State of Wisconsin
Department of Natural Resources

Public Forest Lands Handbook

2460.5

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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.

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 the Wisconsin Forest Inventory & Reporting System (WisFIRS) Management application. The tabular data is referenced as 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.

Recon Policy

1. Recon will be collected on all County Forest and Department lands.

2. Responsibility for maintaining the recon database will be with the Division of Forestry.

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 be 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, endangered resources) that alter vegetation in any way (e.g. invasive species treatments, timber stand improvement, site preparation, tree planting, timber sales, wildlife habitat management) 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. The forest recon should be used as resource assessment tool in the development of a master and/or comprehensive plan.

RECONNAISANCE PROCEDURE

Field Examination - Utilizing the Stand Examination Tally Sheet or a data recorder.

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

The Stand Exam Tally Sheet is designed to be used in cruising areas which have been stratified into stands prior to the cruise. Complete the Stand Examination Tally (Form 2400-032) or the equivalent information on a data recorder 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, but in no case should more than one stand be recorded on the same sheet.

Completing a Tally Sheet (Examples reference the sample Stand Exam Tally (2400-32) in **Appendix A**).

1. Header Information – Complete all areas of the header to ensure data is appropriately accounted for.

2. Pulpwood Tally - 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.
      - Count the number of trees recorded for each point, by species. (Ex. 5 red oak recorded on Point No. 1)
      - Add all sticks recorded to determine the total number of sticks on each Point, by species. (Ex. 20 sticks of red oak recorded on Point No. 1)
      - 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. (Ex. 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. Sawtimber Tally - 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 Sp. column.
   b. For each sawtimber size tree tallied, strike out (/) a number in the appropriate size and species category. (Ex. 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 **the last numbers struck in each log category** for each species. (Ex. 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. Site Index Tally - 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. Tree Diameters and Calculation of the Quadratic Mean Stand Diameter - Randomly measure one tree per plot (Ex. 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. Basal Area Tally – Tally 1 dot for each tree tallied in sapling, poletimber, and sawtimber categories: Each dot = 10 sq. ft. BA/ac. 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.

   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. (Ex. 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. (Ex. 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. (Ex. 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. (Ex. 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.)

   Species Basal Area Tally

   a. Poletimber – Add the total number of trees entered by species for each point in the Basal Area Total/Acre row above the sawtimber tally section. (Ex. For Red Oak, 5 trees in Point 1 + 5 trees Pt. 2 + 4 trees Pt. 3 + 6 trees Pt. 4 + 5 trees Pt. 5 + 1 tree Pt. 6 + 3 trees Pt. 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. Average this value by dividing by the total number of plots taken for that stand and enter that value below the total BA. (Ex. 290 BA for red oak / 7 points sampled = 41 BA/Acre rounded for red oak pole-timber.)
   b. Small and Large Sawtimber – 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. (Ex. 3 strike-outs for red oak small sawtimber x 10 BA = 30 entered in the SS column listed in the red oak species column.) Average this value by dividing by the total number of plots taken for that stand and enter that value below the total BA. (Ex. 30 BA red oak small sawtimber / 7 points sampled = 4 BA (rounded).)
   c. Average Total BA by Species – 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. (Ex. 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. Double check BA values. 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. Remarks - Determine and record appropriate management recommendations. Include all treatment recommendations. Mention small inclusions under remarks if they are not given a stand number.

Mapping

Forest 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 M.C 8622.2.

Compartment base map:

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:

a. It is recommended 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 ¼" = 1 mile.

b. Include this information in the map heading information by entering it into the text fields in the map output dialog box in WisFIRS Public GIS.
   - Property name & compartment number.
   - Compartment acreage
   - Town, range, and section
   - Date the map was prepared
   - Enter your name in the "Forester" field

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

c. Mapping symbols, which can be found in **Appendix E**, 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.

d. Compartment boundaries should be the outermost continuous line on the map.

e. 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.

3. Transfer the data from the Stand Examination Tally to the Stand Detail screen 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.

RECONNAISSANCE - 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 screen – WisFIRS and the Stand Examination Data Sheet (Form 2400-026 - **Appendix B**). A reference guide of WisFIRS codes can be found in **Appendix D.**

Required Fields- Fields that must be filled in to update or add a stand sheet.

- Compartment and Stand #
- Exam date – SI and BA measured
- Primary Forest Type
- Acres
- Invasive Level
- Soil Type
- Management Objective

Conditionally Required Fields

- Primary Size Class (for forested types)
- Primary Density (for forested types)
- Year of Origin (for even-aged forest types)
- Total Height (for even-aged forest types)
- Mean Stand Diameter (for forested types)
- Site Index (for even-aged forest types)
- Total Basal Area (for forested types if poles or sawtimber)
- Total Volume Cords (for forested types if poles or sawtimber)
- Total Volume Bd. Ft. (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.
- A Planned Management Prescription (for a forest type)
- Invasive species and density (when invasive level is "present")
- Treatment type, treatment purpose, and forester year of treatment (when a treatment is scheduled)

Listed below are the items of information to be recorded in the order in which they appear on the WisFIRS Stand Detail screen – and the Stand Examination Data Sheet (Form 2400-026 - **Appendix B**).

Stand Heading Information

Property Code

Property description, property type, and FR property code will appear automatically at the top of each Stand Detail page. *For new Recon, an FR property code will be needed. A list of FR property codes can be found in **Appendix** C. If no code exists contact the County Forest / Public Lands Specialist or your Regional WisFIRS contact.

Compartment Number

Compartment # 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 problems.

Stand Prefix(es)

Record stand prefix(es) in space provided.
Stand number prefixes are given special recognition. Stands that fall in one to four of the following categories must be prefixed by one to four alpha codes. Example: Stand 3 is a red pine plantation in an aesthetic zone. The stand should be numbered as follows: A P 3 . Any alpha code may be written first. Stands identified in the preceding manner may be singled out for either omissions or special consideration in computer programming.

Prefix Codes (Use for stands that are/have……)

A Aesthetic zone.

B Fuel breaks

C Extended rotation.

D Deer yard.

E Erodable soils.

F for filter strip or riparian stands.

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).

I Old Growth -Managed

J Old Growth - Reserved

K Wildlife Openings - treated

L Lake and river zones.

M Poor markets.

N Designated state natural area (SNA). Also prefix with a "Z" if stand is to be removed from harvest schedule.

O Old growth -potential

P Plantation

Q Road aesthetics zone

R Designated wild river zone. These will be omitted from the harvest schedule.

S Species and communities of special concern (NHI plants, animals, communities – specify under remarks.)

T Adjacent to trout stream

U for County Forest special use designation

V Silvicultural concerns

W Wild area

X Non-productive forested type (<20 ft^3 / acre / year of growth)

Y Designated Wilderness Area (these stands are omitted from harvested schedule)

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 stand 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.

Stand Number

Record stand number in space provided. New stands are created using the Create New Stand button in the Stand Search screen. The Stand Search screen displays a list of all the existing stands in a compartment. Give each stand a number, including lakes, road zones, etc. Combine types only when they are similar in composition and identical in management objective and are close enough in proximity to receive uniform treatment at one point in time. Combining of several noncontiguous stands all under one stand number will cause acreage lumps in the harvest schedule, as the computer will not split stands. 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 (2 acres is commonly used) to warrant separate management.

Stand Attribute Information

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.

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 F***.

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 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.

Code	Habitat Type
AArL	Acer-Acer/Lysimachia
AAtRp	Acer/Athyrium Rubus
AArVb	Acer-Acer /Viburnum
AAs	Acer/Arisaema
AAt	Acer/Athyrium
ACaCi	Acer/Caulophylium-Circaea
ACal	Acer/Caulophyllum-Impatiens
ACl	Acer/Clintonia
AFAd	Acer-Fagus/Adiantum
AFAl	Acer-Fagus/Allium
AFAs	Acer-Fagus/Arisaema
AFAs-O	Acer-Fagus/Arisaema Osmorhiza Variant
AFH	Acer-Fagus/Hydrophyllum
AFrDe	Acer-Fraxinus / Desmodium
AFrDeO	Acer-Fraxinus/Desmodium - Osmorhiza
AFrDe(Vb)	Acer-Fraxinus/Desmodium Viburnum Phase
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
ArVRp	Acer/Vaccinium-Rubus ASaI
	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
ATiCr(As)	Acer-Tilia/Cornus Arisaema Phase
ATiCr(O)	Acer-Tilia/Cornus Osmorhiza Phase
ATiDe	Acer-Tilia/Desmodium
ATiDe(Pr)	Acer-Tilia/Desmodium Prunus phase
ATiDe-As	Acer-Tilia/Desmodium Arisaema variant

Code	Habitat Type
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 phase
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
HYDME	Hydromesic site – wet mesic south
HYDRI	Hydric site – wet forest lowland
PArV	Pinus-Acer /Vaccinium
PArV-U	Pinus-Acer/Vaccinium, Uvularia variant
PArVAa	Pinus-Acer /Vaccinium.-Aralia
PArVAa-Po	Pinus-Acer/Vacc.-Aralia, Polygonatum variant
PArVAa-Vb	Pinus-Acer /Vacc.-Aralia , Viburnum variant
PArVAm	Pinus-Acer /Vaccinium-Amphicarpa
PArVAo	Pinus-Acer/Vaccinium-Apocynum
PArVHa	Pinus-Acer /Vaccinium-Hammamelis
PArVPo	Pinus-Acer /Vaccinium-Polygonatum
PArVRh	Pinus-Acer/Vaccinium-Rubus
PEu	Pinus/Euphorbia
PQE	Pinus-Quercus/Epigaea
PQG	Pinus -Quercus/Gaultheria
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
TFAa	Tsuga-Fagus/Aralia
TMC	Tsuga/Mainthemum-Coptis

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 must be in whole numbers.

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, 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, 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, SH. It is optional for these types but should be recorded if the stand has a representative age class.

1. 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.

Accepted Site Index Species Codes (All valid species types are eligible. Those with site index curves in the database are indicated with an "*")

A – Aspen*	CR – Cedar, Red	KC – Kentucky Coffee Tree	PA – Pine, Austrian
AQ – Aspen, quaking*	CC – Cherry, Pin or Choke	L – Larch (all)	PJ – Pine Jack*
AY – Aspen, big-toothed*	CH – Cherry, Black	MA – Mountain Ash	PR – Pine, Red*
AS - Ash	CW – Cottonwood*	MH – Maple, Sugar*	PS – Pine, Scots*
AB – Ash, Black*	EA – Elm, American	MN – Maple, Norway	PW – Pine, White*
AG – Ash, Green*	EC – Elm, Chinese	MO – Maple, Other	S - Spruce
AW – Ash, White*	ER – Elm, Rock	MR – Maple, Red*	SB – Spruce, Black*
BA – Basswood*	ES – Elm, Slippery	MS – Maple, Silver	SN – Spruce, Norway*
BE – Beech*	F – Balsam Fir*	MV – Mulberry	SW – Spruce, White*
BG – Balm of Gilead	H – Hemlock	OB – Oak, Black*	SY – Sycamore
BL – Black Locust	HA – Hawthorne	OJ – Oak, Northern Pin*	T – Tamarack*
BR – Birch, River	HB – Hackberry	OM – Oak, Bur*	W – Walnut, Black*
BS – Box Elder	HI – Hickory, Bitternut	OO – Oak, Other	WI – Willow
BW – Birch, White*	HL – Honey Locust*	OR – Oak, Red*	YP – Poplar, Yellow (tulip)
BY – Birch, Yellow*	HS – Hickory, Shagbark*	OS – Oak, Swamp White	
C – Cedar, White*	IR - Ironwood	OW – Oak, White*	

Total Basal Area

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 codominants 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 in 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 Board Feet 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. DO NOT USE MBF.

2. Volumes recorded here are intended to be approximate. Precise volumes will be determined when the stands are cruised for timber sales.

Species Information

1. Record the major forest species present in the stand, including basal area (≥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. If "Present", the invasive species and its approximate density on the forest floor are to be recorded under "Invasive Species and Density" (below)

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 and approximate coverage. This is based on field observations on and between plots. This is a two-parted entry.

2. Record up to 4 species and their respective ground cover densities.

Code	Species	Code	Density
10	Buckthorn spp.	1	<5% cover
11	Garlic mustard	2	5 – 20% cover
12	Spotted knapweed	3	21-35% cover
13	Black locust	4	36 – 50% cover
14	Honeysuckle spp.	5	>50% cover
15	Reed Canary grass		
16	Multiflora rose		
17	Japanese barberry		
18	Leafy spurge		
19	Dame's rocket		
20	Autumn / Russian olive		
21	Japanese knotweed		
22	Oriental bittersweet		
23	Other (enter in remarks)		

Soil

Record type of soil upon visual observation and/or knowledge of the area. Use one of the following codes:

Code	Classification
A	Sand
B	Loamy sand
C	Sandy loam
D	Silt loam, loam, silt
E	Clay loam, silty clay loam, sandy clay loam
F	Peat
G	Muck
H	Clay, silty clay, sandy clay
I	Sand mantled clay, Lake Superior red clay
J	Poorly drained mineral soil

Management Objectives

1. Record a management objective for each stand, including noncommercial types. The objective a stand is to be managed toward is expressed in terms of the expected future type.

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 next rotation or if forced or natural conversion is planned.

Code Recommendation

Natural Type Maintenance
A Type will regenerate or maintain itself naturally.

Natural Type Conversion
B To balsam fir
C To white pine
D To red pine
E To jack pine
F To northern hardwoods
G To red maple
H To aspen
I To central hardwoods
J To white birch
K To oak
L To other forest or non-forest species (specify in remarks)

Forced Type Maintenance (artificial regeneration)
O Type must be regenerated by seeding, planting, site preparation, prescribed burning, etc. (forest or non-forest species).

Forced Type Conversion (artificial regeneration)
R To spruce after treatment.
S To white pine " "
T To red pine " "
U To jack pine " "
V To northern hardwoods "
W To oak "
X To other forest or non-forest species after treatment (specify under remarks).

Planned Treatments (initial stand record must exist in order to enter planned treatments)

1. Record a management prescription for each stand, including noncommercial types, 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 next 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 purpose". Lastly, record the year to complete the practice.

4. **Determine management prescription based on guides found in the Silviculture and Forest Aesthetics Handbook** (2431.5).

5. 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.

Timber Type	Estimated Annual Average Basal Area Growth Per Acre
White and red pine	2.0 to 7.0 sq. ft.
Jack pine, 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

1. Record noncommercial activities if needed and appropriate.

2. Code the next treatment that needs to be undertaken.

3. Record year treatment is to be accomplished.

Treatment Type	Code	Treatment
Treatment Type = TN (Noncommercial Thinning)		
TN	1	Thinning, Improvement cut, Crop tree release
TN	2	Cull tree removal (including girdling)
TN	3	Insect or disease control (sanitation cutting)
Treatment Type = PR (Pruning)		
PR	4	Pruning
Treatment Type = RL (Release)		
RL	5	Release – regeneration (via hand, herbicide, or fire)
Treatment Type = HM (Habitat maintenance)		
HM	6	Invasive plant control (via hand, herbicide, or fire)\
HM	7	Habitat Management (via hand, herbicide, or fire)
HM	8	Survival check (planting, seeding, or natural regeneration)

Site Preparation

Treatment Type = SP

1. Record any site preparation needs.

2. "Site Preparation" is a two-parted code. The first digit indicates the purpose of treatment, and the second digit will indicate method of treatment.

3. Enter “SP” on the “Create Planned Treatment” screen, hit “continue”.

4. Enter the purpose, method, and year of treatment on the “Planned Treatment Detail” screen.

5. Further description of the method of site preparation may be included under remarks.

Code	Treatment
	Purpose
1	Seedbed preparation for natural or direct seeding
2	Preparation for planting
3	Treatment to stimulate coppice or root suckering
4	Slash treatment

	Method
5	Motorized Mechanical Equipment
6	Mechanical treatment with hand tools
7	Prescribed fire
8	Chemical treatment
9	Other

Artificial Regeneration

Treatment Type = PL

1. Record planting needs if appropriate.

2. "Artificial Regeneration" must include planting method, species, and number of trees per acre (coded in that order). Example: A code of 1-6-29 would mean to hand plant red pine at nine hundred per acre.

Code	Treatment

Planting Methods

1	Hand plant
2	Machine plant
3	Direct seed

Species Recommend for Planting

Code	Species	Code	Species
5	PW - White Pine	11	MH – Sugar Maple
6	PR - Red Pine	12	AW – White Ash
7	PJ - Jack Pine	13	W - Walnut
8	SW - White Spruce	14	Prairie grasses
9	OR – Red Oak	15	Other
10	OW – White Oak		

Trees or Lbs. Seed Per Acre

Code	No./acre	Lbs./acre
20	1000+	100+
21	100	0-1
22	200	1-3
23	300	3-6
24	400	6-10
25	500	10-20
26	600	20-40
27	700	40-60
28	800	60-80
29	900-1000	80-100

3. Record year treatment is to be accomplished.

Intermediate Treatments – Commercial

Treatment type = T

1. These are commercial timber sales in even-aged managed types.

2. Record one of the following codes and the year it is to be accomplished.

Code	Treatment
1	Harvest scattered mature or over mature trees
2	Thinning or improvement cutting
3	Salvage or sanitation cutting

Harvest Methods

Treatment Type = RE (Even-aged Regeneration) or RA (All-aged Regeneration)

1. These are commercial timber sales which establish regeneration for a new stand.

2. For even-aged types, the year of harvest is determined from site index/rotation age relationship. Modifications may be made based on local conditions.

3. For uneven-aged types, the year of harvest is determined by basal area projection. Modifications may be made based on local conditions.

4. Record the exact year of harvest and not a range of years.

5. Record one of the following codes and the year it is to be accomplished.

	Treatment Type	Code	Treatment
For Natural Regeneration			
	RE	1	Coppice (e.g. aspen regeneration cuts)
	RE	2	Clearcut (relying on regeneration by seed)
	RE	3	Seed tree harvest
	RE	4	Shelterwood harvest
	RE	5	Overstory Removal
	RA	6	Group Selection
	RA	7	Single Tree Selection
	RE	8	Other
For Artificial Regeneration (relying on future planting or seeding)			
	RE	10	Clearcut
	RE	11	Partial cut (even-aged)
	RA	12	Partial cut (uneven-aged)

Completed Treatments

Prior to a treatment being implemented in the field it is assumed the recon is updated (e.g. Present day recon for timber sales should 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 post-sale Recon update in WisFIRS. 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.

Current Harvest Information

The tract number (for 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 assigned a tract number, it is removed from the treatment schedule.

Remarks

Record any and all pertinent remarks for the stand, supplementing and clarifying the preceding items. Remarks will be unlimited and will stay on the file until removed by the field forester.

User Defined Fields

This section provides up to six opportunities to track information specific to a property. The property manager, 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).

WISCONSIN INVENTORY & REPORTING SYSTEM (WisFIRS)

In 2006 it became obvious that the existing public land timber database was no longer adequate to serve the needs of 21st century public land management. It was based on out-dated, unsupported technology and did not have the necessary functionality. Both the private PlanTrac and Tax law applications were also missing needed functionality and not readily adaptable to working with external partners. There was significant overlap between the three programs and it was determined that an integrated, web-based system would best serve the need. It was decided a 7-release approach to release the project would be the best means of addressing immediate needs while acknowledging that such a project would span multiple years. WisFIRS phases include:

Release 1 – Public Lands Recon (planning, public lands management, stands and treatments)
Release 2 – GIS Public Lands Management
Release 3 – Private Lands – (MFL/FCL administration, Enrollment and plan writing, letter generation)
Release 4 – Public Land Financials, County Forest Law, Timber sales
Release 5 – GIS Private Lands Management
Release 6 – Private Financials, Private (Tax Law) timber harvest, cost share programs
Release 7 – Stewardship Plans, FTS enforcement tracking, field data collection, accomplishment reporting

Below is a brief summary of the pages, or tabs, for the Public Lands recon portion of WisFIRS. 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 in the system should be referenced for specific how-to information. In addition to WisFIRS, the Land Management System (LMS) being developed by the Bureau of Wildlife Management will ultimately complement WisFIRS, providing infrastructure, wildlife projects, and information on both fee title and eased lands.

Accessing Public Land Recon in WisFIRS

1. Internal users
   Department employees can automatically access WisFIRS through their work computer on the DNR intranet site. No additional password is required.

2. External users (such as County Forest employees) and Department employees working from a personal computer
   a. Initially you must obtain the overall approval to use WisFIRS through the system administrator in Central Office (County Forest / Public Lands Specialist) or your district's WisFIRS contact. New County Foresters should work through their County Forest administrator.
   b. If approved, users must get a password through the State's Web Access Management System (WAMS) at https://on.wisconsin.gov/WAMS/home . Follow the instructions to set up your password.
   c. Save the site to your desktop on your computer for ready access in the future.
   d. Access for employees leaving the DNR, or to County Foresters leaving County employ, will be revoked. The immediate supervisor (for DNR employees) and the County Forest Administrator (for County Forests) will be responsible for notifying their district WisFIRS contact or the System Administrator at DNR Central Office when employees are leaving their employ.

WisFIRS – Overview of the Public Lands Tabular application

1. Properties

   a. This is the opening or default tab in WisFIRS. Use this page 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. Recon

   a. Use this tab to:

- Create new stands, copy and modify stand information, delete stands
- Search stands / compartments by primary forest types, harvest status, invasive species, exam year, or year of origin
- Create new planned treatments
- Record completed treatments
- Launch the WisFIRS Public Lands GIS mapping portal.

3. Treatments

a. Use this tab to:

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

4. Planning

Completing the Planning schedule for a property MUST be completed before the schedule of treatments can be created. Only the Property manager and lead forester (State lands) or County Forest administrator and DNR Liaison (County Forests) should run the planning schedule for a property. Planning **should be run only once each year**, preferably prior to the annual planning meeting.

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 or through the "P" button next to the property on the opening Properties page.

a. Use this 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 early / late 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 from 1996 to present.
- Launch the WisFIRS Public Lands GIS mapping portal (Harvest & Cultural Schedule)

5. Timber Sales

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

a. Use this tab to:

- View existing timber sales for a property.
- Search sales by tract number and year, sale number, sale status, sold or completed year, or by contractor.
- If authorized, record new timber sales, modify established and active sales, close sales.
- If authorized, add new contractors for a sale.
- View Public Land Stumpage rates
- View Private Land Stumpage rates
- Launch to WisFIRS Public Lands GIS application

6. GIS

This tab has only one sub-menu. "Download ACORN" sub-menu gives instructions to download information and links for DNR Forestry's ArcView Optional Recon Tool (ACORN). *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. Follow the directions on the sub-menu to install **ACORN.** The initial installation must be done by someone with administrative privileges on your computer. Subsequent updates may be done by the user.

6. Reports

WisFIRS includes Recon & Assessment, Planning & Schedules, Timber Sales & Monitoring, GIS, 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 this 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

7. 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. Use this 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

RECONNAISSANCE DATA UPDATING

A. General

1. Importance of Recon 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.

2. When to Update

The following list of 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
l. Stand/Compartment data is older than 20 years on State lands and older than 20 years on County Forest lands.

3. Timber Sales

Whenever a timber sale is established on part of a stand, the compartment recon files must be updated in the Wisconsin Forest Inventory and Reporting System (WisFIRS) and associated recon map before the timber sale is entered into the timber sale database. Usually when a stand has a timber sale established on part of it, the stand must be split. The part of the stand that is not in the timber sale should keep the original stand number and have the acres reduced. The part in the timber sale should be given a new stand number. If more than one timber sale is established on a stand, each part of the stand should get a different stand number. The recon must be updated before the timber sale is entered into the timber sale database. Form 2460-001 (Timber Sale Notice and Cutting Report) should use the new stand numbers and reflect what is actually on the timber sale.

If the stand data is not updated for a sale that is on part of the stand, the entire stand will be removed from harvest scheduling in WisFIRS. This will contribute to an unreliable number of acres being scheduled for harvest. The recon files and the timber sales files are tied together and this requires that information for both systems be exact. If it is not, then the recon data on 2460-001 will not be allowed to be entered into the timber sale database. Successful entry of stand data from 2460-001 into the timber sale system will generate a tract number for that stand and cause it to be removed from scheduled treatments in WisFIRS.

Whenever a timber sale is closed, the data for all stands, or portions of stands, which have been affected by the timber sale must again be updated so that the new post-sale stand conditions are reflected. The tract number from each stand will be removed when the sale is closed in the timber sale system.

4. Errors

Where possible, RECON errors in the old oracle data base were cleaned up prior to the cutover to the WisFIRS system (June 2007). However, some will carry over and ideally need to be cleaned up to improve accuracy and performance in the WisFIRS scheduling, graphing, charting, reporting, and querying functions. Reviewing and

sorting of stand data in WisFIRS (RECON tab / stands sub-menu) is an excellent place to find many of these errors. Edit checks and validations have been built into WisFIRS so that future recon updates will not be accepted into the system until fields are completed as designed.

5. Splitting/Combining Stands

During the normal 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.

6. Record Keeping/Tracking Changes

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 has changed, updates should be made on the WisFIRS Public Lands GIS to reflect the tabular data. For work planning or individual accomplishment reporting it will be necessary for the user to either track this separately or to include Forester name, as one of the user-defined fields in WisFIRS. These user defined fields are set on a property-wide basis. User-defined fields are located at the bottom of the Stand Detail page in WisFIRS.

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. Acres of recon resulting from such deferrals during the schedule year of harvest are 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 important for sound management decisions and has been brought up during forest certification audits. State lands and County Forests have a goal of updating all recon on no more than 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 now 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 NEW Recon entry

a. New Property acquisition – contact WisFIRS Support staff / administration to get a Forestry Property Code created and ask the admin to grant you edit authority over that property.
b. After completing the field work (see Chapter 110), transfer the information from the Stand Exam Tally sheet (Form 2400-32) or data recorder into WisFIRS Public Lands tabular. If a third party is doing the data entry, summarize data on a Stand Exam Data sheet (Form 2400-26). 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.

   Note: A tabular stand record is needed to create a GIS stand record. A WisFIRS Management Boundary is required to create a stand boundary.
c. In the WisFIRS GIS application, create the approximate WisFIRS Management Boundary using the DNR Managed Lands layer as reference if the shape already exists in that layer.

i. Optional – upload the WMB layer from ACORN to WisFIRS GIS.
ii. Optional – if you have a shape from another source, upload using My Uploads and use as reference.

d. Create stand polygons to identify the stand boundaries. *Note: Refer to online help for digitizing and creating stands*.
e. Run Compartment Summary report (Report 110) to double check data entry.
f. Make any adjustments to the WisFIRS Management Boundary that may have been discovered when cruising the property and reviewing the aerial photography.

2. 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.
   ii. Run Compartment Summary report (Report 110) to double check data entry.
b. Make any adjustments to the WisFIRS Management Boundary that may have been discovered.
c. Remember to update or delete approximate polygons that may have been created to generate cruise points prior to field exam.
d. When updating Recon on completed timber sales complete the timber sale in WisFIRS prior to updating the Recon.

3. WisFIRS Public Lands Planning

Planning needs to be run *and **accepted*** annually on all properties in order to create a harvest schedule. Only the Property Manager & Lead Forester (State Lands) or County Forest Administrator & DNR Liaison (County Forests) should run the planning schedule for a property. Typically this should be done prior to the Annual Property Meeting. In evaluating Planning runs, the managers may consider applying harvest constraints (early, late, and harvest intervals) to those forest type / harvest type combinations that have 400 acres or more on the property. Constraints are used to modify the forester's harvest year in order to smooth out peaks and valleys in the harvest schedule and to balance age class imbalances. In applying constraints, managers can do preliminary planning runs (hit "Run Scheduling" on the Run Schedule submenu) and then evaluate the impacts on the harvest schedule. Age class distribution charts are also available to consult. If no constraints are used, the forester's year of harvest is used to establish the harvest schedule. Once managers are satisfied with the results of the preliminary Planning runs they must hit the "Accept" button in the Accept Planning sub-menu. Once stand data is completed for new properties, Planning needs to be run immediately to ensure monitoring and accomplishments are being tracked.
Note: If Planning is not run by local staff, it will be run annually by default through Central Office. This ensures that monitoring and accomplishments will be tracked appropriately in WisFIRS. However, it is strongly recommended that each forester / property manager be responsible for their own Planning each year.

4. WisFIRS Public Lands Timber Sale data entry

a. Once established on the ground, and prior to advertising, the timber sale should be entered into WisFIRS. Entering the sale information upon establishment will guarantee that sale accomplishments are tallied in a timely fashion. It is recommended that the Recon and associated GIS information be updated at this stage also, so that the stand data on the Timber Sale accurately portrays the Recon data.
Optional: If a map is needed to depict the established sale (X) use the established treatment layer of the WisFIRS Public lands GIS. Refer to the online help for digitizing and creating an established treatment.

b. Once sold, the contractor information and sold values / volumes should be updated in WisFIRS.

c. Completed sale information including final value / volume and acreage harvested should be entered into WisFIRS once all sale activity and financial transactions are complete. *It is important to complete the sale in WisFIRS prior to updating the Recon. Stand numbers listed for the timber sale must remain valid for you to complete the timber sale.
Note: refer to WisFIRS on-line help, Timber sales for instructions on timber sale data entry.

1. Completing Treatments

a. When a Scheduled Treatment has been completed WisFIS data should 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 completed treatment can also be mapped in the WisFIRS public lands GIS application. When completing a treatment it is important to determine if the treatment was part of a timber sale or a cultural treatment. Remember not to complete a treatment related to a timber sale until the timber sale information is updated to a closed status. Use the appropriate check boxes in WisFIRS to note if the treatment was a timber sale. There is also an opportunity to have the corresponding stand polygon copied to the completed treatment layer in the GIS application. If the completed treatment was a cultural treatment, do not check the boxes to associate it with a timber sale. See the complete treatment section of the WisFIRS online help for a full description.

b. An Unplanned Treatment can be created from the planned treatments section of the recon stand detail page of WisFIRS public lands tabular application. The unplanned treatment can also be mapped in the WisFIRS public lands GIS application. When completing an unplanned treatment it is important to determine if the treatment was part of a timber sale or a cultural treatment. Remember not to complete an unplanned treatment related to a timber sale until the timber sale information is updated to a closed status. Use the appropriate check boxes in WisFIRS to note if the unplanned treatment was a timber sale. There is also an opportunity to have the corresponding stand polygon copied to the completed treatment layer in the GIS application. If the unplanned treatment was a cultural treatment, do not check the boxes to associate it with a timber sale. See the complete treatment section of the WisFIRS online help for a full description.

REGENERATION MONITORING

Successful regeneration of harvested sites is paramount for sustainable forestry. The monitoring of artificially-regenerated stands has been historically tracked and documented using the Plantation and Cultural Report (Form 2400-79). One, three, and five year survival checks are done to ensure planting/seeding success. Most stands are naturally-regenerated. Occasionally regeneration on these sites is in doubt, requiring follow-up by the forester. Regeneration success on these stands should also be documented using the Plantation and Cultural Report. In addition, completed treatments should be entered into the Wisconsin Forest Inventory and Reporting System (WisFIRS) for that stand.

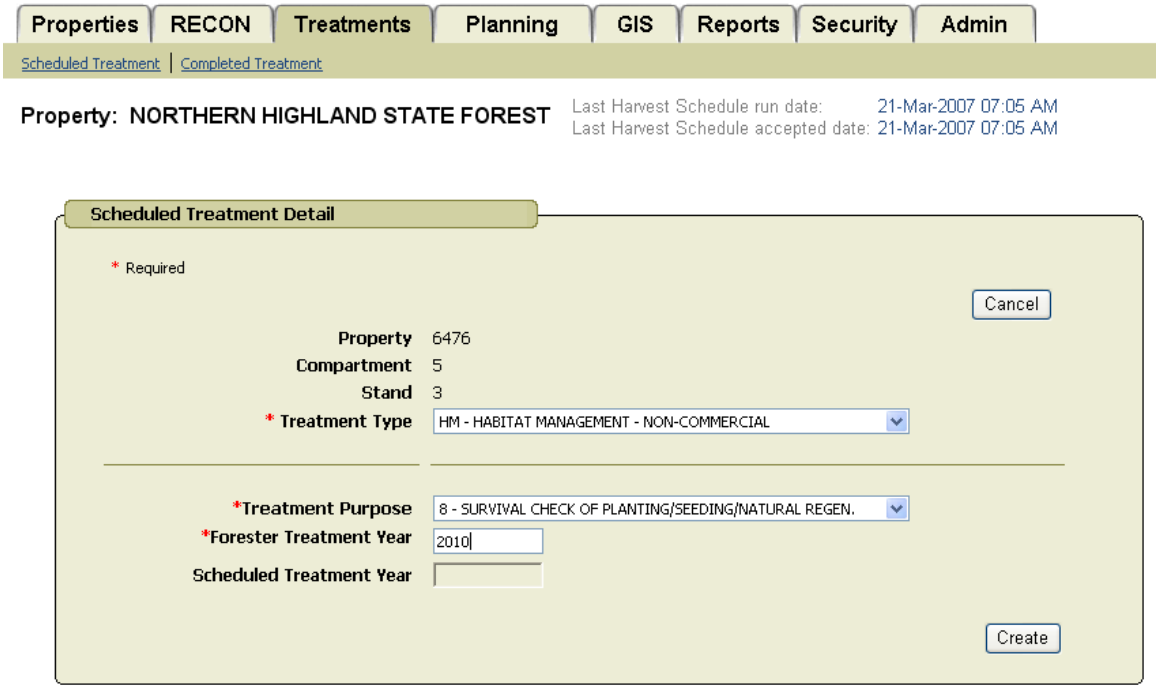
WisFIRS provides an easy, consistent approach to regeneration monitoring. The information below provides methodology to schedule and complete a regeneration check (natural or artificial). This system can be used for planning as well as monitoring and reporting. Consult the WisFIRS training manual or the on-line help link for information supplemental to that below.

Regeneration checks should be scheduled after the management activity (usually a timber sale) has occurred and the stand recon data has been updated. This is because it is often unknown at the time of sale establishment exactly when a stand will be harvested by the logger. Post-sale recon is the perfect time to schedule regeneration checks on individual stands. 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 a regeneration check. This will minimize data changes needed after a site inspection is completed, if regeneration is successful.

It is at the discretion of the forester to decide which stands to schedule for monitoring of natural regeneration. Natural regeneration of most stands is not in question and formal monitoring is unnecessary. For stands with questionable regeneration it is warranted, typically for up to 3 years. Local experience may dictate more or less.

To schedule a regeneration check on a stand in WisFIRS:

1. Navigate to the Stand Detail page for the stand in question.
2. Scroll down to the Planned Treatments section.
3. Click on the Create Planned Treatment button.
4. In the Schedule Treatment Detail window, choose Treatment Type HM, and Treatment Purpose 8 (Habitat Management, Non-Commercial, Survival Check of Planting/Seeding/Natural Regen.)
5. Enter the year for the regeneration check (Note: a check must occur within 3 years for most timber types)
6. Click on the Create button to save the Planned Treatment.



Once the regeneration checks are entered into the system, they can be queried out to give the forester a list of stands in need of monitoring. This list can be queried by individual scheduled year or by a range of years.

To view stands needing a regen check:

1. Navigate to the Scheduled Treatment Search page for the property.
2. Choose HM in the Treatment Type dropdown list and enter the desired year or range of years in the Scheduled Year From boxes. Click on the Search button.
3. This will create a list of all HM coded treatments for that time period. Simply sort the results by Treatment Purpose by clicking on the Treatment column title.
4. These results can be exported to an Excel spreadsheet or GIS program for further display, navigation and printing.

