density N N 1 5 1 2 Secondary Type / Size / Density N N 0 5 1 1 2 Understory Type / Size / Density N N 0 5 1 1 2 Understory Type / Size / Density N N 0 5 1 1 2 Understory Type / Size / Density N N 0 0 5 3 Habitat Type N N 0 0 5 3 Acres -5 -6 0 0 0 0 0 Mean Stand Diameter 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Browse Level	2	-				
3. Delete Stand Prefix(s) & No.: \overline{A} 1 Exam Date-S.I and B.A measured 0 3 / 1 4 / 2 0 1 Primary Type / Size / Density N N 1 5 1 2 Secondary Type / Size / Density N N 0 5 1 1 2 Understory Type / Size / Density N N 0 5 1 1 2 Understory Type / Size / Density N N 0 5 1 1 2 Understory Type / Size / Density N N 0 0 5 3 Habitat Type N N 0 0 5 3 Acres -5 -6 -7 A O C a Year of Origin $$ $$ $$ $$ $$ Number of Crop Trees/Acre $$ $ $	Invasive Species Density	1					
3. Delete Stand Prefix(s) & No.: A 1 Exam Date-S.I and B.A measured 0 3 $/1$ 4 $/2$ 0 1 Primary Type / Size / Density N N 1 5 1 2 Secondary Type / Size / Density N N 0 5 1 2 Understory Type / Size / Density N N 0 5 1 2 Understory Type / Size / Density N N 0 5 1 2 Understory Type / Size / Density N N 0 5 1 2 Understory Type / Size / Density N N 0 5 1 2 Understory Type / Size / Density N N 0 0 0 5 3 Habitat Type N N 0 0 0 0 5 3 Year of Origin $ 5$ 1 $ 5$ 1 7 7	Invasive Species Type	ΜU	<u>G A</u>			_	_
3. Delete Image: Stand Prefix(s) & No:: Image: Access of the second and the sec	Invasive Species Level	3 0					
3. Delete A Stand Prefix(s) & No: A 1 Exam Date-S.I and B A measured 0 3 1 4 2 0 1 Primary Type / Size / Density N N 1 5 $+$ 2 Secondary Type / Size / Density N N 1 5 $+$ 2 Understory Type / Size / Density N N 0 5 1 2 Understory Type / Size / Density N N 0 0 5 3 Habitat Type N N 0 0 5 3 Acres -5 -5 -5 -5 -5 -5 Year of Origin -5 -5 -5 -5 -5 -5 Total Height -5 1 2 -5 1 -5 -5 Number of Crop Trees/Acre 5 1 7 7 7 7 Yotal Basal Area 9 7 7 7 7	Species Volume - Bd. Ft. / ac.	4	0 0	100	1_0	0	_
3. Delete A A 1 Exam Date-S.I and B.A measured 0 3 1 4 2 0 1 Primary Type / Size / Density N N 1 5 1 2 Secondary Type / Size / Density N N 1 5 1 1 2 Understory Type / Size / Density N N 0 5 1 1 2 Habitat Type N N 0 0 5 3 Habitat Type N N 0 0 5 3 Habitat Type $ A$ O C a Acres $ 5$ 2 a O a Year of Origin $ -$ Mean Stand Diameter 1 2 $ -$ Number of Crop Trees/Acre 5 1 $ -$	Species Volume - Cds. / ac.		_		3		
X X <thx< th=""> <thx< th=""> <thx< th=""></thx<></thx<></thx<>	Species BA		0	1 5	1 1		
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 3 / 1 4 / 2 0 1 Primary Type / Size / Density N N 1 5 $+$ 2 Secondary Type / Size / Density N N 1 5 $+$ 2 Understory Type / Size / Density N N 0 5 1 2 Understory Type / Size / Density N N 0 5 1 2 Understory Type / Size / Density N N 0 0 0 5 3 Habitat Type N N 0 0 0 5 3 Habitat Type -5 2 A O C a Year of Origin -5 2 -5 2 -5 2 Year of Crop Trees/Acre 1 2 2 -5 1 -6 7 Number of Crop Trees/Acre -5 1 7 7	Major Species	MH	M	R		<u> </u>	
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 $3 / 1$ $4 / 2$ 0 1 Primary Type / Size / Density N N 1 5 $+$ 2 Secondary Type / Size / Density N N 1 5 $+$ 2 Understory Type / Size / Density N N 0 5 1 1 2 Understory Type / Size / Density N N 0 0 0 5 3 Habitat Type N N 0 0 0 5 3 Habitat Type -5 2 A O C a Acres -5 2 A O C a Year of Origin -5 2 -5 2 -6 7 Mean Stand Diameter 1 2 -5 1 -6 7 % Acceptable Growing Stock -6 7 3 3 7 <td>Total Volume - Bd. Ft / Acre</td> <td></td> <td>600</td> <td></td> <td></td> <td></td> <td></td>	Total Volume - Bd. Ft / Acre		600				
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 3 1 4 2 0 1 Primary Type / Size / Density N 1 5 $+$ 2 Secondary Type / Size / Density N N 1 5 $+$ 2 Understory Type / Size / Density N N 0 5 1 2 Understory Type / Size / Density N N 0 5 1 2 Understory Type / Size / Density N N 0 0 0 0 5 3 Habitat Type N A O C a Acres -5 2 Year of Origin $$ $$ A O C a Mean Stand Diameter 1 2 $$ $$ $$ $$ $$ $$ Site Index $$ $$ $$ $$ $$	Total Volume - Cords / Acre	1 7					
3. Delete Stand Prefix(s) & No.: A 1 Exam Date-S.I and B.A measured 0 $3/1$ $4/2$ 0 1 3 Primary Type / Size / Density N 1 5 $+$ 2 2 Secondary Type / Size / Density N N 1 5 $+$ 2 Understory Type / Size / Density N N 0 5 1 1 2 Understory Type / Size / Density N N 0 0 0 5 1 1 2 Understory Type / Size / Density N N 0 0 0 5 3 Habitat Type N A O C a Acres 5 2 2 2 3 Year of Origin $ 2$ 3 3 Mean Stand Diameter 1 2 2 3 3 3 4 2 3 3 3 3 3	Total Basal Area	9	7				
3. Delete X X A I <thi< th=""> I <thi< th=""> <thi< <="" td=""><td>% Unacceptable Growing Stock</td><td>3</td><td>3</td><td></td><td></td><td></td><td></td></thi<></thi<></thi<>	% Unacceptable Growing Stock	3	3				
3. Delete Stand Prefix(s) & No.: A 1 Exam Date-S.I and B.A measured 0 $3/1$ $4/2$ 0 13 Primary Type / Size / Density N 1 5 $+$ 2 Secondary Type / Size / Density N 1 5 $+$ 2 Understory Type / Size / Density N N 0 0 5 1 1 2 Understory Type / Size / Density N N 0 0 0 5 3 Habitat Type N A O C a Acres 5 2 2 3 Year of Origin $ 5$ 2 3 Mean Stand Diameter 1 2 $ -$ Number of Crop Trees/Acre 5 1 $ -$							
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 3 / 1 4 / 2 0 1 Primary Type / Size / Density N N H 1 5 + 2 Secondary Type / Size / Density N N H 0 5 1 1 2 Understory Type / Size / Density N N H 0 0 5 3 Habitat Type N N H 0 0 0 5 3 Habitat Type 5 2 A O C a Year of Origin 5 2 Site Index 1 2 Site Index Species / Site Index 1 2 1 2 1			1				
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 3 / 1 4 / 2 0 1 Primary Type / Size / Density N N H 1 5 + 2 Secondary Type / Size / Density N N H 0 5 1 1 2 Understory Type / Size / Density N N H 0 0 0 5 3 Habitat Type N N H 0 0 0 5 3 Year of Origin			. — — —	_			
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 3 1 4 2 0 1 Primary Type / Size / Density N H 1 5 + 2 Secondary Type / Size / Density N H 0 5 1 1 Understory Type / Size / Density N H 0 5 3 Habitat Type A O C a Year of Origin		1 2					
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 3 1 4 2 0 1 3 Primary Type / Size / Density N H 1 5 + 2 Secondary Type / Size / Density N H 0 5 1 1 2 Understory Type / Size / Density N H 0 5 3 Habitat Type A O C a Year of Origin	-						
3. Delete	-						
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 3 1 4 2 0 1 Primary Type / Size / Density 0 3 1 4 2 0 1 3 Primary Type / Size / Density 0 3 1 4 2 0 1 3 Primary Type / Size / Density 0 0 5 1 1 2 Understory Type / Size / Density 0 0 0 5 3 Habitat Type 0 0 0 5 3			52				
3. Delete X Stand Prefix(s) & No.: A Exam Date- S.I and B.A measured 0 Primary Type / Size / Density 0 Secondary Type / Size / Density N H 0 N H 0 5 N H 0 0				<u> </u>			
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 3 / 1 4 / 2 0 1 3 Primary Type / Size / Density N H 1 5 + 2 2 Secondary Type / Size / Density N H 0 5 1 1 2					3		
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 3 1 4 2 0 1 3					_2		
3. Delete Stand Prefix(s) & No.: A 1 Exam Date- S.I and B.A measured 0 3 1 4 2 0 1 3					2		
	Exam Date- S.I and B.A measured	0 3	/ <u>14/2</u>				
	· <u> </u>			1			

APPENDIX J - WISFIRS SECURITY OPTIONS

- <u>Property specific</u>: Property specific authorizations can be delegated by authorized supervisors and/or WisFIRS system administrators listed as having delegation authority through the Security Tab. WisFIRS Security Tab currently only allows the viewing of delegations for <u>TS Edit</u> and <u>RX Habitat Manager</u>. Brief descriptions of current authorities are:
 - **A. RX Habitat Manager-** Typically reserved for county forest administrators and lead DNR biologist/Wildlife Technician for the property. This authority allows user to initiate and approve burns plans for assigned properties.
 - **B.** Timber sale edit- Allows user to create, modify, and delete recon information in both tabular and GIS applications. It also allows user to establish, view, and approve timber sales on assigned properties. For state lands only; individuals with TS edit authority will be allowed to upload documents and create journal entries but will not be able to produce an invoice within the ledger tab or create final reports for close-outs.
- 2. <u>Additional/ Non-property specific:</u> These are designed to give individuals additional, specific authorities to complete specialized functions within the database. These authorities are not viewable on the Security Tab and must be granted by WisFIRS system administrators. Current authorities are:
 - A. Timber Sale Financials- Allows authorized users to enter and edit all 3 financial tabs (journal, ledger, invoice). This authority is necessary to generate invoices and create final reports for close-outs. Financial edit authority is reserved for Forestry Financial Specialists and select foresters from each Team. Preferred method is to utilize Financial Specialists to ensure accuracy and consistency in the billing process.
 - **B.** Pesticide use- Authority given to individuals who have pesticide use, monitoring, and/or reporting responsibilities on Department lands. Individuals need to have completed WisFIRS Public Lands training and an additional pesticide use training module offered through the Department training system. Additional information can be located on the <u>Pesticide Use Page</u>.
 - **C. RX Burn (Burn Boss)-** Authorizes individuals who have active RxB3 quals to complete the prescription range, fire behavior, and implementation tabs within the RX Burn function. Qualifications are pulled directly from IQS and updated weekly within the WisFIRS database.
 - **D. Technical reviewer-** Reserved for individuals responsible for approving burn plans; typically the Area Forestry Leaders. Qualifications and expertise needed for this are further described within the Prescribed Burn Handbook.
 - **E. Stumpage Edit**-Allows for annual editing of stumpage base rates for designated stumpage area. For Department lands, this authority is granted to two individuals per stumpage area. For county lands, the County Forest Administrator and Liaison Forester will be granted this authority. Authority is granted by the County Forest & Public Lands Specialist.

