

Wisconsin Board of Commissioners of Public Lands Forest Management Planning System

Introduction

The Wisconsin <u>Board of Commissioners of Public Lands</u> (BCPL) is the oldest state agency in Wisconsin, and the only agency created within the State Constitution. The forefathers of this State placed a high value on public education and created this agency as an independent board to oversee valuable federal land grants through a permanent trust created to benefit Wisconsin schoolchildren. Members of the Board have a fiduciary duty and must administer the trust solely in the interests of the beneficiaries.

The Wisconsin constitution includes language forming the BCPL, with membership comprised of three statewide elected constitutional officers: Secretary of State, State Treasurer, and Attorney General. The BCPL is entrusted with the authority to oversee the sale and management of those lands and resultant monies to benefit the education of current and future generations. The school trust lands and proceeds from their sale and management, have been placed into four distinct state trust funds: 1) Common School Fund, 2) Normal School Fund, 3) University Fund, and 4) Agricultural College Fund. Beneficiaries of the Common School Fund (the largest fund) are K-12 public schools located in Wisconsin. Earnings from the investment of Common School Fund principal are currently directed to provide the sole state aid for the purchase of public-school library media and resources. The University of Wisconsin is the beneficiary of the other three School Trust Funds managed by the BCPL.

BCPL Mission Statement

The mission of the BCPL is to: manage assets of the School Trust Funds in a manner that maintains significant, stable, and sustainable distributions to the beneficiaries, and to manage all assets and programs entrusted to the Board in a prudent and professional manner, in accordance with the Wisconsin Constitution and applicable state law.

Land Assets

BCPL has managed the State of Wisconsin School Trust Lands since statehood in 1848. Originally granted to Wisconsin from the Federal Government, School Trust Lands eventually totaled almost 4 million acres. However, most of these lands were sold during the 1800s. The scattered parcels that remained within the Trust were difficult to sell because the parcels had little monetary value and/or severe management impediments, including the lack of legal access. Many of these impediments continue to affect the marketability and management of these lands.

In 2006, the Wisconsin Legislature unanimously approved legislation with the moniker of "Land Bank Authority", which provided limited authority to the BCPL to purchase replacement land assets. This new law authorized BCPL to use the proceeds from the sale of School Trust Land solely for the purchase of



replacement school trust lands. These transactions are allowed to proceed when it is demonstrated that the purchase will improve timberland management, decrease forest fragmentation, or increase public access. The legislation capped the total acreage owned within the combined School Trust Funds but allowed the BCPL to rearrange holdings into more productive, accessible, and larger tracts that could be managed more efficiently. The law recognized the importance of maintaining land as an asset within the Trust Fund portfolios while also providing a mechanism to improve underperforming parcels.

Since the Land Banking Authority was granted, BCPL has aggressively sold/purchased, and traded out of low performing/scattered lands and replaced them with higher performing lands that have consolidated the ownership. These replacement lands have improved the quality and value of the trust fund land portfolio by:

- Providing access to previously landlocked parcels.
- Increasing timber revenues as newly acquired parcels contain more productive timberland.
- Improving management efficiencies and economies of scale through blocking and creation of larger tracts.

Forest Administration

The BCPL continues to manage just under 76,000 acres that are concentrated within a nine-county consolidation zone in North Central Wisconsin. These lands are grouped administratively into 293 Named Properties (Management Units) which are mostly contiguous parcels which have been grouped to facilitate planning and harvest scheduling. These Properties range in size from 0.02 acres (small lots & islands) to our largest property which is over 5,600 acres in size.

Trust Lands management classification is an ever-changing snapshot due to the active Land Banking program, continual reinterpretation as the result of improved digital mapping layers, and the increased frequency and intensity of forest recon/inventory. January 2025 forest acreage by classification is shown below:

Land Management Classification

January 2025

Timber Base	Plantation		3,050.5
	Forest Production		25,333.6
	HCV-Managed		4,839.1
		Actively Managed Acres:	33,223.2
HCV-Unmanaged			1,742.1
Forest Lowland			23,692.8
Non-Forest			17,028.0
		Non-Managed Acres	42.462.9

Non-Managed Acres: 42,462.9

Total Acres: 75,686.1



<u>Timber Base</u> = Upland Forest Cover types that are actively managed for timber products, and which are included in the Harvest Schedule.