Scheduled Treatment | Completed Treatment

Property: NORTHERN HIGHLAND STATE FOREST

Last Harvest Schedule run date: 21-Mar-2007 07:05 AM
Last Harvest Schedule accepted date: 21-Mar-2007 07:05 AM

Scheduled Treatment Search

Reset Search

Treatment Type: HM - HABITAT MANAGEMENT - NON-COMMERCIAL | Comp | Stand | Primary Forest Type

Scheduled Year from 2007 to 2010

Display 50 Records | Search

row(s) 1 - 2 of 2

Edit Treatment	Edit Stand	Property	Property Name	Comp	Pre	Stand	PFT	Acres	Origin	Exam Year	Scheduled Year	Forester Year	Type	Treatment
		6476	NORTHERN HIGHLAND STATE FOREST	4	AD	1	C	25	1876	2007	2007	2007	HM	7 - HABITAT MANAGEMENT (VIA HAND, HERBICIDE, FIRE)
		6476	NORTHERN HIGHLAND STATE FOREST	128	P	4	PJ	59	1988	2005	2009	2009	HM	8 - SURVIVAL CHECK OF PLANTING/SEEDING/NATURAL REGEN.
	Total							84						

row(s) 1 - 2 of 2

*Unscheduled Treatment - Timber sale has been established or the stand has a R, Y, Z prefix or it is a new treatment since last scheduling occurred.

Export To GIS | Export To Spreadsheet

OR

1. The forester can run a Schedule of Cultural Treatments (Report # 205) report, which can be found in the Reports tab, under the Planning & Schedules sub-menu.
2. After clicking on the report name, enter the years, treatment type (HM), and other data into the fields on the Report Parameters page, then click on the Generate Report button. The report can then be printed or saved to your computer. *Note: All stands with a scheduled "HM" code are displayed with no way of determining the Treatment Purpose code.

Once a stand has been field checked for adequate regeneration, the WISFIRS system can 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.

To update a field checked stand and move the treatment to the Completed Treatments list:

1. Navigate to the Stand Detail page for the stand in question.
2. Scroll down to the Planned Treatments section.
3. Click on the Complete Treatment icon (curved red arrow with book) next to the scheduled monitoring treatment. This will bring up the Completed Treatment Detail page.
4. Enter the year inspected in the Treatment Year field and click on the Complete Treatment button. This will remove the scheduled treatment from the stand and add it to Completed Treatment list for the property.

Scheduled Treatment | Completed Treatment

Property: NORTHERN HIGHLAND STATE FOREST

Last Harvest Schedule run date: 21-Mar-2007 07:05 AM
Last Harvest Schedule accepted date: 21-Mar-2007 07:05 AM

Completed Treatment Detail

* Required

Delete | Cancel

Property	6476
Compartment at time of completion	128
Stand at time of completion	4
Completed Treatment	4
***Treatment Type**	HM - HABITAT MANAGEMENT - NON-COMMERCIAL
***Treatment Purpose**	8 - SURVIVAL CHECK OF PLANTING/SEEDING/NATURAL REGEN.
***Treatment Year**	2007
***Acres**	59
Created by	FARRD **on** 15-Mar-2007 02:30:35 PM
Last changed by	FARRD **on** 15-Mar-2007 02:30:35 PM

Complete Treatment

FOREST COMPARTMENT RECORDS

The Wisconsin Forest Inventory and Reporting System (WisFIRS) database stores all compartment data electronically. Certain information is still important to retain in hard copy (see below).

Forest Compartment Property map

A current Property map showing all the compartment boundaries on a property should be available in an electronic format (e.g. .pdf file) and a paper copy if desired. The project 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.

Forest Compartment Folders

The following items should be retained in the compartment folder.

1. Report 110 -Stand Information by Compartment (in 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 110 (110-15).

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:

      1. Designated wildlife openings - These are openings which have been agreed upon by the forester and wildlife biologist in accordance with M.C. 2112.

      2. 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).

      3. Endangered or threatened species or communities locations - This is the information that was determined through the normal Natural Heritage Inventory (NHI) check. Additional specific information may be suitable as well. **THE INFORMATION IDENTIFIED HERE IS FOR INTERNAL USE ONLY AND NOT SUBJECT TO THE OPEN RECORDS LAW.**

   b. Timber sale activities

      This map or GIS layer is intended to be a quick cross-reference of timber sale activity. The information is designed to provide easy access to more detailed information filed in an appropriate timber sale file.

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. The statutes covering county forests are ss. 28.10 and 28.11, Wis. Stats.

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

County

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

The acreages and Administrators for each of the 29 County Forests can be found on the webpage of the Wisconsin County Forests Association (WCFA) at http://www.wisconsincountyforests.com.

DEPARTMENT LIAISONS TO COUNTY FORESTS

Section 28.11, Wis. Stats., requires that the Department provide technical assistance to counties having lands entered in the county forest program. Each of the twenty-nine 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 administrator who is in charge of day-to-day operations of the forest.

Personnel specified in the DNR Personnel Directory are assigned as Department liaison foresters to the appropriate county forest committee and administrator for the indicated county.

Responsibilities of the liaison forester are:

1. Attend all meetings of the county forest committee.

2. Inform immediate supervisor of significant county forest matters. Liaison and supervisor share responsibility of informing other Department staff of matters affecting their programs.

3. Personally render or arrange for appropriate Department technical assistance to be provided for county forest administration. The type and minimum hours of technical assistance are determined every three years by completion of the County Forest Time Standards Worksheet.

4. Coordinate county forest administration contacts from other Department personnel.

5. Compile bi-annual county forest accomplishments of contributing foresters and report to the forestry team leader.

The district involved is responsible for selection of liaison foresters and for keeping the County Forest Specialist, Division of Forestry, informed of any changes in liaison assignments.

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. 28.11, 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 technology transfer to county forest personnel. The liaison 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 liaison, the liaison will determine the appropriate source and obtain the necessary assistance. The liaison 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 will be responsible for all activities described in the position description but may delegate on-the-ground data collection and technical assistance to others with supervisory approval. In cases where delegation is necessary due to other workload commitments, the liaison 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.

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. Assist in the preparation of the annual plan and the county forest comprehensive land use plan (hereafter

referred to as the county forest plan).

Required under s. 28.11(5)(a), Wis. Stats. The liaison participates by assisting the county forest administrator 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.**

Required under ss. 28.11(5)(a) and (b), Wis. Stats. The liaison shall assist 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 as well.

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

Required under ss. 28.11(4)(a) and (11)(a), Wis. Stats. Also refer to this Handbook for specific procedures. The liaison participates in preparation of necessary documents for entry and withdrawal including any environmental impact statement/environmental assessment (EIS/EA) requirements. During the entry/withdrawal process, the liaison 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 insures the liaison is able to assure compliance of the county forest law, interface with other affected Department programs, and represent the statewide public interest.

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

Required under ss. 28.11(8)(b)1. and 2., Wis. Stats. The liaison assists the county forest administrator in preparing requests for variable acreage and project loans. The liaison also provides the Department with the information necessary to determine if project loans are feasible, desirable, and consistent with the comprehensive plan. By participating in development of loan requests, the liaison is able to assure compliance of the county forest law, provide technical assistance, and represent the statewide public interest.

5. **Review and approve all timber sale cutting notices/reports.**

Required under ss. 28.11(6)(b)3. and 4., Wis. *Stats. The liaison is responsible for reviewing and approving all timber sale cutting notices (Form 2460-1). The liaison will maintain knowledge of the resource and timber sale establishment procedures as listed under worker activity B. Reviewing and approving cutting notices, the liaison assures compliance of the county forest law, assess applicability of silvicultural aesthetic prescriptions and guides, 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 administrator.**

The liaison must have regular personal contacts with the county forest administrator in order to maintain and enhance an open cooperative relationship. A minimum suggested level of contact is three per month. More frequent personal contacts may be needed during certain periods at high activity.

7. **Attend all county forestry committee meetings and any county board meetings as requested.**

The liaison is responsible for maintaining an open cooperative relationship with the county, 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. Provide technical forestry assistance as needed.

1. **Participate in field operations in conjunction with county forest personnel as required to maintain a first-**

hand understanding of resource needs and opportunities.

The liaison 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 will be better able to conduct data analysis and identify the need for specialist expertise. To be most effective, the liaison 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. Cruise and mark timber, establish timber sales boundary, and prepare maps and appraisals, all in accordance with the county and state procedures.

The liaison 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 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 with the ability to assess applicability of silvicultural and aesthetic prescriptions and guides, provide technical assistance, and identify needs for specialist expertise. The acres of timber sales required to fulfill this role will be specified in the annual employee plan of work.

b. Conduct timber sale inspections.

The liaison will assist the county in on-site timber sale inspections in order to ensure compliance with the cutting notice and county forest plan.

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

The liaison will assist in timber sale administration in conjunction with county forest personnel. By participating in sale administration, the liaison 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 with information needed to evaluate silvicultural prescriptions, and the need for technical assistance and technology transfer. The liaison will participate in scaling as needed to ensure compliance with s.* 28.11, *Wis. Stats.*

d. Conduct final silvicultural inspections in conjunction with county forest personnel.

The liaison will conduct final silvicultural inspections in conjunction with county personnel. This will enable the liaison to monitor compliance with the county forest plan and provide the required information necessary to evaluate the silvicultural prescriptions.

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

The liaison 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 to monitor compliance with the county forest plan and interface with other affected Department programs (wildlife, endangered resources, state nurseries).

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

The liaison will assist county personnel with designation of sites needing cultural and regeneration work. This will allow the liaison to insure implementation of the county forest plan.

2. Coordinate implementation and application of new technologies in cultural and regeneration work.

The liaison 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 is able to evaluate silvicultural prescriptions, evaluate nursery stock suitability, and identify possible needs for technical assistance and technology transfer.

3. **Develop, refine and evaluate existing data as necessary to identify trends, potential problems, and opportunities in management of the county forest.**

   The liaison will continually evaluate new and existing procedures and trends to determine what assistance may best meet the counties needs.

4. **Continue development and maintenance of compartment reconnaissance on the county forest including data collection and analysis, records, updating, management information systems, i.e. GIS.**

   The liaison will be responsible 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. This does not mean the liaison will collect all field data; county staff will do this when possible.

   The liaison will continuously assess whether or not the recon system meets county needs, maintain familiarity with local timber types and identify need for technology transfer. The liaison will effectively participate in data analysis, monitor compliance with the county forest plan and provide technical assistance.

5. **Identify sites and make recommendations for endangered resource fish and wildlife management and protection.**

   The liaison will participate with assistance from the Bureau of Endangered Resources and local fish and wildlife staff in providing resource information to the county administrator, including identifying sites and making management recommendations for rare, threatened, endangered plants, animals and communities, and specific fish and wildlife management projects.

C. Function as a catalyst for technology transfer.

1. **Maintain first-hand familiarity with county forest resources and management procedures in order to effectively match Department resources with the county forest needs.**

   The liaison maintains familiarity with the county forest through participation in county forest operations and through constant communication with the county forest administrator. The liaison 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 will be better able to ascertain what resources will best meet county needs. This will allow the liaison to effectively serve as a point of contact to arrange for specialist expertise as needed and to represent the statewide public interest.

2. **Maintain involvement on technical committees and maintain currency with state of the art forestry technology, capitalize on advances, experiences, training opportunities, and potential solutions that relate to individual county needs.**

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

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

3. **Recommend and assist the counties in providing training and interpretation relative to Department technical procedures and capabilities.**

   The liaison 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 to assure compliance with s. 28.11, 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.**

   The liaison needs to realize that periodically short-term workload increases will be necessary 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 should make full use of staff as priorities allow to meet these increases. Likewise, the liaison needs to utilize and coordinate all of the resources at his command to capitalize on immediate opportunities. The liaison 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 should coordinate Department equipment use on county forests.

2. **Coordinate and facilitate cooperation between with county forest administrators and all Department activities that occur on or affect the county forest in order to enhance the integrated management approach.**

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

   This allows the liaison 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 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. In these cases, the liaison will coordinate the assistance of technical specialists. It is important that the liaison maintain good communications with the state's technical experts so that potential problems can be headed off and dealt with in a timely manner. The liaison will also be responsible for involving other functions during the annual work-planning meeting.

Technical Assistance

Technical assistance, from the Department, will be coordinated through the Department liaison forester. Assistance may be available in the following specialties:

Endangered Resources - Bureau of Endangered Resources

Fisheries Management - Local fisheries biologist

Forest Management - Liaison forester - Field silviculturist

Geographic Information Systems - GIS Coordinator, Division of Forestry

Land Acquisition - District real estate agent

Protection:
- Insects and disease - District entomologist/forest pathologist
- Fire Management - Local forester/ranger

Recreation Management:
- Grants - Community services specialist

Water Regulations and Zoning - Water regulation specialist

Water Resources, Best Management Practices - Forest Hydrologist, Division of Forestry

Wildlife Management - Local wildlife biologist

Law Enforcement

This section identifies the enforcement activities with which Department personnel can assist. Department personnel can only enforce county ordinances where they have been deputized by the county sheriff and would include county forest ordinances. The County Corporation Council, county sheriff, and district attorney should be consulted for local procedures.

Chapter 26, Wis. Stats., covers Protection of Forest Lands and Forest Productivity. Any provisions within this chapter that are applicable to the county forest can be enforced. Timber theft (s. 26.05, Wis. Stats.) is the primary area where Department personnel can assist or take the lead role in investigation, seizures and prosecution.

Department personnel can provide information to any county law enforcement officer whereby citations can be written on information and belief.

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.

Annual adjustment items are negotiated at the local level, between the county forest administrator, Department liaison forester, and the 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 not considered part of the minimum time standard requirement.

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

COUNTY FOREST ADMINISTRATOR

The county forest administrator coordinates the state/county partnership with the Department liaison forester in administering the county forest law (s. 28.11, Wis. Stats.). The Department expects the county to hire an administrator with skill levels that will enable the position to carry out the county's end of the partnership.

The county forest administrator will be responsible for all activities described in the position description but may delegate these responsibilities to others under their supervision. The county forest administrator 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 as partners with Department liaison forester in developing and updating the county forest comprehensive land use plan to promote and implement integrated resource management.

3. Work with Department liaison forester and county forestry committee in developing 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 printout for timber sale establishment. Divide the workload within the restraints of each partner.

5. Bid timber sales, prepare contracts and administer timber sales. Is responsible for the administration of all timber sales. Coordinate with the Department liaison forester the administration of each individual timber sale.

6. Project Loans and Variable Acreage Share Loans: Prepare requests and receive approval of the forestry committee of the county board for any project loans.

7. Responsible for cultural and regeneration work: Responsible for coordinating (contracting, etc.) of all cultural and regeneration work performed on the county forest.

8. County Forest Boundaries: Will take the lead regarding any property boundary issues on the county forest.

9. Grants and Aids: Responsible for preparing applications for all grants and aids used on the county forest, including the county forest administrator and sustainable forestry grants.

Questions concerning the program may be directed to the County Forest Specialist in the Division of Forestry, Madison.

COUNTY/STATE ROLES

County	State
A. Administration of County Forest Law, s. 28.11, Wis. Stats.	
1. Identify resource needs.	1. Identify resource needs.
2. Provide technical assistance to meet resource needs.	2. Provide technical assistance to meet resource needs.
3. Take lead in county forest comprehensive land use plan (county forest plan) development.	3. Assist in county forest plan development (protect statewide interest). Prepare environmental assessment for county forest plan.
4. Implement county forest plan	4. Assist with implementation of county forest plan (represent statewide interest).
5. Identify needed changes in plan and amend as necessary.	5. Identify need to update county forest plan.
6. Develop annual plan of work.	6. Assist and monitor county annual plan of work.
7. Request entries under s. 28.11.	7. Process and approve entry of lands under s. 28.11.
8. Request aids.	8. Process and approve aid applications, disperse funds.
9. Disperse county severance to towns.	9. Disperse $0.30/acre to towns.
10. Request withdrawal of lands from s. 28.11.	10. Process withdrawal (see page 250-50 of this Handbook).
11. Appoint county forest committee - hold meetings.	11. Attend forestry committee meetings.
12. Establish regulations for use of forest.	12.
13. Appropriate funding.	13.
14. May enter into coop agreements for fire protection.	14. Provide fire protection as per statutes.
15. May establish aesthetic zones.	15. Recommend aesthetic zones.
16. May establish transplant nurseries.	16.
B. Resource Management	
1. Assist in collection of recon data.	1. Responsible for recon data collection and accuracy, continue to develop and maintain the recon system and procedures.
2. Take lead in GIS development.	2. Assist in development and maintenance of GIS program. Coordinate compatibility between county and state systems.
3. Determine annual harvest, reforestation, cultural work.	3. Assist in determining annual harvest, reforestation, cultural work.
4. Develop silvicultural prescriptions in accordance with state guidelines.	4. Develop silvicultural guidelines and assist and review in developing silviculture prescriptions.

5. Promote and implement integrated management.	5. Promote integrated management, coordinate with other DNR programs, in compliance with county forest plan.
6. Layout of integrated management projects.	6. Provide technical assistance for integrated management projects.
7. Prepare paper work for all integrated management projects including timber sales.	7. Assist in preparation of paper work for management projects.
8. Submit certain management projects for state approval.	8. Review and approve management projects for compliance with statewide standards and compliance with county forest plan and s. 28.11.
9. Maintain a minimum of two planning contacts per year with Department liaison forester, wildlife biologist and endangered resources staff.	9. Insure close communication and coordination between forestry, wildlife and endangered resources staff by maintaining at minimum two planning contacts per year with county forest administrator.
10. Determine habitat improvement projects on county forest land.	10. Confers with other functional managers to identify potential habitat improvement opportunities and assist in technical applications of habitat improvement work. Gain approval of all fish, wildlife and endangered resources habitat work on county forest land. Seek and provide cooperative funds-sources for habitat improvement projects as available.
11. Provide opportunities to meet the need for forest based recreation.	11. Provide technical assistance in the development and enhancement of recreation facilities on county forest land.
12. Provide opportunities to meet the need for forest based recreation.	12. Provide, administer and audit funding for forest based recreation as available on county forest land.
13. Provide opportunities and expertise in providing access to state waters.	13. Provide funding for acquisition and development of access sites as available.

C. <u>Administration of Contracts for Management Projects</u>

1. Prepare prospectus, advertisements, conduct bid opening, award bids, sign contracts.	1. Provide technical assistance to county for advertising, selling and contracting of management projects, attend bid openings.
2. Enforce contracts to represent county's interest.	2. Participate in limited contract monitoring as requested by
3. See that all financial aspects of contracts are completed.	3. Monitor compliance with s. 28.11 for severance collection and dissemination to state and towns.
4. Conduct final contract inspections and prepare final reports/paper work.	4. Participate in final inspections and evaluate for compliance with handbooks and procedures, effectiveness of management prescriptions.
5. Monitor final timber sale billings, make severance payments.	5. Review and approve timber sale completions and track accomplishments.
6. Assist in recon update.	6. Update and ensure accuracy of recon.

7. Conduct follow-up studies and evaluations.	7. Monitor follow-up activities and modify future project recommendations.

D. Cooperation

1. Maintain and enhance open cooperative relationship with the Department.	1. Maintain and enhance open cooperative relationship with county and other Department functions.
2. Assist Department in its responsibilities when faced with short-term periodic workload increases, in an attempt to maximize combined state/county efficiencies.	2. Assist county in its responsibilities when faced with short term periodic workload increases, in an attempt to maximize combined state/county efficiencies.

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 29represents 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 for five years beginning in fiscal year 2014 and concluding in fiscal year 2018. 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 (i.e. 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 2014-2018 County Forest time standards revision process is based upon an agreed 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 cover the time period 2019 through 2023.

The time standard commitment to each county is meant to establish the base level of assistance that DNR will work-plan 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 quarterly 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 through the area forester to the team leader and then to the county forest administrator

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 administrator, 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 non-local 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.

At the time the FY2014-2018 time standards revision was being worked on 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.).

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 administrator 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 the 5-year period (fiscal year 2014 – fiscal year 2018).

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 Specialist in the Central Office. 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 administrator 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 administrator 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 administrator 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 administrator. 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 administrator 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 administrator, will be routed through the area and district forestry leaders to the County Forest Specialist in Madison 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 administrator 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 administrator 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.

Activity #	Description	Adjustment Limitations
1	Recon	May not adjust hours in Column F. DNR must accomplish at least 25% of Column F hours annually
2	Timber Sales – Planning	Adjust by utilizing the range of hours in Column E
3	Timber Sales – Pre-establishment	May not adjust hours in Column F. DNR must accomplish at least 50% of Column F hours annually
4	Timber Sales – Field Establishment	Must do at least the minimum hours calculated in Column F
5	Timber Sales – Office Review	May not adjust hours in Column F
6	Timber Sales – Inspections	Adjust by utilizing the range of hours in Column E
7	Timber Sales – Scaling	Counties which scale should do the minimum hours in Column F
8	Artificial Regen. – Pre-establish.	Adjust by utilizing the range of hours in Column E
9	Artificial Regen. – Field Establish.	May not adjust hours in Column F (see exception in definitions area)
10	Artificial Regeneration – Compliance & Monitoring	May not adjust hours in Column F
11	Natural Regeneration – Planning	Adjust by utilizing the range of hours in Column E
12	Natural Regeneration – Field Establishment	Adjust by utilizing the range of hours in Column E
13	Natural Regeneration – Evaluation	Adjust by utilizing the range of hours in Column E
14	Cultural – Planning	Adjust by utilizing the range of hours in Column E
15	Cultural – Field Establishment – Vegetation management	May not adjust hours in Column F
16	Cultural – Compliance & Records	Adjust by utilizing the range of hours in Column E
17	Cultural – Field Establishment – Infrastructure/equipment work	Adjust by utilizing the range of hours in Column E
18	Meetings & Bid Openings	Adjust by utilizing the range of hours in Column E
19	County Forest Entries	May not adjust hours in Column F
20	County Forest Withdrawals	May not adjust hours in Column F
21	Annual Work Planning	Adjust by utilizing the range of hours in Column E

22	Forest Certification	Adjust by utilizing the range of hours in Column E
23	Contacts & Training	Adjust by utilizing the range of hours in Column E
24	Non-local forestry contributions	Adjust by utilizing the range of hours in Column E
25	Preliminary Base Hour commitment	Total of 1-24
26	Base Hour commitment calculation	Line 25 multiplied by statewide pro-rate
27	Time Standards Grant Adjustments	Hours adjusted via the Time Standards Grant as provided for in administrative code (draft)
28	Annual Adjustments	Locally agreed upon hours – To add or subtract from base hours at annual partnership to determine next year's time standards.
29	Annual Time Standard calculation	Total of 26, 27 and 28. Identifies time standard hours for a particular year.

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

A. Exclude GIS start-up (these hours are included in Activity 28).
B. Use the acres of all forested types on the county forest. Use WisFIRS Report #101.
C. 5% represents updating 1/20th 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 mgt. 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.
E. The 0.067 hours represents a recon updating production rate of 15 acres per hour and includes field, office and travel time. This factor was derived from the 1990 Forestry Workload Analysis and confirmed by a 2003 County Forest survey.
F. Adjustment limitation – A minimum of 25% of the effort calculated in Column F must be done by the Department annually. Remaining hours may be shifted to another activity if annual needs dictate and there is local agreement.

Activity #2 – Timber Sales – Planning

B. Use Department liaison and local DNR forestry staff work hours only. Do not include other DNR personnel who may work on the forest but are not accomplishing forestry work.
E. The range of 4-120 hours accommodates variability between large and small properties and the associated number of planned sales on the property. Planning completed in WisFIRS as reflected on Report 201is the basis for the hours. *Recon accuracy is paramount to a valid harvest schedule***.** ***Forest types not managed for local management decisions or in no-harvest zones should be prefixed with a "Z" in order to remove them from the harvest schedule.*** The hours selected must reflect the actual need for this activity by the county.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E

Activity #3 – Timber Sales - 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) This information is also available in Attachment #1 (provided).
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% = A shared responsibility between the Department and county. This time enables the liaison to maintain proficiency and a working knowledge of the property.
E. 0.1 hours per acres includes field, travel and office time. This number was derived from experience and consensus from the time standards ad hoc committee.
F. Adjustment limitation – at least 50% of the pre-sale establishment hours calculated in Column F must be done by the Department annually. The remaining hours may be shifted to another activity if annual needs dictate and there is local agreement.

Activity #4 – Timber Sales – Field Establishment

A. Calculate the total average annual acres established by averaging the ***accepted*** long term harvest goal (15 yr. annual average) from WisFIRS – Report #201) with the average annual # of A-notice acres established from 2008-2012 (WisFIRS Report 301). [*(Ave. Annual A-notice acres 2008-12) + (Long term harvest goal)] / 2 = Average total acres.*

B. Determine the % of the Average Total Acres calculated in column A that are even-aged harvests and uneven-aged / thinning harvests. Use the CFL Acres Established 2008-12 (Attachment #1) (provided) derived from a query of the even-aged vs. uneven-aged / thinning acres on Line 13 of Form 2460-001 for calendar years 2008-2012. 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 the 2460-001's and there is agreement that local information is more accurate, local information may be used in this determination. Take the % of even-aged harvests and the % of uneven-aged / thinning harvests and multiply it times 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 would set up a quarter of the sales or be involved in 100 percent of the sales as one of four foresters.
E. Time standards of 0.85 hours per acre for even-aged harvests and 1.85 hours per acre for selection harvests are based on a 2008 survey of county forest administrators and Department liaisons, a review of time/accomplishment reports on state timber sales from 2005-07, and a 2007 study completed in Minnesota. Currently considered a routine part of sale establishment, time considerations needed to address BMPs, endangered species, permits, landings, etc have been incorporated into these factors.
F. Adjustment limitation - The Department must do at least the minimum base hours calculated.

Activity #5 - Timber Sales – Paperwork & Approval

A. Includes office time (excludes field time) to prepare Form 2460-001, develop maps, update recon, prepare prospectus and complete the narrative for sales established by the Department as well as to review sales (office and occasional field checks) established by the county staff.
B. Use the **annual** average of number of *all* sales established (A-notice) during the last five (5) calendar years. Use Attachment #1 (provided) to determine the number of sales. Source is timber sale report 35A.
C. All sales are included because the liaison is involved with some aspect of the paperwork on all timber sales.
E. 4.0 hours per sales was derived from experience and consensus of the time standards ad hoc committees and recognizes the time variance between preparing the paperwork and reviewing it. It is understood preparation of the Cutting Notice (Form 2460-001) will likely require more than 4 hours while a review will take less time.
F. Adjustment limitation – None allowed.

Activity #6 – Timber Sales – Inspections

A. Inspections should evaluate proper implementation of the prescribed silvicultural treatment, assess wood utilization, evaluate contract compliance and document the site visit. The level of administrative actions will be determined between the administrator and the liaison. The county has the lead on timber sale administration activities. Post-sale updates of RECON at the time of sale closure are included here.
B. Use the **annual** average number of all sales *closed* (final Cutting Report, Form 2460-001, has been filed with the Department) during the previous five (5) 2008-2012calendar years. Use Attachment #2 (provided) of the County Forest Completed Harvests 2008-2012. Source is timber sale report 36A.
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.
E. The range of 1-3 hours allows flexibility for property size, and associated travel time to the site.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E.

Activity #7 – Timber Sales – Scaling

A. Although most counties currently use the ticket system, Department foresters need to maintain scaling proficiencies.
B. Using data from the previous five (5) (2008-2012) calendar years closed timber sales (final Cutting Report, Form 2460-001, has been filed with the Department) **and** were field scaled, calculate the average pulpwood and sawlogs volumes scaled. **This may include "check scaling" if routinely done as a part of timber sale administration on mill scale sales.** Note: the volume that was field scaled on a sale may be less than the total reported volume for that sale if a portion was mill scaled. NOTE: If not tracked specifically – an estimated percentage of the total reported final cut volume (report #32A) can be applied to calculate the field scale volumes. (e.g. an estimated 25% of all volumes are field scaled – multiply total reported final cut volumes by 0.25) NOTE: If field scaling is not done in the county, then do not assign hours to this activity.
C. 5% of the total field scaled volume is deemed an adequate amount for the liaison to maintain proficiency.

E. A time standard of 0.03 hours per cord and 0.5 hours per MBF are an average of the time required to perform the tasks based on the 1990 Workload Analysis.
F. Adjustment limitation - Counties which field scale are encouraged to complete the minimum hours.

Activity #8 – Artificial Regeneration - Planning

B. Stands scheduled for forced type regeneration are used in this calculation**. Use the annual average of the number of stands for the previous five (5) 2008-12 calendar years.** Get information from accomplishment reports and local records.
C. The 2003, 2008, & 2013 ad hoc time standard team 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.
E. A range of 1-4 hours per site considers variability between county programs statewide.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E

Activity #9 – Artificial Regeneration – Field Establishment

A. Includes delineation of the area and carrying out the reforestation plan for pre or post harvest treatments, including time spent conducting site prep activities, **prior to planting** (ie. meeting to help a contractor get started, flagging the planting site, treatments for site prep, etc.)
B. Use the **average number of acres established annually during the last five (5) calendar years 2008-12.** Get information from accomplishment reports and local records.
C. The 2003, 2008, & 2013 ad hoc time standard team 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.
E. The time factor of 0.6 hours per acre was derived from 2013 Time Standards Committee consensus.
F. Adjustment limitation – None allowed. If a county plants, then the Department is expected to participate at the level identified in Column F. If a county does not plant in a particular year, then the hours may be redirected to another activity.

Activity #10 – Artificial Regeneration – Planting Compliance

A. Time required to inspect proper planting techniques such as seedling depth, spacing, seedling handling and storage, and seedling survival.
B. Use the **annual average of acres planted from the past five (5) calendar years 2008-12.** Get information from accomplishment reports and local records.
C. The 2003, 2008 & 2013 ad hoc time standard team 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. 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. Adjustment limitation – none allowed, utilize the range of hours provided in Column E

Activity #11 – Natural Regeneration – 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) including PJ, O, NH (shelterwoods), H, BW, SC, C, and SH.
B. Use the **annual average of the number of stands for the previous five (5) 2008-12** calendar years. Get information from accomplishment reports and local records.
C. The 2003, 2008, & 2013 ad hoc time standard team 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.
E. A range of 1-4 hours per site considers variability between county programs statewide.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E.

Activity #12 – Natural Regeneration – Field Establishment

A. Includes delineation of the area and carrying out the reforestation plan, including time spent conducting site prep activities, for pre or post harvest treatments (ie. meeting to help a contractor get started, flagging the site, treatments to promote natural regeneration, prescribed fire, scarification prior to harvesting).

B. Use the **average number of acres established annually during the last five (5) 2008-12 calendar years.** Get information from accomplishment reports and local records. Sites where natural regeneration is not in question are not to be included in the acreage.
C. The 2003, 2008, & 2013 ad hoc time standard team 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.
E. The time factor of 0.6 hours per acre was derived from 2013 Time Standards Committee consensus.
F. Adjustment limitation – None allowed if this is an on-going need in a particular county.

Activity #13 – Natural Regeneration – Evaluation & Monitoring

A. Follow-up time required to evaluate success of treatments designed to stimulate natural regeneration when the success of natural regeneration is questionable. Includes both stands which have received treatment via timber harvest to stimulate regeneration (e.g. oak shelterwood, jack pine natural regeneration, northern hardwood single tree or group selection with gaps, etc.), and stands that have received supplemental treatments as described under Activities 11 & 12.
B. Use the **average number of acres scheduled for regeneration monitoring annually during the upcoming five (5) 2013-17 calendar years** from WisFIRS report #205. Under the reports tab – report #205- enter a Treatment Type code of **Habitat Management**. 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. The 2003,2008, & 2013 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). (#Acres x 2 plots/ac. x 50%)
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E

Activity #14 – Cultural* - Planning

* Cultural Activities include, but are not limited to, forest management activities such as prescribed burning, pruning, aspen maintenance, invasive species control, non-commercial thinning and release from competing vegetation. Site preparation for natural regeneration (ie. aspen maintenance separate from harvest) should not be included here. Prescribed burning, chemical, or mechanical treatments to promote regeneration should only be used in the calculations for Activities # 8-13.

E. The range of 8 – 32 hours accommodates the range in property sizes. The hours selected must reflect the actual need for this activity by the county.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E.

Activity #15 – Cultural* – Field Establishment

B. Use the prior five (5) year 2008-12 historic average of the number of acres established per year. Get information from accomplishment reports and local records.
C. The 2003, 2008, & 2013 ad hoc time standard team 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.
E. The time standard of 1.0 hours per acre represents a statewide average to perform the task.
F. Adjustment limitation – None allowed.

Activity #16 – Cultural* – Compliance and Record Keeping

B. Use the prior five (5) year 2008-12 historic average of the number of sites checked per year. Get information from accomplishment reports and local records.
C. The 2003, 2008, & 2013 ad hoc time standard team determined this is a shared responsibility between the county and the Department; it is reasonable for Department forestry staff to be involved in 75% of the workload. Time required to maintain the record keeping system should be included here.
E. The range of 1-4 hours per site is based on the average site size or activities performed. For example, it takes longer to check a 10-acre pruning site than to check a 100 acre prescribed burn.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E.

Activity #17 – Infrastructure Planning, Establishment & Maintenance

A. Includes time planning, establishing, or maintaining county forest infrastructure which 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. The 2013 ad hoc time standards team determined this is primarily a county responsibility but that the Department is uniquely positioned to provide assistance in these efforts via qualified equipment operators. Additionally, some counties rely on Department staff to plan, establish, and/or maintain these infrastructure elements because they lack the equipment and/or expertise and Department staff benefit from time operating equipment to maintain proficiency.
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.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E.

Activity #18 - Meetings and Bid Opening attendance-

A. Time allotted includes *attending* bid openings and meetings important to the County Forest program including but not limited to: Forestry committee, Recreation, Advisory and WCFA. Pre-bid opening work or prospectus development is included in Activity #5. Annual Partnership meeting time should be included under Activity #20. The time may include other forestry personnel, in addition to the liaison, who also may attend the meeting.
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.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E.

Activity #19 –County Forest Entries

B. Use Attachment #2 (provided) – County Forest Entries & Withdrawals 2008-2012. Fractions are permissible in this column.
E. A time standard of 2 hours per entry is based on a statewide average.
F. Adjustment limitation – None allowed.

Activity #20 – County Forest Withdrawals

A. Include the liaison's time for environmental assessment preparation, field inspections of the site, data collection, assistance with the application, etc. Area or district time to develop the Finding of Facts and recommendation should not be included here. Determine number of withdrawals by using the 5 year historic average (2008-2012).
B. Use Attachment #2 (provided) – County Forest Entries & Withdrawals 2008-2012. Fractions are permissible in this column.
E. A time standard of 32 hours per withdrawal represents a statewide average of all county forest withdrawals. If a significantly higher number of hours are anticipated one year due to a complicated withdrawal, these should be addressed in Activity #28
F. Adjustment limitation – None allowed.

Activity #21 – Annual Work Planning

A. Time commitment should include assisting the county in preparation for grant applications, annual partnership meetings, annual work plan, tri-annual program audits, 15 year plan amendments, and other county planning efforts.
E. The 10-60 hour range addresses the variability between county forest acreage. The hours selected must reflect the actual need for this activity by the county.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E.

Activity #22 – Forest Certification

A. Includes the attendance and preparation for forest certification audits including preparing site packets, logistics and doing research. In addition, include time directly related to policy development addressing corrective actions resulting from Forest Certification audits. Also include time spent on 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). Audits typically occur once every 4 years.
E. The range of 5 – 40 hours is based on time records and the variability of audit complexity between counties.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E.

Activity #23 – Contacts or Training Coordination

A. Includes time Department forestry personnel use to contact others (i.e. entomologist, pathologist, endangered resources staff, legal, recreation, water program, etc.) on behalf of the county.
E. The range of 10-40 hours addresses the variability between counties. The hours selected must reflect the actual need for this activity by the county.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E.