<u>APPENDIX K – PLANTING AND CULTURAL REPORT EXAMPLE</u>

P.J Sold A ge Tear Planted Plantation Number Pattation Number Acrea 2.009 Trees Per Acree 2.009 ALSF Districe 2.7 Total Trees 2.009 950 (4150 Vol/AC) Brd Year Brd Year Brd Year Brd Year Section Brd Year Brd Year Section Comparison Brd Year Section Brd Year Section Get / frame Section Get / frame Section Get / frame Comparison Get / frame Section Get / frame Get / frame Comparison Get / frame Section Get / frame Get / frame </th <th>Sile I</th> <th>10N Π -</th> <th>PLANTATIC</th> <th>ON AND SEEDIN</th> <th>G DATA</th> <th></th> <th></th> <th>SECTION I - DESCRIP</th> <th>TION</th>	Sile I	10N Π -	PLANTATIC	ON AND SEEDIN	G DATA			SECTION I - DESCRIP	TION
Acres Total Trees Z O Trees Per Acre 2 7 Total Trees 25.650 Trees Per Acre 9 control 1st Year 2nd Year 3rd Year Survival 838 (88%) + 168 yet. / Ac. 825 (87%) + 265 yot. / AC. 3rd Year Survival 6th Year 7113 (75%) + 265 yot. / AC. 10th Year 10th Year 10th Year 10th Year 9.4 Section 173 (75%) + 263 yot. / AC. 10th Year Soil Type Section 13(15%) + 263 yot. / AC. BA Remarks Section Map Scale 1:	sbecret	PI	S				Plantation Number	Property	NAMES AND ADDRESS OF TAXABLE PARTY OF TAXABLE PARTY.
2.7 2.5 6.50 1350 (1150 vol/AC) Range Section Desc. Survival 1at Year 2.6 2.50 1350 (1150 vol/AC) 310 (2ar) <	Acres	10			2			ALSE	Distric
0.0.1VVal 0.258 (88%) 1180 year 125(712%) + 2288 yoL. Setting 6th Year 7117(75%) + 2263 yoL 10th Year 10th Year 7117(75%) + 2263 yoL 10th Year 9-A Setting 80 80 80 9-A Setting 80 80 80 9-A Setting 80 80 80 80 Setting 9 80 80 80 <tr< td=""><td></td><td>27</td><td></td><td></td><td></td><td>a S</td><td>Per Acre</td><td>Town Range</td><td></td></tr<>		27				a S	Per Acre	Town Range	
B36 (98%) 1188 vol. Acc B25 (87%) 2 225 (87%) 2 288 vol. 9 - A Solid Type	Percent				2nd Year	150	Brd Year	STN 8E	
One inspection Oth Year 10th Year 10th Year 10th Year Solid Type Habitat Type or Ground Cover Species SECTION III - PLANTATION THINNINGS III - PLANTATION THINNINGS Origin Seed Lot Number Origin Sad. Image: Cover Species Side Type Map Scale 1: Seed Lot Number Seed Lot Number Seed Lot Number Sth. Image: Cover Species State Image: Cover Species Seed Lot Number Seed Lot N		- 18	338 (88%			+ 2103 VOL "	125(76%)+288 VOL.	9 - A	Stand Number
SECTION III - PLANTATION THINNINGS Residual BA Remarks Seed Lot Number Origin 1st. Image: Control of the second secon	est		UZ(M57)	77490					Habitat Type or Ground
SECTION III – PLANTATION THINNINGS Residual BA Remarks 1st. Image: Control of the sector	napect	ion	יוערוי	-203V02 113(1	5/0]+26510[[13(05%)-	-325 VOL/AC	Read Lat Number	
AcresYearYearVel/AC RemovedReturns S/ACResidual BARemarks1at. \square \square \square \square \square \square 2nd. \square \square \square \square \square \square 2nd. \square \square \square \square \square \square 3rd. \square \square \square \square \square \square 3rd. \square \square \square \square \square \square 4th. \square \square \square \square \square \square 5th. \square \square \square \square \square \square 6th. \square \square \square \square \square \square 7th. \square \square \square \square \square \square 8th. \square \square \square \square \square \square 9th. \square \square \square \square \square \square								Seed Lot Number	Origin
Ist. Ist. Removed ist/AC Remarks 1at. Image: Constraint of the state	SECTI	ON III -	PLANTATI	ON THINNINGS				1	
Ist. International and		Acres	Year	Vol/AC Removed	Returns	Residual	Remarks		
2nd. Image: Constraint of the second secon	-			Interior	UNC	BA		MAP	Man Scale 1-
Srd. Image: Constraint of the second secon	1st.								mup scale 1.
3rd. Image: Constraint of the state o	2nd.							0	
4th I			-					KAINBOW D	RIVE
Sth. Image: Comparison of the compar	3rd.								
Sth. Image: Comparison of the compar	4th								
6th 6th 6th 7th 6th 6th 8th 6th 6th 9th 6th 6th									
7th. Image: Constraint of the second of th	5th.					-			
7th. Image: Constraint of the second of th									
8th. 9th. 9th. 9th. 9th. 9th. 9th. 9th. 9	otn.							1.1	
9th.	7th.							8	*
9th.									
	8th.	-							
10eh	9th.								
00th.		-							
	Oth.								
	*5.	TE HERR	ICODE RE	LEASED AN	701				
# Size HERBICIDE RELEASED AND TON									
* SITE HERBICIDE RELEASED ANG. ZON	# 51	TE THIN	INED/HA	ND-RELEASE	D SPRING	2013			
# SITE THINNED / HAND-RELEASED SPRING ZO13									

Public Forest Lands Handbook

State Islands Listings

A listing of unsurveyed and unallotted islands controlled by Department of Natural Resources, north of Townships 33-34. Listings are organized by county.

Ashland County

Lake		Location		Island	Island		Location		
	Section	<u>Town</u>	<u>Range</u>		Quarter	Section	<u>Town</u>	<u>Range</u>	
Hoffman Little Clam	26, 35 5 32	41 42 43	1E 4W 4W	No. 1 Snowshoe	S½SE SWSW	26 5	41 42	1E 4W	1.00 .75
Twin Lakes	13,23,24	44	2W	Wolf	W ¹ / ₂ NW	24	44	2W	.45

Barron County

Lake		Location				Location			Acres
	Section	<u>Town</u>	<u>Range</u>		Quarter	Section	<u>Town</u>	<u>Range</u>	
Big Dummy	28, 33	36	13 W	No. 1	NESW	28	36	13 W	1.40
Crystal	28, 33	35	14 W	No. 1	SESW	28	35	14 W	.25
				No. 2	SWSE	28	35	14 W	.30
-				No. 3	S ¹ / ₂ SE	28	35	14 W	.20
Devils	5, 6, 8	36	11 W	No. 5	NENE	6	36	11 W	.90
	31, 32	37	11 W	No. 6	NWNE	6	36	11 W	3.50
				No. 7	E½NE	6	36	11 W	1.80
				No. 8	SWNW	5	36	11 W	1.50
See W	ashburn County also		No. 9	N ¹ / ₂ SW	5	36	11 W	1.00	
	in this lake			No. 10	NWSW	5	36	11 W	.80
	(Islands 1-4 inclusiv	ve)		No. 11	NESW	5	36	11 W	.10
				No. 12	NESW	5	36	11 W	.40
Hemlock	25, 26, 27)	36	10 W	No. 1	NWSE	25	36	10 W	.30
	35, 36)			No. 2	S½SE	26	36	10 W	.80
				No. 3	SWSE	26	36	10 W	.25
				No. 4	SESW	26	36	10 W	1.40
Hogback	11, 12	36	13 W	No. 1	NESE	11	36	13 W	.40
Horseshoe	6, 7	34	14 W	No. 1	(SWSW	6	34	14 W	2.00
	1, 12, 13, 14	34	15 W		(NWNW	7	34	14 W	
				No. 2	NWNE	7	34	14 W	3.00
				No. 3	NENW	7	34	14 W	1.10
				No. 4	E ¹ / ₂ NW	7	34	14 W	.30
	See Polk County also	for		No. 5	(W½NE	7	34	14 W	1.10
	Islands in this lake			(E ¹ /2NW					
				Big Island	NW ¹ /4	7	34	14 W	35.00
Montanis	26, 27, 34) 35)	35	11 W	No. 1	NENE	34	35	11 W	.30
Pickerel	3, 4	36	10 W	No. 1	NWSW	3	36	10 W	.40
Red Cedar	2, 3, 10, 11)	36	10 W	No. 1	NWNE	27	36	10 W	.05
	14, 15, 22)			No. 4	NWSE	22	36	10 W	.10
	23, 27)			No. 5	NWSE	22	36	10 W	.05
	34	37	10 W	No. 6	NENE	15	36	10 W	.15
	5.	51	10 11	No. 7	NENE	15	36	10 W	.02
				No. 8	NWNE	10	36	10 W	.35
Spider	1, 2	36	13 W	No. 1	SWSW	1	36	10 W	.50
Spring	24, 25	36	13 W 14 W	No. 1	SESW	24	36	13 W 14 W	.10
Spring	27,20	50	1 7 77	110.1	SES II	47	50	1 1 11	.10