<u>Upland Deferred</u> = Upland Forest Cover types that could be managed but are temporarily deferred from management because of low volume/value, or that lack reasonable access. These stands will be set-up and harvested as a "Permit Sale" (negotiated, or non-bid sale of less than \$12,000 gross revenue) only when a market opportunity arises (adjacent harvesting operation, interested neighbor, etc.). These acres are NOT included in the Harvest Schedule.

<u>HCV-Unmanaged</u> = Upland Forest Cover types that have been identified as containing High Conservation Value Forest conditions that will not benefit from active management, or that are physically inaccessible. These acres are NOT included in the Harvest Schedule.

<u>Forest Lowland</u> = Wetland Forest Cover types, all of which have been deferred from active management because of sensitive hydrological conditions and extremely poor market conditions. These acres are NOT included in the Harvest Schedule.

<u>Non-Forest</u> = Non-Forest Land types, the majority of which are wetlands. These acres are NOT included in the Harvest Schedule.

Land Management Objectives

- 1) Generate annual income through timber harvesting that follows a third party audited Forest Certification System to verify long-term sustainable management.
- 2) Identify and protect High Conservation Value Forest areas (HCV) and special sites, the largest and most sensitive of which will be sold/traded to appropriate conservation owners.
- 3) Increase the value of real-estate holdings where possible by clearing title issues, gaining legal access, and developing roads.
- 4) Improve management and administrative efficiencies through the rearrangement of land assets into larger and higher productive contiguous blocks.
- 5) Research, develop, and initiate new methods of generating revenue from the land base.

Forest Certification

BCPL is committed to conforming to Wisconsin's Best Management Practices including:

- Wisconsin Forest Management Guidelines
- Wisconsin Best Management Practices for Water Quality
- Wisconsin Invasive Species Best Management Practices: Forestry

In addition, BCPL follows state accepted management practices and silvicultural prescriptions contained within the WDNR Silvicultural Handbook.

• Wisconsin DNR Silviculture Handbook (FA-20-0001)

BCPL is committed to conforming to the American Forest Foundation Standards of Sustainability.



The eight standards are:

- 1. Commitment to Practicing Sustainable Forestry.
- 2. Compliance with Laws.
- 3. Reforestation and Afforestation.
- 4. Air, Water, and Soil Protection.
- 5. Fish, Wildlife and Biodiversity.
- 6. Forest Aesthetics.
- 7. Protect Special Sites.
- 8. Forest Product Harvests and Other Activities.

The BCPL land base and management procedures are audited annually to verify that they continue to adhere to the eight AFF Standards of Sustainability. This certification program is administered by the American Tree Farm System under a Group Certificate (#: US015101).



Forest Inventory and Data Management

The BCPL forest Inventory and management program is a bottom-up philosophy, whereby the experienced Property Managers in the field are responsible for feeding information into the inventory system – to include prescriptive and Year of Treatment activity plans. Once this data is populated in the GIS system the Forest Supervisor ensures data accuracy, standardization, and may modify the Harvest Schedule to better benefit the entire ownership and lead to overall financial and work-flow optimization. These revised plans are then shared back with the Property Managers. With the latest in GIS technology data can be shared in real-time, even to phone apps for use in the field.



Inventory Database

The current inventory database has the following fields:

Field Name	Alias	Description	
PROP_NAME	Property Name	Unique name for the Property or Management Block	
PROP_MANA Property Manager		BCPL Manager responsible for inventory, recordkeeping & management activities	
GIS_ACRES GIS Acres		Calculated Stand Acres	
MGTCLASS	Management Class	Stand Classification based on Land Type & Management Constraints	
PRI_TYPE Primary Type		Primary Forest Cover Type or Land Type Classification	
PRI_SIZE Primary Size		Diameter Class Range describing the overall Cover Type	
PRI_DENS	Primary Density	Total Basal Area for Commercial Types, Stems/Ac for Premerch Types	
SEC_TYPE	Secondary Type	Optional - Secondary Forest Cover Type	
HABITAT	Habitat Type	Upland "Kotar" Habitat Type Classification	
MGT_OBJ	Management Objective	Designated Management Objective	
INV_NOTE	Inventory Notes	Optional - Notes describing Forest Conditions in this Stand	
LOG_CHANC	Logging Chance	Seasonal Harvest Timing Restrictions	
MGT_METH	Management Method	Management Method for this Stand	
FUT_TYPE Future Type		Desired Future Cover Type for this stand	
COM_TREAT	Commercial Treatment	Next Commercial Forest Management Activity Scheduled for this Stand	
YOT_COM	Commercial YOT	Specific Year of Next Scheduled Commercial Treatment	
NONCOM_T	NonCom Treatment	Next Non-Commercial Forest Management Activity Scheduled for this Stand	
YOT_NC	NonCom YoT	Specific Year of Next Scheduled Non-Commercial Treatment	
MGT_NOTE	Management Notes	Optional - Notes describing Management of this Stand	
CRUISER	Cruiser	Tracking Log for the Person who conducted this field Recon and Records Update	
RECONDATE	Recon Date	Tracking Log for the Date of this on-site field Recon and Records Update	
INSPECT_P	Inspection Plan	Purpose for the next scheduled site visit to this stand	
INSPECT_Y	Inspection Year	Specific Year of the next scheduled site visit.	