Activity #24 – Additional Non Local Forestry Contributions

The Department recognizes that the local forestry staff may not be capable of providing all the technical assistance needed by each county forest. Specialists or other staff with advanced skills may be provided to meet this need. Therefore, time contributed from the area, district, division or a Department contractor would be accounted for in this activity. Include assistance requested by the County for such things as entomology, GIS, WisFIRS, invasive species, Gypsy Moth and Silviculturalist review. Wildlife management work is not included here.

E. A range of 40 – 100 hours (total) allows for variability in the county forest programs. The hours selected must reflect the actual need for this activity by the county.
F. Adjustment limitation – none allowed, utilize the range of hours provided in Column E.

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

F. The total of all activities #1 - #24.

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 the FY2014-2018 time standards revision was being worked on 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 administrator 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 Administrator. 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
Effective July 1, 2013 through June 30, 2018

	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.	FRCA	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 .05% to be accomplished each year		Multiply Column D by .067 hours per acre	_____ hours *A minimum of 25% must be done annually (see page 210-54)
		TIMBER SALES					
2.	FRCA	Planning – Annual office planning of timber sales including researching recon, pull compartment files, GIS queries, meetings on annual goals, identifying sale areas.	All liaison and DNR forestry staff hours in a year.			Select **4 – 120** hours	_____ hours
3.	FRCB	Pre-establishment field inspections of timber stands to determine if they are ready for a timber sale -*Use the *accepted* long term harvest goal (15 yr. annual ave) – WisFIRS Report #201	_____average acres per year	Multiply Column B by **50%**		Multiply Column D by **0.1** hours per acre.	_____ hours *A minimum of 50% must be done annually (see page 210-54)
4.	FRCB	Timber Sale Field Establishment * Use the following to determine the average total acres: [(Ave. of CY 2008-12 A-notice acres) + *accepted* long term harvest goal] 2 *Reports #201 & 301 and attachment #1	_____average acres per year harvested even-aged	Multiply Column B by **25%**		Multiply Column D by 0.85hours per acre	_____ hours
			_____average acres per year harvested as uneven-aged or thinned	Multiply Column B by **25%**		Multiply Column D by 1.85 hours per acre	_____ 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
5.	FRCB	Timber Sale Establishment Paperwork and Approval (preparation and/or review of the 2460-1 by the DNR) * Use the 5-year average (CY 2008-2012) of timber sales established – *See Attachment #1 – report 35A	_____# of sales per year*	Multiply Column B by **100%**		Multiply Column D by 4.0 hours per sale.	_____ hours
6.	FRCC	Administration - Timber Sale Inspections * Use the 5-year average (CY 2008-2012) of sales closed (Final notice) – *See Attachment #2 – report 36A	_____# of sales closed per year*	Multiply Column B by **100%,** then Multiply by 2 visits per sale		Multiply Column D by the hours selected. Select **1 - 3** hours / visit.	_____ hours
7.	FRCC	Administration - Scaling * Use the 5-year average of cords or MBF field scaled on closed sales. (CY 2008-2012) *Report 32A	_____average cords field scaled per year*	Multiply Column B by **5%**		Multiply Column D by **0.03** hours per cord.	_____ hours
			_____average MBF field scaled per year*	Multiply Column B by **5%**		Multiply Column D by **0.5** hours per MBF.	_____ hours
		ARTIFICIAL REGENERATION					
8.	FRCD	Reforestation Planning Preestablishment inspections for artificial regeneration *Use the 5 year historic average (CY 2008-2012)	_____ # of annual stands	Multiply Column B by **50%**		Multiply Column D by **1-4** hours per stand.	_____ hours
9.	FRCD	Field Establishment – Pre or post harvest treatments required ***prior* to** planting * Use the 5-year historic average (CY 2008-2012)	_____# of acres per year*	Multiply Column B by **50%**		Multiply Column D by 0.**6** hours per acre.	_____ hours
10	FRCD	Planting compliance, monitoring and record-keeping *Inspections for planting compliance and for conducting survival counts on artificial regeneration sites * Use the 5-year historic average (CY 2008-2012)	_____ # of acres per year	Multiply Column B by 3, then multiply that figure by **50%** *(3 plots / acre= 1 plot / acre at 1, 3 & 5 yr. survival checks)		Multiply Column D by 0.1 hours per acre	_____ 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
		NATURAL REGENERATION					
11.	FRCD	Natural Regeneration-Planning for Site Prep Pre-establishment planning for site preparation on sites with questionable natural regeneration *Use the 5 year historic average (CY 2008-2012) number of stands.	_____ # of annual sites	Multiply Column B by **50%**		Multiply Column D by **1-4** hours per site	_____ hours
12	FRCD (Poss. FRCT)	Natural Regeneration - Field Establishment Pre or post harvest treatments required to promote **natural** regeneration *Use the 5 year historic average (CY 2008-2012) acres	_____ # of acres per year	Multiply Column B by **50%**		Multiply Column D by **0.6** hours per acre	_____ hours
13	FRCD	Natural Regeneration - Monitoring Inspections for evaluating regeneration success on questionable sites *Report #205 or local records (5-yr avg).	_____ # of acres per year	Multiply Column B by 100%_____ ***DNR doing ½ of 2 plots/ac. ***See 210-58)**		Multiply Column D by .1 hr./acre	_____ hours
		CULTURAL ACTIVITIES					
14	FRCE	Cultural – Planning (prescribed burning, hand release, pruning, invasive control, aspen maintenance, non-commercial thinning)				Select **8 – 32** hours	_____ hours
15	FRCE (Poss. FRCT)	Cultural –Field Establishment - (prescribed burning, hand release, pruning, invasive control, aspen maintenance, non-commercial thinning) * Use the 5-year historic average (Calendar Year 2008-2012)	_____# of acres per year	Multiply Column B by **50%**		Multiply Column D by **1.0** hours per acre	_____ hours
16	FRCE	Compliance & Record Keeping. * Use the 5-year historic average (Calendar Year 2008-2012)	_____# of sites per year	Multiply Column B by **75%**		Multiply Column D by **1 – 4** hours per site	_____ 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
		INFRASTRUCTURE					
17	FRCW	Infrastructure – Planning, Establishment & Maintenance (trails, roads, fire breaks, berms, etc that are consistent with comprehensive plan and promote sustainable forestry or forest recreation)				Select **0 – 100** hours	_____ hours
		ADMINISTRATION					
18	FRCZ	Meeting and Bid Opening Attendance *Attendance at bid openings, forestry committee, advisory committee, access planning, and recreation meetings.				Select **25 – 120** hours	_____ hours
19	FRCZ	Process County Forest Land entries * Use the 5-year historic average (Calendar Year 2008-2012)	_____# of entries per year*	Multiply Column B by **100%**		Multiply Column D by **2.0** hours per entry	_____ hours
20	FRCZ	Process County Forest Land withdrawal * Use the 5-year historic average (Calendar Year 2008-2012)	_____# of withdrawals per year (fractions are allowed)	Multiply Column B by **100%**		Multiply Column D by **32.0** hours per withdrawal	_____ hours
21	FRCZ	Annual Work Planning * Annual partnership meeting, review / development of annual work plan**,** grant applications, tri-annual program audits, 15 yr. plan amendments, background research, associated county planning efforts				Select **10 - 60** hours	_____ hours
22	FRCV	Forest Certification Audit preparation and attendance and any time directly related to policy development from Forest Certification findings. Includes time spent on internal certification monitoring.				Select **5 – 40** hours	_____ hours
23	FRCZ	Contacts or Training – Coordinating Department contacts or educational opportunities with county staff				Select **10-40** hours	_____ hours
24	FRCE FRCF FRCQ FRCS	Additional non-local *forestry* contributions for specialized technology or new information between WDNR and County Forest staff (list specific activities in the comment section)				Select **40 –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
25		Preliminary Base Hour Commitment **Subtotal of Activities 1 – 24**					_____ hours
		ADJUSTMENTS					
26		**Base Hour Commitment** for Department forestry staff *Pro-rate of worksheet hours 2014-2018 Time Std. revision resulted in agreement on a statewide total of 46,000 hrs. See pg. 210-50.		Enter preliminary Base Hours from Line 25, Column F		Multiply Column C by _____ *PRO-RATE FIGURE	_____hours
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 (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

**** COMMENT SECTION:**

List the specific additional non-local forestry department contributions for specialized technology or training in Activity #24.

APPROVED:

_____ _____

Department Liaison Forester Date

_____ _____

Department Forestry Team Leader Date

_____ _____

County Forest Administrator Date

TIME STANDARDS SUMMARY (Base Hours)

Activity	Ashland	Barron	Bayfield	Burnett	Chippewa	Clark	Douglas	Eau Claire	Florence	Forest	Iron	Jackson	Juneau	Langlade	Lincoln
1. Recon	60	26	263	160	58	182	366	75	55	19	249	162	24	188	137
2. TS Planng.	40	52	120	120	60	110	120	80	80	60	111	32	30	120	80
3.TS Pre-est.	66	21	233	134	61	140	324	53	49	26	264	129	25	182	140
4a.TS Even-age	101	11	579	304	78	265	990	124	160	32	317	364	33	181	249
4b.TS Uneven	542	173	679	690	255	831	608	180	203	148	1469	223	147	1251	564
5. TS Office	48	20	196	149	52	192	244	92	48	20	172	152	28	220	128
6. TS Admin.	52	36	236	210	48	244	240	84	64	24	152	70	28	240	140
7. Scaling	0	4	31	10	10	41	0	19	17	11	0	38	0	10	3
8. A. regen-Pre	0	2	24	12	2	9	20	3	3	2	0	3	4	4	2
9. A.regen -Est	0	1	166	61	9	25	169	10	32	6	0	30	0	6	3
10. A-reg-Mntg.	0	1	83	30	5	13	12	5	16	6	0	15	15	3	2
11. N.reg-Pre	0	2	20	41	2	8	23	2	2	0	1	5	4	8	2
12. N.reg.-Est	0	11	60	100	9	46	38	12	8	0	3	12	0	6	2
13. N.reg.-eval.	6	1	210	33	3	15	75	4	3	32	20	40	7	2	10
14. Cult. Plan.	8	14	32	32	16	32	32	16	20	8	10	16	32	32	20
15. Cult. Est.	0	10	100	26	10	216	271	10	13	1	0	40	0	10	5
16. Cult. comp	0	3	32	6	2	115	14	2	2	1	0	2	11	3	4
17. Infrastructure	30	40	100	0	50	60	80	50	75	40	80	8	20	100	100
18. Admin.	25	30	120	60	60	120	120	90	120	50	80	28	25	40	80
19. CFL entries	1	1	3	2	2	1	3	1	1	2	.4	2	2	1	0
20. CFL WD's	0	0	19	32	0	13	64	13	13	32	25.6	45	6	19	0
21. Annual pln.	24	40	60	60	40	40	60	35	55	40	55	12	20	40	40
22. For. Cert.	25	20	40	40	40	25	40	30	40	30	36	10	40	20	30
23. Cont. & Trg.	10	20	40	10	20	30	40	20	30	20	10	10	10	20	40
24. Non-local	40	40	60	40	60	65	80	80	40	40	40	40	40	60	40
25. Pre.-Total	1078	579	3506	2362	952	2838	4033	1090	1149	650	3095	1488	551	2766	1821
PRO-RATE	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682
26.Base Hr. Commitment	1044	561	3395	2287	922	2748	3905	1055	1112	629	2997	1441	533	2678	1763

NOTE: All numbers are in hours per year

TIME STANDARDS SUMMARY (Base Hours)

Activity	Marathon	Marinette	Monroe	Oconto	Oneida	Polk	Price	Rusk	Sawyer	Taylor	Vernon	Vilas	Washburn	Wood	Statewide total
1. Recon	38	337	11	60	112	27	116	132	162	27	1	60	210	48	3365
2. TS Planng.	32	80	15	90	80	80	120	120	90	100	8	24	120	40	2214
3.TS Pre-est.	32	344	12	51	95	25	111	173	195	29	2	50	181	44	3191
4a.TS Even-age	57	555	36	69	210	69	286	73	269	42	3	92	270	115	5934
4b.TS Uneven	160	1116	47	249	414	77	318	1280	995	163	8	178	1043	154	14165
5. TS Office	36	236	16	72	84	28	96	108	168	32	8	56	168	56	2925
6. TS Admin.	44	284	16	76	132	14	92	128	176	48	8	28	200	52	3166
7. Scaling	2	113	4	8	14	1	0	120	91	4	18	12	38	13	632
8. A. regen-Pre	1	3	2	5	1	6	2	0	2	0	2	5	10	2	131
9. A.regen -Est	1	22	6	6	2	30	3	0	3	0	4	45	29	5	674
10. A-reg-Mntg.	1	22	3	3	1	22	2	0	2	0	2	30	15	3	312
11. N.reg-Pre	2	6	3	3	4	2	2	0	2	0	2	4	24	2	176
12. N.reg.-Est	6	12	2	9	1	14	3	0	15	0	16	30	70	3	488
13. N.reg.-eval.	7	4	8	7	20	8	25	0	5	6	5	20	23	4	603
14. Cult. Plan.	20	8	32	24	10	8	8	0	8	8	8	20	32	16	522
15. Cult. Est.	20	65	2	15	0	20	5	0	5	28	19	25	49	10	975
16. Cult. comp	3	8	2	6	0	2	2	0	5	7	2	6	20	2	262
17. Infrastructure	40	20	5	50	80	0	20	80	75	10	8	24	100	15	1360
18. Admin.	62	75	93	80	80	30	30	100	90	60	25	60	90	45	1968
19. CFL entries	2	1	1	1	2	0	1	0	1	1	1	2	1	1	37.4
20. CFL WD's	0	32	6	13	13	6	6	6	13	0	0	13	13	19	421.6
21. Annual pln.	30	24	16	40	40	15	60	40	45	45	15	30	60	25	1106
22. For. Cert.	30	12	0	30	40	20	40	40	30	40	5	30	40	40	863
23. Cont. & Trg.	24	20	10	25	10	10	10	20	30	10	10	10	40	10	569
24. Non-local	40	40	40	70	40	40	50	80	75	40	40	40	50	40	1450
25. Pre.-Total	690	3439	388	1062	1485	554	1408	2500	2552	700	220	894	2896	764	47,510
PRO-RATE	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682	0.9682
26.Base Hr. Commitment	668	3330	376	1028	1438	536	1363	2421	2471	678	213	866	2804	740	46,000

NOTE: All numbers are in hours per year

Annual Meeting to Evaluate County/Department Partnership

Annually, a meeting will be held between the county forest administrator, 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 the Neil H. LeMay Forestry Center in Tomahawk. The executive director is the registered agent of the corporation.

An eleven-member board of directors governs WCFA. At the annual meeting held each year on the first Friday of November, directors and five alternates are elected to two-year staggered terms. 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 the following counties:

Marinette, Forest, Oconto, Florence and Langlade

Area 2 - Consisting of the following counties:

Vilas, Taylor, Oneida, Price and Lincoln

Area 3 - Consisting of the following counties:

Iron, Bayfield, Ashland and Douglas

Area 4 - Consisting of the following counties:

Sawyer, Polk, Washburn, Barron, Burnett and Rusk

Area 5 - Consisting of the following counties:

Clark, Marathon, Eau Claire, Juneau, Jackson, Chippewa, Wood, Vernon and Monroe

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 four times each year: during the spring administrators' meeting; during the WCFA summer tour; in September for a budget preparation meeting; and at the annual meeting held in November.

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 administrator 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.

Several forest administrators 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 Public Relations, Recreation and Legislative / Certification committees. Members of these committees consist of one forest administrator from each area, two WCFA board members, the president of the administrators' association, and the executive director.

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

COUNTY FOREST FINANCIAL ASSISTANCE

There are four forms of direct financial assistance available to those counties with county forests that are received from the state Department and administered by the Division of Forestry. The county shall establish an account known as the County Forestry Aid Fund, which shall be segregated and non-lapsing.

1. COUNTY FOREST ADMINISTRATION GRANT PROGRAM

   Each county is eligible for a grant up to 50% funding of the salary and 50% of the fringe benefit costs of a professional 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. The specifics of this program are addressed in s. 28.11(5m), Wis. Stats., and s. NR 47.70, Wis. Adm. Code.

2. SUSTAINABLE FORESTRY GRANT PROGRAM

   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. The specifics in the program are detailed in NR 47.75, Wis. Adm. Code.

SUSTAINABLE FORESTRY GRANT GUIDELINES

Authorization:	NR 47.75, Wis. Adm. Code
Eligibility:	Counties with land enrolled in County Forest Law s. 28.11 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 as short term and unanticipated workload items as identified in the annual adjustment category of the county forest time standards. Maximum project length is 2 years. 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 30th day following application.
Selection criteria:	Project proposal requests will be divided into two preference categories as follows:

1st Preference
Storm – related projects
Hiring of temporary staff to address short-term workload projects

2nd Preference
All other eligible projects

Within a preference category, projects in counties that have received grants the most recently

shall be given the lowest priority.

Application materials:

1. County forestry committee approval to apply
2. Project specifications: maps, short narrative, estimated cost breakdown
3. Signature and approval of specifications by DNR liaison forester and county forest administrator.
4. Other material as the Department feels necessary.

Accountability: Projects will be audited in conjunction with regular Departmental audit. A short accomplishment narrative shall be required with final project completion

3. VARIABLE ACREAGE SHARE LOANS

The county may request, by county board resolution, from 0 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 December 31 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 March 31 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.

4. PROJECT LOANS

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. Application must be made and the state will determine if the project(s) is feasible, 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 20%.

PROJECT LOANS GUIDELINES

Authorization: s. 28.11(8)(b)2., Wis. Stats., Project Loans, and s. NR 47.60, Wis. Adm. Code.

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 NR 47.60 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.

Multi Year Loans: 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:
1. County board resolution
2. Project specifications: maps, short narrative, estimated cost breakdown including any county contributions.
3. Letter of compliance with county forest comprehensive land use plan from the Department liaison forester.
4. Other material as the Department feels necessary.

Accountability Audit: Projects will be audited in conjunction with regular Departmental program audit.

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. 77.06(2), 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 (firewood to the general public).

GRANTS - OTHER

Timeliness and following grant procedures are essential in obtaining grants. Stewardship grants to local government, LAWCON, NRTA, Lakes and Rivers program applications are due May 1. Motorized grant application deadline is April 15.

Numerous federal, state, and local grants may be available to government and non-profit conservation organization sponsors. Contact the community service specialist at the Department regional office for information and/or the publication "Directory of State and Federal Financial Assistance Programs" or visit our website at: www.dnr.state.wi.us/org/caer/cfa/cfindex.html.

ELIGIBLE SPONSOR CODE: T (Town), V (Village), C (City), CO (County), TUG (Tribal Unit of Government), SD (School District),. NCO (Nonprofit Conservation Organization), INO (Incorporated Trail Organization), QLA (Qualified Lake Association), LD (Lake Protection and Rehabilitation Districts), F(Federal Government), QRA (Qualified River Organization).

Stewardship programs:

a. ADLP - Acquisition and Development of Local Parks. Provides up to 50% matching grants for the acquisition, development and renovation of local parks, trails and recreation areas. (T, V, C, CO, TUG, NCO)

b. UGS - Urban Green Space Program. Provides up to 50% matching grants for the acquisition of land and restoration or enhancement of shorelines in and around the larger urban areas. (T, V, C, CO, TUG, NCO)

c. URGP - Urban Rivers Grant Program. Provides up to 50% matching grants for the acquisition of land on or adjacent to urban rivers. (T, V, C, CO, TUG)

**The following five grants are only available to Nonprofit Conservation Organizations (NCO). They are included to illustrate possible grants available for land acquisition activities should local units of government consider partnering with NCOs.

d. HA - Habitat Areas Program. Provides up to 50% matching grants for the acquisition of land for wildlife habitat to provide opportunities for wildlife based recreation. (NCO)*

e. NA – Natural Areas Program – Provides up to 50% matching grants for the acquisition of land to protect natural areas. (NCO)*

f. SBP – Streambank Protection – Provides up to 50% matching grants for the acquisition of land along identified priority streams to protect water quality and fish habitat. (NCO)*

g. State Trails/State Property Development – Provides up to 50% matching grants for the acquisition of lands, development and maintenance of corridors for state trails. Provide grants to friends groups, NCOs to develop or enhance state recreation properties. There are limitations on amounts awarded. (NCO)*

h. Wild Lakes - Provides up to 50% matching grants for the acquisition of wild lake shorelands. (NCO).*

Motorized Programs:

i. ATV - All-Terrain Vehicle Program. Provides 100% grants for the maintenance, acquisition, development and rehabilitation of trails and intensive use areas. (T, V, C, CO, F)

j. MORP - Motorcycle Recreation Program. Provides 50%-100% cost sharing assistance for the acquisition, development and maintenance of trails and intensive use areas for off-road motorcycle recreation. (T, V, C, CO, F)

k. RBF - Recreational Boating Facilities Program. Provides 50% matching grants to develop access to water and harbors of refuge. Program also provides 50% cost sharing assistance for the acquisition of equipment to cut and remove aquatic plants, for the acquisition of aids to navigation, and dredging of channels of waterways for recreational boating. (T, V, C, CO, TUG, QLA, LD)

l. SNOWMOBILE – Snowmobile Program. Provides 100% grants to counties for the maintenance, rehabilitation, acquisition, and development of trails along with the major rehabilitation of bridge structures. Also provides 100% cost sharing to towns, villages and cities for the initial purchases of snowmobile route and highway crossing warning signs. A companion program, Snowmobile Enforcement, is available to county law enforcement patrols. (T, V, C, CO)

Other Programs:

m. COCON - County Conservation Program. Provides 50% matching grants for fish and wildlife projects. (C, TUG, CO)

n. FOR HAB - Forest Wildlife Habitat Program (Nickel/Acre Program) (CO) (See page 220-14 for details on this program).

o. LAWCON - Federal Land and Water Conservation Fund Program. Provides up to 50% matching grants for the acquisition, development and renovation of local parks. (T, V, C, CO, TUG, SD)*

p. NRTA - National Recreational Trails Act, Motorized, Non-Motorized and Combined/Multiple Use. A federal program which provides 50% grants to maintain, develop, renovate and acquire trails. (T, V, C, CO, TUG, INO, SD, F)*.

q. Lakes Planning/Protection/Classification Program – Provides up to 75% matching grants for lake management planning, protection and classification projects. Various maximum award amounts apply. (T,V, C, CO, NCO, QLA, LD)

r. Rivers Planning/Protection Program – Provides up to 75% matching grants for river planning and projects. Various maximum award amounts apply. (T,V, C, CO, NCO, QRO)

s. SFR - Sport Fish Restoration Program. Provides financial assistance for boating access, fishing piers and other sport fishing related projects. Not a grant program. (T, V, CO, TUG, QLA, LD)

* DNR receives a share of these Federal programs. NRTA is administered through Bureau of Parks. LAWCON is coordinated through Bureau of Community Financial Assistance, contact your bureau with project proposals.

Other grant sources are state and national sportsman's groups with local chapters such as Ducks Unlimited, Ruffed Grouse Society, Trout Unlimited, Wisconsin Waterfowl Association, Whitetails Unlimited, Wisconsin Turkey Federation, etc. Contact the Department wildlife biologist for assistance in contacting these local chapters. Other local sources may be sportsmen clubs, service clubs, garden clubs, youth groups, etc.

FOREST WILDLIFE HABITAT IMPROVEMENT PROGRAM (FOR HAB - $.05/acre)

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 (County Forests), 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) increase funding from 5 cents to a maximum of 10 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 forester assigned to the county). Recreation development on county forests is aided by other programs (see M.C. 8719.5 and M.C. 8718).

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 ch. NR 150, Wis. Adm. Code, and M.C. 1606.1. 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 manger 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 plan of work.**
Wildlife Biologist	2.	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.	Obtains updated county forest acreage from County Forest 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 s. 28.11 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.
District Forestry and Finance Staff	7.	Conducts review of county records as part of the normal county forest 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.

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 critical 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 affects 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. Openings Development and Renovation - The opening sites, locations, and amounts should comply with criteria established under M.C. 2112 and M.C. 2112.1.

   b. Trail Development and Renovation - 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. Acquisition - 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. Capital Purchase - 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. Timber Sale Design - 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. Site Preparation and Planting - 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. Snag, Den, Nest and/or Rendezvous Sites - Projects could include various aspects in the identification, selection and management of these unique and important sites.

   h. Aspen Maintenance - This practice, normally handled as part of standard timber sale administration, is acceptable on sites with an average of less than 70 and more than 20 square feet basal area of residual.

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. Trail Mowing, Openings Maintenance and Access Management - 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 note: A county forest access management plan will be required with the next county forest comprehensive land use plan.

Important note: Annual recreational trail maintenance, which goes beyond practical wildlife habitat management, should utilize other funding sources.

b. Wildlife and Wildlife Habitat Inventories - 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. Wetlands Maintenance - 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. Education - Only projects or materials that focus on wildlife education (habitat management, protection, research and/or enhancement) are allowed.

e. Endangered and Threatened Species - 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. 23.09(17m)(h) and (hg), 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 ear, 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 can not 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.

10. Chapter NR 50, Wis. Adm. Code; s. 23.09, Wis. Stats.; and the Wildlife Management Operations Handbook (2310.5) should be used as a reference for other procedures not specifically addressed.

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.

Refer to M.C. 2112 and M.C. 2112.1 for program guidelines. Department liaison forester and/or wildlife biologist should be contacted for program details.

a. 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.

b. Forest Stewardship Program (FSP)

The major emphasis of the federally funded FSP is to encourage private forest landowners to develop and follow a stewardship management plan. The program provides education and information to the private forest landowners and the public about forest management; training for resource professionals, and forest management technical assistance. Applications are available from the Division of Forestry in November and must be submitted by January 1 of each year.

c. 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 ss. 28.11(8)(a) and 28.11(9)(d), Wis. Stats.

a. 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.

b. Towns Timber Sales Revenue

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 each township 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.

Normally this payment should be made in January. With county board approval, a county may pay more than 10 percent of its timber sales revenues to the townships annually.

Acreage by Towns 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 insure that each of the towns 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 summary shows only those monetary forms of assistance provided through the Division of Forestry.

	As of 3-06-2008:
1. Administration Grant Program	$1,330,200
2. Variable Share and Project Loans	$1,012,200[1]
3. State Nursery Stock Discount	$80,000
4. Aid to Towns	$708,000
5. Sustainable Forestry Grant	$246,700
6. Forest Certification	$40,000
7. Wildlife Habitat Grant	$112,200
Subtotal	$3,529,300
Severance payments (credit)	$1,486,000
Net Financial Assistance	$2,043,300[2]

[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 is Division of Forestry financial assistance only and does not include costs of any technical assistance.

All values shown are rounded to nearest $1,000.

PUBLIC LAND RECORDS AND AUDITING

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.

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

s. 19.32(1) 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. 19.32(1).]

s. 19.32(2) 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 through the use of microfilm or other reproductive device. 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)).

Audits

To satisfy its oversight responsibilities under s. 28.11, Wis. Stats. and in its role of County Forest Certification Group Manager, DNR's Division of Forestry will audit the following items on county forests at least once every three years:

- Forestry Fund Account
  - Variable acreage share payments
  - Project loans
- Wildlife Habitat Management Grant
- County Forest Administrator Grant
- Sustainable Forestry Grant
- Forest Certification compliance (for those counties participating in ***FSC***® or ***SFI***® group forest certification)

The fiscal and programmatic procedures for the audit are as follows:

I. PROGRAM OBJECTIVE

The county timber sales audit is not only a fiscal audit, 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. 28.11(1), Wis. Stats.

Timber sales on county forestland shall be conducted in accordance with the management plan, the management objectives for that property, and s. 28.11, 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 obtain maximum financial return from forest land and 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. DNR 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 that effort.

County forest audits should be conducted every 3 years to assure that management of the county forests is aligned with s. 28.11, Wis. Stats. and if participating, that they are managing in accordance with the forest certification standards.

II. PARTICIPATION

The district forester or designee and either a DNR employee or contractor filling the role of fiscal specialist will conduct audits jointly. DNR personnel including the liaison forester, forestry team leader, wildlife biologist, and district wildlife biologist may be contacted for input prior to the audit but need not be present at the audit. The county forest administrator must be present for the audit. Other county staff may be invited at the administrator's discretion.

III. PREPARING FOR THE AUDIT

A. Contact the county forest administrator to select a date for the audit. A request for an appropriate place to conduct the audit should also be made. Follow-up with a letter to the county forest administrator notifying him of the upcoming audit and confirming the information that will be needed (see template letter) including:

1. Timber sale cutting notice & report (Form 2460-001)
2. Stand exam tally sheets
3. Timber sale maps
4. Bidding information
5. Timber sale contracts and addendums
6. Insurance/Worker's comp/SFI Training certificates
7. Timber sale inspection logs

8. Scale sheets, lock box tickets, mill scale slips
9. Timber sale journal
10. Timber sale ledger
11. Closeout-transactions
12. Letters of credit, bonds
13. State aid forestry accounts and ledgers
14. Wildlife habitat account and ledger
15. Forest certification corrective action (CAR) documentation (if applicable)

Also forward a copy of the SFI and / or FSC certification checklist with the letter so that the County Forest administrator can give some forethought to that part of the audit.

B. Contact the county forest specialist in the Bureau of Forest Management to obtain the following for the audit period:

1. County Forest Tax Acreage by Towns (Report 51A)
2. County Forest Ledger Account Detail (Report 53B)
3. Wildlife Habitat Grant distributions
4. County Forest Administrator Grant distributions
5. Variable Acreage Share Loan distributions
6. Project Loan distributions
7. Forest Certification corrective actions (if appropriate)

C. Contact the local county forest DNR liaison forester, forestry team leader, wildlife biologist, and district wildlife biologist to discuss the management of the forest. These people should have a close working relationship with the county and be able to provide information on problem areas as well as the strengths of the county forestry program.

D. Pre-audit conference - During this conference with the County forest administrator review the findings from the previous audit and any pending certification CARS. Determine if these recommendations were implemented. Document this discussion in the new audit report. Briefly explain forthcoming audit procedures to the County forest administrator.

IV. FISCAL AUDIT PROCEDURES

A. SAMPLE: Select a representative sample (5% of total but no less than 3 per year for audit period) of closed sale folders. Include different sized sales, contractors, cutting methods, sale types, etc. The most recent sales would have a higher likelihood of incorporating changes made from previous audits.

B. BIDDING PROCEDURE

1. Responsibility -To verify that competitive bidding is conducted according to the statute, fairly, and without bias. Counties should be selling timber to the highest bidder unless there is just cause. After the county forest staff, Forestry Committee, and DNR approve a timber sale; the sale is to be sold. Except for salvage sales as a result of fire, snow, hail, ice, insects, disease, or wind (s. 28.11(6)(c), 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. Ask to see a copy of the ad and a bid summary. It is particularly important to see the ad if there was only one bidder to make sure the county was not showing preference to one contractor. A summary of all bids shall be available for review. Ensure the highest bidder received the contract or justification as to why not. Bidding requirements shall apply to all bidders. Requirements for bid bonds, worker's compensation, and contractor training should be included if required by county policy.

2. Reference - Timber sale prospectus, County Forest Comprehensive Land Use Plan (typically Chapter 500), timber sale contract

3. Questions to ask / investigate:
    a. Are timber sales > $3000 in appraised value being advertised? - *(Reference 2460-001 in sale file, bid summary sheet, and newspaper ads).*
    b. Are the bid bond policy, worker's compensation, and contractor training requirements being applied for all bidders? - (*Reference timber sale prospectus and County Forest 15 year plan).*

C. BONDS:

Cash Bonds:

1. Responsibility - To verify that bonds are used consistently for all contractors and provide coverage for the counties (and consequently the towns and state) against risk of loss. The county should have a ledger for bonds indicating when received and when they were returned to the logger. Bid and Performance bonds may include the following and must be consistent with the county's 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

2. Reference – Timber sale prospectus, County Forest Comprehensive Land Use Plan (typically Chapter 500), timber sale contract)

Irrevocable Letters of Credit:

1. Responsibility - To verify that ILOCs were used consistently and provided coverage for the entire contract period (including extensions). Letters of credit are returned to the bank after the sale is complete. The County should keep a copy. ILOCs returned prior to sale completion put the county at risk of not receiving payment.

2. Reference – Timber sale files/journal

3. Questions to ask/investigate:
    a. Are performance bonds (including ILOC maintained for the entire contract period (including extensions)?
    b. Are performance bonds returned in a timely fashion after sale is completed (Form 2460-001 signed by county forest administrator)?

D. CERTIFICATE OF INSURANCE:

1. Responsibility - To verify that certificates of insurance are used consistently and in accord with county policy. Copies should be maintained in the sales folder or in a separate file.

2. Reference – County Forest Comprehensive Land Use Plan, timber sale prospectus, timber sale contract, timber sale file

3. Questions to ask / investigate:
    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?

E. EXTENSIONS:

1. Responsibility - To verify that sale extensions were applied consistently in accordance with county policy and in the best interest of the counties, towns, and state. Determine if there were extensions to the contract. The county should charge a penalty for not completing the sale within the original time period unless extenuating circumstances occurred, and the county was willing to waive any penalties. Extensions shall include stumpage increases that align with the county timber sale extension policy. A Timber Sale Contract Extension Form (similar to State Form 2400-005E) shall be used to document the extension and any increases in stumpage prices.

2. Reference – County Forest Comprehensive Land Use Plan, timber sale prospectus and contract, timber sale file.

3. Questions to ask / investigate:
    a. Was the sale extension documented by a written contract extension form or similar amendment to the contract?
    b. Were stumpage increases applied consistently according to county policy?

F. STUMPAGE PAYMENT TIMELINESS:

1. Responsibility - To verify that the county (and consequently the state) is receiving stumpage in a timely fashion and in accordance with the county's payment provisions. Complete a worksheet that will show the county billing cycle and the county collection period. The goal is for the county to bill within 30 days of the mill scale or field scale date, and to have the logger make payment within 30 days of the bill.

2. Reference – Timber sale prospectus, contract, invoices / remittances, and ledger

3. Questions to ask/investigate:
    a. Were payments made in accordance with the contract?

G. LATE PAYMENTS:

1. Responsibility: To verify that the county is consistently applying its late payment fees. The county should assess a late payment fee if payment is not received within 30 days. The late payment fee policy should be reflected in the timber sale contract and should be consistent with that listed in the County Forest Comprehensive Land Use Plan.

2. Reference – Timber sale contract, timber sale ledger, County Forest Comprehensive Land Use Plan.

3. Questions to ask/investigate:
    a. Were late payments applied as stipulated in the contract?

H. 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. 28.11(6)(b), 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. Modifications that add acreage or change the silvicultural prescription on a sale must be approved by the DNR liaison and noted in the file on the 2460-001.

2. Reference – Timber Sale Cutting Notice and Report (2460-001), timber sale file

3. Questions to ask / investigate
    a. Was the sale modified?
    b. Was the modification approved by both the DNR and the county? (s. 28.11(6)(b)3, Wis. Stats.)
    c. Was it in excess of $3,000 appraised value (s. 28.11(6)(b)1, Wis. Stats.)?

I. COUNTY FOREST ADMINISTRATION GRANT:

1. Responsibility: 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 clerk's general ledger should show what the administrator / asst. administrator's salary was for the year. 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 specialist shall make this adjustment but this shall be noted in the audit and the succeeding years Administrator Grant checked for the adjustment. 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 specialist verifies the submission of the annual work plan and salary /benefit package as required by s. NR 47.70, Wis. Admin. Code, each year prior to distributing the annual grants.