Public Lands Handbook

Bayfield County

Lake	Lo		Island		Locat	tion		Acres	
	Section	<u>Town</u>	<u>Range</u>		<u>Quarter</u>	<u>Sectio</u>	<u>Town</u>	<u>Range</u>	
Birch (Bass)	3, 4, 9	44	9 W	Elm	SESE	<u>n</u> 4	44	9 W	3.00
				Stub	NESE	4	44	9 W	1.20
Buffalo	26, 35, 36	43	5 W	Bog	NWSE	35	43	5 W	.02
				Emerald	SWNE	35	43	5 W	1.20
				Twin Rock	SWNE	35	43	5 W	.15
Cable	7)	43	7W)	Cherry	NESE	12	43	8 W	.75
	1, 12, 13)	43	8 W)	Lilly	SESW	1	43	8 W	1.00
				Shadow	SESE	12	43	8 W	.50
				Tamarack	NWNE	12	43	8 W	.20
Chippewa (North Two)	15, 16	43	5 W	Pine	NWSW	15	43	5 W	.40
	21, 22			Tag Alder	NESE	16	43	5 W	.50
Crystal	5	43	6 W)	Loon's Nest	NESW	32	44	6 W	.04
	32	44	6 W)						
Dells (North Four)	21, 22 27, 28	43	5 W	Moline	SWNW) NWSW)	27	43	5 W	1.50
Ghost (or Bass)	20, 21, 29	43	5 W	Huff	SESW	20	43	5 W	.60
Half Moon (Mill Pond)	8,17	47	8 W	Star	NENW	17	47	8 W	.15
Lake Millicent	29, 22, 27, 28	47	8 W	Francis	SENE	28	47	8 W	.10
Namekagon	34, 35	44	6 W)	Chief	SWNW)	3	43	6 W	2.15
	2, 3, 4)	43	6 W)	Namekagon	SENW)				
	9-16)			Della	NENE	13	43	6 W	.80
	Inc.,)								
	21, 24)								
	7, 18)	43	5 W						
Owen or Long	11-15,)	44	7 W	Long	N ¹ / ₂ SW	22	44	7 W	4.10
	Inc., 22,)				SWSW)				
	23, 27			Red Cliff	NENE)	22	44	7 W	.70
	28, 32, 33				NWNE)				
	4, 5	43	7 W)						
Price (Swenson)	8	43	7 W	Pine	SWNE	8	43	7 W	.90
Siskiwit	20, 21	50	6 W	Long	NESE)	20)	50	6 W	1.80
					NWSW)	21)	50	6 W	
				Round	(NESE)	20	50	6 W	2.00
				Siskiwit	NWSE	20	50	6 W	.03
Star	9, 10	45	7 W	Balsam	SESE	10	45	7 W	.60
	11, 15			Crooked	SESE)	10)	45	7 W	4.80
					W ¹ / ₂ SW	11)	45	7 W	
				East	SWSW)	10	45	7 W	3.80
					SESW)				
				Middle	SWSW	10	45	7 W	.60
				West	SWSW	10	45	7 W	2.70
Totagatic	29-32 inc. 43	43	8 W	Lone Pine	NENE	31	43	8 W	1.80
·· · ·· ·	inc.		0.77-		a	•		0.77-	
Upper Eau Claire	2, 3, 9, 10, 44	44	9 W	Three-In-One	S½SW)	2)	44	9 W	11.00
	11, 15, 16				N ¹ / ₂ NW	11)	44	9 W	

Burnett County

Lake	Loc	ation		<u>Island</u>		Locatio	<u>on</u>		Acres
	Section	<u>Town</u>	Range		Quarter	Section	Town	Range	
Bashaw	7, 17, 18, 19	38	14 W	No. 1	N ¹ / ₂ NE	19	38	14 W	.70
Birch Island	7, 8, 17, 18,19)	40	14 W	Burnt	W ¹ / ₂ SW	18	40	14 W	12.0 0
Clam	13, 24 2, 3, 9, 10)	40 38	15 W 16 W	No. 1	NWNE	14	38	16 W	18.0
Clain		50	10 ₩	110. 1		14	50	10 W	18.0
	11, 12, 14, 15) 34, 35	39	16 W		E ¹ /2NW				
Connors	25, 35, 36	40	16 W	No. 1	SWNW	36	40	16 W	.60
Elbow	6	37	16 W	No. 1	SESE	31	38	16 W	1.30
	31, 32	38	16 W						
Goose	2, 3, 11	40	14 W	No. 1	SWSW	2)	40	14 W	.40
					NWNW	11)	40	14 W	
				No. 2	SWSW	2	40	14 W	.30
a	26.25	10	1 - 117	No. 3	SWSW	2	40	14 W	.30
Green	26, 27	40	15 W	No. 1	E ¹ /2	34)	40	15 W	1.60
	34, 35			NT 0	W ¹ / ₂	35)	40	15 W	1 70
				No. 2	SWNW	35	40	15 W	1.70
				No. 3	NWNW	35	40	15 W	1.30
\mathbf{L}_{1}	14 22 24	40	16 W	No. 6	NWNW	35	40	15 W	.12
Johnson (Pickerel)	14, 23, 24	40	16 W	No. 1	SWSE NWNE	14)	40	16 W 16 W	.50
				No. 2	SWSE	23) 14	40	16 W	25
				No. 2 No. 3	SWSE	14 14	40 40	16 W	.25 1.60
				No. 3 No. 4	NWNE	23	40 40	16 W	.08
				No. 4 No. 5	SWNE	23 35	40 40	16 W	.08 .40
Little McGraw	13, 24	42	15 W	No. 1	SWINE	13	40 42	10 W 15 W	.40
Long	16, 17, 20	38	15 W 16 W	No. 1	SWSE	21	38	15 W 16 W	.70
Long	21, 28	38	16 W	No. 2	NWSW	21	38	16 W	.30
Lost	23, 25, 26, 35	41	10 W 14 W	No. 1	NWNE	26)	41	10 W 14 W	.35
2030	25, 25, 26, 55	71	17 11	100.1	NENW	26)	41	14 W	.55
Lower Loon	16	40	15 W	No. 1	SENE	26	40	16 W	.10
Middle McKenzie	(18, 19	40	13 W)	No. 1	NENE	24	40	14 W	.20
	(13, 24	40	14 W)	1.01.1	1,21,2				
Mud	26, 27	40	16 W	No. 1	NWSW	26	40	16 W	.50
	-)			No. 2	S½NW	26)	40	16 W	6.00
					N ¹ / ₂ SW	26)	40	16 W	
				No. 3	NWSW	26	40	16 W	.10
Myre (Mid Loon)	16, 17	40	15 W	No. 1	S½SE	17	40	15 W	.60
Nicaboyne	(2, 3	40	14 W)	No. 1	SENE	3	40	14 W	.25
	(35, 36	41	14 W)						
Oak	19, 20	40	14 W	No. 1	E ¹ / ₂ SW	20)	40	14 W	16.5 0
					SWSE	20)	40	14 W	U
				No. 2	E ¹ / ₂ SW	20)	40	14 W	.40
Point (Buckhorn)	28, 29	40	15 W	No. 4	NWSE	29	40	15 W	.55
(2 <i>u</i> -mioin)		. •		No. 5	NESE	29	40	15 W	.40
Shoal	11, 14	40	15 W	No. 1	SESW	11)	40	15 W	.30
	,	-			NENW	14)	40	15W	
Tomoe	30, 31	40	15 W	No. 1	NWNE	31	40	15 W	.70
Trade	16, 20, 21	37	18 W	No. 1	N ¹ / ₂ NE	29	37	18 W	.30
	28, 29			No. 2	N ¹ / ₂ NE	29	37	18 W	1.30
Webb	8, 9, 16	41	14 W	No. 1	E ¹ / ₂ SE	17	41	14 W	.45
4-30-86			L-	3			HB	24605.L	

	17, 20, 21								
Wood (Big Wood)	26, 27, 28	38	18 W	No. 1	SWSW	27	38	18 W	.20
	33, 34			No. 2	NENW	34	38	18	1.40
								V	
				No. 3	N½NW	34	38	18 W	2.00
				No. 4	SWNE	34	38	18 W	.90
				No. 5	SWNE	34	38	18 W	.50
				No. 6	NESW	34	38	18 W	.40

Douglas County

Lake		Location		Island		Locatio	<u>n</u>		Acres
	Section	<u>Town</u>	Range		Quarter	Section	<u>Town</u>	Range	
Amnicon	12, 13	46	14 W	Dollar	NWNW	13	46	14 W	.05
				Little (3 Pine)	SESW	12	46	14 W	.60
				Tomahawk	SESW	12	46	14 W	23.50
					NWNE	13	46	14 W	
					NENW	13	46	14 W	
Murray	13, 24	45	10 W	No. 1	NENW	24	45	10 W	.40
Muskrat	28, 33	45	11 W	No. 1	NWNW	33	45	11 W	.15
St. Louis River	8	48	15 W	Nekak	Govt. Lot 2	8	48	15 W	20.20
				Amik	Govt. Lot 3	8	48	15 W	8.74
Steel	28, 32, 33	47	11 W	No. 1	NWNW	33	47	11 W	1.50
				No. 2	NWNW	33	47	11 W	.60

Florence County

Lake		Location		<u>Island</u>		Locati	ion		Acres
	Section	<u>Town</u>	Range		Quarter	Section	<u>Town</u>	Range	
Ellwood	8, 16, 17	39	19 E	No. 1 (Norway)	SWSE) SESE)	8	39	19 E	.50
				No. 2	NWŃÉ	17	39	19 E	.75
Price	17, 18	39	17 E	No. 1	NESW	17	39	17 E	.10
Sealion	1, 2, 11, 12	39	17 E	No. 1	NENE	11	39	17 E	.70
				No. 2	NENE	11	39	17 E	.15
				No. 3	NENE	11	39	17 E	.15
				No. 4	NWNW	12	39	17 E	.10
				No. 5	NENE	11)	39	17 E	.10
					NWNW	12)			
				No. 6	SENW	12	39	17 E	.05
Shadow (Boot)	7,18	40	17 E	No. 1	SWSE	7	40	17 E	.50
Spread Eagle	3, 4, 5	39	19 E						
Chain	28, 29, 32) 33, 34)	40	19 E						
Bass				Bass	NWNW	4	39	19 E	.60
East				Paradise	SWSW	34	40	19 E	.80

Lake	Lo	cation		Island		Locat	ion		Acres
	Section	<u>Town</u>	<u>Range</u>		<u>Quarter</u>	Section	<u>Town</u>	<u>Range</u>	
Arbutus (Little Sand)	27, 28	34	13 E	No. 1	NWSW	27	34	13 E	.25
Butternut	21, 22, 27)	40	12 E	No. 1	NWNW	34	40	12 E	1.00
	28, 29, 33)			No. 2	NWSE	28	40	12 E	1.75
	34)								
	3	39	12 E						
Crane	18, 20, 21)	34	13 E	No. 1	SESW	20	34	13 E	.15
	29)								
Franklin	15, 16, 20)	40	12 E	Franklin	SESE	20	40	12 E	1.75
	21)	• •					• •		
Julia	5, 6, 7	38	12 E	No. 1	NWSE	6	38	12 E	1.10
Ŧ	1, 12	38	11 E	NT 1		~-	•	145	o -
Long	24, 25	39 20	14 E	No. 1	SENE	25	39	14 E	.05
т	19, 30	39	15 E	D	N 111 / N 111 /	22	25	10 5	0.5
Lucerne	3, 10, 11, 14)	35	13 E	Bay	NWNW	23	35	13 E	.05
	15, 22, 23)	26	12 5	Birch	NENE	22	35	13 E	.40
	34	36	13 E	East	NENE	22	35	13 E	.20
				Marsh	NWNE	22 22	35 35	13 E	.10
				Pine Rocky	N½NE NENE	22	35 35	13 E 13 E	.90 .15
				Slim	NENE	22	35 35	13 E 13 E	.13
				Stony	NWSW	14	35 35	13 E 13 E	.20
Pickerel	30, 31, 32)			Rocky (No. 3)	SENE	32	33 34	13 E 13 E	.03
See Langlande County				Rocky (110. 5)	SLIL	52	54	15 L	.15
for islands in this lake	diso								
Pine	10, 15, 16)	37	12 E	No. 1	SESE	21	37	12 E	.10
1 me	21, 22, 23)	57	12 12	110.1	SESE	21	51	12 12	.10
	27, 28)								
Wabikon (Rat)	5,6	35	14 E	Wild Rice	W½SW	32	36	14 E	14.00
()	29, 30, 31)	36	14 E						
	32)								
	/								