Forest Recon & STAND Attribute Updates

The forest inventory is continuously updated to capture the dynamic nature of the forest ecosystem. In general, foresters update attributes for all of the following layers: "STANDS', "LOGGING ROADS", "WATER CROSSINGS", "ROAD BARRIERS", "BOUNDARY CORNERS", "INVASIVE SPECIES", and "POINT OF INTEREST". The Point of Interest (POI) GIS layer includes archeological sites, raptor nests, T&E species, etc. (this is not a public layer). In addition, invasive species locations and treatment information are maintained in the Invasive Species GIS layer.

- 1) Immediately after a harvest has been "completed", a site recon is conducted. The GIS STAND attribute data including the next Year-Of-Treatment is updated. This is scheduled and completed by the designated Sale Administrator.
- 2) A post-harvest recon is conducted 3-6 years after the completed harvest. The primary function is to document regeneration status and health of overstory. The GIS STAND treatment prescription and Year-Of-Treatment are modified if necessary. This is scheduled and completed by the designated Property Manager utilizing the "recon plan, and date" STAND attributes.
- 3) Forest Supervisor creates the annual sale planning report in January as the annual work plan.
 - a. This includes all scheduled treatments for the next fiscal year.
 - b. Property Managers will conduct a site visit to evaluate sale potential, road and water crossing conditions, property line maintenance, invasive species concerns, T&E species concerns, archeological concerns, illegal trespass, HCV areas, etc.
 - c. Property Managers will update GIS STAND attributes and treatment schedule as necessary.
 - d. Property Managers will schedule and complete sale set-up work utilizing the annual sale planning / recon report.
- 4) If the Stand is ready for a harvest, it will be appended to the "Sale Planning" layer and additional sale specific attributes will be entered. Next a printout of the NHI Report, Recon and the Harvest Planning Report will be made to document the recon, a timber sale map is created, and all of this is stored in a new sale file folder.
- 5) Stands not ready for treatment will be re-scheduled to a year of treatment that better matches their silvicultural and financial goals.
- 6) At the Property Managers discretion, a detailed plot/point cruise may be conducted to fine-tune the marking/harvest prescription. Typically, this will be a volume cruise for even-aged management or a diameter class distribution model (BDQ) for all-aged management.



Harvest Scheduling

Harvest Scheduling and Regulation is calculated utilizing the acreage approach. All-aged stands are calculated using an average 15-year re-entry cycle, and even-aged stands are calculated using an average 45-year rotation age. This method simply utilizes the total acreage of a forest cover type divided by the re-entry cycle/rotation age, to calculate an acreage harvest goal on an annual basis.

A precise regulation of the harvest acres within the next 5-year planning horizon is established. The goal is to maintain an equal area of overstory removal and marked selection thinning for each year within the 5-year plan. The acceptable acreage deviation per year is +/- 5 percent.

A longer-term regulation going into the future 5 to 15 years is also conducted, but the acceptable deviation per year is increased to +/- 20 percent. Accurately predicting harvest schedules out 15+ years is only achievable for the even-aged stands. This glimpse into the longer-term future of the even-aged forest is also regulated to within an acceptable deviation of 50 percent or less.

Smaller acreage, lower value, and hard to access sales are moved out of the Harvest Schedule (Timber Base) to the "HCV/Deferred" Management Class (with a scheduled Year of Treatment of 2000). These Stands may be appended to the "Permit Sales" layer for advertising or direct sales on an opportunity basis for harvesting.

Higher priority treatments are scheduled earlier in the 5-year harvest schedule. Release of successful advance regeneration and/or imminent decline of the overstory are both examples of treatments with a higher priority.