2. Reference – ss. 28.11(5m), Wis. Stats, NR 47.70, Wis. Adm. Code, Administrator Grant summary (provided by county forest specialist)

3. Questions to ask / investigate:
    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 specialist?
    c. Was there a vacancy for all or a portion of the year or unspent funds in the account?

J. COUNTY FOREST SUSTAINABLE GRANT:

1. Responsibility - The county forest 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. Grants are for two years unless extended. Counties submit accomplishments and summaries of expenditures to the county forest specialist to receive final payment. If requested, 50% advance payments are available.

2. Reference – ss. 28.11(5r), Wis. Stats., NR 47.74, Wis. Adm. Code).

3. Questions to ask/investigate:
    a. Do the amounts in the county's state aid forestry account match the Sustainable Grant spreadsheet provided by the county forest 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?

K. 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. 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. Ensure that the funds are being spent. There should be a separate ledger showing the grant and expenditures. The projects need to be identified in their County Forest Comprehensive Land Use Plan. These projects are agreed upon with the local DNR wildlife

biologist, approved by the county forest administrator, and revisited each year at the Annual Partnership / Annual Work Planning Meeting.

2. Reference – s 23.09(17m), Wis. Stats, Annual Partnership meeting minutes.

3. Questions to ask/investigate
   a. Is the balance of the grant equal to or less than the sum of the allocations from the three previous years (*s. 23.09(17m)(h)1, Wis. Stats*. (interest excluded).
   b. Are the expenditures being made for projects approved by DNR 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 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?
   ***If lands withdrawn from County Forest include acreage on which $.10/acre funds were expended, and if those lands are being transferred to a private party, then a reimbursement of funds is due the DNR. The county forest specialist will ascertain that at time of withdrawal application. A debit may show up in the account balance for that reason.*

L. COUNTY FOREST PROJECT LOANS

1. Responsibility – The county forest specialist ensures that the loan was used for project costs only. The audit team shall verify that loan amounts match those provided by the county forest specialist and were properly deposited / dispensed from the county's State Aid Forestry Account. 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. Project loans are typically used only for special projects, rather than an annually as are the Variable Acreage Share Loans (below). Loan projects are for two years unless extended. Counties submit accomplishments and loan expenditures to the county forest specialist to receive final payment. If requested, advance payments of 75% are available.

2. Reference – ss. 28.11(8)(b)2, Wis. Stats, NR 47.60, Wis. Adm. Code, County State Aid Account ledger

3. Questions to ask/investigate:
   a. Are loan funds deposited in the County State Aid Account?
   b. Does the loan amount match that provided by the county forest specialist?

M. COUNTY FOREST VARIABLE ACREAGE SHARE LOANS

1. Responsibility - The county forest specialist ensures that the loan was used for project costs only. The audit team shall verify that loan funds were properly deposited, and dispensed from the county's State Aid Forestry Account. 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 specialist distributes loans in full in the spring of each year.

2. Reference – ss. 28.11(8)(b)1, Wis. Stats, County State Aid Account ledger

3. Questions to ask/investigate:
   a. Are loan funds deposited in the County State Aid Account?
   b. Does the loan amount match that provided by the county forest specialist?

N. REVIEW THE ANNUAL FINANCIAL STATEMENT FROM THE COUNTY CONTRACTED CPA FIRM:

Review the annual statement for any references to the county forestry program. There may or may not be anything listed.

O. SEVERANCE TO TOWNS:

1. Responsibility- To verify that towns received their statutory share of gross timber sale receipts. In some cases counties have elected to distribute additional funds to the towns. This is permissible but a minimum of 10% must be dispersed. Use Report 51A - County Forest Tax Acreage by Towns provided by the county forest specialist to identify what percentage of acreage is in each township.

2. Reference - ss 28.11(9)(d), Wis. Stats, Report 51A- County Forest Tax Acreage by Towns, county ledgers

3. Questions to ask/investigate:
   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? (Ideally this would be in January of each year; however, there is no statutory requirement to do so).

P. SEVERANCE TO THE STATE:

1. Responsibility: To 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 DNR Central Office when they submit timber sale partials or closeouts. The County Forest Ledger Account Detail (Rpt. 53A) provided by the county forest specialist can be used to determine timeliness of payments.

2. Reference – ss. 28.11(6)(b)4, Wis. Stats., Report 53B- County Forest Ledger Account Detail, County ledgers

3. Questions to ask/investigate:
   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 DNR liaison)? (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 Madison for volumes reported*).*

V. PROGRAM REVIEW:

This section includes items required in the timber sale handbook and in some cases, forest certification. The DNR liaison forester and DNR team leader review all county forest timber sales prior to sale. The audits should document findings that are consistently outside the norm but not overly repetitive of the liaison and team leader's review.

Each unaudited timber sale file should have the following either in the file, or accessible separately (*Pg. 111-1 Timber Sale Handbook*).

- *Timber sale cutting notice and report (Form 2460-001)
- *Contract and all addendums
- Timber sale inspection form(s)
- Stand exam tally sheet (Form 2400-032 or similar form with cruise information)
- *Timber sale map
- *All correspondence
- Scale sheets
- Timber Sale transactions / remittances
- Opening of bids/timber sale award

- Lock box tickets and mill scale slips
- Timber sale ledger
- Timber sale journal
- Timber sale closeout

*- *Indicates those items to be retained permanently*.

After the audit, all closed sales within the time frame of that audit can be purged with the exception of those items with an "*".

A. *TIMBER SALE CUTTING NOTICE AND REPORT (Form 2460-001):
Ensure there are cutting reports in the timber sale folders. Cutting reports should include the narrative. Verify that the narratives have been completed and that they include an NHI check, cultural / historical check, and BMP considerations.

1. Verify the accuracy of scale slips / billings with what is reported on 2460-001.

B. STAND EXAMINATION TALLY SHEET (Form 2400-032 or a similar sheet documenting the cruise):

1. Is the cruise information available in the sale file?

C. *****TIMBER SALE MAP:

1. Ensure there is a timber sale map in the sale folder.

D. OPENING OF BIDS / TIMBER SALE AWARD
(See subsection B. -Bidding Procedure under IV. Fiscal Audit Procedures)

E. *CONTRACT AND ADDENDUMS:
Review the contract and addendums.

1. Do the contract and extensions cover the entire time frame of the sale? Compare contract with timber sale inspections and timber sale ledger.

F. TIMBER SALE INSPECTION FORMS:
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 can be on State form 2460-002 or a similar county form.

1. Is a timber sale inspection log available in the sale file or readily accessible in another location?

G. SCALE SHEETS:

1. Are scale sheets and mill scale slips available in the sale file in order to verify accuracy of stumpage invoicing?

H. LOCK BOX TICKETS & MILL SCALE SLIPS:
Match up with invoices to logger. Also see subsection F – Stumpage Payment Timeliness under IV. Fiscal Audit Procedures.

I. TIMBER SALE TRANSACTIONS / REMITTANCES

1. Is there documentation of invoicing and payments made?
2. This information would be useful in determining stumpage payment timeliness (see Item #6 in Fiscal audit section).

J. TIMBER SALE JOURNAL:
A journal shall be used to record information for each sale regarding the volume of all products, which have been removed from the sale area. Volume determination can be based on woods scale or mill scale. Entries shall be made following each scale. Verify this is completed and in the sale folder. Often this information will be maintained electronically.

1. Is a journal included in the sale file or readily accessible for each sale?
2. For closed out or partial sales, do the journal volumes match what has been reported on the 2460-001?

K. TIMBER SALE LEDGER:
A ledger shall be used to record information for each sale regarding the value of all products, which have been removed from the sale area. Entries shall be made following each billing or stumpage payment. Verify this is completed and in the sale folder. Generally this information will be maintained electronically.

1. Is a ledger included in the sale file or readily accessible for each sale?
2. For closed out or partial sales, does the ledger values match what has been reported on the 2460-001?
3. Does the ledger align with fiscal audit guidelines in Subsection E, F, and G in Section IV?

L. *ALL CORRESPONDENCE

M. CLOSE-OUT TRANSACTIONS:
A validated copy of a timber sale close-out form or documentation of sale closure should be in the sales folder as a record indicating final disposition of a cash performance bond and excess stumpage payment.

1. Is a closeout transaction included in the sale file?
2. Was the performance bond released or returned in a timely fashion after sale closure?

VI. 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 DNR is the Group Manager and certificate holder. While each member county is periodically audited by third-party auditors, it is the DNR's responsibility to establish internal control mechanisms to ensure group member compliance to the certification principles and standards. The regularly-scheduled (3 yr.) DNR audits will be used to document progress on certification issues for participating counties.

Prior to the audit the county forest specialist will provide a list of current corrective actions (CARs) for each certification program (SFI & FSC) to the lead auditor who will attach the list to the introductory letter for the forest administrator. The DNR auditor should verify progress on addressing CARs for the applicable certification program(s) for that county. The CARs will periodically change as a result of annual surveillance audits done by third-party auditors. The CARs will be current to the year they were issued which will not mesh perfectly with the DNR audits which generally go back 2-3 years. In auditing a county's progress on certification issues the DNR auditor will need to communicate with the county forest administrator and assess that county's most recent efforts at addressing CARs. It would not be realistic to expect a county to have addressed a CAR in 2004 that was not issued until 2006. As an example:

SFI CAR 2006-1: Not all counties have incorporated contractor training into their timber sale requirements as required by SFI Indicator 10.2.4.

DNR Audit Finding:

Requirements for contractor training were not found in the Marinette County timber sale contract or County Forest Comprehensive Land Use Plan. The county forest administrator acknowledged that letters would be mailed to all contractors bidding on Marinette County timber sales in 2006. Training to the SFI training standard will be a requirement on all county sales effective with that bid opening.

In addition to the follow-up on any externally-issued CARs, Opportunities for Improvement (OFI) or Recommendations, the lead auditor also needs to more broadly assess the County's compliance with the entire certification standard(s). The DNR's role as Group Certification manager is also assessed during this process. Use the appropriate Certification Checklist (SFI, FSC or both) 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, DNR Forestry Team Leader, DNR Group Certification Manager, Chair of the respective County Forest committee, and the WCFA Executive Director. The Group Manager and DNR Certification Coordinator shall be responsible for monitoring follow-through on Internal CARs issued by DNR Lead Auditors.

VII. EXIT CONFERENCE AND AUDIT REPORT

Communicate the audit findings with the county forest administrator. The administrator may have further information pertinent to a finding. Tell the administrator that a copy of the draft report should be sent to the county office within a 30 day time frame. The basic format can be found on the attached sample. Ways to improve the administration of the program should be identified as well as commendations for the county program.

The initial draft of the audit report should be sent to the DNR Bureau of Forest Management (county forest specialist), DNR liaison, and county forest administrator for review and input. Upon receipt of the draft report a 30-day review/comment period should be provided.

The lead auditor will forward the final audit report to the county forest specialist in the Bureau of Forest Management along with the name and address of the County Forest Committee Chair. The final audit report should be addressed to the County Forestry Committee Chairman. The director of the Bureau of Forest Management should sign the report.

Copies should be sent to the county forest administrator, the DNR liaison forester, forestry team leader, area forestry leader, district forestry leader, regional director, and DNR county forest specialist.

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

Note: Caution should be exercised in the disposal of any original record generated in the administration of your programs, and disposal must be consistent with procedures established in ch. 19, Wis. Stats.

COUNTY FOREST COMPREHENSIVE LAND USE PLAN

A comprehensive land use plan, also called the county forest plan, shall be prepared for a 15 year period by the county forest committee with assistance of technical personnel from the Department and other interested agencies as required by s. 28.11(5), 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 county forest 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.

Revisions to the plan may be added as changing conditions require. The plan 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 as follows:

100-Background	700-Roads, Trails and Access
200-General Administration	800-Integrated Resource Management
300-Management Planning	900-Appendix
400-County Forest Ownership	1000-Needs
500-Land Management &Use	2000-Annual Planning
600-Protection	3000-Accomplishments & Monitoring

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, as required by s. 28.11, Wis. Stats. Department approval authority for approving comprehensive county forest plans has been delegated to the Division of Forestry Administrator.

Before implementation of the county forest plan, an environmental assessment (EA) is necessary to determine if an environmental impact statement is needed for the plan's implementation. The Department liaison forester will prepare the EA.

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 comprehensive county forest plans has been delegated to the Bureau of Forest Management Director, within the Division of Forestry.

As soon as they are available, and no later than June 30 of each year, the county forest administrator will distribute to each official copyholder any approved amendments, an annual accomplishment report and an annual work plan and budget. The accomplishment report, work plan and budget shall be placed in the plan's appendix but do not require approval by the Department as plan amendments.

The annual work plan and budget are based upon the county forest plan. The annual plan shall include a schedule of compartments to be harvested and a listing by location of management projects where appropriate. The annual budget, listing estimated expenditures for work projects, administration and protection of the forest shall accompany the annual plan. Both are to be submitted to the county board for approval at the November meeting. The annual work plan 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 Specialist, within the Division of Forestry. Approval will be granted via the county forest administration grant award letter distributed with grant checks annually.

Official updated copies of the comprehensive county forest land use plan (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 supervisor, area forestry supervisor, Division of Forestry-County Forest 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 comprehensive plan, the Department must bring it to the attention of the county forest 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, ch. 28, 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 blocking 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 will be the agent of the 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, 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.

M.C. 9103.11 places restrictions on Department personnel before they may acquire land or timber from lands located within a county forest boundary.

Acquisition of Private Land Enrolled in the Forest Tax Law

No withdrawal tax penalty may be assessed for private forest tax law lands sold to a county for use as public forest lands. This includes all lands enrolled in the Managed Forest Law and Forest Crop Law. When purchasing such lands the county should submit an application for entry as county forest (Form 2453-1) along with the necessary Transfer of Ownership to a Governmental Unit (Form 2450-162).

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 Specialist (Madison). There are two types of lands entered under the law: regular and special use lands.

Regular Class:

These are lands that are primarily for the production of forest products.

Special Use:

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 Specialist, within the Division of Forestry.

Acreage Printouts

County forest acreage printouts are mailed 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 mailed to the County Forest Specialist (Madison) 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. 28.11, 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 district forester. The Department may ask for additional information from the county and then will coordinate the public notice and proceed with needed environmental studies. Pending the results of the environmental studies and any investigatory hearings deemed necessary, the Department will act on the withdrawal application. If the application is denied, the county may appeal under s. 28.11(11)(a), 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 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 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 district forestry supervisor is designated as the authorized representative of the Department who shall consult with the forestry committees in formulating withdrawal proposals. District forestry supervisors may appoint designees to represent them if circumstances warrant. All Department communications concerning withdrawal of county forest lands shall be coordinated through the district forestry supervisor. The final decision for requests for withdrawal presently rests with the Department's Division of Forestry.

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. The liaison forester shall review ch. NR 48 with the county forest administrator to ensure all the required information is identified for the application. 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 established the minimum values of the land as required in s. 28.11(11)(a). To protect the county interest, the necessary preliminary negotiations should also be made conditional upon approval of the withdrawal by both the county board and Department as provided by statutes.
Department Liaison Forester	2. Advises supervisor and district forestry supervisor immediately of the proposed withdrawal and committee meeting date.
District Forestry Supervisor (or designee)	3. Takes action necessary to be acquainted with the proposal. 4. Consults with the County Forest Specialist, Division of Forestry, concerning the proposed withdrawal.

5. Attends county forestry committee meeting and consults with the committee on the proposed withdrawal.

County Forestry Committee

6. A committee meeting held to evaluate proposal and to consult with Department district forestry supervisor or designee, 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

7. 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.

8. 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 district forestry supervisor.

District Forestry Supervisor (or designee)

9. Upon receipt of county forest withdrawal application (Form 2453-3), acknowledges receipt of the application to the county clerk with copies to the Department liaison forester to county forestry committee, county forest administrator, the liaison forester's supervisor and Division of Forestry. Requests additional information from the county as necessary to provide adequate detail for Department processing of the application. This request must be sent to the county within 60 days as identified in s. NR 48.03(2).

10. Consults with County Forest Specialist regarding specifics of the proposal.

11. Directs Department liaison forester to county forestry committee to contact the district environmental impact coordinator to determine if an environmental assessment (EA) or environmental impact statement (EIS) is required under M.C. 1606.1 or an environmental impact report should be requested from the county. If required, prepares environmental documents. If an EIS is required, notifies the Bureau of Integrated Science Services, Environmental Analysis and Liaison Section, to proceed in accordance with M.C. 1610.1.

12. Coordinates public notice and certifies environmental proposal is in compliance with Wisconsin Environmental Policy Act (WEPA).

13. Transmits one copy of county application, approved EA/EIS, if required, and the district recommendation to Division of Forestry.

Division of Forestry

14. Coordinates with Bureau of Legal Services for scheduling of public hearing(s), if requested in writing by the county or if determined by the Department to be necessary or if required as part of the WEPA procedure.

15. Coordinates with the Bureau of Integrated Science Services the preparation of an EIS if required.

If an investigatory hearing is held on the withdrawal application which is a contested case:

Administrative Law Judge

16. Upon completion of public hearing, normally makes and issues a decision approving or rejecting the withdrawal application.

If an investigatory hearing is held on the withdrawal application which is not a contested case:

OR

If a hearing is not held on the withdrawal application

District Forestry Supervisor (or designee)	17. 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 Specialist. The draft shall, at the minimum, cover the items identified in s. NR 48.04. Note: This draft is NOT a public record. It may not be released to the public upon request.
Division of Forestry	18. Reviews and modifies draft documents as necessary. Upon completion of Department investigation of the withdrawal application, prepares 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	19. Issues the final decision on the withdrawal application. Department approval authority for approving county forest withdrawals has been delegated to the Division of Forestry Administrator.

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

Division of Forestry	20. 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. 893.29, Wis. Stats. (Laws of 1998).

1997 WI Act 108, published April 28, 1998, revised s. 893.29, Wis. Stats., to prohibit title 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. No legal adverse possession action may be commended involving public land held in trust, abandoned railroad or land held for highway purposes.

Adverse Prescriptive Rights

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

Such adverse use of land rights 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, the mere use of a way over unenclosed land of another owner is presumed to be permissive rather than adverse, by the statutes.

The establishment of any prescriptive land rights is also barred by the statutes against public land held in trust, abandoned railroad or land held for highway purposes.

Adverse Claim Establishment

The establishment of any adverse claim of land title or rights to land use, is not simply a voluntary assumption, but must be legally decided by the courts as the result of the commencement of an action to establish in accordance with state statutes.

The legal principle of "tacking" is also involved with respect to such adverse actions, wherein any accrued uninterrupted and continuous occupation or use of land is transferable, or may be "tacked" onto by the succeeding party. Adverse occupation upon a seasonal basis is also legally sufficient to establish continuity.

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

TIMBER SALE PROCEDURES

Bidding

State guidelines for bidding are detailed in ch. 16, Subchapter IV - Purchasing (16.70-16.76), Wis. Stats. Bidding of any product is also covered in s. 28.11(6)(b), Wis. Stats., and also in the Timber Sale Handbook (2461) in Chapter 50 (Sale Method) and Chapter 60 (Sale of Timber). The 9320 manual codes detail purchasing procedures by the Department.

The Corporation Counsel or District Attorney should also be consulted concerning the county's policy.

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. 28.11(1), 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. Specific attention is given to weight and product conversions, reporting procedures, marking color code, survey marker preservation, cruise accuracy, stumpage rates, rounding guide, sale methods, advertising, stumpage payment and sale inspection.

Authority for timber harvesting is found in s. 28.11(6), 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. 28.11(6)(a) and s. 28.11(6)(b), Wis. Stats.)

Timber sales with an estimated value of $3000 or more are sold by sealed bid after the county publishes a classified advertisement in a newspaper having general circulation within the county. Sales valued at less than $3000 may be sold without prior advertisement.

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.)

Areas of particular scenic or wildlife value will be referenced within the county forest comprehensive land use plan.

Areas identified for special management treatment may include such areas as threatened and endangered species sites, deeryards, shoreline zones, sensitive soils, natural area springs and important watersheds and aesthetic roadside vistas. (See s. NR 1.24, Wis. Adm. Code.)

Severance Share

1. Payment to the Department

   The county pays to the Department a severance share for timber harvested from the county forest. This payment is not less than 20% of the actual stumpage sales value of the timber. The Department and the county may agree upon a higher rate. (See s. 28.11(9), Wis. Stats.)

   Timber which is harvested by the county and not sold has a severance share calculated at 20% of the severance tax schedule in effect under s. 77.06(2), Wis. Stats.

   All of the acreage share payment paid by the county is restored to the appropriation made by s. 20.370(5)(bu), Wis. Stats., and is credited to the county's forestry fund account.

No severance share is required:

a. if no balance is due in the county's forestry fund account.
b. if timber harvested is for individual home heating purposes as described in s. 28.11(3)(k), Wis. Stats.
c. if the timber is harvested from county forest "special use lands".

2. County Payment to the Town

The county pays annually to the towns a minimum of 10% of the gross receipts from all county forest timber sales. The payment is based upon the number of acres of county forest land in a township. Both special use and regular class County Forest lands receive this payment.

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.

RECREATION

Recreation is a vital part of the county forest program and the multiple use of public land. 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.

WILDLIFE MANAGEMENT

Management of Wisconsin's wildlife resource involves working with people toward the protection and enhancement of wildlife populations and their habitats while promoting wildlife enjoyment and appreciation.

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

A primary goal of wildlife management on the county forests is to provide a diversity of ecosystems necessary to sustain native populations for their biological, recreational, cultural and economic values. In managing the wildlife of our county forests we are drawn to the community approach in comparison to the "bits and pieces" approach on private lands.

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. Knowledge gained suggests a continued, aggressive management of shade intolerant forest types. This action has value for numerous wildlife (game and non-game) and for overall diversity and biotic health of the region. Guidelines for early successional species management have been developed.

M.C. 2112 (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. 2112.1 (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.

Unfortunately, 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. Although there are no established guidelines similar to M.C. 2112 to aid public land managers with this important part of the biotic community, there exists a few key references.

- The Endangered Resources Handbook (1724.5) provides guidance for management of nongame, endangered and threatened species.
- Natural Heritage Inventory provides known occurrences of threatened and endangered species and communities.
- Silviculture and Forest Aesthetics Handbook (2431.5) gives direction on management of timber types for wildlife diversity.
- Guide to Wisconsin's Endangered and Threatened Plants.
- Wisconsin's Biodiversity as a Management Issue (May 1995) relates to natural communities, status, future and recommendations.
- Comprehensive Fish and Wildlife Management Plan.
- ER website that also contains ER screening guidelines (which includes archeological procedures): http://www.dnr.state.wi.us/org/land/er/

Public land managers are urged to communicate with local wildlife biologists regarding specific management concerns.

Generally our county forests are a mixture of six larger communities: Northern Forest, Oak Savanna, Oak and Pine Barrens, Grasslands, Wetlands and Aquatic. The size, age, composition structure and position of these communities in relation to each other and the forest's neighborhood (other surrounding natural communities) is important in determining wildlife priorities.

Northern Forest

The northern forest is the predominate community on our county forests. It includes the boreal forest; aspen forest; jack pine and oak forests; and various combinations of the hemlock, sugar maple and yellow birch forests (Northern Dry Forest, Northern Dry-Mesic Forest, Northern Mesic Forest, Northern Wet-Mesic Forest). Of greatest concerns are the management

of adequate amounts of shade intolerant communities, and the retention and possible expansion of remnant old growth communities.

Oak Savanna

This community, once present on over 5.5 million acres, is essentially gone with potential of restoration only in our southern tier of county forests. Oak savanna protection/recovery currently is a top priority of the Nature Conservancy and is addressed in the Department's Biodiversity Report. Because this community is optimum habitat for many wildlife species (squirrels, deer, turkey, bobwhite quail, bluebirds and savanna songbirds), the potential for management should be reviewed on all county forests that still have remnants intact. Restoration and management may include the use of acquisition, prescribed burns, livestock grazing, thinning and brushing.

Oak and Pine Barrens

The barrens community in Wisconsin comprised over 4 million acres in the past. Currently there is approximately 10,000 acres in this community. This is less than 0.003 percent of it's original size. Unless dedicated management occurs, this community is predicted to all but disappear from the landscape. However, due to use limitations of the barrens (soils, climate, topography, moisture, etc.), there exists the potential to manage and restore. The sharp-tailed grouse is the wildlife species that represents the brushy, open habitat common to the barrens. Yet with increased awareness many have discovered that the barrens is home to numerous species of wildlife. The upland sandpiper, Karner blue butterfly, badger, thirteen-lined ground squirrel, and hog-nosed snakes are just examples of wildlife found in the barrens community. Future management may include prescribed burns, brushing, thinning, timber sales and acquisition.

Grasslands

Wisconsin's grasslands (the eastern edge of our mid-continent grasslands), once totaling over 2.5 million acres, presently occur on about 13,000 acres. Portions of this community occur on county forestlands throughout the western part of the state with only minor occurrences elsewhere. Most (11,000 acres) of the remaining grasslands are sedge meadows with prairie, brush prairie, sand barrens, fen, and bracken-grasslands making up the remainder.

Most wildlife that are parts of this community currently exist on agricultural land such as set aside and pasture. Examples are the 13-lined ground squirrel, prairie mole, red-winged blackbird, mourning dove, and song sparrow. Many species didn't adapt and are not doing well or are extirpated. The white-tailed jack rabbit, loggerhead shrike (on the state's endangered list), the greater prairie chicken (on the state's threatened list), elk, and buffalo are examples.

Currently the best management recommendations for this community (where it exists) is to protect the type from any further changes in land use. Most sites will be of the sedge meadow type. However, upland grass/forb prairie remnants still exist and need to be managed due to extreme rarity.

Wetlands

Wetlands are a diverse and precious natural resource of Wisconsin. Following the recent ice age, which ended about 10,000 years ago, glaciers reformed our state “gifting” us with over 10 million acres of wetland communities. Today we still have nearly one-half of these land forms, which we carefully use, and protect. Their presence gives character to our landscapes, with public lands the best site for intact, functional wetland systems. Wetlands in northern Wisconsin tend to be more forested with conifers such as tamarack, white cedar, black spruce, and balsam fir, normally growing on a base of sphagnum moss and peat. Wetlands in southern and western portions of the state are more likely composed of deciduous trees and shrubs, growing either on muck or mineral soils.

Wetlands are critically important in absorbing and dispersing water falling on or flowing through them, reducing affects of significant rainfall and subsequent flooding potential. They also act as buffers keeping soil and pollutants from entering our lakes and rivers. Of equal importance, wetlands are home for scores of native plant and animal species important in the biological diversity of our state, region, and continent. Numerous rare and endangered plant species in Wisconsin are found in wetlands.

Activities in wetlands are usually subject to various permits and regulatory requirements. Public land managers should become familiar with the following references (see section 270-40 of this handbook for additional details):

- Wisconsin's Forestry Best Management Practices For Water Quality. Wisconsin Department of Natural Resources. 1995. Publication Number FR093.
- Section 404 of the Clean Water Act.
- Chapter 26, Wis. Stats. – Protection of Forest Lands.
- Chapter 30, Wis. Stats. – Navigable Waters, Harbors and Navigation.
- Chapter 31, Wis. Stats. – Regulation of Dams and Bridges Affecting Navigable Waters
- Chapter NR 103, Wis. Adm. Code – Water Quality Standards for Wetlands.
- Chapter NR 115, Wis. Adm. Code – Wisconsin's Shoreland Management Program.
- Chapter NR 116, Wis. Adm. Code – Wisconsin's Floodplain Management Program.
- Chapter NR 117, Wis. Adm. Code – Wisconsin's City and Village Shoreland-Wetland Protection Program.
- Chapter NR 299, Wis. Adm. Code - Water Quality Certification
- Chapter NR 302, Wis. Adm. Code – Management of Wisconsin's Wild Rivers.
- Chapter NR 320, Wis. Adm. Code – Bridges In or Over Navigable Waterways.
- Chapter NR 216, Wis. Adm. Code – Storm Water Discharge Permits (Sub-Chapter III)

Public land managers are urged to communicate with their local DNR water management specialist, county zoning office, and the U.S. Army Corps of Engineers on any questions or plans regarding wetland activities.

Aquatics

Aquatics includes springs, ponds, lakes, streams and rivers. Wisconsin has a large and diverse aquatic resource that supports numerous species, communities, ecological processes, and human uses. On a large scale, the aquatic systems are one integral piece of a larger continuum that includes upland terrestrial systems and transitional wetland areas. Many of these areas provide the basis for the tourism industry that thrives in the northern part of the state. Land management adjacent to these areas must protect both the water resources and the associated flora and fauna.

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. 29.604, Wis. Stats., and ch. NR 27, Wis. Adm. Code.

The Department is required by law to implement conservation programs on 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 Bureau of Endangered Resources 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 Endangered Resources conducts inventories, maintains a statewide database of rare species and habitats, purchases and manages high quality natural areas, and implements species recovery programs.

For more information on endangered and threatened species work in Wisconsin, contact the local wildlife or fisheries manager or the Bureau of Endangered Resources, Madison, or call (608) 266-7012.

Federal Laws for Endangered Resources

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 prior to any project activity.

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. Permits may be obtained by contacting: U.S. Fish and Wildlife Service, Endangered Species Division, Fort Snelling, MN 55222; (612) 725-3276.

Federal Lacey Act

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

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.

Bald Eagle Protection Act

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 ch. 29, Wis. Stats., and ch. NR 27, 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. Forestry practices are exempted from the taking 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. (http://intranet.dnr.state.wi.us/int/land/er/nhi/indexnhi.htm) County forest programs may obtain access to the data through a license agreement.

More information on endangered and threatened species, permits, and license agreements is available from the Bureau of Endangered Resources, Madison, (608) 266-7012.

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 **Wisconsin's Forestry Best Management Practices for Water Quality** (PUB-FR-093 97REV) field manual 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.

If a Department permit is required and the project is located in or near wetlands, the Department will also be involved in a review of the project to see if it can meet wetland water quality standards (ch. NR 103, 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.

Contact the appropriate Department water regulation and zoning specialist for information on permits that may be required for work in or near navigable waters.

In 2004 new Storm Water regulations were enacted (ch. NR 216, 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.

Contact the appropriate Department water specialist for information on permits that may be required for non-silvicultural projects disturbing more than one acre of land.

County Zoning Regulations in the Shoreland Zone

Section 59.692, 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 87.30, 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. 59.692, Wis. Stats., and ch. NR 115, 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.

1. Cutting of Trees and Shrubbery. 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 not apply to removal of dead, diseased or dying trees or shrubbery.
2. Filling, grading, lagooning, dredging, ditching and excavating. 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. 30, 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. Structure setbacks. 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 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. 23.32(1), 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 county, city or village zoning office before you begin your project.

County, City and Village Floodplain Zoning

Under s. 87.30, Wis. Stats., and ch. NR 116, 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 county, city or village zoning office before you begin your project.

Federal Regulations

Section 404 of the Federal Clean Water Act regulates discharges to waters of the U.S., 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 401 of the Clean Water Act, using procedures and criteria found in ch. NR 299, Wis. Adm. Code. Denial of water quality certification advises the Corps that projects are inconsistent with state water quality standards for wetlands (ch. NR 103, 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, contact the Department water regulation and zoning specialist and the U.S. Army Corps of Engineers district office for more detailed information.

CHIPPEWA TREATY RIGHTS

Indian treaty rights, and specifically Lake Superior Bands of Chippewa, 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 Native Americans retain those rights to this day. In a February 21, 1991 decision, Federal Court Judge Barbara Crabb determined that the Chippewa's rights however 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 pine 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 Indians 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 now retain the right to regulate any forest product gathering conducted under the 1800 treaties in order to protect the natural resources of public ownership. Suggested permit forms have been developed by the Wisconsin County Forest Association to provide uniformity of permits across the state. Permit forms for gathering miscellaneous forest products must be obtained from the property owner prior to any gathering activities. A 14-day response time for issuance of the permits is allowable. Permit information should include the following:

- Property name and address
- Applicant name, address and telephone number
- Tribal identification card number
- Type of forest product to be gathered
- Amount of forest product to be gathered
- Location description and map
- Conservation, public health, and safety items
- Permit time frame
- Signatures of permittee and property representative

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, specific objectives and management goals should be identified in the plan.

Each area will be evaluated on its own merits. Criteria could include educational, scientific, recreational, or biological diversity values. Certain use restrictions may require consideration for entry as County Forest Special Use Lands (Page 250-30). Assistance in reviewing potential sites and developing management plans can be obtained by contacting the local wildlife biologist or the Bureau of Endangered Resources, Madison.

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 district forestry supervisor, the County Forest Specialist in Madison, 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 advised and a public informational hearing held. This information should be gathered before a legal agreement is drafted. All sides 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, etc.), 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 all of the following are met:

1) The easement does not conflict with Wis. Stat. s. 28.11.
2) The easement is consistent with the purpose of Wis. Stat. s. 28.11(1).
3) The easement is approved under the county forest management plan under Wis. Stat. s. 28.11(5).

It is not enough that easements do not conflict with the county forest law purposes. They must also be consistent with (i.e., help to achieve) the purposes of Wis. Stat. s. 28.11(1), and must be included in an approved county forest management plan. For example, any easements or leases for a private purpose would not be consistent with the “maximum public benefit” language in Wis. Stat. s. 28.11(1). 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 that 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. 28.11, Wis. Stats. and are not permitted. A number of counties have cabin permits / leases carried over from many years ago. Any remaining cabins in existence are to be phased out and eliminated by 2011.

Mineral Exploration-Prospecting-Mining

The county board has the power as described in s. 28.11(3)(i), 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. 28.11(3)(i) 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.

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 it can not 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. 2712.1, 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. NR 135, 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 (NOT applicable to county or local road projects). NR 135 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 NR 135. 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. 28.11, 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 250-50 of this handbook, ch. NR 48, Wis. Adm. Code and s. 28.11.(11), Wis. Stats. Any proposals for tower siting should involve early notification of local DNR staff as well as the County Forest Specialist at Central Office in Madison. See also M.C. 2222.1.

ROADS

A county forest road system is important for forest management and outdoor recreation on the county forest. Other than county trunk highways and town roads, the roads throughout the county forest serve multiple uses.

The Department of Transportation, which has established a road aid program, realizes 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 program. These roads must meet minimum road standards. Annual payments are made to county forest programs to compensate for maintenance of these roadways.

Each individual 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. All county forests shall develop an access management plan that addresses these considerations.

The County Forest 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 other than exclusive silviculture use may require stormwater permitting under ch. NR 216, Wis. Adm. Code or other water regulation permitting under ch. NR 30, Wis. Adm. Code. Refer to 270-40 and 270-41 for further information.

TREE PLANTING STOCK SOURCES

The Department operates three nurseries in Wisconsin under provisions of ss. 28.06 and 28.11(3)(f), Wis. Stats., and s. NR 1.20, Wis. Adm. Code. These nurseries can provide the county forests with the following assistance on county forest reforestation efforts:

1. bare root conifer and hardwood seedlings for hand or machine planting.
2. 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.

The Department currently produces between 20-25 million tree and shrub seedlings annually from three nursery facilities. The Hayward State Nursery in Hayward, the Griffith State Nursery in Wisconsin Rapids and the Wilson State Nursery in Boscobel produce stock for shipments throughout the state.

Orders for seedlings are placed in early fall using the Tree and Shrub Application (Form 2420-31) and sent to the Griffith State Nursery for processing on a first come, first serve basis. Delivery of seedlings occurs in the spring. Counties are responsible for pickup and transportation of their seedling order.

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 nursery stock used for reforestation. (Note: The discounted costs not paid by the counties must be paid for from the Department's forestry account.) Payment for seedlings must be made to the Department within 30 days of billing following seedling distribution in the spring.

Tree seed for direct seeding efforts may also be purchased from the state nurseries. Seed for selected species must be ordered in advance and will be tested for germination viability and treated with appropriate fungicides and rodenticides. The Department will determine prices and availability of seed.