Forest County

Iron County

Lake		Location		Island		Locat	ion		Acres
	Section	<u>Town</u>	<u>Range</u>		<u>Quarter</u>	Section	<u>Town</u>	<u>Range</u>	
Bearskull	25, 26	41	3 E	Wild Rose	S ¹ / ₂ NW	25	41	3 E	.20
Cedar	13, 14	43	4 E	*No. 2	E½NE	14	43	4 E	2.40
				*No. 3	NENE	14	43	4 E	.04
Charnley	20	41	3 E	Pine (No. 1)	NENW	20	41	3 E	.10
-				No. 2 (Alder)	SENW	20	41	3 E	.006
Crystal (Bass)	27, 33, 34	43	3 E	Seven Pine	NENW	34	43	3 E	.10
Echo	24, 25	43	3 E	North	SWSE	24	43	3 E	.20
				South	SWNE	25	43	3 E	.15
Ess	16, 17	41	3 E	John	NESE	17	41	3 E	.03
Ferry	23	41	3 E	East Twin	NWSE	23	41	3 E	.10
				West Twin	NWSE	23	41	3 E	.10
Island	(24, 25, 36	44	1 E	Grass	NESW	25	44	1 E	.05
	(19, 30	44	2E	Three Balsam	SWNW	19	44	2E	.20
Little Pike	(2, 3	42	3 E	East	SESW	35	43	3 E	.20
	(35	43	3 E	West	SWSW	35	43	3 E	.05
Long	18, 19, 20	44	4 E	No. 1	(NWNW	29	44	4 E	1.30
	29, 30, 31	44	4 E		(NENE	30			
	32			No. 2	E ¹ / ₂ NE	30	44	4 E	.50
				No. 5	(SWNE (SENW	32	44	4 E	1.00
Martha	29, 30, 31	43	4 E	No. 1	SWNW	29	43	4 E	.30
	32			No. 2	NESE	30	43	4 E	1.30
McDermott	30	41	3 E	Lois	SENE	30	41	3 E	.10
Moose	2, 3, 10	43	2 E	Six Pine	SWSW	2	43	2 E	.40
North Bass	14, 23	43	4 E	*No. 1	NENW	23	43	4 E	.10
O'Brien	8,17	44	1 E	Cedar	SESW	8	44	1 E	.40
Owl	15, 22	44	4 E	Pine	(SWSE	15	44	4 E	1.30
					(NWNE	22	44	4 E	
				No. 2	SWSE	15	44	4 E	.04
Pine	20, 28, 29	44	3 E	Beaver	SE¼	29	44	3 E	.80
	32, 33			Cedar	SWNE	29	44	3 E	.70
Pleasant	27, 34	44	1 E	Evergreen	(SESW (SWSE	27	44	1 E	2.00
Rice	23, 24, 25, 26	43	3 E	Rice	NENE	26	43	3 E	.10
Sand	24	42	2 E	Jennie	SENE	24	42	2 E	3.00
	19	42	3 E	Katie	SWNW	19	42	3 E	.50
Spider	7, 8, 17,	43	4 E	North (No. 2)	N ¹ / ₂ SW	8	43	4 E	.07
1	18			South (No. 1)	SWNW	17	43	4 E	.15
Stone	16, 21	41	3 E	Alder	NWNE	21	43 41	4 E 3 E	.13
Virgin	21, 22	41 44	3 E 4 E	No. 1	SWNW	21 22	41 44	3 E 4 E	.20
Wilson	15, 16	44 42	4 E 3 E	No. 1	SENE	16	44 42	4 E 3 E	.03
vv 115011	21, 22	4 2	5 E	No. 2	SENE	16	42 42	3 E 3 E	.10
	21, 22			110. 2	SESE	10	72	эĽ	.10

* Within NHSF.

Langlade County

Lake		Location		Island		Locat	tion		Acres
	Section	Town	Range		Quarter	Section	Town	Range	
Camp	7	34	10 E	Tamarack	NWNE	7	34	10 E	.03
Enterprise	3, 4, 9, 10	34	10 E	No. 1	SESW	4	34	10 E	.35
Lower Post	10, 11, 14	34	11 E	E. Wilber	NWSW	23	34	11 E	.10
	15, 22, 23			Middle Wilber	NWSW	23	34	11 E	.05
				W. Wilber	NWSW)	23)	34	11 E	.50
					NESE)	22)			
Moccasin (Bass)	8	34	10 E	No. 1	SWNÉ	8	34	10 E	.15
Otter	12	34	10 E	North (One Pine)	SESW	12	34	10 E	.04
Pickerel*	24, 25	34	12 E	Mericle or Indian	NESE)	25	34	12 E	1.70
	28, 29, 30 31, 32	34	13 E		SESE)				

* See Forest County also for Islands in this lake.

Lincoln County

Lake		Location		<u>Island</u>		Loca	<u>tion</u>		Acres
	Section	Town	Range		<u>Quarter</u>	Section	<u>Town</u>	<u>Range</u>	
Seven Island	14, 15, 22) 23)	34	8 E	Long (No. 1)	SWSE NWNE	15) 22)	34	8 E	2.60
	,			Round (No. 2)	NWNE	22	34	8 E	1.10
				Birch (No. 3)	SESE	15)	34	8 E	.75
					NENE	22)			
				Lone Pine (No. 4)	SESE	15	34	8 E	.15
				Twin Pine (No. 5)	SESE	15	34	8 E	.05

Marinette County

Lake		Location		Island		Loca	ation		Acres
	Section	Town	Range		Quarter	Section	<u>Town</u>	Range	
Coleman Hilbert	8, 9, 17 1 5, 6, 7, 8	36 37 37	18 E 16 E 17 E	No. 1 No. 1 No. 2	NESW SENE SWNE) SENE)	8 7 7	36 37 37	18 E 17 E 17 E	.55 .60 .50
Island Oneonta	12, 13 7, 18 6	34 34 37	20 E 21 E 17 E	No. 3 No. 1 Spruce	SWNÉ SWSE NWNE NENW	7 12) 13) 6	37 34 37	17 E 20 E 17 E	.60 1.20 .25

Oneida County

Lake	L	ocation		Island		Locat	ion		<u>Acres</u>
	Section	<u>Town</u>	<u>Range</u>		<u>Quarter</u>	Section	<u>Town</u>	Range	
Alva	10, 11	37	7 E	White Birch	NESW	10	37	7 E	.20
Bear	19 24, 25	38 38	6 E 5 E	Cub (No. 1)	SENE	24	38	5 E	.40
Brown	15, 16	38	8 E	Low	NESE	16	38	8 E	.02
				Pine	NESE	16	38	8 E	.55
Buckskin	1, 2, 11,1 2	39	4 E	South No. 1	NESE NESE	16 2	38 39	8E 4 E	.65 .40
DUCKSKIII	1, 2, 11,1 2 35, 36	39 40	4 E 4 E	No. 2	NWSW	1	39 39	4 E 4 E	.40 2.00
	55, 50	10	ΤL	No. 3	NESW	1	39	4 E	1.20
				No. 4	SESW	1	39	4 E	.60
				No. 5	E ¹ / ₂ NW	12	39	4 E	8.00
Buffalo	11, 12, 13, 14	39	7 E	Spruce (Jacobs)	NESE	11	39	7 E	.20
Burnham	30, 31	38	7 E	Dumbell	NENW	31	38	7 E	1.50
Burrows	3, 4	36	5 E	McDonald	NWSW	3	36	5 E	.50
Carrol	(4, 5, 8	39	7 E	Balsam	(SESE	5	39	7 E	.80
	(33, 34	40	7 E	Oala	(NENE	8	39 20	7 E 7 E	1.00
				Oak	(SWSW (SESE	4 5	39 39	7 E 7 E	1.00
				Turtle	NWSE	4	39	7 E 7 E	3.00
				West	(SESE	5	39	7 E	1.85
					(NENE	8	39	7 E	1100
Coon	18, 19	37	8 E	Coon	NENE	19	37	8 E	.15
Crescent	7, 8, 17, 18 20, 21	36	8 E	Campfire	N½NW	17	36	8 E	.35
Crooked	26, 27 34, 35	38	11 E	Seven Pine	NESE	27	38	11 E	.40
Currie	13, 14	37	6 E	Spruce (No. 1)	(SENE (NESE	14	37	6 E	.25
				Pine (No. 2)	NESE	14	37	6 E	.50
Emma	21, 28	36	8 E	Pine	SESW	21	36	8 E	.80
Fifth	(4, 5	36	10 E	Pelican	(NENW	4	36	10 E	5.20
Flownow	(33)	37 37	10 E 8 E	Dauch	(SESW	33 33	37 37	10 E 8 E	.03
Flannery	28, 33	57	οĽ	Brush Lone Pine	NWNE SWSE	28	37	8 E	.03
				Shack	N ¹ / ₂ SE	28	37	8 E	.30
Four Mile	22, 23	39	11 E	No. 1	SENW	23	39	11 E	.40
Franklin	15, 16	39	5 E	Bear	SWNE	16	39	5 E	2.60
				Spruce	NWNE	16	39	5 E	.20
George	11, 13, 14	36	9 E	Long	W½SW	14	36	9 E	1.50
	15			Spring	SWSW	14	36	9 E	.10
Gilmore	13, 24	39	7 E	Knob	SENW	24	39	7 E	.45
Ginty	(24	37	10 E	East	NWSW	19	37	11 E	.02
Hancock	(19, 30 8, 9, 17	37	11 E 7 E	Long Loomis	NWSW NESE	19 8	37	11 E 7 E	.20
Hasbrook	8, 9, 17 25, 26, 27	36 39	7 E 7 E	Crescent (West)	SESE	8 27	36 39	7 E 7 E	4.85 .20
110301008	34, 35	57	11		BEBE	21	57	/ L	.20
Hook	29, 32	37	8 E	Hook	NWNE	32	37	8 E	.30
	- , -		- 1	Pine	SWSE	29	37	8 E	.40
Horsehead	10, 11, 14, 15	38	7 E	Burnt	NENW	14	38	7 E	1.30
	22, 23			Tamarack	NWNW	14	38	7 E	.10
Indian	(1	38	9 E	Balsam	SWNE	1	38	9 E	.50
	(6	38	10 E	Point	SENE	1	38	9 E	1.10
8-18-78			L-8	3			HB2460)5.L	