The Harvest Schedule and Regulation plan is re-evaluated and re-balanced at the end of each calendar year. Prior to re-balancing, a thorough audit and data clean-up of the GIS layers must be conducted – to include a recalculation of stand acres. Once the re-balance is completed, these updates lead to the creation of an annual pre-sale work plan which is then distributed to the respective Property Managers by late January. Site visits "Recons" are conducted of these potential sale areas by mid-February and an annual work plan (Harvest Schedule) is formalized.

The annual Harvest Schedule may need to be modified due to extreme weather events, insect/disease outbreaks, market constraints or opportunities, or other unforeseen factors. This is a plan of action that will only be beneficial if it can positively adapt to outside forces.



Timber Sale Procedures

Timber Sale Establishment

- 1) Ensure all necessary recon, inventory, and/or pre-sale work has been completed.
 - a. Consult inventory and GIS data for special sites and conduct a search of the NHI database so that appropriate measures, silviculture, and/or buffers can be determined for any special sites or species. Any necessary action will be documented in the Recon Report and Harvest Planning Form.
 - b. Any forest health and aesthetic issues and/or actions will be documented in the Harvest Planning Form.
- 2) Establish timber sale boundaries as necessary. Property lines should be painted with blue vertical stripes. All other boundaries are at the forester's discretion. If paint or flagging is used for boundary lines or unit lines, it should be of a different color or different symbology. Ex: Red paint timber sale boundary lines marked with vertical stripes and unit lines are painted with red crosses on both sides of the tree.
- 3) Should timber marking be required, paint colors will be chosen at the forester's discretion so that it makes for a sensible and cohesive timber sale. Stump marks may or may not be used at the forester's discretion.
- 4) Long term retention trees (wildlife, legacy, bearing trees, etc.) should be rung with red paint during timber sale set up and stump marked with red. This step may be skipped if retention is species or diameter designated (i.e. leave all hemlock spec, no hemlock needs to be rung).
- 5) For all timber sales, the specific paint color and symbol will be clearly described in the bid form and timber sale contract.
- 6) Timber Sale volume estimates will be created using whatever method the forester deems most effective for that timber sale. Methods that can be used include, but are not limited to, plot or point cruising, mark and tally, mark and tally with a cruise, etc.
- 7) HCV-Managed stands will focus on promoting unique and longer lived species, larger diameter stems, and more time between cutting cycles. Care should be taken to address these objectives, while maintaining a working forest, on a case-by-case basis.
- 8) Any deviation from standard silvicultural practices and or internal policies will be documented on the Harvest Planning Form.



Timber Sale Administration

- 1) Timber Sales should have a pre-work meeting prior to the start of harvesting operations. This can be forgone if the logger has a history of quality performance.
- 2) Site visits and sale inspections will be at a frequency that fits the situation.
- 3) Should logger performance be outside of contract compliance, they will receive two documented verbal warnings and one written warning before they can be removed from the sale at the forester's discretion.
- 4) On scaled sales, the Sale Administrator will be responsible for collecting trip tickets and making sure there are enough trip ticket books available.
- 5) Any necessary timber sale accounting, final inspections, and close out procedures will be done in a prudent and efficient manner.
- 6) After the sale closing an update of all stand attributes in the GIS to reflect post-harvest conditions and a date for the first post-harvest recon will be entered. Post-harvest recons should be three to six years after the completion of harvesting operations, unless the stand has been rotated and even-aged natural regeneration is expected. Then the first post-harvest recon can be six to twelve years post-harvest.

Supporting Documents

- 1) GIS Database
- 2) Timber Sale Recon Report & Harvest Plan Forms
- 3) BCPL Timber Sale Folder Checklist
- 4) State of Wisconsin Board of Commissioners of Public Lands Timber Sale Contract
- 5) BCPL Forestry Services Hiring Contract
- 6) Pesticide Use Form

Annual Reporting

- At calendar year-end (December 31) a snapshot of the STAND layer attributes will be downloaded to the Excel "StandStats" Spreadsheet for analysis and reporting. One of the primary reports will be the "Property Report" depicting an analysis of value for each of the BCPL properties. These reports along with the exported Stands layer will be archived for future reference.
- 2) At fiscal year-end (June 30) A report showing the acreage and value of timber sold during the fiscal year, along with a companion report to show the acreage and value harvested will be created. These reports will be summarized and discussed in the BCPL biannual report.