State nurseries may produce special nursery stock for County Forest Reforestation Programs or the stock may be obtained from private nurseries. Production of seedlings from specific state nurseries, from selected seed sources, with special age or size requests or other cultural requests should be coordinated through the Department liaison forester. Other reforestation advice is available by consultation with nursery managers or other Department specialists.

RENTALS

Department forestry site preparation equipment for rent is discussed in the Forestry Operations Handbook (2420.5). Procedure, type, and rates are detailed. Rental rates for heavy equipment are found in chapter 60 of the Fleet Management Handbook (9210.5). Requests shall be submitted on Form 2400-72 to the assistant superintendent, LeMay Center, Tomahawk.

Consult county policy for specific procedures.

PEST MANAGEMENT

Forest insect and disease prevention, detection, and control will be conducted in an ongoing process by forestry personnel, both county and Department, throughout the year. Unusual pest outbreaks will be reported to the forest health specialist at the district level on the Forest Pest Report, Form 2400-89, or with the electronic database. Appraisals of pest population, hazard areas, damage, and forest reconnaissance will be conducted, and operational control procedures will be evaluated to determine if active control measures are needed. Integrated pest management (IPM) will be implemented at all times and the least invasive control method will have priority. Pest control through silvicultural manipulation using approved forest management techniques will be given first priority. Other control methods may include biological and/or chemical control. Evaluation before and after control methods will be conducted to measure effectiveness of control operations.

FOREST FIRE BILLS

Chapter 26, Wis. Stats., gives the state all authority in the matter of forest fires. Sections 26.14 (3) and (4) deal with the hiring of emergency fire fighters and equipment and the payment of the same. In those instances where the Department has to hire people or equipment to assist them in the suppression of a forest fire (see s. 26.01(2), Wis. Stats., for the legal definition of a forest fire), they bill the county for one half of all costs related to the emergency fire fighters or equipment. The county will have 60 days in which to pay the bill for their share, or be charged interest at the rate of 6% per year. The Department of Administration will include this in the levy against the county for state taxes the following year. Some very important things to be aware of regarding this charge are:

If the responsible party is found, and billed for the costs, and pays, the county is not charged for their share of the costs. If the payment comes after the county has been billed, their share is credited to the county's account.

No county shall be required to pay more than $5,000 in any one year. However, any unpaid balance shall remain a charge against the county and the Department of Administration will include the unpaid sum, up to $5,000 in the state tax levy of the county in subsequent years until it is paid.

The county is not billed for the Department personnel or equipment or expenses relating to the personnel or equipment when it is used for the suppression of a forest fire.

TIMBER THEFT

The policy of the individual county for disposition of timber theft cases is contained in Chapter 600 of the respective county forest comprehensive land use plan.

County officials may obtain assistance from their sheriff and deputies or Department foresters with forest ranger credentials or conservation wardens to enforce the timber theft law in ch. 26, Wis. Stats., on county forest land. If Department personnel are requested to assist, then contact with the sheriff's office should be made early in the investigation to determine if that office has begun an investigation.

The Department's participation in a case of timber theft on county forest land will vary depending on the policy of the individual county. Section 55-10 of the Forestry Operations Handbook (2420.5) details the procedures for Department foresters and enforcement officers to follow when requested to assist in timber theft investigations by county officials.

Refer to ss. 26.05, 26.06, 26.09 and 26.97, Wis. Stats., in cases of alleged timber theft. Contact with the county district attorney's office should be made in all cases for guidance in the case. Section 26.05(2), the timber theft law, says, "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.

The penalty for an unintentional violation of the law is a civil forfeiture (conservation citation) not less than $100.00 or more than $10,000.00. An intentional violation of the law may be punishable under s. 943.20, Wis. Stats., for theft. Depending on the value of damages suffered this may be a misdemeanor or a felony crime.

In addition to any other penalty, persons who violate s. 26.05 are liable for the reasonable costs incurred to establish the volume and value of raw forest products cut, removed or transported.Chapter 814, Wis. Stats., may provide for recovery of surveying costs if a survey was necessary to prove the case.

Under s. 26.09, persons who violate s. 26.05 are liable in civil action for the applicable amount of damages suffered and other reasonable and necessary costs. For this action a volume and value determination are needed. Applicable damages are defined as follows:

1. Equal to single stumpage value if harvesting relied upon a recorded survey by a registered surveyor.

2. Equal to double stumpage value if harvesting did not rely upon a recorded survey, but the person took reasonable precautions in identifying harvesting boundaries.

3. Equal to quadruple stumpage value or double fair market value (whichever is greater) if harvesting did not rely upon a recorded survey, and the person did not take reasonable precautions in identifying harvesting boundaries.

4. Other reasonable and necessary costs that may include:

    - Repair of damages to, or cleanup on the land.
    - Removal of slash from agricultural land, waterways, highways, roads, trails or other sites where the slash would interfere with reforesting or replanting.
    - Determination of timber volume and value.
    - Determination of property boundaries.
    - Preparation of forest management or reforestation plans.
    - Reforesting.
    - Replanting by direct seeding or by use of seedlings.

The civil forfeiture penalty does not need a volume determination. However, when intent is an element of the crime, the volume and value of raw forest products cut or removed are needed to aid in determining the penalty. Values less than $1000.00 are class A misdemeanors. Values between $1000.00 and $2,500.00 are class E felonies. Values greater than $2,500.00 are class C felony cases. The courts have ruled that each stage of the wood harvesting process adds value to the initial stumpage value. Therefore when determining the value of wood products cut or removed, the stage of the harvesting process the cut or removed products are at determines their value along with species, product type, and aesthetic or wildlife values.

An investigation of timber theft on county forest land should include:

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. 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 Timber Sale Handbook (72-1) for further information on timber sale inspections and seizure procedures.

COUNTY FOREST LAW GROUP CERTIFICATION

Background

The Wisconsin County Forest Program, as administered by the Wisconsin Department of Natural Resources (DNR), includes 29 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 29 county forests participate in forest certification through a group format. They were assessed by third-party auditors 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 www.aboutsfb.org/generalPDFs/SFBStandard2005-2009.pdf (SFI). This chapter outlines the procedures used to administer the certification group.

Authority and Purpose

The DNR entered into the county forest certification agreement under authority in ss. 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 sustainability
- Maintain the ecological integrity and functionality of the forest

History

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. 28.11, Wis. Stats., and in the Public Forest Lands Handbook (2460.5). 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. The full certification audit followed in the fall of 2004 under the principles of the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (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 a world-wide certification system now being applied in over 57 countries. In 1995 FSC-US was established as a "chapter" of FSC. It is one of the most widely accepted forest certification systems world-wide.

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. The certification program is 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.

GROUP ORGANIZATION

Roles & Responsibilities

Group Organization

The Wisconsin Department of Natural Resources is the group organization that maintains all aspects of both the FSC and SFI group 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 group certificates and other official documents. The Department determines eligibility and membership requirements of the group as outlined in this handbook. The group organization is also responsible for fees associated with participation in the certification programs.

Group Manager

The DNR's Division of Forestry - County Forest Specialist is designated as the group manager who administers the affairs of the Wisconsin County Forest Certification Group. The group manager works with district and field staff in that role and may delegate responsibilities through normal supervisory channels. The group manager:

- Maintains the records of the group organization.
- Applies for group certification and selects accredited certification firm(s) to conduct audits.
- 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 and payment of fees to FSC, SFI, and firms conducting audits.
- 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.

Group Members

The group members are the selected county forests in the Wisconsin County Forest Program as provided for in s. 28.10, 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 group certificate(s) and share in the benefits, privileges, and responsibilities of being a certified group member. This includes the ability to market timber as FSC- or SFI-approved under the group 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. The WCFA Certification/Legislative committee is comprised primarily of county forest administrators and serves as the primary link between the group manager and group members.

Group Membership 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 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 group manager. The group member counties will be responsible for costs associated with implementing the certification principles and standards on their county forest.

Landowner 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. 28.10, Wis. Stats., and administered in s. 28.11, Wis. Stats.

Entry

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 group manager. The application for entry shall be in resolution form and be approved by a majority of the county forest committee.

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. Group member counties that wish to be removed from the FSC and/or SFI certification groups shall submit a request to the group manager. The withdrawal request shall be in resolution form and be approved unanimously by the county forest committee. The group 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 group 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, group 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 six month time frame in which to initiate correction action. If that is unsuccessful, a written warning is to be issued from the group manager documenting the measures needed to bring that county into compliance 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 group 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 group manager, WCFA Certification/Legislative committee, and DNR program specialists will be responsible for interpreting and applying the FSC and SFI principles and standards in the context of the Wisconsin County Forest program (s. 28.11, Wis. Stats.). The group 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 (2460.5), the Timber Sale Handbook (2461), and the Silviculture and Forest Aesthetics Handbook (2431.5). 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 Group Organization). This commitment should also be included in their County Forest Comprehensive Land Use Plan.

Designation of New Group Members

The group 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, http://dnr.wi.gov/org/land/forestry/certification/county.html, so that prospective buyers of forest products can determine which counties are certified.

Training and Education

The group 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 group 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
- Other relevant documents and records

Internal Review & Monitoring

A four -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. They approve all timber sales (as does DNR Forestry Team Leader), 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.28.11WI. 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 each fall to evaluate the partnership between the DNR and county on that particular forest. As part of those meetings, the local Forestry Team Leader 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 (see 230-10). These will be completed on a rotating basis so that each county is audited approximately every 3 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 230. Audits are reviewed by the DNR County Forest Specialist (group manager) and approved by the Director, DNR Bureau of Forest Management.

Lastly, 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 both must approve these plans.

External (3rd party) Corrective Action Requests (CARs)
The Wisconsin County Forests Association (WCFA) Certification / Legislative Committee works with the Group Certification 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 Group manager, or the DNR Certification Coordinator. It is expected that prior to the issuance of any internal CAR their will be communication between the County Forest Administrator, Liaison forester, Team Leader and Group Manager. Internal CARs shall be submitted to the County Forest Administrator with CC's to the Liaison, 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 Group Manager shall be responsible for monitoring follow-through on Internal CARs. Should the DNR Group Manager be found out of compliance in its coordination role for the Group, the DNR Certification Coordinator shall monitor follow through.

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 lands to meet property objectives and goals per the Property Master Plan or Interim Forest Management Plan (IFMP). Close cooperation and integration must exist between staff from the Land, Forestry, and Water Divisions 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.

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 ch. NR 44 Wis. Adm. Code, the master planning rule. 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.

In accordance with 2005 Wisconsin Act 166 and to ensure conformance with forest certification standards, all state owned lands that do not have an NR44 compliant Tier 1 or 2Master Plan or a Tier 3 Management Sheet/Management 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 actively engaged in a property planning process (Tier 1, 2, or 3). 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 Manual Code 1750.15. 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 Manual Code 1750.15.

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 forest reconnaissance. Foresters should **provide and interpret forest recon** to the property manager. Key elements include forest cover types, age class, size class and successional stage.

2.) **Landscape Considerations.** Foresters 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, etc.) to support information developed by Natural Heritage Conservation district ecologists.

3.) **Management Objectives and Options.** Foresters should provide property managers with the range **of feasible options for managing the variety of cover types on each property**. Foresters are well versed in developing management objectives reflecting property goals and future desired

conditions. Foresters 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. Foresters should schedule treatments in WisFIRS based on stand conditions, property goals as described in the management plan, and based on discussions at IPMMs.

4.) **Plan Implementation.** 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 and generates a grounded annual allowable harvest goal.

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

ANNUAL INTEGRATED PROPERTY MANAGEMENT MEETING

Purpose:
In 2005, WI Act 166 effectively required the Department to complete inventory on our State lands, establish annual allowable harvest levels, and to report on the progress towards those goals. In 2008, all state lands were certified by the Sustainable Forestry Initiative (SFI) and the Forest Stewardship Council (FSC). Collectively, these changes have led the Department to implement Annual Integrated Property Management Meetings (IPMMs) within the DNR, across programs to create a forum to collectively assess and plan for management of all DNR managed lands and to provide the public an opportunity to comment on proposed activities and projects on those lands.

IPMMs provide a structured venue for staff from the Land, Forestry, and Water Divisions and the Bureau of Law Enforcement to consider property management in a holistic, integrated fashion. The meetings accomplish multiple objectives – debriefing on the previous year's accomplishments, consideration of planned work for the upcoming year, assessing progress toward compliance with master plan objectives and providing the opportunity for public feedback on planned management actions. They are also a critical component of forest certification compliance for Department properties.

Who is responsible for scheduling and holding the meeting?

Forestry Division	Northern State Forests
Lands Division	State owned lands other than Northern State Forests

What role do foresters play?
Foresters should be active participants in the meeting and should come prepared by identifying any proposed forest management activities for each property to be discussed, including;

Forest Management Activities. Foresters should provide an update on the status of;

- Property 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 IPMM, the planned treatments (both timber sale and cultural practices) entered in WisFIRS should be updated to reflect the decisions made during the IPMM.

See section 3.5 of the Property Managers Guidance, for additional information on IPMMs.

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 Integrated Property Managers Meeting. ***Note*:** **No timber sales may be sold on Fish and Wildlife property within the first two years of acquisition.**

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 Timber Sale Handbook.

Forest Products Permits

The administration and issuance of forest products permits for firewood and other forest products is the responsibility of the property manager. Forester may assist with remittances and annual forest products permit reporting, as outlined in chapter 57 of the Timber Sale Handbook.

FOREST REGENERATION PROJECTS ON STATE OWNED (DNR) LANDS

Changes to the Forestry Division's base operations funds and changes to s. 28.05, Wis. Stats. in 2011, provide consistent funding for regenerating forests on state owned lands. The administrative rule can be found in s. NR 1.27, Wis. Adm. Code. 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 direction. Foresters shall participate in annual property meetings to facilitate this and to discuss and present scheduled practices for the upcoming year.

There are two types of funding for regeneration work on state owned lands; funding for regeneration specifically related to a timber sale, and funding for all other regeneration projects including, but not limited to, backlog regeneration efforts and afforestation of open or understocked lands. The two different funding mechanisms have different requirements and procedures for the use of the funds.

Regeneration Projects Associated with a Timber Sale

The source of funds to complete regeneration projects in accordance with NR 1.27, 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, etc). Regeneration projects must meet all eligibility requirements specified in this handbook in the section titled: 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, s.20.370 (1) (cy), 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 titled: Contracting with Cooperating Foresters and Private Forestry Contractors for Regeneration Services.

Regeneration projects NOT Associated with a Timber Sale

Priorities for Funding:

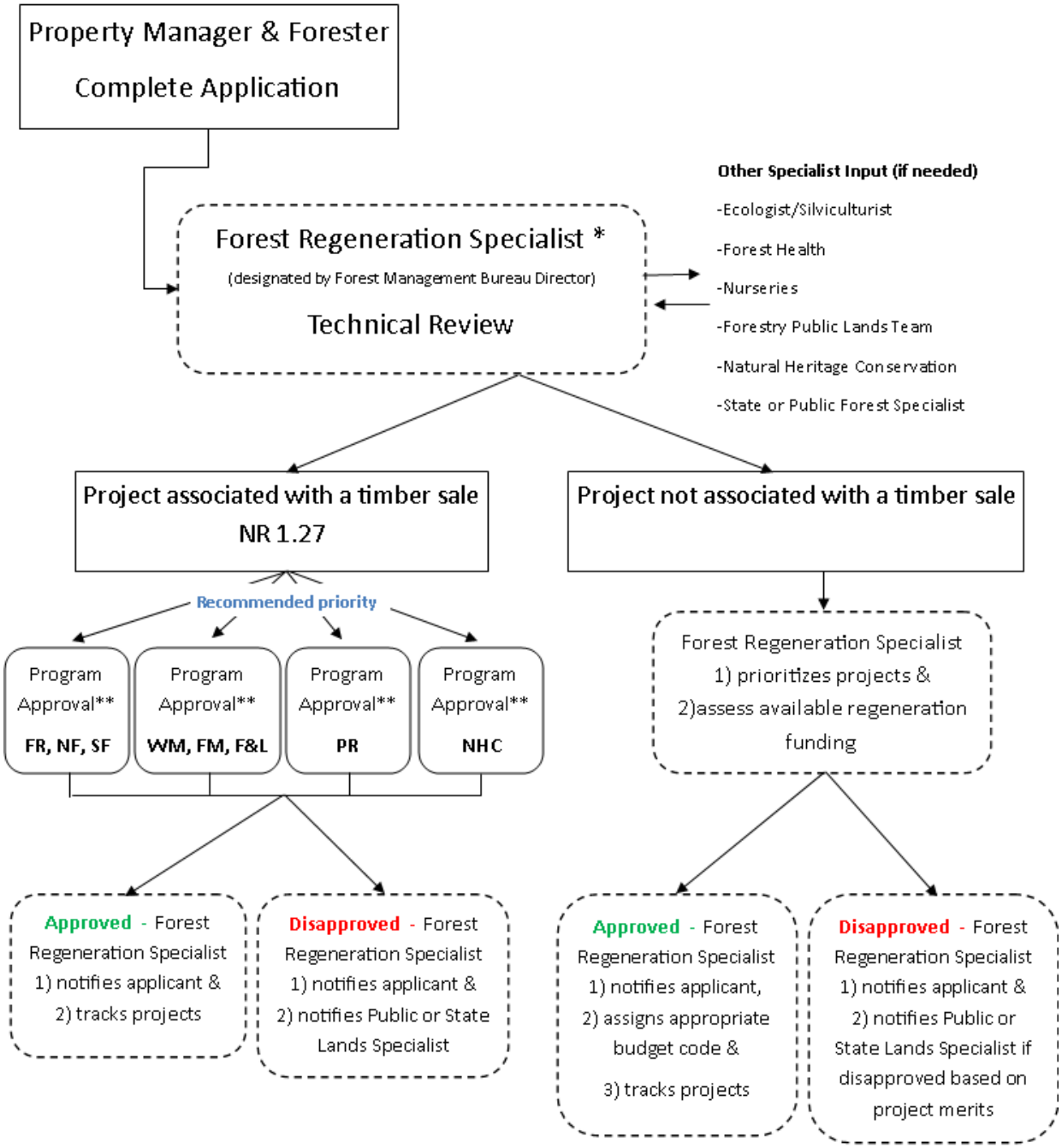
1) Afforestation where it is approved by property goals or master plan.
2) Reforestation efforts not eligible for funding via NR 1.27.
3) LTE support for regeneration project development, administration, and monitoring.
4) Equipment purchases limited to reforestation items only.

The source of funds to complete regeneration projects **not associated with a timber sale** shall be selected based on the project details by the forest regeneration specialist, as designated by the Forest Management Bureau Director, and the appropriate budget code will then be provided to the applicant.

For **all** regeneration projects a Forest Regeneration Project Application and a Forest Regeneration Project Closeout Report are required.

Applications should be submitted as soon as possible after the project is identified and should be saved and sent via e-mail to DNRForestryRegenFund@Wisconsin.gov with the subject "Regeneration Funding Request".

Forest Regeneration Project Application Review: All projects will be reviewed by the forest regeneration specialist, as designated by the Forest Management Bureau Director, in consultation with technical experts. For regeneration projects **associated with a timber sale,** final approval is by the program responsible for property management. The flow chart below outlines the application approval process for all regeneration projects.



* Forest regeneration specialist role will include 1) project technical review (and potential feedback/revision with applicant), 2) project eligibility review for funding under either funding source, 3) recommended priority of projects based on estimated cost/acre and likelihood of success (e.g. high, medium, low, not-recommended), 4) notification of applicants of project funding status, and 5) project detail tracking.

** Program approval process to be determined by the affected Bureaus (could be approved by designee, team, process, etc.).

Preparing a Forest Regeneration Project Application

The Forest Regeneration Project Application can be found on the **State Lands Regeneration Fund** section of the Forestry Division Homepage; http://intranet.dnr.state.wi.us/int/land/forestry/Div_Overview/FR_Management/regeneration/.

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. Project Type: Select at least one activity (and check all that apply) and provide a Timber Sale Tract No. 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 done. Remember you must be consistent with the funding mechanism; projects associated with a timber sale must be done by contractor(s) only. You cannot fund any department operations with this funding source. (An example of specific wording: e.g. *this stand will be mechanically mowed through a private contractor in the fall of 2013 and the resprouts will be treated with herbicides (foliar spray) through a private contractor in the summer of 2014, following a timber harvest in the fall and winter of 2014/2015 the stand will be contract planted with 800 oak seedlings per acre*).

6. Detailed Budget: Provide a detailed budget by fiscal year and by activity for the complete project. Identify if there are other funds being utilized in association with this request. Try to estimate the costs to be as close to expected as possible, do not pad the request. Make contact with other foresters in your area that may have done similar projects or contact contractors for estimated costs.

7. Project Approvals: Identify Property Manager and forward request through them for submission.

Submitting a Forest Regeneration Project Closeout Form

The Forest Regeneration Project Closeout Form can be found on the **State Lands Regeneration Fund** section of the Forestry Division's Homepage; http://intranet.dnr.state.wi.us/int/land/forestry/Div_Overview/FR_Management/regeneration/. 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 you are reporting the work for. If multiple contractors are used during the fiscal year, please submit separate closeout forms for each contractor.

2. Timber Sale Information: 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. Budget: 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, work that was completed or not completed as planned, costs per unit and acres accomplished. This information will help other foresters when developing proposals or contract language, identifying contractors for bidding, or estimating costs.

CONTRACTING WITH COOPERATING FORESTERS AND PRIVATE FORESTRY CONTRACTORS FOR REGENERATION SERVICES

The property manager and DNR forester will jointly agree on which regeneration tasks will be appropriate to contract for on individual timber sales. DNR foresters are responsible for monitoring cooperating forester or private contractor performance.

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

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 and staff are encouraged to utilize competitive pricing no matter the value of the services. All services provided will 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 contracting on state forest lands 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, http://dnr.wi.gov/topic/forestlandowners/locator/or the Directory of Foresters, http://dnr.wi.gov/files/pdf/pubs/fr/fr0021.pdf. Additional Regeneration Contractors can be found at http://dnr.wi.gov/topic/TreePlanting/documents/TreePlanting-SitePrepVendors.pdf . 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 should be used for projects $5,000 or greater, and can be found on the DNR intranet (Finance Homepage) http://intranet.dnr.state.wi.us/int/at/fn/pc/forms.html/. A simplified services contract has been developed for projects less than $5,000 and can be found on the Regeneration homepage. Sample contracts and performance expectations can be found in the Public Lands Toolkit http://dnr.wi.gov/topic/countyforests/toolkit.html. The DNR Secretary or assigns 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 specialist will provide staff a budget code to utilize along with project approval notice.

For regeneration services **associated with a timber sale**, expense budget 212 FG02 1864 will be used in combination with unique activity codes in order to designate the proper conservation fund account from which to draw the funds. Payment for services does not come directly from the individual timber sale a contractor may be working on.

- Activity code **FRTM** for the contracting with a cooperating forester or private contractor for regeneration services associated with a Forestry Account timber sale for authorized work on a Division of Forestry or Northern or Southern Forest property.

- Activity code **FRTN** for the contracting with a cooperating forester or private contractor for regeneration services associated with a Fish &Wildlife Account timber sale for authorized work on a Wildlife, Fisheries, or Flowage property.

- Activity code **FRTO** for the contracting with a cooperating forester or private contractor for regeneration services associated with a Parks Account timber sale for authorized work on a Bureau of Parks and Recreation property.

- Activity code **FRTP** for the contracting with a cooperating forester or private contractor for regeneration services associated with a Natural Heritage Conservation timber sale for authorized work on a stand-alone Natural Heritage Conservation property.

STATE LANDS FOREST CERTIFICATION

Background

The Wisconsin DNR state lands, as administered by the Wisconsin Department of Natural Resources (DNR) divisions of Forestry, Land and Water includes 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™ (FSC®)* with certificates issued in 2005. In 2009 ~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 lands, fish hatcheries, state tree nurseries, administrative sites, access easements, and other lands owned, leased or eased for intensive non-forest use.

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

Authority and Purpose

Under authority in §23.11, 28.01, 28.07, 28.11 and 77.80, Wisconsin Statutes, the Department may enter into voluntary agreements such as ATFS, 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 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. The Forestry Leadership Team (FLT) and the Land Leadership Team (LLT), 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 two divisional management teams and assist the Certification Coordinator. The ICIT, composed of staff appointed by FLT, LLT and the Division of Water from land management bureaus, has four functions:
    a. Develop strategic alternatives to address Corrective Action Requests (CAR) that come out of certification reviews;
    b. Translate policies approved by FLT and LLT into operations;
    c. Compile internal accomplishment and monitoring reports needed to document conformance to certification indicators.

d. Annual certification review with senior management.

The ICIT may be assisted by ad hoc working groups or other standing teams as needed.

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 effectual 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 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 form the current year's internal monitoring. The ICIT will meet with senior management, typically division administrators and members of FLT, LLT and the Water Division 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 of a product through every step from the forest to finished goods. The FSC standard includes criteria 8.3, which states "Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the "chain of custody." There are two indicators within this chain of custody criteria. Indicator 8.3.a states "When forest products are being sold as FSC-certified, the forest owner or manager has a system that prevents mixing of FSC-certified and non-certified forest products prior to the point of sale." Indicator 8.3.b states "The forest owner or manager maintains documentation to enable the tracing of the harvested material from each harvested product from its origin to the point of sale." The SFI certification program also requires organizations that sell or transfer certified products to provide customers with documentation of the certified products which clearly accounts for their origin from certified lands.

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 contracts, which all contain the certification information required by the applicable certification standard.

To satisfy chain of custody standards timber sale documents must contain a) name and contact details of the organization; b) name and address of the customer; c) date when the document was issued; d) description of the product; e) quantity of the products sold; f) the organization's FSC and/or SFI Forest Management (FM/COC) code; and g) a clear indication of the product claim "FSC 100%" and/or "SFI-Certified". If separate transport documents are issued (i.e. 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 Timber Sale Handbook. 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.

In the case of harvesting any timber on lands that are not covered by forest certification, that is state or county lands that are not included within the scope of the certificates, forest products should be kept separate from any certified products and any timber sale and shipping documents should not include any certification code or product claim.

PUBLIC LAND RECORDS AND STATE LAND TIMBER SALE AUDITING

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 Records Management Handbook 9520.5 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) 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. 19.32(1).]

s. 19.32(2) 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 public records, in any state office, that are not required for current use may, in the discretion of the public records board, be transferred into the custody of the historical society, as provided in s. 16.61(s. 19.23(1)).

State Land Timber Sale Audits

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 2461. Timber sales must be sold pursuant to s. 28.05, Wis. Statutes. Collection and remittance of timber sale money should follow Manual Code 9341.1.

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 an accurate and transparent manner that is consistent with the guidance in this handbook and the Timber Sale Handbook 2461. 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 the maximum financial return from forest land.

The Department's Division of Forestry recognizes the importance of conducting timber sales in an accurate, transparent, and accountable manner and consequently will periodically audit the timber sale files for department managed land timber sales. Audits will be conducted once every three years for a Division of Forestry Area. Audits will incorporate timber sales on all department managed lands within that Forestry Division's Area except for the four large northern State Forests. Audits for the Northern State Forests shall also include additional non-timber programmatic fiscal audit items, which document accountability for non-timber revenue collected and remitted for the property; specific items addressed under Section IV. I. The Brule River, Black River, Flambeau River, and Northern Highland – American Legion State Forests will be audited independently once every three years, or more often if desired, utilizing the same audit procedures outlined below. The Governor Knowles and Peshtigo River State Forests should also be audited for the additional programmatic fiscal items. In order to facilitate incorporation of the non-timber fiscal audit elements, audits for the Cumberland Area should be conducted at the Governor Knowles State Forest and for the Peshtigo Area at the Peshtigo River State Forest. At least one of the sales selected for the Area should be from the State Forest.

The County and Public Forest Specialist will maintain an audit schedule for the 10 Areas and 4 large northern State Forests. The Area Forestry Leader will ensure that audits are scheduled and completed as outlined in the schedule.

The fiscal and programmatic procedures for the audit are as follows:

I. PROGRAM OBJECTIVE

The timber sales audit is not only a fiscal audit, but also a way to monitor for compliance with the Department's policies for the sale of timber. Additional audit program objectives include increased staff awareness of policies and procedures and identification of potential timber sale process improvements, while implementing the best forest practices to ensure sustainable forestry.

Audits should be conducted every 3 years on a sample of timber sales representative of all Department managed properties within each of the Division of Forestry's Areas and on each of the 4 large northern state forests, to assure that management is consistent with s. 28.05, Wis Stats., Manual Code 9341.1, the Timber Sale Handbook 24601, and other applicable Department guidance on the sale of timber.

II. PARTICIPATION

The Area Forestry Leader or designee and either a DNR employee or contractor filling the role of fiscal specialist will conduct audits jointly. DNR personnel including administering forester, forestry team leader, property manager, and others responsible for sale approval and administration may be contacted for input prior to, during, or after the audit but need not be present at the audit unless requested by the auditor or their supervisor.

III. PREPARING FOR THE AUDIT

A. SAMPLE: Select a representative sample (5% of total, but no less than 3 per year for the audit period) of timber sales completed during the period of time being audited. Include different sized sales, contractors, cutting methods, sale types, etc. The most recent sales would have a higher likelihood of incorporating changes made from previous audits. Sales can be selected based on a query of completed sales in WisFIRS.

B. Contact the administrating forester and team leader responsible for each of the sales selected to notify them that their sale(s) have been selected for audit. A request for an appropriate place to conduct the audit should also be made. Inform them that, if desired, they may attend the audit in person or may provide comments before or after the audit. Notify them of what information will need to be available to the auditor, including all of the applicable items below:

1. Notice and Cutting Report (Form 2460-1)
2. Stand Examination Tally sheet (Form 2400-32)
3. Timber sale map
4. Contract and all addendums
5. Timber Sale Inspection (Form 2460-2) and/or Contractor – Pre-Sale Meeting (Form 2460-009)
6. All correspondence

7. Timber Sale Bid Advertisement and Opening of Bids/Timber Sale Award (Form 2400-6)
8. Scale Sheets (Form 2400-63), Lock Box Tickets, and Mill Scale Slips
9. Timber Sale Transaction/Remittance (Form 2460-3)
10. Timber Sale Ledger (Form 2460-6)
11. Timber Sale Journal (Form 2460-5)
12. Worker's Comp. Insurance Certificates (entire contract period)
13. SFI Training Standard (FISTA) Certificates (entire harvest period)
14. Letters of Credit or bonds (entire contract period)
15. Timber Sale Close Out Transaction (Form 2460-4)
16. Timber Sale Close-Out Checklist (Form 2460-013)

C. Pre-audit conference – This can be done in person or via phone or email. Contact the administrating forester, forestry team leader, and property manager to discuss the management of the properties and any local timber sale procedures. Review findings from the previous audit and determine if any recommendations were implemented. Document this discussion in the new audit report. Briefly explain forthcoming audit procedures to staff that will be involved.

IV. FISCAL AUDIT PROCEDURES

A. BIDDING PROCEDURE

1. Responsibility -To verify that competitive bidding is conducted according to the statute, fairly, and without bias. The department should be selling timber to the highest bidder unless there is just cause documented in the sale file. After the forester completes and the property manager and forestry team leader approve a timber sale; the sale is to be sold. Except for salvage sales as a result of fire, snow, hail, ice, insects, disease, or wind (s. 26.22, Wis. Stats.), all sales with an appraised value of $3,000 or more must be advertised at least twice by a classified advertisement in a newspaper having general circulation in the county in which the timber sale is located. Ask to see a copy of the ad and a bid summary. It is particularly important to see the ad if there was only one bidder to ensure the seller was not showing preference to one contractor. A summary of all bids shall be available for review. Ensure the highest bidder received the contract or justification was included in the sale file as to why not. Bidding requirements shall apply to all bidders.

2. References - Timber sale prospectus, timber sale bid advertisements, Opening of Bids/Timber Sale Award (Form 2400-6), bid summary documents.

3. Questions to ask / investigate:
   a. Are timber sales > $3000 in appraised value being advertised? - *(Reference 2460-001 in sale file, bid summary sheet, and newspaper ads).*
   b. Are timber sales being awarded to the high bidder? If not, is justification included in the sale file?
   c. Was the County and Public Forest Specialist notified if a winning bidder failed to execute the contract and submit a performance bond and did the contractor forfeit the 10% of bid value penalty? (If applicable at time of bid - if the bid was received under previous bid policy was the bid bond dealt with appropriately?

B. PERFORMANCE BONDS:

Cash Bonds:

1. Responsibility - To verify that bonds are used consistently for all contractors and provide coverage for the state against risk of loss. The timber sale ledger should indicate when received and when they were returned to the logger. Performance bonds may include the following and must be consistent with the department's policies as outlined in the Timber Sale Handbook 2461:
   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

2. References – Timber sale prospectus, timber sale contract, timber sale file/ledger, timber sale close-out transaction, timber sale close-out check list, Timber Sale Handbook 2461.

3. Questions – See #3 under Irrevocable Letters of Credit below.

Irrevocable Letters of Credit:

1. Responsibility - To verify that ILOCs were used consistently and provided coverage for the entire contract period (including extensions). Letters of credit are returned to the bank after the sale is complete. A copy should be kept in the sale file. ILOCs returned or expired prior to sale completion put the state at risk of loss from damages or not receiving payment.

2. References – Timber sale prospectus, timber sale contract, timber sale file/ledger, timber sale close-out transaction, timber sale close-out check list, Timber Sale Handbook 2461.

3. Questions to ask/investigate for both :
   a. Are performance bonds (including ILOC) maintained for the entire contract period (including extensions)?
   b. Are performance bonds returned in a timely fashion after sale is completed?
   c. Are performance bonds for at least the amount required by the prospectus & contract?
   d. Are performance bond amounts and form of bond in conformance with the requirements in the Timber Sale Handbook 2461?

C. CERTIFICATE OF INSURANCE:

1. Responsibility - To verify that certificates of insurance are used consistently and in accord with department policy. Copies should be maintained in the sales folder or in a separate file.

2. References – Timber sale prospectus, timber sale contract, timber sale file/ledger, Timber Sale Handbook 2461.

3. Questions to ask / investigate:
   a. Was there a worker's comp certificate on file and did it cover the entire time period of the sale?
   b. Was the certificate adequate based on department policy?
   c. 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?
   d. Was other insurance required (e.g. liability) if required by additional provisions in the prospectus or contract?

D. EXTENSIONS:

1. Responsibility - To verify that sale extensions were applied consistently in accordance with department policy and in the best interest of the state. Determine if there were extensions to the contract. 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 department's timber sale extension policy. A Timber Sale Contract Amendment Form (Form 2400-005E) 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 2460-007).

2. References – Timber sale prospectus, timber sale contract, timber sale file/ledger, Timber Sale Handbook 2461.

3. Questions to ask / investigate:
    a. Was the sale extension documented by a written contract amendment form (2460-005E)?
    b. Was the timber sale amendment accompanied by a Timber Sale Amendment Approval Form (2460-007)?
    c. Were contract extensions applied consistently according to department policy, and always in the best interest of the state?
    d. Were stumpage increases applied consistently and in accordance with contract provisions and department policy?

E. STUMPAGE PAYMENT TIMELINESS:

1. Responsibility - To verify that the state is receiving stumpage payments in a timely fashion and in accordance with the contract payment provisions and department policy. Complete a worksheet that will show the billing cycle and the collection period. The goal is for the department to typically bill within 30 days of the mill scale or field scale date, and to have the logger make payment within 30 days of billing for scaled sales.

2. References – Timber sale prospectus, timber sale contract, timber sale file/ledger, invoices / remittances, Timber Sale Handbook 2461.