	(36	39	9 E	Squash	(W½NE	1	38	9 E	3.20
Island	(31 28, 29	39 39	10 E 11 E	Olson	(SENW SWSW	28	39	11 E	.25
	32, 33								
Julia	(12, 13	36	8 E	Pine	NESE	12	36	8 E	.65
	(7, 18	36	9 E	Tamarack	SESE	12	36	8 E	.08
Katherine	2, 3, 10, 11	38	6 E	6 Pine	NENW	11	38	6 E	.10
Kawaguesaga	14, 15 9, 10, 15, 16 21, 22	39	6 E	Norway	E ¹ / ₂ SE	16	39	6 E	.45
(Kewasokogan) Little Bearskin	21, 22 11, 12	37	6 E	No. 1	(SENE	11	37	6 E	1.35
				No. 2	(NESE NESE	11	37	6 E	.70
				No. 3	NWSE	11	37	6 E	.85
Long	9, 10, 15, 16	38	8 E		(W ¹ / ₂ SW	10	38	8 E	.35
Long	9, 10, 15, 10	30	δE	Big Rock					.55
					(E½SE	9	38	8 E	
				Little Rock	(SWSW	10	38	8 E	.25
					(SESE	9	38	8 E	
				Dead Pine	NWSE	9	38	8 E	.15
				Spruce	NENE	16	38	8 E	.50
T	14 15	25	11 E						
Lucille	14, 15	35	11 E	Hill Billy	NWSW	14	35	11 E	1.70
Lumen	33	38	7 E	Lone	(SWNE	33	38	7 E	.25
					(NWSE				
Madeline	(5, 8	39	6 E	Farm	NESW	5	39	6 E	2.70
	(32	40	6 E						
Mason	32, 33	36	σ Ε 7 Ε	Loon's Nest	SWSW	33	36	7 E	.30
Iviason	52, 55	50	/ L						
	A (~ -		Manson	SENE	32	36	7 E	.35
Margaret	3, 4	37	11 E	Bear	(NWSW	3	37	11 E	.65
					(NESE	4	37	11 E	
Maud	13, 23, 24	37	7 E	Muskrat	NWNW	24	37	7 E	.65
				Squirrel	(SESW	13	37	7 E	.50
				Squirier	· ·	24	37	7 E 7 E	.50
	10.14	20	4 F		(NENW				
Mercer	13, 14	39	5 E	No. 1 (Pine)	SWNW	13	39	5 E	1.75
				No. 2 (Poplar)	(SENW	13	39	5 E	1.70
					(NESW				
Mildred	(24	37	7 E	Bearpaw (West)	SWSW	20	37	8 E	.40
	(19, 20, 29	37	8 E	Crane (North)	S½SW	20	37	8 E	.40
	(1), 20, 2)	57	θL			20	37	8 E	2.40
				Doughnut (Big)	(SWSW (NWNW	20	57	δE	2.40
				Mildred (Pine)	SESW	20	37	8 E	1.00
Minocqua	(11, 12, 13, 14	39	6 E	Crescent	SWNE	13	39	6 E	.25
1011110 0 1 444	(18)	39	7 E	*G. L. 7	E ¹ /2NW	13	39	6 E	5.80
Nontuno	(24	36	10 E	Alder	SENW	19	36	11 E	.20
Neptune (Ogemaga)	(24	30	10 E	Aldel	SEINW	19	30	11 E	.20
	(19	36	11 E		NESW				
Oscar Jenny	(12	36	6 E	South	W½SW	7	36	7 E	1.00
o bear o ennig	(7	36	7 E	Spruce	NWSW	, 7	36	7 E	.60
	(/	50	/ L						
0 11	4 5 0 0	26		Tamarack	NWSW	7	36	7 E	.05
Oneida	4, 5, 8, 9	36	7 E	Fournier's	(SWSW	4	36	7 E	1.85
					(SESE	5			
					(NENE	8			
				Three Stumps	SWSW	4	36	7 E	.07
Perch	6, 7	39	11 E	Muskeg	NENE	7	39	11 E	.07
				e					
Pier	31, 32	39	8 E	Hidden	S½NE	31	39	8 E	.05
Pine	(36	39	4 E	No. 1 (Faun)	NESE	36	39	4 E	1.30
	(31	39	5 E						
Seed	(31, 32	38	7 E	Seed	SWSW	32	38	7 E	.07
	(51, 52	37	7 E				20		
Seventeen	8, 17, 18	38	6 E	Muskeg	SWNE	17	38	6 E	.02
	-, -,			-					
8-18-78			L-9)			HB246	505.L	

				No. 1	NESW	17	38	6 E	.15
				No. 2	NESW	17	38	6 E	.35
Shisebogama	(1, 2, 3, 10, 11)	39	5 E	No. 1 (Scotty)	(SWSW	2	39	5 E	6.40
	(35, 36	40	5 E		(SESE	3	39	5 E	
South Two	(15, 16	38	7 E	No. 2 (South)	SESW	16	38	7 E	.25
Squash	(21, 22 (13, 24	36	7 E	Marshall	SESE	13	36	7 E	1.10
-	(18, 19	36	8 E	Scrub Oak	SENW	24	36	7 E	.15
Squaw	(4, 8, 9	39	4 E	No. 1 (Boulder)	NWSW	9	39	4 E	.50
- 1	(16, 17			No. 2 (South)	NWNW	16	39	4 E	.30
	(33	40	4 E						
Squirrel	(5, 8, 9, 16	39	5 E	Ivy	SENW	8	39	5 E	.10
-	(17, 18, 19, 20			Lone Rock	NENW	8	39	5 E	.003
	(30			North	NESW	5	39	5 E	.75
	(32	40	5 E						
Stella	1, 2, 11, 12	37	10 E	Stella	E½SW	1	37	10 E	.20
Sunday	3, 10	39	5 E	No. 1	NWNW	10	39	5 E	.40
5	-) -		-	No. 2	NWNW	10	39	5 E	.10
				No. 3	NENW	10	39	5 E	.05
				No. 4	SWSW	3	39	5 E	.20
Swamsauger	10, 11, 14, 15	38	4 E	Bulrush	E ¹ /2NW	14	38	4 E	.25
Swamsauger	10, 11, 14, 15	50	ΤL	Three Pine	NENW	14	38	4 E	.55
Sweeney	14, 15, 22, 23	39	7 E	Cabin (White	SESE	15	39	7 E	2.30
Sweeney	17, 15, 22, 25	39	/ L	Birch)	SESE	15	59	/ L	2.30
Thompson	1, 2, 3	36	9 E	Camp	NESW	2	36	9 E	1.00
1				Squirrel	NWSW	2	36	9 E	.40
				Swamp	NESE	3	36	9 E	.50
Thunder	2, 3, 9, 10	38	10 E	Kuney's (No. 5)	NWNE	15	38	10 E	1.75
	11, 12, 14, 15			No. 1 (Squash)	SENW	15	38	10 E	.35
	16			No. 2 (Beaver)	NWSW	15	38	10 E	.35
	10			No. 3 (Rock)	SWSW	14	38	10 E	.25
				Brush	SWSW	14	38	10 E	.10
Tomahawk	(24, 25, 36	39	6 E	Balsam	SENW	5	38	7 E	.06
Tomanawk	(21, 25, 50) (1	38	6 E	Crescent	SWNE	5	38	7 E	.25
	(29, 30, 31	39	0 E 7 E	Dead Pine	NWNW	5	38	7 E	.02
	(32, 33, 34	57	/ L	High	NENW	5	38	7 E 7 E	2.50
	(3, 4, 5,	38	7 E	Hughston	E ¹ /2NW	5	38	7 E 7 E	.80
	(6, 8, 9	58	/ L	IIugiistoii	E721N W	5	58	/ L	.80
Tom Doyle	21, 22, 28	38	8 E	Otter	SWSE	21	38	8 E	2.10
Town Line	(2	36	8 E	Swamp	SESW	35	37	8 E	.05
	(35	37	8 E	2 (will p	22211	00	01	0 2	100
Two Sisters	16, 17, 18	38	8 E	Ellis	NWNE	19	38	8 E	4.75
1 10 515015	19, 20	50		Ling	1111111	17	50		1.75
Virgin	10, 11, 14, 15	38	11 E	Pine	NWNW	14	38	11 E	2.50
Wind Pudding	20, 21, 28, 29	38	7 E	Punk	SESE	20	38	7 E	.50
C				Stump	SWSE	20	38	7 E	2.00
				-					

* Non-Grant Island. Listed for Periodic Inspection purposes.

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Lake	Ī	<u>Location</u>	<u>Pc</u>	olk County Island		Locat	ion		Acres
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Section	<u>Town</u>	Range		<u>Quarter</u>		<u>Town</u>	<u>Range</u>	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Alahama	8 17	36	18 W	No 1	SWSW	<u>n</u> 8	36	18 W	70
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 Huouinu	0,17	20	10 11		(W½NE				16.80
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					No. 3	(SENW	17	36	18 W	2.00
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					No. 4	NESW	17	36	18 W	1.00
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Balsam	5, 6	34	16 W	No. 9	SESE	3	34	17 W	.10
(26, 27, 34 (35, 36 35 17 W No. 12 No. 13 SENW 6 34 16 W .08 (NSW Bass Lake 30, 31 36 36 16 W No. 1 SENE 36 36 16 W .40 (NWSE Bom 4, 5 37 17 W Banana Skinw 4 37 17 W 3.00 (NWSW Bome (5, 6, 7, 8 35 16 W No. 1 (SWNW 8 35 16 W 3.00 (NWSW Diamond 3, 4 37 17 W No. 2 SWNW 3 37 17 W .20 No. 5 Diamond 3, 4 37 17 W No. 2 SWNW 3 37 17 W .20 No. 5 No. 4 NWSW 3 37 17 W .20 No. 6 SENW 3 37 17 W .20 No. 5 More Server 3 37 17 W .20 No. 6 SENW 37 17 W .20 No. 7 EV/NW 37 17 W .20 No. 6 .20 N		31	35	16 W	No. 10	NWSW	6	34	16 W	.15
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		1, 2, 3, 4, 10	34	17 W	No. 11	SWNW	6	34	16 W	.75
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		(26, 27, 34	35	17 W	No. 12	SENW	6	34	16 W	.08
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(35, 36			No. 13	· · · · · · · · · · · · · · · · · · ·	6	34	16 W	1.60
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Bass Lake		36	16 W	No. 1	SENE	36	36	16 W	.40
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Blom	4, 5	37	17 W	Banana	S½NW	4	37	17 W	3.60
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Bone	(5, 6, 7, 8)	35	16 W	No. 1	(SWNW	8	35	16 W	3.00
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		(17, 18, 20				(NWSW				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		32, 32	36	16 W						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Diamond	3, 4	37	17 W	No. 2	SWNW	3	37	17 W	.60
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					No. 3	SWNW	3	37	17 W	.25
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					No. 4	NWSW	3	37	17 W	.20
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					No. 5	SWNW	3	37	17 W	.20
Horseshoe 6, 7, 8 34 14 W No. 1 W½NE 1 34 15 W .10 1, 12, 13, 14 34 15 W No. 2 SWNE 1 34 15 W .80 No. 3 SWNE 1 34 15 W .00 No. 3 SWNE 1 34 15 W .80 No. 4 SWNE 1 34 15 W .50 No. 4 SWNE 1 34 15 W .50 No. 5 S½NE 1 34 15 W .20 No. 6 E½SE 1 34 15 W .20 No. 6 E½SE 1 34 15 W .20 No. 7 SESE 1 34 15 W .20 No. 7 SESE 1 34 15 W .20 No. 7 SESE 1 34 15 W .25 Islands in this lake Emerald NENE 12 34 15 W .50 Long 5, 6, 7, 8 34 17 W No. 1 SENW 8 34 17 W					No. 6	SENW	3	37	17 W	1.00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					No. 7	E½NW	3	37	17 W	.80
No. 3 SWNE 1 34 15 W .50 No. 4 SWNE 1 34 15 W .60 No. 5 S½NE 1 34 15 W 2.20 No. 6 E½SE 1 34 15 W 2.20 No. 6 E½SE 1 34 15 W 2.20 No. 7 SESE 1 34 15 W 2.5 Islands in this lake Emerald NENE 12 34 15 W .50 Long 5, 6, 7, 8 34 17 W No. 1 SENW 8 34 17 W .50 Lykens (Howie) 15, 22 34 17 W No. 1 NENE 22 35 15 W .40 Pipe 10, 15, 22 35 <td>Horseshoe</td> <td>6, 7, 8</td> <td>34</td> <td>14 W</td> <td>No. 1</td> <td>W½NE</td> <td>1</td> <td>34</td> <td>15 W</td> <td>.10</td>	Horseshoe	6, 7, 8	34	14 W	No. 1	W½NE	1	34	15 W	.10
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1, 12, 13, 14	34	15 W	No. 2	SWNE	1	34	15 W	.80
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					No. 3	SWNE	1	34	15 W	.50
No. 6 E½SE 1 34 15 W 1.20 No. 7 SESE 1 34 15 W .25 See Barron County also for Bunker's SWNW 13 34 15 W .25 Islands in this lake Emerald NENE 12 34 15 W .25 Long 5, 6, 7, 8 34 17 W No. 1 SENW 8 34 17 W .50 Lykens (Howie) 15, 22 34 17 W No. 1 NENE 22 34 17 W .40 Pipe 10, 15, 22 35 15 W Birch NENW 22 35 15 W .60 Juniper NWNE 22 35 15 W .40 Maple NWNE 22 35 15 W .20					No. 4	SWNE	1	34	15 W	.60
See Barron County also for Islands in this lake No. 7 SESE 1 34 15 W .25 Long 5, 6, 7, 8 34 17 W No. 1 SENW 13 34 15 W .25 Lykens (Howie) 15, 22 34 17 W No. 1 SENW 8 34 17 W 1.50 Pipe 10, 15, 22 35 15 W Nench NENE 22 34 17 W .40 Maple NWNE 22 35 15 W .40					No. 5	S½NE	1	34		2.20
See Barron County also for Islands in this lake Bunker's SWNW 13 34 15 W .25 Long 5, 6, 7, 8 34 17 W No. 1 SENW 8 34 15 W .50 Lykens (Howie) 15, 22 34 17 W No. 1 SENW 8 34 17 W 1.50 Pipe 10, 15, 22 35 15 W Birch NENE 22 35 15 W 1.60 Juniper NWNE 22 35 15 W .40 Maple NWNE 22 35 15 W .40					No. 6	E ¹ / ₂ SE	1	34		1.20
Islands in this lake Emerald NENE 12 34 15 W .50 Long 5, 6, 7, 8 34 17 W No. 1 SENW 8 34 17 W 1.50 Lykens (Howie) 15, 22 34 17 W No. 1 NENE 22 34 17 W .40 Pipe 10, 15, 22 35 15 W Birch NENW 22 35 15 W 1.60 Juniper NWNE 22 35 15 W .40 Maple NWNE 22 35 15 W .20					No. 7	SESE	1	34		.25
Long 5, 6, 7, 8 34 17 W No. 1 SENW 8 34 17 W 1.50 Lykens (Howie) 15, 22 34 17 W No. 1 NENE 22 34 17 W .40 Pipe 10, 15, 22 35 15 W Birch NENW 22 35 15 W 1.60 Juniper NWNE 22 35 15 W .40 Maple NWNE 22 35 15 W .40		also for				SWNW				.25
Lykens (Howie) 15, 22 34 17 W No. 1 NENE 22 34 17 W .40 Pipe 10, 15, 22 35 15 W Birch NENW 22 35 15 W 1.60 Juniper NWNE 22 35 15 W .40 Maple NWNE 22 35 15 W .40	Islands in this lake									.50
Pipe 10, 15, 22 35 15 W Birch NENW 22 35 15 W 1.60 Juniper NWNE 22 35 15 W .40 Maple NWNE 22 35 15 W .40			34		No. 1			34		1.50
Juniper NWNE 22 35 15 W .40 Maple NWNE 22 35 15 W .20										.40
Maple NWNE 22 35 15 W .20	Pipe	10, 15, 22	35	15 W						1.60
										.40
Pine NWNE 22 35 15 W .40										.20
										.40
(NESE 18						(NESE	18			.50
Wild Goose 13 34 17 W No. 1 NWNE 13 34 17 W 2.40	Wild Goose	13	34	17 W	No. 1	NWNE	13	34	17 W	2.40
							13	34	17 W	.50

Price County

Lake	Location			<u>Island</u>	<u>Island</u>			Location			
	Section	<u>Town</u>	<u>Range</u>		<u>Quarter</u>	Section	<u>Town</u>	Range			
Cochran	9, 10	40	3 E	Echo Camp Edgell Chicken Park Long	NESE SENE SENE SENE)	9 9 9 9	40 40 40 40	3 E 3 E 3 E 3 E 3 E	.25 1.10 .90 .50		
Dardis	34, 35	38	1 E	Dardis	NESE) NENE) NWNW)	34 35	38	1 E	.30		
Hultman Lake Ten	25, 36 3, 10	34 36	2 E 1 W	Picnic Marie	NWNE S½SW) N½NW	25 3 10	34 36	2 E 1 W	.70 .90		
Lake Sixteen	16	36	1 W	Tamarack North Middle	NWNW) SWNE) SWNE) SENW)	10 10 16 16	36 36 36	1 W 1 W 1 W	.002 1.20 2.00		
				South	SENW) NESW	16	36	1 W	3.20		
Long	30, 31, 32 6	39 38	2 W 2 W	Long Lake	W ¹ / ₂ SE	31	39	2 W	.05		
Miles Pike	2, 3 25, 26, 35, 36	40 40 39	3 E 3 E 3 E	No. 1 Pike South	NWSW NESE SESE	2 35 35	40 40 40	3 E 3 E 3 E	.15 .40 .07		
Sailor Stone	1, 2, 11, 12 20, 29, 30 25 30	39 39 34 34	3 E 2 E 2 E 3 E	Lone Pine No. 1	SESE SWNW SWNW	33 29 30	40 39 34	3 E 2 E 3 E	.07 .15 .10		
Worchester	23, 24	36	1 E	Cedar	SWNW	24	36	1 E	.30		

Rusk County

Lake	Loc	cation		<u>Island</u>		Acres			
	Section	Town	Range		Quarter	Section	Town	Range	
Bass	16, 21	34	9 W	No. 1 No. 2 No. 3 No. 4 No. 5 No. 6 No. 7	NESW NESW NESW SESW SESW SESW	16 16 16 16 16 16 16	34 34 34 34 34 34 34	9 W 9 W 9 W 9 W 9 W 9 W 9 W	.17 .89 .60 .06 .06 .17 .15
Island	20, 32, 28, 29	33	8 W	Unnamed*	NWNE	29	33	8 W	.50

* Non-grant island. List for periodic inspection.

Sawyer County

Lake	Loc	Location				Locat	tion		<u>Acres</u>
	Section	<u>Town</u>	<u>Range</u>		<u>Quarter</u>	Section	<u>Town</u>	<u>Range</u>	
Birch	19 24, 25	37 37	9 W 10 W	Penny	NWSW	19	37	9 W	.40
Black Dan (McDonald)	1	39	5 W	Emma	(NWNE (NENW	1	39	5 W	2.00
× ,	36	40	5 W	Grace Jeanette	NWNE NWNE	1 1	39 39	5 W 5 W	.80 .10
Connors	22, 27, 28	38	3 W	Pine	SWNW	27	38	3 W	2.40
Evergreen	1	38)	3 W	Herman	SWSE	36	39	3 W	.35
a.t.t.	36	39)	3 W	D' 1		2	10	0.111	
Grindstone	13, 23, 24) 25, 26)	40	9 W	Birch	NWNE	26	40	9 W	1.75
	17, 18, 19 20, 29, 30	40	8 W	Observation	N ¹ / ₂ NE	26	40	9 W	5.25
Little Sissabagama	17, 18, 19	38	9 W	No. 1	W ¹ / ₂ NW	20	38	9 W	.15
	20			NW No. 3	(NESE	19	38	9 W	.50
				CENT O	(NWSW	20	20	0.111	2 20
D ((2.4	12)	(W	SE No. 3	W ¹ / ₂ SW	20	38	9 W	3.20
Patsy	(3, 4)	42)	6 W	Hermit	NENE	4	42	6 W	1.10
D 1	(33, 34	43)	6 W	F 1	CUAIE	14	41	0 117	1 20
Round	(18, 19, 30 (13, 14, 22 (23, 24, 25 (26, 27, 25, 20)	41) 41)	7 W 8 W	Evelyn	SWNE	14	41	8 W	1.20
Sissabagama	(26, 27, 35, 36) (5, 6, 7, 8	38	9 W	Cowhorn	SWSE	6	38	9 W	.60
Sissabagama	(16, 17	50	<i>y</i> w	No. 1	NWNE	7	38	9 W	.00
	(10, 17			No. 2	SESW	6	38	9 W	.40
				Sunnyside	(SENW	8	38	9 W	1.80
				Sumyside	(NESW	0	50	<i>)</i> ((1.00
Spider	14, 22, 23, 26)	42	7 W	Brewer	SWSW	27	42	7 W	.05
	27, 28, 33, 34)			No. 2 (North)	SESW	14	42	7 W	.35
				No. 3	E ¹ / ₂ NW	23	42	7 W	.40
				No. 4	NWSE	23	42	7 W	.05
				No. 6	SENE	22	42	7 W	.10
				No. 7	NESE	22	42	7 W	.20
				No. 8	W ¹ / ₂ BE	22	42	7 W	.80
				No. 9 (Picnic)	NENE	27	42	7 W	1.20
				No. 10	NESE	27	42	7 W	.25
	22 27 28	10	7 11	No. 11	NWSE	27	42	7 W	.001
	22, 27, 28	42	7 W	Butternut	(SWNW (SENE	27) 28)	42	7 W	9.75
о ·	6 7	10)	0.117	Norway	NESE	28	42	7 W	.70
Spring	6, 7 1, 12	40) 40)	8 W 9 W	Grapevine	N ¹ / ₂ NE	12	40	9 W	.35
Squaw	31	41)	7 W	N. Part Papoose	SWSW	31	41	7 W	.50
	1	40)	8 W	1					
	6	40)	7 W						
Teal (Little Duck)	26, 27, 28	42	6 W	Cedar	SENW	34	42	6 W	1.00
	33, 34)			Knot	W½SW E½SE	27) 28)	42	6 W	18.80