3. Questions to ask/investigate:
    a. Were invoices generated and sent to contractors in a timely fashion and in accordance with department policy?
    b. Were payments made in accordance with the contract?
    c. For lump sum timber sales, was payment received for each harvest unit before harvesting began?

F. LATE PAYMENTS:

1. Responsibility: To verify that the state is consistently applying the department's late payment policy. The department should assess a late payment fee if payment is not received within 30 days. The late payment fee policy should be reflected in the timber sale contract and should be consistent with the department's policy as included in the Timber Sale Handbook 2461. Late payment contract breeches should be communicated to the county and public forest specialist for tracking.

2. References – Timber sale contract, timber sale file/ledger, invoices / remittances, correspondences, Timber Sale Handbook 2461.

3. Questions to ask/investigate:
    a. Were late payments applied as stipulated in the contract?
    b. Was interest calculated and collected in accordance with the contract and department policy?
    c. Were late payment contract breeches communicated to the contractor, including the department's interest policy and requirements for prepayment on the remainder of that sale (or for a 2-year period for the second such occurrence)?
    d. Were late payment contract breeches communicated to the county and public forest specialist for tracking?

G. SALE MODIFICATIONS:

1. Responsibility - To ensure that sales are cut according to sound silviculture, amendments are not in excess of the $3,000 direct sale limit, and sales are harvested as approved on the original timber sale Notice and Cutting Report (Form 2460-1). 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. 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 (Form 2400-005E) and should be accompanied by a Timber Sale Contract Amendment Approval Form (Form 2460-007).

2. References – Timber sale contract, timber sale contract amendment, timber sale contract amendment approval, Timber Sale Handbook 2461.

3. Questions to ask / investigate
   a. Was the sale modified? If so, was the amendment documented by a written Contract Amendment Form (2460-005E)?
   b. Was the timber sale amendment accompanied by a Timber Sale Amendment Approval Form (2460-007)?
   c. Were amendments applied consistently and in accordance with department policy?
   d. If the acreage or volume of a sale was modified, was the change reflected on the timber sale Notice and Cutting Report Form (2460-001) and in WisFIRS?
   e. Was it in excess of $3,000 appraised value (s. 28.05(2), Wis. Stats.)?

H. MISCELLANEOUS FOREST PRODUCTS PERMITS:

1. Responsibility - To ensure that any miscellaneous forest products harvested under a Forest Products Permit (Form 2460-008) were sold according to Manual Code 2465.4 and Timber Sale Handbook guidance. When selecting a random sample of timber sales there is a chance that the sale selected will be for a summary of sales of miscellaneous forest products. If no miscellaneous forest product permits sales are included in the audit sample this item can be disregarded.

2. References – Forest Products Permit (Form 2460-008), Timber Sale Notice and Cutting Report (Form 2460-001), Chapter 57 Timber Sale Handbook 2461, and page 87-16 Timber Sale Handbook 2461.

3. Questions to ask / investigate
   a. Were Forest Products Permit (Form 2460-008) accurately completed and approved by the property manager?
   b. Were all permits on a property totaled and reported once a year by December 31 on a completed Form 2460-001, as a final report for that calendar year?
   c. Was the volume sold by species and product, sales value, acreage (if applicable), and number of permits involved listed on one Form 2460-001 per property?
   d. Were all monies remitted on a Timber Sale Transaction/Remittance, Form 2460-003 (several permits can be covered by one remittance), or a General Remittance Sheet, Form 9300-029A?

I. NORTHERN STATE FORESTS – ADDITIONAL NON-TIMBER FISCAL AUDIT*

*Non-timber fiscal audit items **only applicable on the northern state forests** with non-timber program items to audit (Brule River, Black River, Flambeau River, Northern Highland – American Legion, Governor Knowles, & Peshtigo River State Forests).

1. Responsibility - To ensure that all revenues, in addition to timber sale revenues previously addressed, are properly recorded and remitted timely; to determine if adequate internal controls are being exercised; to determine if assets are adequately secured; to determine if property complies with relevant Statutes and Manual Codes.

2. Procedures and questions to ask/ investigate
   a. **<u>Prior to the audit –</u>**
      i. Make appointment with property managers, providing a brief summary of what we're hoping to accomplish (see notes in entrance discussion).
      ii. Gather documentation for cash short/overages (if available). Also find out if property has a petty cash fund, and/or change fund. Record amounts for each.

   b. **<u>Entrance discussion –</u>** <u>(incorporate in overall entrance discussion for entire audit)</u>
      i. Explain purpose of audit – (to determine if all revenues are properly recorded and remitted timely; to determine if adequate internal controls are being exercised; to determine if assets are adequately secured; to determine if property complies with relevant Statutes and Manual Codes).
      ii. Request space to work, availability of files (checking account and other related documentation).
      iii. Request that appropriate person (property manager?) be available for a short time to explain procedures. Mention that we'll spend time independently reviewing records. To wrap up, we'll meet with him/her again to discuss our audit and/or learn more about their concerns.

   c. **<u>Systems review, internal control, & security –</u>**
      i. It is important that we understand property's system so that appropriate audit procedures can be determined while in the field. Questions to ask:
         - How many guests typically visit the property annually?
         - How many campers do you typically register annually?
         - How many campsites does this property have?
         - What types of items are being sold at the property?
         - For each of the items mentioned, describe your system for inventory control, selling and processing remittance.
         - Describe your system for processing camping reservations
         - Describe your system for processing camping fees (for non-reserved sites)
         - Describe your system for processing camping refunds (Note differences for credit card refunds, cash refunds and check refunds)
         - Does the camper/customer always sign the refund receipt?
         - Do you use camping and park sticker self-registration? If yes, how is this handled? Who has access to lockbox? Are stickers attached to self-registration forms and retained for 2 years?
         - Describe your process for using courtesy notices (form 4100-138)? How are they monitored? Are citations issued for noncompliance of courtesy notice terms?
         - Describe your procedures for handling bad checks.
         - Have there been occasions when the bank notified you that the account was overdrawn or that they returned your checks because of insufficient funds?
         - Describe your procedures for handling cash shortages/overages.

      ii. It is important that a property has a good system of "checks and balances", so that more than one employee is involved with management of the account. Questions to ask relating to internal control:
         - Who is authorized to sign checks for the revenue depository checking account (need to have 2)?
         - Who does the monthly bank reconciliation?
         - Who does bank deposits?
         - How often are bank deposits made (see MC 9343.2)?
         - Who is responsible for record-keeping?
         - Who maintains control over the issuance of permits and stickers?
         - Who prepares remittances and returns?

- Who does the account inventory monthly reconciliation (report from Madison)?
- When an assigned staff member is in leave, who performs the duties of their assignments as described above?

iii. If using individual employee accounts, or a rotating drawer system being used by more than one employee. Questions to ask:
- Who assigns park stickers to employees (or drawers)?
- Are employees assigned stickers by use of the Recreation Sales Control Receipt?
- Are employees required to sign the Recreation Sales Control Receipt?
- How is start-up money supplied to employees at beginning of season? If property supplies money, do employees sign receipt?
- What (if any) identification is being verified before accepting personal checks?
- Are employee accounts audited periodically by the property manager or designee?

iv. If using a cash register. Questions to ask:
- Are all sales rung up on the cash register?
- Does each person using the cash register have a separate drawer or till? If not, what security measures are in place (if any) to protect each individual?
- Are receipts (cash, checks, etc.) reconciled to sales (register tape) daily?

v. It is important that a property has adequate security in place to protect assets. Questions to ask relating to security:
- Is the property protected by security alarms, fire alarms (detectors), deadbolt locks?
- Is there a physical separation from customers, such as a counter?
- Where are unsold stickers, licenses and campbooks stored? (other items as relevant)
- Where is cash stored (including petty cash and change fund, if applicable)?
- Who has access to unsold stickers, licenses and cash?
- Where are credit card receipts kept?
- Where do employees perform their remittance/reconciliation and count cash?
- Who has access to the safe? (should be only property manager and 1 back up)
- Is the safe stored out of public view? Is it kept locked when not needed for operations?
- Are keys or combinations to the safe changed immediately upon resignation of person having access?
- Is there a log kept to show who has keys to offices?
- When staff resign or transfer, are their keys returned and accounted for?
- Review endorsement stamp being used – should state “for deposit only, name and address of bank, name of station, account number”

d. **Review of documentation –**

i. Review of checking account:
- Be sure that all checks written are payable to DNR
- If canceled checks are available, check to see who is signing them
- Review record of deposits to see if done timely
- Check to see if account is being reconciled
- If not using U S Bank (state contract), check to see where one is available
- Is checking account “0” after remittance (oftentimes difficult to tell, need to ask more)
- Is the checkbook register current?
- Is the account properly titled? (includes station name and address)
- Are there any outstanding checks over 1 year old? (should be sent for collections)
- Does Manager or designee review bank reconciliation?

ii. Review of camping books:
- Verify accuracy of one or more individual camp book totals (if applicable)
- Track revenue through system to verify that all got remitted
- Reconcile unremitted revenue with cash/checking.

iii. Review of individual remittance/reconciliation, property remittance & cash register tapes:
- Review remittance frequency to determine compliance with state statute (monthly for licenses, weekly for other revenue types)
- Use samples to track revenue through the documentation to ensure that all got deposited (verify deposit ticket or checking account statement) and remitted.
- Reconcile 2 individual cash drawers.

iv. Review of Master Control Log (9300-148, or some other method):
- Review log to see that it's kept up-to-date

v. Review of inventory record sheets:
- Review prior year account statement to ensure that it's closed out.
- Review records to see if periodic reconciliation is being done.
- Reconcile physical inventory with inventory sheet for at least a couple of sticker types.
- Review procedures for purchase of store items, inventory control, and remittance process.
- Reconcile 2 store inventory items against property's records.

e. **Exit discussion –** (incorporate in overall exit discussion for entire audit)
Summarize any audit concerns and make recommendations for improvement. Ask property manager if they have concerns or questions that they'd like help with.

V. PROGRAMMATIC (NON-FISCAL) AUDIT PROCEDURES:

This section includes items required as Department and/or Division policies as found in the timber sale handbook, public lands handbook, BMP manuals, and various other guidance documents, including memos and directives. The DNR team leader or supervisor reviews all forest timber sales prior to sale. The audits should document findings that are consistently outside the norm, and if deviations from recommended procedures are noted there should be adequate documentation in the sale file justifying such modifications.

Each unaudited timber sale file should have the following items, if applicable, either in the file or accessible separately (*Pg. 111-2 Timber Sale Handbook*).

1. Notice and Cutting Report (Form 2460-1)
2. Stand Examination Tally sheet (Form 2400-32)
3. Timber sale map
4. Contract and all addendums
5. Timber Sale Inspection (Form 2460-2) and/or Contractor – Pre-Sale Meeting (Form 2460-009)
6. All correspondence
7. Timber Sale Bid Advertisement and Opening of Bids/Timber Sale Award (Form 2400-6)
8. Scale Sheets (Form 2400-63), Lock Box Tickets, and Mill Scale Slips
9. Timber Sale Transaction/Remittance (Form 2460-3)
10. Timber Sale Ledger (Form 2460-6)
11. Timber Sale Journal (Form 2460-5)
12. Worker's Comp. Insurance Certificates (entire contract period)

13. SFI Training Standard (FISTA) Certificates (entire harvest period)
14. Letters of Credit or bonds (entire contract period)
15. Timber Sale Close Out Transaction (Form 2460-4)
16. Timber Sale Close-Out Checklist (Form 2460-013)

After the audit, all closed sale files within or prior to the time frame of that audit throughout the Forestry Area can be purged of excess documents, with the exception of those items designated for permanent retention on page 111-2 of the Timber Sale Handbook. Please see Timber Sale Handbook Chapter 110 for the required contents for timber sale files at each stage of a sale.

A. TIMBER SALE CUTTING NOTICE AND REPORT (Form 2460-001):
Ensure there are cutting reports 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.

1. Verify the accuracy of scale slips / billings with what is reported on 2460-001.
2. Are final reported sale volumes greater than +/-20% different from estimated volumes justified in comment section?
3. Are all relevant fields in the Timber Sale Notice and Cutting Report Form (Form 2460-001) including the Narrative (Form 2460-001A) completed? Are all required approvals included?
4. Was an NHI review completed and documented during sale establishment?
5. Does management follow the guidance provided in the property master plan or interim forest management plan?
6. Does management follow the guidance provided in the Silviculture Handbook 2431.5? If not, is justification provided?
7. Does management follow the guidance provided in the Wisconsin BMPs for Water Quality? If not, is justification provided?
8. Does management follow the guidance provided in the Wisconsin Woody Biomass Harvesting Guidelines? If not, is justification provided?
9. Does management follow the guidance provided in the Wisconsin BMPs for Invasive Species? If not, is justification provided?
10. Does management follow the guidance provided in the Annosum Root Rot Treatment guidance? If not, is justification provided?
11. Is reforestation adequately addressed on the Timber Sale Notice and Cutting Report Narrative (Form 2460-001A) and in WisFIRS if follow-up treatment was needed?

B. 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. Was cruise consistent with cruise accuracy guidelines provided in chapter 23 of the Timber Sale Handbook 2461?

C. TIMBER SALE MAP:
1. Verify that there is a timber sale map in the sale folder.

D. CONTRACT AND ADDENDUMS:
Review the contract and addendums.

1. Do the contract and extensions cover the entire time frame of the timber sale? Compare contract with timber sale inspections, timber sale ledger, and correspondences.

E. TIMBER SALE INSPECTION FORMS:

A pre-sale meeting with the logging contractor should be conducted to address sale specification and concerns and should be documented on the Contractor – Pre-Sale Meeting (Form 2460-009). 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).

1. Is a Timber Sale Inspection (Form 2460-002) log available in the sale file or readily accessible in another location?
2. Is a Contractor – Pre-Sale Meeting (Form 2460-009) form completed and included in the sale file?

F. ALL CORRESPONDENCE

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

G. SCALE SHEETS:

1. Are scale sheets and/or mill scale slips available in the sale file in order to verify accuracy of stumpage invoicing?

H. TIMBER SALE TRANSACTIONS – COLLECTIONS & REMITTANCES

1. Is there documentation of invoicing and payments made? (See item E in fiscal audit section)
2. Were invoices generated and sent to contractors in a timely fashion and in accordance with department policy? (See item E in fiscal audit section)
3. Do stumpage invoices match scaled volumes and reflect the correct price per unit?
4. Were collections and remittances processed in accordance with Manual Code 9341.1 and s. 20.906 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.)
5. Are payments received stored in a secure manner consistent with Manual Code 9341.1?

I. TIMBER SALE LEDGER:

A ledger shall be used to record information for each sale regarding the various transactions that occur during a timber sale, including bonds and invoicing & payment for all products which have been removed from the sale area. Entries shall be made following each transaction, including each billing or stumpage payment. Verify this is completed and in the sale folder. Often this information will be maintained electronically.

1. Is a ledger included in the sale file or readily accessible for each sale?
2. Do ledger values match timber sale journal values?
3. For closed sales, do the ledger values match what has been reported on the 2460-001?
4. Does the ledger align with fiscal audit guidelines in Subsection D, E, and F in Section IV?

J. TIMBER SALE JOURNAL:

A journal shall be used to record information for each sale regarding the volume of all products, which have been removed from the sale area for scaled sales. Volume determination can be based on woods scale or mill scale. Entries shall be made following each scale. Verify this is completed and in the sale folder. Often this information will be maintained electronically.

1. Is a journal included in the sale file or readily accessible for each sale?
2. For closed out sales, do the journal volumes match what has been reported on the 2460-001?

K. CLOSE-OUT TRANSACTIONS:
A completed copy of a Timber Sale Close-Out Transaction (Form 2460-4) and the Timber Sale Close-Out Checklist (Form 2460-013) should be in the sale folder as a record indicating final disposition of performance bonds and/or excess stumpage payments.

1. Is a completed Timber Sale Close-Out Transaction (Form 2460-4) included in the sale file?
2. Is a completed Timber Sale Close-Out Checklist (Form 2460-013) included in the sale file?

L. 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?

M. FOREST RECONNAISSANCE UPDATES

1. Has the WisFIRS stand recon data for harvested stands been updated following timber sale close-out?
2. Have harvest treatments been logged as completed treatments, both tabular and spatial data?
3. Have planned treatments been updated to reflect the current stand conditions?

N. ADDITIONAL DEPARTMENT POLICIES & PROCEDURES:
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 2461, and other Department or Division directives regarding temporary and permanent timber sale policies that would apply to the audited sales.

1. Does management and sale administration follow all other relevant department or division guidance documents, both permanent and temporary (e.g. temporary contract extension policy, etc.) that would have been applicable during the contract period?

VI. EXIT CONFERENCE AND AUDIT REPORT

Communicate the preliminary audit findings with the administrating forester(s), property manager(s), and team leader(s). The foresters, property managers, or team leaders may have further information pertinent to a finding. Tell all staff involved in the audit that a copy of the draft report should be sent electronically within approximately 30 days. The basic format will include five sections, which will include: 1) a summary of recommendations; 2) a summary of commendations; 3) an evaluation of the fiscal audit items (section IV); 4) an evaluation of the programmatic (non-fiscal) audit items (section V); and 5) a summary of any division wide recommendations that result from the audit findings. A template of the audit report format is available from the County and Public Forest Specialist. Recommended ways to improve the administration of the timber sale program should be clearly identified as well as commendations for the particularly well implemented portions of the program.

The initial draft of the audit report should be sent to the administrating forester(s), forestry team leader(s), and property manager(s) for review and input. Upon receipt of the draft report an approximately 14-day review/comment period should be provided.

The lead auditor 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 and Public Forest Specialist. The lead auditor 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 by the AFL or Team Leader with their staff. 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 or department staff as needed.

PUBLIC FOREST LANDS ACCOMPLISHMENT REPORTING

The Accomplishment Report is completed quarterly (January, April, July, and October) and forwarded through channels to the District Forester. In addition to the public land accomplishments, this report includes data on private forestry and fire activities that are also addressed in the Private Forest Lands & Fire Presuppression handbooks. District Foresters shall make available (either electronically or on a shared drive) these quarterly accomplishments to Central Office staff for compilation: Public lands reporting should be forwarded to the County Forest Specialist. Private lands go to the Private Forestry Specialist and fire activity to the Forest Fire Suppression Specialist.

Individual reports should be filed for:

a. Each northern state forest
b. Each county forest
c. Northern Unit of Kettle Moraine State Forest
d. Southern Unit of Kettle Moraine State Forest
e. Lower Wisconsin Riverway
f. Each State Wild River (Pine-Popple and Pike)
g. Meadow Valley
h. Other DNR lands (fish and wildlife management lands, state parks, recreation areas and demonstration forests) These can be combined for reporting purposes.
i. Other public lands including community forests, County lands not in County Forest Law, town lands, trust lands, DOT lands and federal lands. School Forest should be reported on the private forestry page.

One person in each County should be responsible for compiling the information for each report and submitting to the Forestry Team Leader (e.g. One person compile all the foresters accomplishments on a particular State Forest or County Forest.). As an alternative Teams / Areas / Districts may choose to have individual forester's accomplishments combined electronically.

General Instructions for Public Forest Lands Accomplishment Report

1. Round all numbers to the nearest whole number. DO NOT record fractions.

Instructions and Definitions

Harvesting and Recon in lieu of sale – Report Acres ESTABLISHED or updated.

Even-aged regeneration harvests: Report acres established including clearcut, patch-clearcut, final shelterwood, or seed tree harvests. Timber is typically designated in these areas, not marked.
Uneven-aged Selection Systems: Report acres established for sale by marking including single tree selection, crop tree, initial shelterwood, canopy gap, or small group selection harvests. .
Even Aged Thinning: Report acres established where even-aged stands are thinned out (i.e. plantation thinning, aspen removal from an even-aged stand). Timber to harvest can be "designated" or marked.
Recon in Lieu of sale: Include those acres that were scheduled for harvest by Recon Program 12B but are not ready for harvest as yet. The recon update of these stands contributes to the annual allowable cut and must be kept separate from other recon.

Non-Commercial Treatments – Report Acres ESTABLISHED (excepting prescribed burns).

Release: Include mechanical, fire or chemical release completed for improving timber stands. This would also include non-commercial thinning in seedling & sapling stands. Aspen residual cutting is to be counted only if completed in a separate operation and not part of the sale contract.
Non-commercial Thinning: Acres established for marked thinnings in pole-sized stands that are not commercial due to markets or quality. *Non-commercial thinnings in seedling & sapling stands should be reported as "release".
Sanitation: Acres completed for sanitation. Includes non-commercial insect & disease control.
Invasive Species Control: Acres completed for invasive species control using mechanical, chemical or fire methods.
Pruning: Only report acreage actually completed.
Habitat Maintenance: Include habitat maintenance work completed using mechanical, chemical or fire methods for hazard reduction, wildlife habitat, barrens management, etc**.**

Site Preparation – Report Acres COMPLETED.

Natural or Direct Seeding: Report acres completed in which the site has been treated to create an improved seedbed for seeding. Examples include scarifying, whole tree skidding in sale specifications, followup slash treatments, prescribed burning and herbicide applications. Note: Also report any use of fire under "Prescribed Burning". Aspen residual cutting should be reported as "release".

Planting: Report acres completed in which the site has been treated to allow for followup planting. Examples include slash treatments, patch scarifying, herbicide applications prior to planting and prescribed fire. Also report any use of fire under "Prescribed Burning".

Artificial Regeneration – Report Acres COMPLETED.

Direct Seeding: Report acres completed in which seed has been scattered or placed over a designated area for the establishment of a forest stand.

Planting: Report number of acres planted with seedlings, transplants or cuttings.

Recon Updating – Report Acres COMPLETED.

All acres updated except those in lieu of a timber sale being established. This includes sale closeouts, updates after planting or cultural activities, updates of stands being set up for sale, and other updates independent of any activity.

Annual Property Meeting - Report # COMPLETED.

Completion of the annual property meeting (ref. Timber Sale Handbook 10-10) designed to finalize a property's workplan. On County Forests this may also include discussions on the partnership between the DNR and the County (see 210-65).

Prescribed Burning – Report Acres COMPLETED.

Number of burns plus acres completed of prescribed burning. All burning activities should be included here. Total of all prescribed fire activities, including non-commercial treatment, habitat maintenance, fuel break maintenance, and site prep.

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. Refer to the example on how this information should be recorded. These reports will be filed by compartment and stand number.

I. Heading Information

This data applies to both plantation and cultural practices. You should record the habitat type, if know. This is a letter code as determined from the habitat Classification System Field Guide and displayed on page 110-117 of this handbook. For example, a code of PArVPo would represent this Pinus - Acer rubrum/Vaccinium-Polygonatum pubescens Habitat Type. As better comprehension is gained concerning habitat types, this information will aid in identifying site potential.

II. Plantation Data

Your plantation number is 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.

You should record the average overall percent survival of the entire plantation. Your survival checks should be completed during the first fall following spring planting and again after the third growing season. Also record the year the survival checks were completed. Under remarks, indicate possible reasons for poor survival.

Your plantations should be checked the fifth and tenth year after planting to determine cultural needs and/or possible pest control. Record the practice accomplished and year completed. This would include release, gopher control, inspect suppression, etc.

III. Natural Regeneration Data

This information will be recorded for forced type maintenance of even-aged timber types where there is dependence on natural regeneration. Record the month/year harvested, species harvested, harvest type, machinery used in harvest, month/year scarified, type of scarification and acres scarified.

Sites should be evaluated 3-10 years after scarification, depending on species type, to determine success, failures, and if supplemental planting is required. Record the natural regeneration results by acres, trees/acre, year of regeneration, and any additional comments.

IV. Plantation Thinnings

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

V. Plantation and/or Cultural Information

This information will be recorded for all practices regardless of who completed the work (e.g. county personnel and contract work). Record the data for each practice completed in the stand. (See example.) You should indicate areas treated and method implemented. Your costs (e.g. labor, travel) should be reported per acre. Also indicate the date and (if appropriate) the funding source and project number.

Your remarks should include, but not be limited to, information such as: planting weather conditions, planting stock condition, type of stock packaging, number of trees, species and age of stock used in replanting; chemicals used in release and/or pest suppression, rate of application, success of kill, weather conditions, droplet size; pruning height, basal area removed and average diameter removed for intermediate treatments and aspen maintenance work, 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 purposes
    f. Herbicide application prior to planting
    g. DO NOT report aspen maintenance.

2. Intermediate treatments (Record separately under the appropriate heading).

    a. Release – specify hand or aerial
    b. Pruning
    c. Non-Commercial thinning.

3. Aspen Maintenance – Record separately, do not include under site prep. If treatment is completed by a timber sale contract specification, do not record.

Department of Natural Resources

PLANTING AND CULTURAL REPORT
Form 2400-79 1-84

SECTION II – PLANTATION AND SEEDING DATA

Species: PR	Stock Age: 3-0	Year Planted: 1947	Plantation Number: 101-5
Acres: 64	Total Trees: 57,600	Trees Per Acre: 900	
Percent Survival	1st Year: 95%	2nd Year:	3rd Year: 81%
Cultural Pest Inspection	5th Year: Gopher	10th Year: none	

SECTION I – DESCRIPTION

Property: Burnett County Forest			District: NW
Town: 40N	Range: 17W	Section: 20	Desc.: SW 1/4
Compartment Number: 101		Stand Number: 5	
Soil Type: Sand		Habitat Type or Ground Cover Species: unknown	
Seed Lot Number:		Origin:	

SECTION III – PLANTATION THINNINGS

	Acres	Year	Vol/AC Removed	Returns $/AC	Residual BA	Remarks
1st.	64	1970	9.17	$65.13	92	ave. diameter 6"
2nd.	64	1980	11.06	$223.91	90	good utilization to 3" top
3rd.						
4th.						
5th.						
6th.						
7th.						
8th.						
9th.						
10th.						

MAP Map Scale 1:

Additional Remarks:

Every fourth row removed for first thinning.
Every third row removed second thinning, narrow spacing.

SECTION IV — PLANTATION AND/OR CULTURAL INFORMATION

Practice	Acres	Method	Costs Per Acre: Labor	Travel	Eq. Rental	Materials	Other	Total	Total Cost	Date	Funding	Remarks
Site Prep.	64	furrow	2.99		2.35		hauling .45	5.79	370.56	1946		county equipment work completed in fall
Seeding												
Reseeding												
Planting	64	hand	13.61			7.01	hauling .66	21.28	1361.92	1947	PR-186	contract
Replanting												
Release	40	aerial			2.00	2.50	.25	4.75	190.00	1949	DRAP 200	2-4-5-T contract 2# acid eq/ac.
Release	30	hand							0	1959	YACC	
Release												
Pruning	64	hand							0	1973	YACC	took 20 person crew 7 days
Pruning												
Non-Comm. Thinning												
Aspen Mtce.												
Pest Supp.	20	hand	information not recorded							1952		aspen contract county crew; 2,4-D chemical applied
Pest Supp.												

Additional Remarks:

good rainfall after planting, packaged in bales

only designated crop trees pruned to 17 feet

Appendix A

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Sheet 1 of 1

DRAFT

Stand Examination Tally
Form 2400-032 (R 5/07)

Property/Comp No. or Landowner	Stand No.	Acres	Estimator	Date
GOV. KNOWLES S.F. COMPT. 1	3	35	WALLIS	5/9/07

Section	Town	Range	1/4 1/4	Primary	Secondary	Understory
20	36	20W	SENW	05-11³	MR 5-11¹	

Point No.	Species: OR	MR	OB	PW			Total Cords	Trees/Acre Seed/Sap	Total Basal Area P 5-9/11	SS 9/11-15	LS 15+	Total
1	3,4,5,4,4 (12.5)	4,3,4 (7)	2,4,3 (6)				25.5		110	10		120
2	3,3,6,4,5 (13)	5 (3)	2,3,2 (5)				21		90			90
3	5,5,3,3 (10)	4,4 (5)	3 (2)				17		70	20		90
4	5,3,3,3,2,5 (13.5)		2,2 (3)				16.5		80			80
5	4,3,3,5,5 (12.5)	4,3,2 (6)					18.5		80	10		90
6	5 (3)	5,4,4,6,2,3,3 (17)	3,3 (4)	5 (3)			27		110			110
7	4,2,5 (7)	2,2 (3)	3,2,1 (4.5)				14.5		80			80
8												
9												
10												
Cords Total/ Acre	71.5 / 10.2	41 / 5.9	24.5 / 3.5	3 / .4			20					94

Basal Area Total/ Acre	OR P	OR SS	OR LS	MR P	MR SS	MR LS	OB P	OB SS	OB LS	PW P	PW SS	PW LS						
	290	30		180			140	10		10								
	41	4		26			20	1		1								
Total BA	45			26			21			1								

Tree Diameters

8, 10, 7, 6, 10

No. of 16-foot logs BAF 10

	Sp	1/2	1	1 1/2	2	2 1/2	3	Board Feet
Small Sawtimber 9-15/11-15	OR	~~6~~ 7 10 13 17	~~6~~ ~~12~~ 18 24 30 36 42 48 54 60 66 72 78 84	9 17 26 35 43 52 61 70 78 87 96 104 113	10 21 32 42 52 63 73 84 95 105 115 126	13 26 39 52 65 78	15 30 45 60	1500
	OB	~~3~~ 7 10 13 17	6 12 18 24 30 36 42 48 54 60 66 72 78 84	9 17 26 35 43 52 61 70 78 87 96 104 113	10 21 32 42 52 63 73 84 95 105 115 126	13 26 39 52 65 78	15 30 45 60	300
		3 7 10	6 12 18 24 30 36 42	9 17 26 35 43 52 61	10 21 32 42 52 63 73	13 26 39	15 30	
		3 7 10	6 12 18 24 30 36 42	9 17 26 35 43 52 61	10 21 32 42 52 63 73	13 26 39	15 30	
		3 7 10	6 12 18 24 30 36 42	9 17 26 35 43 52 61	10 21 32 42 52 63 73	13 26 39	15 30	
		3 7 10	6 12 18 24 30 36 42	9 17 26 35 43 52 61	10 21 32 42 52 63 73	13 26 39	15 30	
		3 7 10	6 12 18 24 30 36 42	9 17 26 35 43 52 61	10 21 32 42 52 63 73	13 26 39	15 30	
		3 7 10	6 12 18 24 30 36 42	9 17 26 35 43 52 61	10 21 32 42 52 63 73	13 26 39	15 30	

Site Index Species	Age	Ht
OR	82	65
OR	80	60
OR	72	68
	78 (1929)	64

	Sp	1/2	1	1 1/2	2	2 1/2	3	3 1/2	4
Large Sawtimber 15+		4 8 12 16	7 14 20 27 34 41	9 19 29 38 47 57 67 77 85 95 105	12 25 37 49 62 74 86 98 111 123 135	15 29 44 59 74 88 103 118 132	17 34 51 68 85 102 119	19 38 58 77	21 43 65 86
		4 8 12 16	7 14 20 27 34 41	9 19 29 38 47 57 67 77 85 95 105	12 25 37 49 62 74 86 98 111 123 135	15 29 44 59 74 88 103 118 132	17 34 51 68 85 102 119	19 38 58 77	21 43 65 86
		4 8	7 14 20	9 19 29 38 47 57	12 25 37 49 62 74	15 29 44 59 74	17 34 51 68	19 38	21 43
		4 8	7 14 20	9 19 29 38 47 57	12 25 37 49 62 74	15 29 44 59 74	17 34 51 68	19 38	21 43
		4 8	7 14 20	9 19 29 38 47 57	12 25 37 49 62 74	15 29 44 59 74	17 34 51 68	19 38	21 43
		4 8	7 14 20	9 19 29 38 47 57	12 25 37 49 62 74	15 29 44 59 74	17 34 51 68	19 38	21 43

Invasive Species / Coverage
Buckthorn - <5%
Leafy spurge - <5%

Soil Type / Habitat Type
SANDY LOAM / QAP

Total	1800
Average / Acre	257

Remarks
Aesthetic zone. Poor quality - oak wilt.
Convert to pine mix with reserves.

CLCT. - 2008
Treat small buckthorn patch with herbicide - 2008
Replant with PR/PW mix post-harvest.
190-10

Appendix B

Stand Examination Data Sheet

Form 2400-26
Report 113

1. Add _____	Property Code:	4979	GOVERNOR KNOWLES STATE FOREST
2. Update _____	Compartment No:	1	
3. Delete _____	Stand Prefix(s) & No.:	A	3

Exam Date- S.I and B.A measured	5/9/2007		
Primary Type / Size / Density	O	0511	3
Secondary Type / Size / Density	MR	0511	1
Understory Type / Size / Density			
Habitat Type	QAp		
Acres	35		
Year of Origin	1929		
Total Height	64		
Mean Stand Diameter	8		
Site Index Species / Site Index	OR	50	
Total Basal Area	94		
Total Volume - Cords / Acre	20		
Total Volume - Bd. Ft / Acre	257		
Major Species	OR	MR	OB
Species BA	45	26	21
Species Volume - Cds. / ac.	10	6	3
Species Volume - Bd. Ft. / ac.	257		
Invasive Species Level	30		
Invasive Species Type	10	18	
Invasive Species Density	1	1	
Soil Type	C		
Management Objective	X		
Last Changed Date	15-May-2007 10:25:31 AM		

Planned Treatments:

Management Prescriptions	Code	1	2	3	Year
Intermediate Treatments : Non-Commercial					
Non-Commercial Thinning	TN				
Non-Commercial Pruning	PR				
Non-Commercial Release	RL				
Non-Commercial Habital Maintenance	HM	6			2008
Site Preparation	SP				
Artificial Regeneration	PL	1	6	28	2011
Intermediate Treatment - Commercial	T				
Harvest Method					
Even Aged	RE	1			2008
All Aged	RA				

Remarks: 10-May-2007 11:39:57 AM Poor quality oak - oak wilt. Convert to pine mix after harvest

Wisconsin Department of Natural Resources Division of Forestry
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Appendix C – FORESTRY PROPERTY CODES LIST

The following are property codes for department owned or managed properties and for county forests. Other public lands may have property codes in WisFIRS, but are not listed below.
Enter correct code on form where applicable. Code as follows, by Division of Forestry district.