				Loons Nest Paradise	W½NE SWNW NWSW SENE NESE	33 26) 26) 27) 27)	42 42	6 W 6 W	3.80 14.00
				Raspberry	SWSW N½NW	27) 34)	42	6 W	12.80
				Southwest	SENE	33	42N	6 W	.50
Windigo (Bass)	21, 22, 26 27, 28)	40 40	9 W 9 W	Crescent	(SESW (SWSE	22	40	9 W	1.20
				Heart (North) Pine (East) South	NWSE SE¼ NWNE	22 22 27	40 40 40	9 W 9 W 9 W	2.60 1.80 1.50

Vilas County

Lake	L	ocation		<u>Island</u>	Locati	<u>Acres</u>			
	Section	<u>Town</u>	<u>Range</u>		<u>Quarter</u>	Section	<u>Town</u>	<u>Range</u>	
Alequash	9, 15, 16, 17	41	7 E	Alder	SESW	9	41	7 E	.10
1				*Balsam	NENW	16	41	7 E	.12
				*Burnt	NENW	16	41	7 E	.10
				No. 6	NWSE	9	41	7 E	.15
				Three Pine	SESW	9	41	7 E	.30
Armour	2, 3, 10, 11	43	6 E	Bill's	SW1/4	11	43	6 E	9.30
Arrowhead	35, 36	40	6 E	Alder	(NESE	35	40	6 E	.45
			. –		(NWSW	36	40	6 E	
Aurora (Rice)	18, 19	41	8 E	Brush	(NWNE (NENW	19	41	8 E	.45
				East	SWNE	19	41	8 E	1.25
				North	SWNE	19	41	8 E	1.50
Ballard	3, 4, 5, 9, 10	41	8 E	East	(SWNW (NWSW	3	41	8 E	1.70
				Spruce	SWNW	3	41	8 E	.20
Big	13, 14, 23, 24	43	8 E	Beaver	SWSW	13	43	8 E	.35
Big Crooked	1, 12	42	6 E	No. 1	S½NW	7	42	7 E	.45
D' 14 1 11	6,7	42	7 E	No. 2	NWSW	7	42	7 E	1.00
Big Muskellunge	15, 16, 21, 22	41	7 E	Dome	NWNW	27	41	7 E	1.20
	23, 27, 28			Is. Of Bays	N ¹ / ₂ NE	28	41	7 E 7 E	6.35
				Minnow	NENE	28	41	7 E 7 E	.15
				* No. 4	(SWNE	22	41	7 E	25.00
Dig Dortago	7 9 17 19	42	10 E	(G.L. 7 & 8) Poulder Out Crop	(SENW (SWSW	0	42	10 E	.05
Big Portage	7, 8, 17, 18	42	10 E	Boulder-Out-Crop	(SWSW (NWNW	8 17	42 42	10 E 10 E	.05
Big St. Germain	16, 17, 18, 19	40	8 E	Pickeral	SWSW	20	40	8 E	1.00
-	20, 21, 29, 30								
Birch	2, 3, 10, 11 14, 15	43	5 E	Kleo (No. 1)	NWNW	14	43	5 E	1.00
Boulder	13	42	6 E	Balsam	E ¹ /2NW	17	42	7 E	1.40
	7, 8, 17, 18	42	7 E	Norway	SWNW	17	42	7 E	.50
Buckatabon	13, 14, 22, 23	41	9 E	Aspen	E ¹ / ₂ SE	22	41	9 E	.90
	24, 26, 27	10		Drowned	NWNW	24	41	9 E	.15
Camp 12 (Bass)	4	40	9 E	Cranberry	S ¹ / ₂ SE	33	41	9 E	3.30
C	33, 34	41	9 E	(No. 1)	CUAIN	17	40	11 12	10
Carpenter	17, 18 19, 20	40	11 E	Dead Pine (No. 1)	SWNW	17	40	11 E	.10
Catfish	1, 2	39	10 E	Long	SWNE	2	39	10 E	.40
	35, 36	40	10 E						
Cochran	20, 21	43	8 E	Virgin	S½SE	20	43	8 E	5.00
Crab	13, 14, 15, 22	43	6 E	No. 2	NENE	23	43	6 E	.50
	23, 24, 26, 27	43	6 E	No. 21 (No. 17)	S½SE	22	43	6 E	1.10
Dry	16, 17, 20	40	7 E	Dead Pine	SESE	17	40	7 E	50
				Muskeg	SWSE	17	40	7 E	20
				Pine	SESE	17	40	7 E	.50
				Swamp	SWSW	16	40	7 E	.10
F 1	2	41	7 5	West (No. 1)	SWSE	17	40	7 E	.20
Escanaba	2	41	7 E	Brush	NENE	2	41	7 E	.15
	35	42	7 E	Burnt	NE ¹ /4	2	41	7 E 7 E	5.10
				South	S½NE	2	41	7 E	3.00

HB24605.L

				Town Line	NENE	2	41	7 E	.30
				Spruce	NENE	2	41	7 E	.05
Fishtrap	1, 2, 11, 12	42	7 E	No. 1	S½SE	2	42	7 E	2.10
Found	11, 13, 14	40	8 E	Hog's Back	SWNE	14	40	8 E	.60
Frank	13	41	7 E	Bear	NWSW	18	41	8 E	.10
	18	41	8 E	Cub	NWSW	18	41	8 E	.15
Harris	23, 25, 26 35, 36	44	5 E	No. 1	SWNE	26	44	5 E	1.00
High	1	42	7 E	Frog (No. 1)	SE1⁄4	31	43	8 E	15.00
	6	42	8 E	Lunch (No. 3)	NENW	6	42	8 E	.15
	36	43	7 E	Paquette	E½SW	31	43	8 E	.75
	31, 32	43	8 E	(No. 2)					
Horsehead	2, 3, 11	43	6 E	No. 1	NWSW	2	43	6 E	.20
	_, _,			No. 2	SWNW	2	43	6 E	.30
Irving	2, 3, 10, 11	41	8 E	East	SESW	2	41	8 E	.10
nving	2, 5, 10, 11	11	υĽ	Musky Inn	W ¹ / ₂ SW	2	41	8 E	1.30
				Pike	SWSW	$\frac{2}{2}$	41	8 E	.75
Island	13	42	5 E	No. 2	SWSW	18	42	6 E	.75
Island							42 42		
	7, 17, 18	42	6 E	No. 3	SWNE	18		6 E	.60
	19, 20			No. 4	NWNE	19	42	6 E	.45
_			. –	No. 5	NESW	18	42	6 E	.60
Jag	26, 27, 34, 35	42	6 E	MacPhail	NENE	34	42	6 E	.20
Jenny	24	43	6 E	No. 1	SESE	24	43	6 E	.65
	19	43	7 E	No. 2	SWSW	19	43	7 E	1.60
Lac du Lune	8, 9, 16, 17	42	9 E	Black Spruce (No.	SESW	9	42	9 E	.75
				1)					
				Hemlock (No. 2)	NENW	16	42	9 E	.90
				High Point (No.	NW ¹ ⁄4	16	42	9 E	.70
				4)					
				Middle (No. 3)	NENW	16	42	9 E	.60
				Rocky	SWNW	16	42	9 E	.03
Landing	5	42	10 E	Middle (No. 3)	SENE	32	43	10 E	.10
Dunding	32, 33	43	10 E 10 E	North (No. 2)	NENE	32	43	10 E 10 E	1.60
	52, 55	ч)	10 L		E ¹ / ₂ SE	32	43	10 E 10 E	2.10
I :441- D	15	40	0 E	South (No. 1) $* E 2/2$ of Endlite					
Little Bass	15	40	8 E	* E 2/3 of Erdlitz	W ¹ / ₂ NE	15	40	8 E	1.20
Little John	20, 29	41	7 E	Heron	SWSE	20	41	7 E	1.20
				Loon	NENE	29	41	7 E	1.10
Little Presque Isle	3	43	7 E	Alder	NWSE	3	43	7 E	.10
				Grass	NESW	3	43	7 E	.05
Little St. Germain	23, 24, 25	40	8 E	East Bay (No. 1)	NWNE	25	40	8 E	.80
	26								
	19, 30	40	9 E	Lone Pine (No. 2)	NWNE	26	40	8 E	.20
Lone Tree	9	41	8 E	*Loon Egg	SENW	9	41	8 E	.50
Lost Canoe	34, 35	42	7 E	No. 2	N½SE	34	42	7 E	.35
	-)			No. 3	(SWNE	34	42	7 E	.85
				11010	(NWSE	0.		, 2	
Lynx	(24	43	6 E	Cedar	NESW	18	43	7 E	.01
Lylix	(18, 19	43	0 L 7 E	Virgin	NWNW	19	43	7 E 7 E	2.50
Mamie	20, 21, 28, 29	43	9 E	Porcupine	NWSW	21	43	9 E	1.10
				_					
Mann	30, 31, 32	41	7 E	Deer	SENW	32	41	7 E	.50
Manitowish	14, 22, 23 24	42	5 E	Pinnacle (No. 1)	NWNE	23	42	5 E	.20
McCollough	13, 14, 23	43	7 E	John	SESW	13	43	7 E	.50
Moconougn	24	-15	1 L	Long Birch	NWNW	24	43	7 E 7 E	.50
Middle Gresham		41	6 E		SESE		43 41	7 E 6 E	.33 1.20
	3, 4, 9			Campsite		4			
Mirror (George)	7	43	8 E	Raven	SESW	7	43	8 E	.15
Nebish	10, 11	41	7 E	*Muskeg	SWNW	11	41	7 E	.02
				*Pine	NWNW	11	41	7 E	.10
0 10 70			т 14	-			1102460) <i>с</i> т	