NORTHEAST DISTRICT

Property Name	Code	Property Name	Code
ACKLEY WILDLIFE AREA	3414	GIFT LANDS - EMBARRASS RIVER	5902
AHNAPEE STATE TRAIL	3102	GIFT LANDS - MARINETTE CTY.	3814
ALTA SPRINGS FISHERY AREA	3501	GIFT LANDS - OCONTO CTY.	4305
AMBERG WILDLIFE AREA	3818	GIFT LANDS - OUTAGAMIE CO.	4507
AMERICAN LEGION STATE FOREST	4475	GIFT LANDS - WAUPACA CTY.	6905
ARTHUR A. OEHMCKE FISH HATCHERY	4430	GOVERNOR THOMPSON STATE PARK	3809
BAILEYS HARBOR BOREAL FOREST SNA	1508	GREEN BAY COASTAL FISH HABITAT	503
BEARSKIN STATE TRAIL	4406	GREEN BAY WEST SHORES WILDLIFE ARE	4329
BIG AND LITTLE MARSH SNA	1507	GREEN BAY WEST SHORES WILDLIFE ARE	3801
BIG EAGLE CREEK PUBLIC ACCESS	3807	GREEN BAY WEST SHORES WILDLIFE AREA - BROWN CTY.	505
BIG RIB RIVER FISHERY AREA	3524	HALEY CREEK SWAMP SNA	1906
BILL CROSS WILDLIFE AREA	3506	HARTMAN CREEK STATE PARK	6964
BLOCH PINES PRIMEVIL SNA - MARINETTE CTY.	3812	HERITAGE HILL STATE PARK	501
BOWLER STATION	5907	HOLLAND WILDLIFE AREA	577
C.D. (BUZZ) BESADNY FISH AND WILDLIFE AREA	3132	HORTONVILLE BOG SNA	4504
CHILSEN DEMO FOREST	3508	ICE AGE TRAIL - WAUPACA CTY.	6917
CLUBHOUSE LAKE-SUNSHINE SPRINGS FISHERY AREA	3401	ICE AGE TRAIL- LINCOLN	3521
COFFEY SWAMP SNA	1506	INSTITUTE OF PAPER TECH. #1 SWF	4505
COPPER CULTURE MOUNDS STATE PARK	4301	JUNG BEECH HEMLOCK SNA	5905
COUNCIL GROUNDS STATE PARK	3577	KROENKE LAKE SNA	5906
DANEAULT SPRINGS FISHERY AREA	3404	LAKE NOQUEBAY WILDLIFE AREA	3835
DEER CREEK WILDLIFE AREA	4523	LAKEWOOD REARING STATION	4317
DEMLOWS LAKE FISHERY AREA	3405	LAMBERT SPRINGS FISHERY AREA	3415
DETROIT HARBOR SNA	1502	LANGLADE COUNTY FOREST	3400
DUNBAR BARRENS SNA	3804	LANGLADE REARING STATION	3409
DUNN NA	6425	LANGLADE SPRING PONDS ETC	3416
EMBARRASS RIVER FISHERY AREA	5901	LILY LAKE SNA - LINCOLN CTY.	3505
EVERGREEN RIVER FISHERY AREA	3403	LINCOLN COUNTY FOREST	3500
FLORENCE COUNTY FOREST	1900	LITTLE RICE WILDLIFE AREA	2117
FLORENCE STATION	1901	LITTLE RIVER REARING POND	3805
FOREST COUNTY FOREST	2100	LITTLE WOLF RIVER FISHERY AREA (WAUPACA)	6912
FOREST CTY. - MISC. STATE LANDS	2199	LOST DAUPHIN STATE PARK	506
FOX MAPLE WOODS SNA	1904	LOWER WOLF RIVER BOTTOMLANDS NATURAL RES. AREA - OUTAGAMIE	4509
FOX RIVER STATE TRAIL	504	LOWER WOLF RIVER BOTTOMLANDS NATURAL RESOURCE AREA - SHAWANO	5909
GARDNER SWAMP WILDLIFE AREA	1526	LOWER WOLF RIVER BOTTOMLANDS NATURAL RESOURCE AREA - WAUPACA	6909

NORTHEAST DISTRICT

Property Name	Code	Property Name	Code
LUP GRANTS - FOREST CTY.	2119	POWELL MARSH WILDLIFE AREA	6424
MACK WILDLIFE AREA	4560	PRAIRIE RIVER FISHERY AREA	3407
MAINE WILDLIFE AREA	4542	RABES LAKE FISHERY AREA	3408
MARINETTE COUNTY FOREST	3800	RADLEY CREEK FISHERY AREA	6908
MARINETTE CTY. - MISCELLANEOUS STATEWIDE HABITAT	3899	RED BANKS ALVAR (STATEWIDE NATURAL AREA)	502
MENARD ISLAND RESOURCE AREA	3503	REM-DOTY CREEK	6914
MENOMINEE RIVER NATURAL RESOURCES AREA	3808	REM-LEER AND GRIFFEN CREEK	6904
MISC. FISH & WILDLIFE - RHINELANDER	4402	REM-PETERSON AND SANNES CREEK	6910
MISC. FISH & WILDLIFE - WOODRUFF	4401	REM-S BR PIGEON RIVER	6911
MISC. STATE LANDS - VILAS CTY.	6401	REM-WAUPACA RIVER	6907
MISC. WILDLIFE - ALSF PROJECT BOUNDARY	4404	REM-WOLF RIVER-COLIC SLOUGH	6913
MISC. WILDLIFE - NHAL PROJECT BOUNDARY	6404	REM-WOLF RIVER-HORTONVILLE FLATS	4501
MISCAUNO WILDLIFE AREA	3846	REM-WOLF RIVER-SPOEHRS MARSH	4502
MONTANA LAKE FISHERY AREA	3803	ROCK ISLAND STATE PARK	1574
MOONLIGHT BAY BEDROCK BEACH SNA	1503	ROSE AND MARY LAKE SNA	6426
MOUNTAIN-BAY STATE TRAIL	5920	S. BRANCH OCONTO RIVER FISH AREA	4316
MUD LAKE WILDLIFE AREA-DOOR	1501	SCATTERED FOREST LANDS	4370
MUKWA WILDLIFE AREA	6948	SEAGULL BAR WILDLIFE AREA	3813
NAVARINO WILDLIFE AREA	5950	SHAKY LAKE SNA	4503
NEW LONDON TO SEYMOUR STATE TRAIL	6919	SHAWANO LAKE FISHERY AREA	5911
NEW WOOD WILDLIFE AREA	3522	SIMENSON SWF	1510
NEWPORT STATE PARK	1563	SISTER ISLAND SNA	1505
NICOLET STATE TRAIL	4304	SPREAD EAGLE BARRENS NATURAL AREA	1975
NICOLET STATE TRAIL-FLORENCE COUNTY	1903	SPRING LAKE FISHERY AREA	3523
NICOLET STATE TRAIL-FOREST COUNTY	2116	SPRUCE GROUSE SWAMP SNA	6411
NO BOTTOM LAKE	1902	STATE OWNED ISLANDS-FLORENCE	1920
NORTH BRANCH BEAVER CREEK FISHERY AREA	3806	STATE OWNED ISLANDS-FOREST CO	2120
NORTHERN HIGHLAND STATE FOREST	6476	STATE OWNED ISLANDS-LANGLADE	3425
OCONTO COUNTY FOREST	4300	STATE OWNED ISLANDS-LINCOLN	3525
OCONTO RIVER STATE TRAIL	4306	STATE OWNED ISLANDS-ONEIDA	4420
ONEIDA COUNTY FOREST	4400	STATE OWNED ISLANDS-VILAS COUNTY	6412
OUTAGAMIE WILDLIFE AREA	4552	STATEWIDE HAB. AREAS - OUTAGAMIE	4506
PENINSULA STATE PARK	1568	STATEWIDE HABITAT AREAS (SHAWANO COUNTY)	5904
PESHTIGO BROOK WILDLIFE AREA	4354	STATEWIDE HABITAT AREAS - DOOR CO	1511
PESHTIGO RIVER STATE FOREST	3810	STATEWIDE HABITAT AREAS - MARINETTE	3811
PETERS MARSH WILDLIFE AREA	3423	STATEWIDE HABITAT AREAS - WAUPACA CTY.	6920
PIKE WILD RIVER	3819	STATEWIDE HABITAT AREAS -LINCOLN CTY.	3599
PINE-POPPLE WILD RIVERS	1976	STATEWIDE HABITAT AREAS-OCONTO	4302
POTAWATOMI STATE PARK	1573	STATEWIDE NA-CRANDON RIBBED FEN	2115

NORTHEAST DISTRICT

Property Name	Code	Property Name	Code
STATEWIDE NATURAL AREA	1547	WOODS FLOWAGE FISHERY AREA	3411
STATEWIDE NATURAL AREA	1569		
STATEWIDE NATURAL AREA	1522		
STATEWIDE NATURAL AREA - RHINELANDER	4412		
STATEWIDE NATURAL AREA - WOODRUFF	4411		
STATEWIDE NATURAL AREA-LANGLADE	3424		
STATEWIDE NATURAL AREA-VILAS	6413		
STATEWIDE NATURAL AREA-WILLOW FLOWAGE AREA	4413		
STATEWIDE PUBLIC ACCESS (MASHEK CREEK)	3103		
STATEWIDE PUBLIC ACCESS - WAUPACA CTY.	6915		
STATEWIDE PUBLIC ACCESS- OCONTO	4303		
STATEWIDE PUBLIC ACCESS-FLORENCE	1909		
STATEWIDE SPRING PONDS - EMBARASS RIVER	5903		
STATEWIDE SPRING PONDS - OCONTO	4307		
STATEWIDE WILDLIFE HABITAT - BRUSKY (KEWAUNEE)	3101		
THORP POND SNA	1504		
THUNDER LAKE WILDLIFE AREA	4426		
THUNDER RIVER REARING STATION	3802		
TOMORROW RIVER STATE TRAIL	6918		
TOWN CORNER WILDLIFE AREA	3888		
TROUT-NACE CREEK F.A. -WAUPACA CTY.	6902		
UPPER WOLF RIVER FISHERY AREA	3410		
VILAS COUNTY FOREST	6400		
VILAS MISCELLANEOUS - BOULDER JCT.	6402		
VILAS MISCELLANEOUS - WOODRUFF	6403		
WAUPACA CTY. SNAS (STATEWIDE NATURAL AREA)	6916		
WAUPACA RIVER FISHERY AREA	6903		
WAUSAUKEE TIMBER DEMO FOREST	3820		
WHITCOMB CREEK F.A.	6901		
WHITEFISH DUNES STATE PARK	1575		
WILLOW FLOWAGE SCENIC WATERS AREA	4403		
WIOUWASH STATE TRAIL	5921		
WIOUWASH STATE TRAIL - WAUPACA CO.	6921		
WOLF RIVER BOTTOMS WILDLIFE AREA	4553		
WOLF RIVER BOTTOMS WILDLIFE AREA - WAUPACA AREA	6953		
WOLF RIVER FISHERY AREA	6906		
WOLF RIVER STATE TRAIL	3420		
WOLF RIVER STATE TRAIL-CRANDON TO WHITE LK	2118		
WOODBORO LAKES WILDLIFE AREA	4405		
WOODS CREEK FISHERIES AREA	1905		

NORTHWEST DISTRICT

Property Name	Code	Property Name	Code
AMERY TO DRESSER STATE TRAIL	4931	FISH LAKE WILDLIFE AREA	719
AMNICON FALLS STATE PARK	1640	FLAMBEAU RIVER STATE FOREST	5873
AMSTERDAM SLOUGHS WILDLIFE AREA	711	FLAT CREEK WILDLIFE AREA	6606
APOSTLE ISLANDS STATE FOREST	241	FREDERIC TOWER SITE	4989
APPLE RIVER TIMBER DEMO FOREST	4988	GALBRAITH W.A. (EXTENSIVE WL HABITAT)	314
ASHLAND COUNTY FOREST	200	GANDY DANCER STATE TRAIL-BURNETT&POLK	4932
BARRON COUNTY FOREST	300	GANDY DANCER STATE TRAIL-DOUGLAS	1642
BARRON CTY. - MISCELLANEOUS	315	GIFT LANDS IN ASHLAND COUNTY	245
BAYFIELD COUNTY FOREST	400	GOOSE LAKE W.A. (LUP GRANT)	702
BEAN BROOK FISHERY AREA	6603	GOV. TOMMY G. THOMPSON HATCHERY & NOR HDQTRS.	6610
BEAR LAKE F.A.	6660	GOVERNOR KNOWLES STATE FOREST	4979
BEAVER BROOK WILDLIFE AREA	6612	GRASSY LAKE W.A. - BARRON CTY.	301
BENSON CREEK FISHERY AREA	5801	GRINDSTONE CREEK FISHERY AREA	5803
BEVERLY LAKE FISHERY AREA	5804	HAY CREEK-HOFFMAN LAKE WILDLIFE AREA	2621
BIBON SWAMP NATURAL AREA	402	HAYWARD NURSERY	5817
BIG BAY STATE PARK	242	HICKEY CREEK F.A.	313
BRULE RIVER STATE FOREST	1674	ICE AGE TRAIL - POLK CTY.	4934
BURNETT COUNTY FOREST	700	INTERSTATE PARK-IANSR	4935
BUTTERNUT LAKE PA-STATEWIDE PUBLIC ACCESS	237	IRON COUNTY FOREST	2600
CATTAIL STATE TRAIL	4930	IRON CTY. -SCATTERED FOREST LANDS	2660
CHIEF RIVER WILDLIFE AREA	5887	ISLAND LAKE WILDLIFE AREA	5533
CHIPPEWA FLOWAGE	5818	JOEL MARSH WILDLIFE AREA	4901
CHIPPEWA RIVER FISHERY AREA	5806	KIEZER LAKE WILDLIFE AREA	722
CLAM LAKE FISHERY AREA	239	KIMBERLY CLARK WILDLIFE AREA	5123
CLAM LAKE WILDLIFE AREA	715	KISSICK SWAMP WILDLIFE AREA	5824
CLAM RIVER FISHERY AREA	706	LAMPSON PINES & TOTAGATIC HEMLOCKS SNA	6617
COPPER FALLS STATE PARK	243	LAMPSON TOWER SITE	6615
CRANBERRY LAKE FISHERY AREA	5101	LOON LAKE WILDLIFE AREA	383
CREX MEADOWS WILDLIFE AREA	780	MC KENZIE CREEK WILDLIFE AREA	4984
CULBERTSON SPRINGS FISHERY AREA	701	MCDERMOTT BROOK FISHERY AREA	5810
DANBURY WILDLIFE AREA	717	MCKENZIE CREEK FISHERY AREA	6611
DEAD CREEK SPRINGS FISHERY AREA	5807	MINONG STATION	6605
DIAMOND LAKE SNA (STATEWIDE NATURAL AREA)	6102	MISC. STATE LANDS - BURNETT CTY.	799
DOUGLAS COUNTY FOREST	1600	NAMEKAGON RIVER FISHERY AREA	5811
DOUGLAS COUNTY MISC.	1699	NEW AUBURN WILDLIFE AREA	385
DOUGLAS COUNTY WILDLIFE AREA	1617	NIEBAUER SPRINGS FISHERY AREA	5102
DUMMY LAKE FISHERY AREA	302	NORTH COUNTRY NAT'L SCENIC TRAIL	244
EDDY CREEK FISHERY AREA	5808	NORTH COUNTRY NAT'L SCENIC TRAIL-DOUGLAS	1641
ENGLE CREEK SPRINGS FISHERY AREA	311	OSCEOLA HATCHERY	4985
ERNIE SWIFT YOUTH CAMP	6604	PATTISON STATE PARK	1644

NORTHWEST DISTRICT

Property Name	Code	Property Name	Code
PERSHING WILDLIFE AREA	6128	STATE OWNED ISLANDS-POLK	4920
POLK COUNTY FOREST	4900	STATE OWNED ISLANDS-PRICE	5120
POTATO CREEK WILDLIFE AREA	5529	STATE OWNED ISLANDS-RUSK	5520
PRICE COUNTY FOREST	5100	STATE OWNED ISLANDS-SAWYER CO	5820
PRICE MISCELLANEOUS	5103	STATE OWNED ISLANDS-WASHBURN	6620
PUBLIC ACCESS IN WASHBURN COUNTY	6601	STATEWIDE HABITAT AREAS-DOUGLAS CO	1602
REM MOSQUITO BROOK - STATEWIDE HABITAT AREAS	5816	STATEWIDE NATURAL AREA-DOUGLAS	1650
REM-BIG LAC COURT OREILLES	5815	STATEWIDE NATURAL AREA-SAWYER	5896
REM-CALLAHAN LAKE	5805	STATEWIDE NATURAL AREAS - BAYFIELD CTY.	401
REM-HAUER CREEK	5809	STATEWIDE NATURAL AREAS - IRON CTY.	2650
REM-LAKE NEBAGAMON	1603	STATEWIDE PUBLIC ACCESS-SAWYER	5899
REM-MAPLE CREEK	5814	STRAIGHT LAKE WILDERNESS STATE PARK	4902
REM-NAMEKAGON RIVER	6608	STRAIGHT LAKE WLA	4912
REM-RAPID CREEK	240	STRESS SPRINGS-STATEWIDE SPRING PONDS	5821
RIB RIVER FISHERY AREA	6101	TAYLOR COUNTY FOREST	6100
RICE BEDS CREEK WILDLIFE AREA	4986	TAYLOR MISCELLANEOUS	6103
RUSK - MISC OSL	5531	TEN MILE CREEK WILDLIFE AREA	5532
RUSK COUNTY FOREST	5500	TOTAGATIC LAKE WILDLIFE AREA	434
RUSK-STATEWIDE NATURAL AREA	5534	TOTAGATIC WILDLIFE AREA	5833
SAND CREEK FISHERY AREA-POLK	4981	TOTOGATIC WILD RIVER	6618
SAND LAKE REARING STATION	5813	TOZIER SPRINGS F.A. (STATEWIDE SPRING PONDS)	6613
SAUNDERS STATE TRAIL	1643	TURTLE CREEK FISHERY AREA	303
SAWYER COUNTY FOREST	5800	TURTLE FLAMBEAU SCENIC WATERS AREA	2615
SAWYER CREEK FISHERY AREA	6609	TUSCOBIA STATE TRAIL	5845
SCATTERED FOREST LANDS	404	UHRENHOLDT MEM TIMBER DEMO FOREST	5802
SCATTERED FOREST LANDS - POLK CTY.	4987	UNDERWOOD WILDLIFE AREA	2635
SHELL LAKE REARING STATION	6614	WASHBURN COUNTY FOREST	6600
SILVERNAIL WILDLIFE AREA	5530	WASHINGTON CREEK WILDLIFE AREA	5536
SOUTH SHORE LAKE SUPERIOR FISH & WILDLIFE AREA	406	WEIRGOR SPRINGS WILDLIFE AREA	5837
SPIDER LAKE NA-SCATTERED FOREST LANDS	5819	WHALEN CREEK FISHERY AREA	6602
SPOONER LAKE PUBLIC ACCESS	6607	WHITE RIVER FISHERY AREA-BAYFIELD	410
SPRING CREEK FISHERY AREA	703	WHITE RIVER WILDLIFE AREA-ASHLAND	238
SPRING CREEK WILDLIFE AREA	5131	WILD RIVERS STATE TRAIL	6616
ST. LOUIS RIVER STREAM BANK AREA	1601	YELLOW RIVER FISHERY AREA	382
STATE OWNED ISLANDS-ASHLAND	220		
STATE OWNED ISLANDS-BARRON	320		
STATE OWNED ISLANDS-BAYFIELD	420		
STATE OWNED ISLANDS-BURNETT	720		
STATE OWNED ISLANDS-DOUGLAS	1620		
STATE OWNED ISLANDS-IRON	2620		

SOUTHERN DISTRICT

Property Name	Code	Property Name	Code
ABELMAN'S GORGE STATEWIDE NATURAL AREA	5709	CEDARBURG BOG NATURAL AREA	4610
ADELL SCATTERED WILDLIFE - SHEBOYGAN CTY.	6009	CEDARBURG HABITAT PRESERVATION	4601
ALBANY WILDLIFE AREA	2303	CHAMPION VALLEY TIMBER DEMO FOREST	6302
ALLENTON WILDLIFE AREA	6704	CHEROKEE MARSH FISHERY AREA	1301
ANDREW KRAKOW PUBLIC ACCESS AND FISHERY AREA	3906	CHIWAUKEE PRAIRIE-CAROL NATURAL AREA	3009
ARKIN MARSH PUBLIC HUNTING GROUND	2810	CLOVER VALLEY (SCATT.WILDLLIFE - WALWORTH)	6503
AVON BOTTOMS WILDLIFE AREA	5406	COLLINS MARSH WILDLIFE AREA	3622
AVON NATURAL AREAS	5407	COLUMBUS WILDLIFE AREA	1107
AZTALAN STATE PARK	2802	COON CREEK FISHERY AREA	6304
BAD FISH CREEK WILDLIFE AREA	1375	CROSS PLAINS STATE PARK-IANSR	1310
BAHR CREEK HABITAT PRESERVATION	6007	DANE COUNTY ICE AGE TRAIL	1316
BARABOO HILLS RECREATION AREA	5704	DANE COUNTY STATEWIDE NATURAL AREA	1326
BARK RIVER HATCHERY	2807	DANE COUNTY STREAM BANK PROTECTION FEE PROGRAM	1322
BATTLE HOLLOW, BERGEN BLUFF, ROMANCE PRAIRIE	6315	DEANSVILLE WILDLIFE AREA	1312
BEAR CREEK FISHERY AREA	5707	DEKORRA PHG	1111
BEAVER DAM LAKE (EXTENSIVE WL HABITAT - WAUKESHA CTY.)	6808	DELL CREEK WILDLIFE AREA	5715
BELMONT MOUND STATE PARK	3301	DEPPE WILDLIFE AREA	7104
BEULAH BOG SNA	6511	DEVILS LAKE STATE PARK-IANSR	5747
BIG FOOT BEACH STATE PARK	6512	DEVILS RIVER STATE TRAIL	3604
BIG MUSKEGO LAKE WILDLIFE AREA	6802	DODGE COUNTY SCATTERED WILDLIFE	1404
BIG SPRINGS FISHERY STATEWIDE HABITAT AREAS	2511	DORN CREEK FISHERY AREA	1323
BIXBY-MELLI TRUST SNA	2216	DOUGLAS HALLOCK DEMO FOREST	2207
BLACK EARTH CREEK FISHERY AREA	1319	DOVER WILDLIFE AREA	5201
BLACKHAWK LAKE RECREATIONAL AREA	2506	DUCK CREEK PHG	1112
BLOOMFIELD WILDLIFE AREA - (SCATT. WILD. - WALWORTH CO.)	6514	EAGLE LAKE FISHERY AREA	5209
BLUE MOUND STATE PARK	1346	EISENBAHN STATE TRAIL	6702
BLUE RIVER BLUFF SNA	2215	ELDORADO WILDLIFE AREA	2063
BONIWELL ROAD	4604	EVANSVILLE WILDLIFE AREA	5416
BRILLION WILDLIFE AREA	821	EXTENSIVE WILDLIFE HABITAT - FOND DU LAC CTY	2002
BROOKLYN WILDLIFE AREA	1309	EXTENSIVE WILDLIFE HABITAT - GREEN LAKE CTY.	2403
BROWNTOWN-CADIZ SPRINGS STATE RECREATIONAL AREA	2305	EXTENSIVE WILDLIFE HABITAT - WAUSHARA CTY.	7010
BURLINGTON SCATTERED WETLANDS	5205	EXTENSIVE WILDLIFE HABITAT - WINNEBAGO CTY	7111
BURLINGTON TO KANSASVILLE STATE TRAIL	3012	EXTENSIVE WL HABITAT - DODGE COUNTY	1406
CADY'S MARSH	5711	EXTENSIVE WL HABITAT - JEFFERSON CTY.	2804
CAMP LAKE FISHERY AREA	3003	EXTENSIVE WL HABITAT - SHEBOYGAN CTY.	6010
CAPITOL SPRINGS CENTENNIAL STATE PARK	1313	EXTENSIVE WL HABITAT - WAUKESHA CTY.	6815
CASSVILLE EAGLE SNA	2209	EXTENSIVE WL HABITAT -WALWORTH (TN. OF BLOOMFIELD)	6519
CASTLE MARSH FISHERY AREA	1320	F G WILSON STATE FOREST NURSERY	2206
CAVES CREEK FISHERY AREA	3959	FISCHER CREEK RECREATION AREA	3602
CEDAR SAUK	4606	FORESTRY EDUCATION AND AWARENESS CENTER	4104

SOUTHERN DISTRICT

Property Name	Code	Property Name	Code
FOX LAKE FISHERY AREA	1409	HWY P	6713
FRENCH CREEK WILDLIFE AREA	1117	ICE AGE TRAIL - COLUMBIA CO	1114
GERMANIA WILDLIFE AREA	3964	ICE AGE TRAIL - MANITOWOC CNTY	3606
GIFT LANDS - DODGE CTY.	1402	ICE AGE TRAIL - WASHINGTON CTY.	6701
GIFT LANDS - FENLEY	2202	ICE AGE TRAIL - WAUKESHA CTY.	6812
GLACIAL DRUMLIN TRAIL	6804	ICE AGE TRAIL - WAUSHARA CO	7025
GLACIAL DRUMLINE TRAIL DANE COUNTY	1331	IOWA CO STREAM BANK PROTECTION FEE PROGRAM	2514
GLACIAL HABITAT RESTORATION	1407	IPSWICH PRAIRIE SNA	2214
GLACIAL HABITAT RESTORATION AREA (WINNEBAGO)	7103	JACKSON MARSH WA & MARSH SNA	6703
GOOSE LAKE WILDLIFE AREA	1318	JAMES J RULE TIMBER DEMO FOREST	2503
GORDONS BAY LANDING PUBLIC ACCESS	1201	JEFFERSON COUNTY DOT SCATTERED WILDLIFE	2811
GOVERNOR DODGE STATE PARK	2548	JEFFERSON COUNTY STATEWIDE WILDLIFE HABITAT	2809
GOVERNOR NELSON STATE PARK	1314	JEFFERSON MARSH STATE WILDLIFE AND NATURAL AREA	2801
GRAND RIVER MARSH WILDLIFE AREA	2465	JENNINGS CREEK WILDLIFE AREA	1124
GRANT COUNTY STATEWIDE NATURAL AREA	2212	JERSEY VALLEY	6305
GRASSY LAKE WILDLIFE AREA	1119	JOHN A LAWTON FISHERY AREA	3904
GREEN COUNTY SCATTERED WILDLIFE	2309	JOHN MICHAEL KOHLER STATE PARK	6067
GREEN COUNTY STATEWIDE WILDLIFE HABITAT	2301	KARCHER MARSH WA & SPRINGS SNA	5204
GREEN COUNTY STREAM BANK PROTECTION FEE PROGRAM	2308	KENOSHA CTY. - PUBLIC ACCESS	3011
GREEN LAKE REARING STATION	2404	KETTLE MORAINE STATE FOREST-LAPHAM PEAK UNIT	6814
GREENWOOD WILDLIFE AREA	7030	KETTLE MORAINE STATE FOREST-LOEW LAKE UNIT	5463
HACKER DRIVE	6709	KETTLE MORAINE STATE FOREST-MUKWONAGO RIVER UNIT	6816
HAMPDEN WETLAND PHG	1108	KETTLE MORAINE STATE FOREST-NORTHERN UNIT-IANSR	6717
HANK AARON STATE TRAIL	4102	KETTLE MORAINE STATE FOREST-PIKE LAKE UNIT	6712
HARDSCRABBLE SNA - LAFAYETTE CTY.	3302	KETTLE MORAINE STATE FOREST-SOUTHERN UNIT	6813
HARRINGTON BEACH STATE PARK	4611	KICKAPOO WILDLIFE AREA	1207
HAVENWOODS FOREST PRESERVE AND NATURE CENTER	4101	KIEL MARSH WILDLIFE AREA	6004
HEART LAKE REARING STATION	2401	KILLSNAKE WILDLIFE AREA	834
HIGH CLIFF STATE PARK	865	KOSHKONONG WILDLIFE AREA	2877
HILLSBORO STATE TRAIL	6311	LA BUDDE CREEK FISHERY AREA	6001
HINKSON CREEK FISHERY AREA	1104	LA CROSSE AREA COMPREHENSIVE FISHERY AREA	6312
HONEY CREEK WA & CHERYL LAKE SEDGE MEADOW SNA	5202	LA CROSSE AREA COMPREHENSIVE FISHERY AREA	1203
HOOK LAKE/GRASS LAKE WILDLIFE AND NATURAL AREA	1315	LAKE BUTTES DES MORTS WILDLIFE AREA	7105
HOOKER LAKE MARSH FISHERY AREA	3008	LAKE COMO (STATEWIDE HABITAT - WALWORTH CO.)	6507
HOOSIER CREEK SCATTERED WETLANDS	5208	LAKE GEORGE SCATTERED WETLAND	3006
HORICON ROUGH FISH STATION	1401	LAKE IVANHOE (STATEWIDE HABITAT -WALWORTH CO.)	6515
HORICON WILDLIFE AREA	1421	LAKE KEGONSA ROUGH FISH STATION	1325
HULBURT CREEK FISHERY AREA	5703	LAKE KEGONSA STATE PARK	1311
HWY 144	6711	LAKE MENDOTA PUBLIC ACCESS	1327
HWY 32	4605	LAKE MILLS HATCHERY	2803

SOUTHERN DISTRICT

Property Name	Code	Property Name	Code
LAKE MILLS WILDLIFE AREA	2826	NORWAY SCATTERED WETLANDS	5203
LAKE SINNISSIPPI	1405	OAKFIELD LEDGE SNA	2001
LAKE WAUBESA FISHERY AREA	1328	OZAUKEE SCATTERED WILDLIFE AREAS	4603
LAKESHORE STATE PARK	4103	PARADISE MARSH WILDLIFE AREA	1137
LAWRENCE CREEK WILDLIFE AREA	3966	PARADISE VALLEY WILDLIFE AREA	6817
LEACH NATURAL RESOURCE CENTER	7004	PARFREYS GLEN NATURAL AREA	5706
LIBERTY CREEK WILDLIFE AREA	2327	PEAT LAKE SNA	3005
LILY ROAD	6715	PEAT LAKE WEST W.A.	3007
LIMA MARSH HATCHERY	5401	PECATONICA STATE TRAIL	3307
LIMA MARSH WILDLIFE AREA	5429	PETER HELLAND WILDLIFE AREA	1174
LISBON BOTTOMLAND (SCATTERED WILDLIFE - WAUKESHA CTY.)	6810	PEWIT'S NEST SNA	5712
LODI MARSH WILDLIFE AREA	1330	PINE ISLAND WILDLIFE AREA	1138
LODI SPRING CREEK FISHERY AREA	1106	PINE RIVER SYSTEM FISHERY AREA	7009
LOST LAKE STATE NATURAL AREA	1110	PLAIN HONEY CREEK WATERSHED	5702
LOWER MUD LAKE FISHERY AREA	1329	POINT BEACH STATE FOREST	3672
LOWER WISCONSIN STATE RIVERWAY	2232	POLK KAMES	6705
LOWER WOLF RIVER BOTTOMLANDS NATURAL RES. AREA - WINNEBAGO	7109	POTTER'S LAKE (EXTENSIVE WLF. HABITAT - WALWORTH CO.)	6517
LULU LAKE NATURAL AREA	6502	POYGAN MARSH WILDLIFE AREA	7056
MASCOUTIN VALLEY STATE TRAIL	2010	POYNETTE GAME FARM	1139
MCFARLAND ROUGH FISH STATION	1302	PRINCES POINT WILDLIFE AREA	2840
MCGILVRA WOODS SNA	5713	PUBLIC ACCESS - MANITOWOC (FM)	3605
MECAN RIVER FISHERY AREA	7059	PUCKAWAY ROUGH FISH STATION	2405
MECAN RIVER FISHERY AREA	3969	RACINE CTY. - PUBLIC ACCESS	5210
MIRROR LAKE STATE PARK	5749	RAT RIVER WILDLIFE AREA	7110
MONTELLO RANGER STATION	3907	RED CEDAR LAKE NATURAL AREA	2808
MOUNT HOPE REARING STATION	2201	REM-ANTHONY BRANCH	1321
MOUNT VERNON CREEK FISHERY AREA	1303	REM-AREAS-MULLET RIVER	6003
MUD LAKE WILDLIFE AREA-COLUMBIA	1135	REM-AREAS-ONION RIVER	6005
MUD LAKE WILDLIFE AREA-DODGE	1436	REM-ASH CREEK	5310
MUKWANAGO R. (STATEWIDE HABITAT -WAUKESHA)	6803	REM-ASHIPPUN LAKE	6807
MULLET CREEK WILDLIFE AREA	2070	REM-BEAVER DAM LAKE	1403
MURALT PRAIRIE SNA	2311	REM-BEULAH LAKE (TURTLE POND)	6505
NATURAL BRIDGE STATE PARK	5705	REM-BIG GREEN RIVER	2204
NELSON DEWEY STATE PARK	2210	REM-BIG SPRING CREEK	2507
NEVIN HATCHERY	1304	REM-BISHOP BRANCH CREEK	6301
NEW GLARUS WOODS STATE PARK	2306	REM-BLUE RIVER	2205
NEW MUNSTER WA & BOG SNA	3004	REM-CAMP CREEK	5303
NEWVILLE ROUGH FISH STATION	5409	REM-CARTER CREEK	7001
NICHOLS CREEK WILDLIFE AREA	6015	REM-CASTLE ROCK CREEK	2208
NORTH BRANCH MILWAUKEE RIVER WILDLIFE AND FARM HERITAGE AREA	4602	REM-CONLEY SMITH CREEK	2513

SOUTHERN DISTRICT

Property Name	Code	Property Name	Code
REM-DELAVAN LAKE	6506	RUSH CREEK NATURAL AREA	1204
REM-ELK CREEK	5304	SABIN SPRINGS FISHERY AREA	5309
REM-ELK CREEK	6303	SAUK PRAIRIE RECREATION AREA	5716
REM-ELVERS CREEK	1308	SCATTERED FOREST LANDS - PURDY, AJ MILLER	6310
REM-FOX RIVER-EUREKA LOCKS	7101	SCATTERED WILDLIFE - CALUMET CO.	801
REM-GALENA RIVER	3303	SCATTERED WILDLIFE - GREEN LAKE CO.	2402
REM-GOLDEN LAKE	2806	SCATTERED WILDLIFE - RICHLAND CTY.	5306
REM-HANSELL CREEK	5308	SCATTERED WILDLIFE - WALWORTH (TN. SHARON)	6504
REM-LAING CREEK	3905	SCATTERED WILDLIFE - WINNEBAGO CO.	7106
REM-LAKE KEESUS	6806	SCHUET CREEK FISHERY AREA	6006
REM-LITTLE GREEN LAKE	2453	SHAW MARSH WILDLIFE AREA	1442
REM-LITTLE PLATTE RIVER	2203	SHEBOYGAN MARSH WILDLIFE AREA	6016
REM-LITTLE SILVER CREEK	7002	SIDIE HOLLOW	6306
REM-LOVE CREEK	2508	SILVER LAKE MARSH FISHERY AREA	3010
REM-MAPLE DALE CREEK	6308	SMITH LAKE	6714
REM-MILANCTHON CREEK	5301	SMITH STREAM BANK PROTECTION	3306
REM-MILL CREEK	5305	SNOW BOTTOM STATE NATURAL AREA	2213
REM-OTTER CREEK	3305	STATEWIDE FISH HABITAT AREAS - DANE CO	1317
REM-PADDOCK LAKE MARSH	3002	STATEWIDE HABITAT AREAS	6313
REM-PINE RIVER-YUBA	5311	STATEWIDE HABITAT AREAS - DODGE COUNTY	1408
REM-POMPEY PILLAR CREEK	2512	STATEWIDE HABITAT AREAS - MARQUETTE & GREEN LAKE CTY	3943
REM-PONY CREEK	7003	STATEWIDE HABITAT GRANT COUNTY	2211
REM-RAINBOW SPRINGS	6307	STATEWIDE NATURAL AREA - HOGBACK	1209
REM-ROELKE CREEK	1109	STATEWIDE NATURAL AREA - MARQUETTE & GREEN LAKE CTY.	3945
REM-WAUKAU CREEK	7102	STATEWIDE NATURAL AREA - WAUKESHA CTY.	6801
REM-WEST FORK KICKAPOO RIVER	6309	STATEWIDE NATURAL AREA - WAUSHARA CO	7020
REWEY STATEWIDE NATURAL AREA	2504	STATEWIDE NATURAL AREA-LIMERY	1202
RHINE CENTER BOG SNA (STATEWIDE NATURAL AREA)	6008	STATEWIDE NEW HATCHERIES - KETTLE MORAINE	6002
RICHARD BONG RECREATION AREA	3001	STATEWIDE PUBLIC ACCESS - CLEAR LAKE ROCK CTY.	5403
RIDGEWAY PINE RELICT STATE NATURAL AREA	2509	STATEWIDE PUBLIC ACCESS - CRAWFORD CTY.	1208
RIESCH ROAD	6710	STATEWIDE PUBLIC ACCESS - LAKE BEULAH	6509
ROCK COUNTY EXTENSIVE WL HABITAT	5405	STATEWIDE PUBLIC ACCESS - MARQUETTE & GREEN LAKE CTY.	3944
ROCK COUNTY GIFT LANDS	5408	STATEWIDE PUBLIC ACCESS - WAUKESHA CTY.	6811
ROCK COUNTY STATEWIDE NATURAL AREAS	5404	STATEWIDE SMALL LAKES CREATION	1305
ROCKY ARBOR STATE PARK	5701	STATEWIDE WILDLIFE HABITAT	6314
ROCKY RUN CREEK FISHERY AREA	1103	STATEWIDE WILDLIFE HABITAT - DANE CO.	1324
ROCKY RUN STATE NATURAL AREA	1113	STATEWIDE WLF. HABITAT - WINNEBAGO CO.	7107
ROGERS MEMORIAL HABITAT PRESERVATION	2406	STATEWIDE WLF. HABITAT- MANITOWOC CO.	3601
ROME POND WILDLIFE AREA	2841	STOCKBRIDGE LEDGE WOODS SNA	802
ROWAN CREEK FISHERY AREA	1105	STORRS LAKE WILDLIFE AREA	5473