HB24605.L

No Mans	17, 20	44	5 E	No. 1	NESW	20	44	5 E	.40
North Turtle	(4, 5	43	5 E	Balsam (No. 1)	NW ¹ /4	4	43	5 E	.80
	(33	44	5 E						
Oxbow	(1, 12	43	6 E	Alder	NWSE	36	44	6 E	.03
	(6	43	7 E	Cedar	W ¹ / ₂ SW	31	44	7 E	1.80
	(36	44	6 E	Grass	NENW	6	43	7 E	.05
	(31	44	7 E	Lone Pine	NWSE	36	44	6 E	.06
Papoose	(24, 25	43	5 E	No. 1	(SWNW	30	43	6 E	.35
	(19, 20	43	6 E		(NWSW				
				No. 2 (Green)	E ¹ / ₂ NE	25	43	5 E	3.00
				No. 3 (Tourist)	SWSW	19	43	6 E	5.20
Partridge	28, 29, 32	42	8 E	Balsam (No.1)	(NWNE	33	42	8 E	1.10
	33				(NENW				
Plum	(25, 36	41	7 E	Five Pine	SENW	28	41	8 E	.30
	(21, 27, 28	41	8 E	Swamp	SESW	21	41	8 E	.15
	(29, 30, 31, 32								
Razorback	17, 20, 21, 29	41	8 E	Burnt	SESE	20	41	8 E	.60
				Razorback	S½NE	20	41	8 E	1.60
Rock	28, 33	44	5 E	Balsam (No. 1)	NESE	28	44	5 E	.40
				No. 2	SESE	28	44	5 E	.30
				No. 3	SESE	28	44	5 E	.05
Ross	10, 11, 15	40	7 E	No. 3	SENW	15	40	7 E	.10
				Pine	S½SE	10	40	7 E	.20
				Ross	NWNE	15	40	7 E	.35
Rudolph	7, 17, 18	43	7 E	No. 1	E ¹ / ₂ NE	18	43	7 E	1.10
				No. 2	SENE	18	43	7 E	.30
Sanborn	18, 19	43	8 E	No. 1	SESW	18	43	8 E	.60
Scattering Rice	13, 23, 24	40	10 E	Norway	SENW	24	40	10 E	3.00
South Turtle	5, 8, 17, 20	43	5 E	Cedar (No. 1)	SENE	17	43	5 E	1.00
				Lone Birch (No.	NWNE	8	43	5 E	.20
				3)					
				South (No. 2)	SENE	17	43	5 E	.20
Star	10, 14, 15	41	8 E	Balsam	NENE	22	41	8 E	.50
	16, 21, 22, 23			Cucumber	NWNW	22	41	8 E	.10
				Loon	NENE	21	41	8 E	.002
				Pine	(NENE	22	41	8 E	.40
) (NWNW	23			
				*Prospect	(SENE	16	41	8 E	10.80
				(G.L. 6)	NESE				
Stateline	26, 34, 35	44	6 E	No. 1	NENW	35	44	6 E	.20
Street (Poor Farm)	23, 24, 25	42	6 E	No. 1	E ¹ / ₂ NE	26	42	6 E	.45
· · · · ·	26								
Trilby	11, 12, 13, 14	40	6 E	No. 1	NWNW	13	40	6 E	4.00
Trout	(12, 13, 24	41	6 E	*Eustice (No. 3)	S½SE	13	41	6 E	11.70
	(5, 6, 7, 8	41	7 E	(-)					
	(17, 18, 19, 20		, _	Loon	SWSW	7	41	7 E	1.00
	(31, 32	42	7 E	North	NWNW	7	41	7 E	.30
	(01,02		, 2	Tenpin	SESW	7	41	7 E	1.00
Twin Island	2, 10, 11	43	7 E	No. 1	SWNW	11	43	7 E	.50
	-,,			Vilas (No. 2)	SWNW	11	43	7 E	.30
Wharton	25	41	8 E	*No. 1	NENE	25	41	8 E	.40
White Birch	(5	41	8 E	Beaver	SENW	5	41	8 E	.80
	(32	42	8 E	Pine	NWNE	5	41	8 E	.35
Wildcat	27, 28, 33	43	7 E	Moody (No. 1)	W ¹ / ₂ SW	27	43	7 E	2.60
	34	.5	1 1	No. 2	SESE	28	43	7 E	.50
	5.			No. 3	SESE	28	43	7 E 7 E	.50
				No. 4	SESE	28	43	7 E 7 E	2.40
*Non Grant Island	Listed for periodi	increation		110. T		20	-15	1 1	2.40

*Non-Grant Island. Listed for periodic inspection purposes.

Washburn County

<u>Lake</u>		Location				Locati	on		
	Section	Town	Range	Island	<u>Quarter</u>	Section	Town	<u>Range</u>	Acres
Baker (Christie)	2, 3, 10, 11	38	11 W	W. No. 1	(SESE	3)	38	11 W	30.00
					(N ¹ / ₂ NE	10)			
					(SENE	10)			
				E. No. 1	NENE	10	38	11 W	1.20
				No. 2	NENE	10	38	11 W	.10
Bass	5, 6, 7, 8	37	10 W	No. 1	NWNE	7	37	10 W	.35
				No. 2	NWNE	7	37	10 W	.50
				No. 3	SWNE	7	37	10 W	.35
				No. 4	NWSE	7	37	10 W	.10
D' 1	(10	25	0.111)	No. 5	NWSE	7	37	10 W	.15
Birch	(19	37	9 W)	No. 1	SWSE	24	37	10 W	.03
C 11	(24, 25	37	10 W	No. 2	SESW	24	37	10 W	.10
Cable	(18	39	12 W)	No. 1	NESE	13	39	13 W	.15
	(13	39	13 W)	NT 1	NUCON	22	27	1 1 337	0.0
Devils*	31, 32	37	11 W	No. 1	N ¹ / ₂ SW	32	37	11 W	.80
				No. 2	W ¹ / ₂ SW	32	37	11 W	2.10
	16.01	20	10 11	No. 3	SESE	31	37	11 W	2.80
Dock	16, 21	39	13 W	No. 1	NWNE	21	39 20	13 W	.60
E 11 d	7 17 10	20	10 11	No. 2	NWNE	21	39 20	13 W	.40
Ellsworth	7, 17, 18	39 27	13 W	No. 1	NENE	18	39 27	13 W	.50
Fenton	20, 21, 28	37	11 W	No. 1	W ¹ / ₂ NW	28	37	11 W	.25
T-1d	11 14	40	12 W	No. 2	SWNW	28	37	11 W	.05
Island Kimball	11, 14	40	13 W	Half Moon	NENW	14	40	13 W	2.10
Kimball	13, 14	42 38	13 W	No. 1 Deat	$N\frac{1}{2}SE$	14	42 38	13 W	1.00
Leesome	9, 16	38	11 W	Boot	(SWNE) (SENW)	16	38	11 W	2.10
Long	34, 35	38	13 W	No. 1	S ¹ /2NW	35	38	13 W	1.00
0	,			No. 2	NENE	34	38	13 W	.62
				No. 3	NENE	34	38	13 W	.29
MacRae (Martin)	27, 28, 33	38	10 W	No. 1	NENE	28	38	13 W	.40
				No. 2	NENE	28	38	10 W	.50
				No. 3	NWNE	28	38	10 W	.25
				No. 4	SENE	28	38	10 W	.10
				No. 5	S½NE	28	38	10 W	.30
				No. 6	NWSE	28	38	10 W	.90
				No. 7	NWSE	28	38	10 W	.70
				No. 8	NWSE	28	38	10 W	2.25
				No. 9	E ¹ / ₂ SE	28	38	10 W	.20
				No. 10	SESE	28	38	10 W	.15
				No. 11	SESE	28	38	10 W	.80
				No. 12	SESE	28	38	10 W	.45
				E. No. 13	NENE	33	38	10 W	.50
				W. No. 13	(SESE	28)	38	10 W	.80
					(NENE	33)			

Nancy	22, 27, 28, 33	42	13 W	No. 1	(W ¹ / ₂ SE	28)	42	13 40.00 W)
Nick (Duck)	3, 4	37	10 W	No. 1 No. 2 No. 3 No. 4	(NENW NENW NW¼ SENE SENE	33) 3 4 4	37 37 37 37	10 W 10 W 10 W 10 W	.06 1.75 .03 .90
No Name	3	37	10 W	No. 5 No. 1	SENE SESW	4 3	37 37	10 W 10 W	1.00 .90
Oak	19, 20, 30	41	10 W	No. 1	NWNW	20	41	10 W	.50
Offers (Office)	30, 31	37	13 W	No. 1	SESW	30	37	13 W	.50
Shallow	16, 17, 20	37	12 W	No. 1	SESE	17	37	12 W	.25
	10, 17, 20	0,		No. 2	SESE	17	37	12 W	.10
				No. 3	SWSE	17	37	12 W	1.40
				No. 4	SWSE	17	37	12 W	.20
				No. 5	NWNE	20	37	12 W	.20
Shallow	(31	37	13 W)	Shallow (No. 1)	NWSW	31	37	13 W	1.10
	(36	37	14 W)						
	(1	36	14 W)						
	(6	36	13 W)						
Shell	(25, 36	38	13 W)	Scout	(SWSW	31	38	12 W)	11.00
					(SESE	36	38	13 W)	
	(1	37	13 W)		(NENE	1	37	13 W)	
					(NWNW	6	37	12 W)	
	(29, 30, 31, 32	38	12 W)						
a 11	(5, 6	37	12 W)		~~~~				
Silver	25, 26, 35, 36	41	12 W	No. 1	SWSW	36	41	12 W	.25
Spider	(35	38	10 W)	No. 2	SENE	3	37	10 W	.50
	(2, 3, 10, 11	37	10 W)	No. 3	SWNE	3	37	10 W	1.00
				No. 4	NWSE	3 3	37	10 W 10 W	.75
				No. 5 No. 8	SESE NENE	5 10	37 37	10 W	4.00 .20
				No. 8 No. 9	NENE	10	37 37	10 W	2.00
				No. 10	NWNE	10	37	10 W	.30
				No. 11	(NWNE)	10	37	10 W	4.25
				100.11	(NENW)	10	57	10 ₩	7.23
				No. 12	NENE	10	37	10 W	1.20
				No. 13	SENE	10	37	10 W	.60
				No. 14	W ¹ / ₂ NE	10	37	10 W	.20
				No. 15	NWNE	10	37	10 W	.40
				No. 16	SWNE	10	37	10 W	.30
				No. 18	(SWNE) (SENW)	10	37	10 W	1.60
				No. 19	(SWNE) (SENW)	10	37	10 W	4.20
				No. 20	(NESW) SENW	10	27	10 W/	15
				No. 20	SEIN W	10	37	10 W	.45

*See Barron County also for islands in this lake (islands 5-12)