SOUTHERN DISTRICT

Property Name	Code	Property Name	Code
STREAM BANK PROT. FEE AREA -CRAWFORD CTY.	1206	WIND LAKE FISHERY AREA	5206
STREAM BANK PROT. FEE PGM. - ROCK CTY.	5402	WOLF RIVER WILDLIFE AREA	7108
STREAMBANK PROTECTION FEE PGM.-WALWORTH CO.	6510	WYALUSING STATE PARK	2251
SUGAR RIVER STATE TRAIL	2320	YELLOWSTONE LAKE STATE PARK	3352
SWAN LAKE WILDLIFE AREA	1143	YELLOWSTONE WILDLIFE AREA	3304
SWARTZ WOODS SNA	2310	YORK PRAIRIE SNA	2304
TERRY ANDRAE STATE PARK	6066		
THERESA WILDLIFE AREA	6706		
TICHIGAN WA & WET PRAIRIE & FEN SNA	5207		
TILLIE LAKE ROAD	6708		
TOKEN CREEK REARING STATION	1306		
TOWER HILL STATE PARK	2505		
TROUT CREEK FISHERY AREA-IOWA	2501		
TROUT CREEK FISHERY AREA-IOWA	2510		
TROY WILDLIFE AREA - (SCATTERED WILDLIFE - WALWORTH CO.)	6516		
TURTLE CREEK WILDLIFE AREA	6508		
TURTLE VALLEY WILDLIFE AREA	6501		
TWO CREEKS STATE PARK-IANSR	3603		
UPPER FOX RIVER PUBLIC ACCESS	3942		
UPPER WAUBESA FISHERY AREA	1307		
VERNON COUNTY FOREST	6300		
VERNON WILDLIFE AREA	6809		
WASHINGTON CO SCATTERED WILDLIFE	6707		
WASHINGTON CTY. - PUBLIC ACCESS	6716		
WATERLOO WILDLIFE AREA	1444		
WAUNAKEE WILDLIFE AREA	1345		
WESTFIELD HATCHERY	3902		
WESTFORD MARSH W.A.	1445		
WHITE MOUND CO. PK. - PLAIN HONEY CREEK WATERSHED	5710		
WHITE RIVER FISHERY AREA-WAUSHARA	7014		
WHITE RIVER MARSH WILDLIFE AREA	3972		
WHITE RIVER PRAIRIE/TAMARACKS	2408		
WHITE RIVER SEDGE MEADOW	2407		
WHITE RIVER STATE TRAIL	6513		
WHITE RIVER WILDLIFE AREA - (EXT. WILDLIFE HAB.-WALWORTH CO	6518		
WILD GOOSE STATE TRAIL	1410		
WILD ROSE DEMO FOREST	7011		
WILDCAT MOUNTAIN STATE PARK	6339		
WILLOW CREEK FISHERY AREA	5307		
WILLOW CREEK FISHERY AREA	7017		

WEST CENTRAL DISTRICT

Property Name	Code	Property Name	Code
ALBION REARING STATION	2703	EAU CLAIRE COUNTY FOREST	1800
AUGUSTA WILDLIFE AREA	1814	ELK CREEK FISHERY AREA	901
BASS HOLLOW SNA - JUNEAU CTY.	2911	ELK CREEK FISHERY AREA	1714
BAY CITY MINE SNA	4809	ELROY-SPARTA STATE TRAIL	4233
BEAR BLUFF STATE NATURAL AREA	2722	EMMONS CREEK FISHERY AREA	5002
BEAVER CREEK REARING STATION	2701	EXTENSIVE WL HABITAT - DUNN CTY.	1711
BIG CREEK FISHERY AREA	4204	EXTENSIVE WL HABITAT - PEPIN CTY.	4701
BIG ROCHE A CRI FISHERY AREA	107	GIFT LANDS - ADAMS CTY.	110
BIG SWAMP WILDLIFE AREA	615	GILBERT CREEK FA	1720
BIRCH CREEK TOWNSHIP SNA	979	GLEN HILLS WATERSHED	5607
BLACK RIVER STATE FOREST	2777	GREAT RIVER STATE TRAIL	3204
BOLEN CREEK FISHERY AREA	1705	GREAT RIVER STATE TRAIL	6218
BORST VALLEY WILDLIFE AREA	6204	GRIFFITH NURSERY	7203
BOTTOMROAD W.A. (SCATTERED WILDLIFE - JUNEAU CTY.)	2904	HALF MOON LAKE FISHERY AREA	2720
BROOKS BLUFF SNA (STATEWIDE SNAS)	101	HALLS (STOCKWELL) CREEK FISHERY AREA	2711
BRUNET ISLAND STATE PARK	931	HARDIES CREEK TIMBER DEMO FOREST	6209
BUCKHORN STATE PARK	2928	HAY CREEK FISHERY AREA	902
BUCKHORN WILDLIFE AREA	2906	HOFFMAN HILLS RECREATION AREA	1708
BUENA VISTA WILDLIFE AREA	5012	ICE AGE TRAIL - MARATHON CTY.	3703
BUFFALO RIVER FISHERY AREA	6210	ICE AGE TRAIL- FIRTH LAKE	932
BUFFALO RIVER FISHERY AREA	2702	JACKSON COUNTY FOREST	2700
BUFFALO RIVER STATE TRAIL	6212	JAY CREEK STATE NATURAL AREA	2713
CASEY LAKE WILDLIFE AREA	5612	JUNEAU COUNTY FOREST	2900
CATARACT POND PUBLIC ACCESS	4202	KICKAPOO RIVER FISHERY AREA	4203
CHIMNEY ROCK WILDLIFE AREA	6205	KINNICKINNIC RIVER FISHERY AREA	5601
CHIPPEWA COUNTY FOREST	900	KINNICKINNIC STATE PARK	4879
CHIPPEWA MORAINE STATE RECREATION AREA	978	LA CROSSE AREA COMPREHENSIVE FISHERY AREA	4213
CHIPPEWA RIVER STATE TRAIL	1712	LA CROSSE AREA COMPREHENSIVE FISHERY AREA	3207
CLARK COUNTY FOREST	1000	LA CROSSE RIVER FISHERY AREA	4205
CLAY CORNERS WILDLIFE AREA (GIFT LANDS)	4804	LA CROSSE RIVER STATE TRAIL	3205
COLBURN WILDLIFE AREA	115	LAKE CAMELOT PUBLIC ACCESS	102
COULEE EXPERIMENTAL FOREST	3213	LAKE MENOMIN FISHERY AREA	1703
CRANBERRY MOUND SNA - JUNEAU CTY.	2910	LAKE PEPIN WILDLIFE AREA	4702
CYLON MARSH WILDLIFE AREA	5616	LAKE WISSOTA STATE PARK	936
CYLON WILDLIFE AREA	5603	LAKES COULEE WILDLIFE AREA	6206
DELLS OF THE WISCONSIN RIVER NATURAL AREA	2905	LEMONWEIR SNA - JUNEAU CTY.	2907
DEWEY MARSH WILDLIFE AREA	5078	LEOLA MARSH WILDLIFE AREA	116
DRYWOOD WILDLIFE AREA	906	LITTLE BEAR HEMLOCKS SNA	5006
DUNCAN CREEK FISHERY AREA	910	LITTLE PLOVER RIVER FISHERY AREA	5055
DUNNVILLE WILDLIFE AREA	1719	LITTLE WOLF RIVER FISHERY AREA (PORTAGE)	5011

WEST CENTRAL DISTRICT

Property Name	Code	Property Name	Code
LOWER CHIPPEWA RIVER STATE NATURAL AREA	1717	REM-BLACK RIVER	1003
LOWER ST CROIX STATE PARK RIVERWAY	4801	REM-BLACK RIVER	2717
LOWES CK. STREAMBANK PROT. AREA	1801	REM-BOB LAKE	908
MARATHON COUNTY FOREST	3700	REM-BREWER CREEK	2908
MARSHMILLER CEDARS SNA	914	REM-BUFFALO RIVER	6211
MC MILLAN WILDLIFE AREA	3718	REM-CLEAR CREEK	1802
MCCANN CREEK FISHERY AREA	903	REM-DICKENSON CREEK	1001
MEAD WILDLIFE AREA	3719	REM-ELK CREEK	905
MEADOW VALLEY WILDLIFE AREA	2920	REM-KING CREEK	6203
MERRICK STATE PARK	610	REM-LITTLE LACROSSE RIVER	4210
MILL BLUFF STATE PARK-IANSR	4237	REM-LITTLE LEMONWEIR RIVER	2903
MILL CREEK FISHERY AREA	4206	REM-PINE CREEK	6215
MISC. STATE LANDS - EAU CLAIRE	1803	REM-RATHBONE CREEK	4211
MISC. STATE LANDS -CHIPPEWA	912	REM-RED CEDAR RIVER PUBLIC ACCESS	1713
MISSISSIPPI ISLANDS WILDLIFE AREA	3203	REM-RULLANDS COULEE CREEK	4212
MONROE COUNTY FOREST	4200	REM-S BRANCH TREMPEALEAU RIVER	2718
MORGAN COULEE PRAIRIE SNA	4806	REM-SAND CREEK	909
MORGAN MARSH W.A.	2715	REM-WASHINGTON COULEE	2714
MUDDY CREEK WILDLIFE AREA	1722	REM-WILSON CREEK	1707
NEW HOPE PINES SNA	5004	REMNANT AREAS - PORTAGE CO.	5001
NINE MILE ISLAND STATE NATURAL AREA	4703	RIB MOUNTAIN STATE PARK	3730
NORTH BEND BOTTOMS WILDLIFE AREA	2708	RICHARD A HEMP FISHERY AREA	5009
NORTH BRANCH TREMPEALEAU RIVER FISHERY AREA	2704	ROCHE A CRI STATE PARK	140
OAK RIDGE W.A. (EXTENSIVE WLF. HAB.-ST. CROIX)	5606	RUSH RIVER DELTA SNA	4808
OHMART WETLANDS SNA	915	SAND CREEK F.A. (STREAMBANK PROT. FEE AREA - MONROE)	4209
OTTER CREEK WILDLIFE AREA	1704	SAND CREEK FISHERY AREA	1706
PAUL OLSON WILDLIFE AREA	7202	SAND CREEK FISHERY AREA	904
PERROT STATE PARK	6238	SANDHILL WILDLIFE AREA	7225
PICKERAL LAKE SNA	5003	SCATTERED FOREST LANDS - MONROE CTY.	4201
PIERCE CO ISLANDS WILDLIFE AREA	4824	SCATTERED WILDLIFE	3206
PINE CREEK FISHERY AREA	4811	SCATTERED WILDLIFE	6207
PINNACLE ROCK REARING STATION	4207	SCATTERED WILDLIFE - CHIPPEWA CTY.(HALLIE)	907
PLOVER RIVER FISHERY AREA	3705	SCATTERED WILDLIFE - CLARK CTY. (OWEN)	1002
PLUM CREEK SNA	4803	SCATTERED WILDLIFE - DUNN CTY.	1710
PLUM CREEK WATERSHED (NUGGET LAKE)	4802	SCATTERED WILDLIFE - ST. CROIX CTY.	5604
QUINCY BLUFF AND WETLANDS NATURAL AREA	109	SMITH POND FISHERY AREA	2705
RAY MORRISON WLA (PHEASANTS FOREVER)	4805	SOHLBERG SILVER LAKE SNA (STATEWIDE NATURAL AREAS)	111
RED CEDAR STATE TRAIL	1709	SOUTH BEAVER CREEK WILDLIFE AREA	2709
REM-ADAMS CTY.	106	ST CROIX ISLANDS W.A.	5626
REM-ALLEN CREEK	2716	ST. CROIX STREAM BANK PROTECTION FEE PGM.	5609

WEST CENTRAL DISTRICT

Property Name	Code	Property Name	Code
ST. CROIX WESTERN PRAIRIE HABITAT RESTOR.	5608		
STATEWIDE HABITAT AREAS	3201		
STATEWIDE HABITAT AREAS - JACKSON	2707		
STATEWIDE N.A. -BAUER-BROCKWAY - JACKSON CTY.	2721		
STATEWIDE NATURAL AREA	6217		
STATEWIDE NATURAL AREA - OTTER CK. DUNN CTY.	1715		
STATEWIDE NATURAL AREA - RED CEDAR R. - DUNN CTY.	1716		
STATEWIDE NATURAL AREAS - WOOD CTY.	7207		
STATEWIDE PUBLIC ACCESS	3202		
STATEWIDE SPRING PONDS - MARATHON CTY.	3702		
STATEWIDE WILDLIFE HABITAT	6213		
STATEWIDE WILDLIFE HABITAT - BUFFALO CNTY	605		
STATEWIDE WILDLIFE HABITAT - ST. CROIX	5611		
STATEWIDE WILDLIFE HABITAT - YOHNK	913		
STATEWIDE WLF HAB - ALMOND FARM	5005		
STREAM BANK PROTECTION FEE AREA - WOOD CTY.	7205		
STREAMBANK PROT. FEE AREA - PIERCE	4810		
TAINTER LAKE SPAWNING MARSH	1718		
TAMARACK CREEK WILDLIFE AREA	6208		
TANK CREEK FISHERY AREA	2712		
TEN MILE CREEK F.A. (STREAMBANK EASEMENT PGM.)	7204		
TEN MILE CREEK SEED ORCHARD	7206		
TIFFANY WILDLIFE AREA	628		
TOM LAWIN WILDLIFE AREA	911		
TREMPEALEAU COUNTY REARING POND	6200		
TREMPEALEAU LAKES FISHERY AREA	6201		
TREMPEALEAU PUBLIC ACCESS	6202		
TREMPEALEAU RIVER MEADOW (SNA)	612		
TRENTON BLUFF PRAIRIE SNA	4807		
TRUMP COULEE REARING STATION	2706		
UPPER NEENAH FISHERY AREA	108		
VAN LOON WILDLIFE AREA	3229		
WEST TAYLOR W. A.	2710		
WHITMAN DAM WILDLIFE AREA	630		
WILLOW RIVER STATE PARK	5640		
WILLOW RIVER WILDLIFE AREA	5610		
WINDING CREEK REARING STATION	3701		
WOOD COUNTY FOREST	7200		
WOOD COUNTY WILDLIFE AREA	7227		

Appendix D – WISFIRS CODES REFERENCE GUIDE

STAND PREFIX CODES

Code	Description
A	Aesthetic Zone
B	Fuel Breaks
C	Extended Rotation
D	Deer Yard
E	Erodable Soils
F	Filter or Riparian Strips
G	Consultation/Deferral
H	Mgt. Objective Not Yet Determined
I	Old Growth - Managed
J	Old Growth – Reserved
K	Wildlife Opening - Treated
L	Lake or River Zones
M	Poor Markets
N	Natural Area
O	Old Growth - Potential
P	Plantations
Q	Road Aesthetic Zone
R	Designated Wild River Zone**
S	Species & Communities of Special Concern
T	Trout Stream
U	County Forest Special Use class lands
V	Silvicultural concerns
W	Wild Area
X	Non-productive Forest Type (<20 ft^3 /ac./yr.growth)
Y	Designated Wilderness Area**
Z	Other stand to be omitted from mgt. schedule**

**Designates omission from management schedules

FOREST TYPES

Commercial	Non-commercial / Non-Forest
A – Aspen	F – Farmland
BH – Bottomland Hardwoods	FG – Farmland, grazed
BW – White Birch	G – Upland grass
C – White Cedar	GG– True Grasses
CH – Central Hardwoods	GH – Herbaceous vegetation
FB – Balsam Fir	GLS – Low-growing shrubs
H – Hemlock	GP – Prairie grasses
MC – Misc. coniferous	I – Developed use
MD – Misc. deciduous	IA – Parking area
MR – Red Maple	ICG – Campground
NH – Northern Hardwoods	ITH – Nature or hiking trail
O – Oak	ITM – Motorized vehicle trail
OX – Scrub Oak	ITS – Snowmobile and/or horse trail
PJ – Jack Pine	IP – Picnic area
PR – Red Pine	K – Marsh
PW – White Pine	KB – Muskeg – bog
SB – Black Spruce	KEV – Emergent vegetation
SH – Swamp Hardwoods	KG – Lowland grass
SW – White Spruce	KH – Lowland herbaceous vegetation
T – Tamarack	L – Water
W – Black Walnut	LB – Lowland brush
	LBA – Lowland brush-alder
	LBB – Lowland brush – bog birch
	LBD – Lowland brush –red dogwood
	LBW – Lowland brush – willow
	LM – Minor Lake
	LMS – Minor Stream
	UB – Upland brush
	R – Recreational
	ROW – Rights-of-way
	Z – Rock outcrops / Sand dunes

SIZE CLASSES

0005 – Seedlings and saplings
0509 – Softwood poles
0511 – Hardwood poles
0915 – Softwood small sawlogs
1115 – Hardwood small sawlogs
15+ - Large sawlogs

DENSITY CLASSES

Density Class	Poles & Sawtimber (by basal area)	Sapling (by # stems per acre)	Seedlings (by # stems per acre)
1	10-30 ft^2 / ac.	100-300 stems/ac.	200-600 stems/ac.
2	31-70 "	301-900 "	601-1500 "
3	71-110 "	901+ "	1501+ "
4	111-150 "		
5	150+ "		

Code	Habitat Type
AArL	Acer-Acer/Lysimachia
AAtRp	Acer/Athyrium Rubus
AArVb	Acer-Acer/Viburnum
AAs	Acer/Arisaema
AAt	Acer/Athyrium
ACaCi	Acer/Caulophylium-Circaea
ACal	Acer/Caulophylum-Impatiens
ACl	Acer/Clintonia
AFAd	Acer-Fagus/Adiantum
AFAl	Acer-Fagus/Allium
AFAs	Acer-Fagus/Arisaema
AFAs-O	Acer-Fagus/Arisaema Osmorhiza Variant
AFH	Acer-Fagus/Hydrophyllum
AFrDe	Acer-Fraxinus /Desmodium
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
ArVRp	Acer/Vaccinium-Rubus
ASaI	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
ATiCr(As)	Acer-Tilia/Cornus Arisaema Phase
ATiCr(O)	Acer-Tilia/Cornus Osmorhiza Phase
ATiDe	Acer-Tilia/Desmodium
ATiDe(Pr)	Acer-Tilia/Desmodium Prunus phase
ATiDe-As	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
HYDME	Hydromesic site – wet mesic south
HYDRI	Hydric site – wet forest lowland
PArV	Pinus-Acer/Vaccinium
PArV-U	Pinus-Acer/Vaccinium, Uvularia variant
PArVAa	Pinus-Acer/Vaccinium.-Aralia
PArVAa-Po	Pinus-Acer/Vacc.-Aralia, Polygonatum variant
PArVAa-Vb	Pinus-Acer/Vacc.-Aralia, Viburnum variant
PArVAm	Pinus-Acer/Vaccinium-Amphicarpa
PArVAo	Pinus-Acer/Vaccinium-Apocynum
PArVHa	Pinus-Acer/Vaccinium-Hammamelis
PArVPo	Pinus-Acer/Vaccinium-Polygonatum
PArVRh	Pinus-Acer/Vaccinium-Rubus
PEu	Pinus-Euphorbia
PQE	Pinus-Quercus/Epigaea
PQG	Pinus-Quercus/Gaultheria
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
TFAa	Tsuga-Fagus/Aralia
TMC	Tsuga/Mainthemum-Coptis

Accepted Species Codes (For Site Index & Species information)

Code	Species	Code	Species
AS	Ash		
AB	Ash, Black	KC	Kentucky Coffee Tree
AG	Ash, Green	L	Larch
AW*	Ash, White	BL	Locust, Black
A*	Aspen	HL	Locust, Honey
AQ*	Aspen, Quaking	MN	Maple, Norway
AY*	Aspen, Big-toothed	MO	Maple, Other
BG	Balm of Gilead	MR*	Maple, Red
F*	Balsam Fir	MS	Maple, Silver
BA*	Basswood	MH*	Maple, Sugar
BE*	Beech	MA	Mountain Ash
BR	Birch, River	MV	Mulberry
BW*	Birch, White	OB	Oak, Black
BY*	Birch, Yellow	OM	Oak, Bur
BS	Box Elder	OJ	Oak, Northern pin
WC	Butternut	OO	Oak, Other
C*	Cedar, Northern white	OR*	Oak, Red
CR	Cedar, Red	OS	Oak, Swamp white
CH*	Cherry, Black	OW*	Oak, White
CC	Cherry, Pin or Choke	PA	Pine, Austrian
CW	Cottonwood	PJ*	Pine, Jack
E	Elm spp	PR*	Pine, Red
EA*	Elm, American	PS	Pine, Scots
EC	Elm, Chinese	PW*	Pine, White
ER	Elm, Rock	SB*	Spruce, Black
ES	Elm, Slippery	SN	Spruce, Norway
HB	Hackberry	SW*	Spruce, White
HA	Hawthorne	SY	Sycamore
H	Hemlock	T*	Tamarack
HI	Hickory, Bitternut	W	Walnut
HS	Hickory, Shagbark	WI	Willow
IR	Ironwood	YP	Yellow Poplar (tulip)

*Indicates species with site index curves in database

INVASIVE LEVEL

Code	Description
30	Present
31	Not Present
32	Not Evaluated (not trained)
33	Not Evaluated (off season)

INVASIVE SPECIES

Code	Description	Code	Description
10	Buckthorn	17	Japanese Barberry
11	Garlic Mustard	18	Leafy Spurge
12	Spotted Knapweed	19	Dame's Rocket
13	Black Locust	20	Autumn / Russian Olive
14	Honeysuckle sp.	21	Japanese Knotweed
15	Reed Canary grass	22	Oriental Bittersweet
16	Multiflora Rose	23	Other

INVASIVE DENSITY

Code	Description
1	< 5%
2	5 – 20 %
3	20 – 35%
4	35 – 50%
5	>50%

SOILS

Code	Classification	Code	Classification
A	Sand	F	Peat
B	Loamy sand	G	Muck
C	Sandy loam	H	Clay, silty/ sandy/ red clays
D	Silt loam, loam, silt	I	Sand mantled clay
E	Clay loams	J	Poorly drained mineral

MANAGEMENT OBJECTIVES

Code	Recommendation
Natural Type Maintenance:	
A	Natural maintenance or regeneration
Natural Type Conversion (after cutting or treatment):	
B	To spruce or fir
C	To white pine
D	To red pine
E	To jack pine
F	To northern hardwoods
G	To Red Maple
H	To Aspen
I	To Central Hardwoods
J	To White Birch
K	To Oak
L	To other forest or non-forest species)
Forced Type Maintenance (artificial regeneration):	
O	Type must be regenerated by seeding, planting, site preparation, prescribed burning, etc. (forest or non-forest species)
Forced Type Conversion (artificial regeneration):	
R	To spruce or fir after cutting or treatment
S	To white pine " " "
T	To red pine " " "
U	To jack pine " " "
V	To northern hardwoods " "
W	To oak " " "
X	To other forest or non-forest species "

INTERMEDIATE TREATMENTS (Non–Commercial)
("TN, PR, RL, OR HM")

Treat	Code	Description
TN	1	Thinning, Improvement cut, Crop tree release
TN	2	Cull tree removal (includes girdling)
TN	3	Insect or disease control (sanitation cutting)
PR	4	Pruning
RL	5	Release –regeneration (via hand, herbicide, fire)
HM	6	Invasive plant control (via hand, herbicide, fire)
HM	7	Habitat management (via hand, herbicide, fire)
HM	8	Survival check of planting / seeding / natural reg.

SITE PREPARATION ("SP"):

Treat	Code	Purpose
SP	1	Seedbed preparation for natural or direct seeding
SP	2	Preparation for planting
SP	3	Treatment to stimulate coppice or root suckering
SP	4	Slash treatment Method
SP	5	Motorized mechanical equipment
SP	6	Mechanical treatment with hand tools
SP	7	Prescribed fire
SP	8	Chemical treatment
SP	9	Other

ARTIFICIAL REGENERATION ("PL"):

Treat	Code	Planting Methods
PL	1	Hand plant
PL	2	Machine plant
PL	3	Direct seed

Species Recommended for Planting

Code	Species	Code	Species
5	PW	11	MH
6	PR	12	AW
7	PJ	13	W
8	SW	14	Prairie grasses
9	OR	15	Other
10	OW		

Rate/Acre	Planting	Direct Seed
Code	No./Acre	Lbs./Acre
20	1000+	100+
21	100	0-1
22	200	1-3
23	300	3-6
24	400	6-10
25	500	10-20
26	600	20-40
27	700	40-60
28	800	60-80
29	900-1000	80-100

INTERMEDIATE TREATMENTS – Commercial ("T")

Treat	Code	Description
T	1	Harvest scattered mature or over-mature trees
T	2	Thinning or improvement cutting
T	3	Salvage or sanitation cutting

HARVEST METHODS: "RE"- Even-aged regeneration or "RA"- All-aged regeneration

FOR NATURAL REGENERATION

Treat	Code	Description
RE	1	Coppice (e.g. aspen regen. cuts)
RE	2	Clearcut (relying on regeneration by seed)
RE	3	Seed tree harvest
RE	4	Shelterwood harvest
RE	5	Overstory Removal
RA	6	Group Selection
RA	7	Single Tree Selection
RE	8	Other

FOR ARTIFICIAL REGENERATION

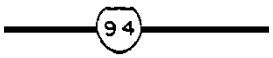
Treat	Code	Description
RE	10	Clearcut (relying on planting or direct seeding)
RE	11	Partial cut (even-aged)
RA	12	Partial cut (uneven-aged)

APPENDIX E
Mapping & Mapping Symbols

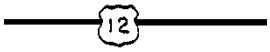
Mapping

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. 443.14(16) 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.

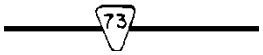
Hand Drawn Mapping Symbols



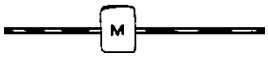
Interstate Highways



Federal Highways



State Highways



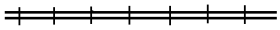
County Highways

Town Roads

Unimproved Roads

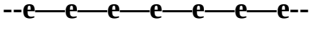
Trails

Single Track Railroads



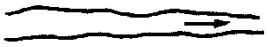
Multiple Track Railroads

Abandoned Railroads



Powerlines

All fence lines



Rivers

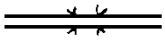
Creeks and Streams

Intermittent Streams

Ditch

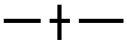
Dike

Dam

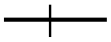


Bridges

Lakes

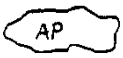


Definitely located section corner



Approximately located section corner

FOREST TYPE LINES:



Natural forest types

Plantations

WisFIRS Mapping Symbols

APPENDIX F

Cover Type, Size, & Density Classifications and Stand Classification Procedure

Cover Type Classification

Cover type - A tract of forest land characterized by the predominance of one or more key species which make up 50 percent or more of the basal area of saw-timber and pole-timber stands, or of the number of trees in seedling and sapling stands. Forest land less than 10 percent stocked with commercial tree species is classified as upland brush, grass or lowland brush.

Forest Types	Symbol	Definition
Aspen	A	Aspen comprises 50% or more of the basal area in saw-timber and pole-timber 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 comprises 50% or more of the basal area in saw-timber and pole-timber 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 saw-timber and pole-timber stands, or 50% or more of the stems in sapling and seedling stands.
White cedar	C	White cedar comprises 50% or more of the basal area in saw-timber and pole-timber stands, or 50% or more of the stems in sapling and seedling stands. In mixed swamp conifer stands, white cedar is predominant.
Central hardwoods	CH	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 saw-timber and pole-timber stands, or 50% or more of the stems in sapling and seedling stands. In mixed swamp conifer stands, balsam fir is predominant.
Hemlock	H	Hemlock comprises 50% or more of the basal area in saw-timber and pole-timber 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 saw-timber and pole-timber 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 saw-timber and pole-timber stands, or 50% or more of the stems in sapling and seedling stands.
Oak	O	Oak comprises 50% or more of the basal area in saw-timber and pole-timber stands, or 50% or more of the stems in saplings and seedling stands.
Scrub oak	OX	More than 50% of the basal area in saw-timber and pole-timber stands, or 50% or more of the stems in sapling and seedling stands is comprised of oak with site indices ≤50. Typical forest products include only fuelwood and fiber.
Red pine	PR	Red pine comprises 50% or more of the basal area in saw-timber and pole-timber 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 saw-timber and pole-timber stands, or 50% or more of the stems in sapling and seedling stands. In mixed pine stands, white pine is predominant.
Jack pine	PJ	Jack pine comprises 50% or more of the basal area in saw-timber and pole-timber stands, or 50% or more of the stems in sapling and seedling stands. In mixed pine stands, jack pine is predominant.
Black spruce	SB	Black spruce comprises 50% or more of the basal area in saw-timber and pole-timber 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 that comprises 50% or more of the basal area in saw-timber and pole-timber 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 saw-timber and pole-timber stands, or 50% or more of the stems in sapling and seedling stands.
Tamarack	T	Tamarack comprises 50% or more of the basal area in saw-timber and pole-timber 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 saw-timber and pole-timber stands, or 50% or more of the stems in sapling and seedling stands.

Non-Forest Types	Symbol	Definition
Upland brush	UB	Upland sites less than 10% stocked with tree species but having 50% or more of the area stocked with taller growing, persistent shrubs. Includes but is not limited to, shrubs such as hazel, gray dogwood, juneberry, sumac, ninebark, prickly ash, etc.
Grass	G	The "G" symbol will be used for upland grasses, forbs, and ferns,, including abandoned fields less than 10% stocked with tree species.
Grass	GG	Ground cover predominately non-native grasses such as brome, quack, blue grass, timothy, etc.
Herbaceous vegetation	GH	Ground cover predominately herbaceous vegetation species such as bracken fern, sweet clover, giant ragweed, stinging nettle, upland aster, goldenrod, prairie dock, etc.
Prairie grass	GP	Ground cover predominantly native grasses such as big and little bluestem, Indian grass, etc.
Low growing shrubs	GLS	Ground cover predominately low growing woody plants such as blueberry, raspberry, etc.
Marsh	K	The "K" symbol should be used for grass or high water table areas.
Muskeg - bog	KB	Bog such as sphagnum moss, cotton grass, leatherleaf, cranberry, Labrador tea, etc.
Emergent vegetation	KEV	Coarse emergent marsh vegetation such as cattails, river bulrush, tall sedges, etc.
Lowland grass	KG	Ground cover consisting of more than 50% of true grasses such as canary grass, bluejoint, redtop, cordgrass, big bluestem, fire stemmed sedges, etc.
Lowland herbaceous vegetation	KH	Ground cover consisting of more than 50% of herbaceous vegetation, such as lowland asters, stinging nettle, wild sunflowers, etc.
Lowland brush	LB	The "LB" symbol will be used for lowland brush on forest lands less than 10% stocked with tree species.
Alder	LBA	More than 50% alder.
Bog birch	LBB	More than 50% bog birch.
Red dogwood	LBD	More than 50% dogwood, such as silky and red osier.
Willows	LBW	More than 50% shrub willow.
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.
Farmland	F	Land actively used for agriculture but excluding farm woodlots.

Heavily grazed	FG	Grazed pastures with fences. Use only as a secondary timber type symbol. Will most often be used in conjunction with GG, KG, and poorly stocked forest types.
Developed use	I	The "I" symbol should be used for general developed uses.
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.
Recreational	R	An area developed for general recreation use.
Rights-of-way	ROW	Improved roads, railroads or right-of-way for gas, power or telephone lines.
Rock outcrops/ Sand dunes	Z	Rock outcrops including rocky beaches more than 1 acre in extent. Sand dunes including sand beaches, more than 1 acre in extent.

NOTE: Effective 2007 – Forest type codes HH, FS, SX, AX, SC were no longer available for use on new or updated recon. All “HH” (Hardwood-Hemlock) were migrated to “H” (Hemlock). All “AX” (off-site aspen) were migrated to “A” (Aspen). SXT, SXSB, SXC were migrated to T, SB, and C respectively with a prefix of “X”, indicating their non-commercial status. The remaining old forest types (FS and SC) will remain in the WisFIRS database until they are updated.

Forest Stand Size Classification

Size classes - The size class designation for a forested cover type is assigned according to the following size class chart: (The division between pole-timber and small saw-timber is 9 inches for softwoods and 11 inches for hardwoods.)

Symbol	Class	DBH
0 - 5	Seedling and sapling	0 - 5″
5 - 9 or 11	Pole-timber	5 - 9″ or 11″
9 or 11 - 15	Small saw-timber	9″ or 11 - 15″
15+	Large saw-timber	15″+

Saw-timber 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 d.b.h.[1] or larger for softwood species and of 11.0 inches d.b.h. and larger for hardwood species (including aspen)

> **Large saw-timber stands** (15+") - Saw-timber stands typed as large saw-timber within the primary cover type based on the basal area size class distribution of saw timber trees 15.0 inches d.b.h. and larger.
>
> **Small saw-timber stands** (Softwoods 9-15", Hardwoods 11-15") - Saw-timber stands typed as small saw-timber within the primary cover type based on the basal area size class distribution of saw-timber trees less than 15.0 inches d.b.h.

Pole-timber stands (Softwoods 5-9", Hardwoods 5-11") - Stands typed as pole-timber within the primary cover type having a minimum net basal area of 10 sq. ft./acre. Pole-timber trees are trees of softwood species 5.0 - 8.9 inches d.b.h. or hardwood species (including aspen) 5.0 - 10.9 inches d.b.h.

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 pole-timber 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.

Stand size and Density Classification

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+		
Pole-timber and Saw-timber (5+)" DBH	Basal area (sq. ft./acre)	10 - 30	31-70	71 - 110	111 - 150	150+

1/ Seedlings and saplings should be combined into a reproduction (restocking) class 0-5.
2/ Stocking levels considered adequate to regenerate a stand vary by cover type – see Silviculture Handbook (2431.5) for details.
3/ 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 covert type will be required in all cases. If a secondary and /or understory type 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 ft^2 of aspen & 50 ft^2 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 ***all*** 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: NH 11-15[3]
Secondary Type: NH 5-11[1]

Example 2

Stand Basal Area – All merchantable trees are pole timber size (5-11”),
90 sq. ft. of aspen
15 sq. ft. of red maple
10 sq. ft. of hard maple
15 sq. ft. of red oak
10 sq. ft. of white ash
600 seedlings & saplings of white pine

Primary Cover Type:	A	>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
Understory Cover Type:	PW	600 seedlings and saplings of white pine
Size Class:	0-5	
Density:	2	

Primary Type:	A 5-11^4
Secondary Type:	NH 5-11^2
Understory Type:	PW 0-5^2

The cover type from the example above, 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	A	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.