

Forestry

DNR DIVISION OF FORESTRY STRATEGIC DIRECTION 2020-2024

STATE FOREST PROPERTIES

MISSION

"It is the public policy of Indiana to protect and conserve the timber, water resources, wildlife, and topsoil in the forests owned and operated by the Division of Forestry for the equal enjoyment and guaranteed use of future generations. However, by the employment of good husbandry, timber that has a substantial commercial value may be removed in a manner that benefits the growth of saplings and other trees by thinnings, improvement cuttings, and harvest processes and at the same time provides a source of revenue to the state and counties and provides local markets with a further source of building material."

The mission of the Division of Forestry Properties Section is:

To manage, protect and conserve the timber, water, wildlife, soil and related forest resources for the use and enjoyment of present and future generations, and to demonstrate proper forest management to Indiana landowners.

INDIANA CODE

IC 14-23-4 State Forest Management

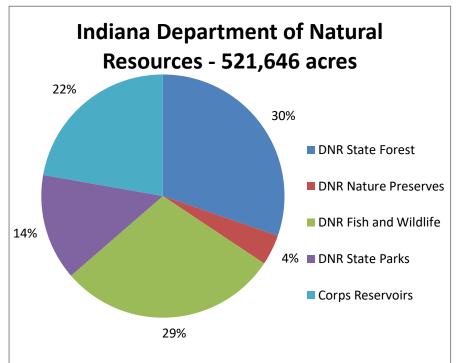
VISION

We, the employees of the property section of the Division of Forestry, will demonstrate sound forest stewardship in our management of the Division's public forest lands. These lands will provide forest products, outdoor recreation, educational opportunities and other benefits, both tangible and intangible. We will conserve, protect, enhance and make available the varied forest resources of state forest properties for the present and future citizens of Indiana.

BACKGROUND

The Department of Natural Resources (DNR) manages a total of 521,646 acres for the benefit of Indiana citizens. Each Division has its unique mission which collectively serves the Department's mission.

Division of Forestry lands, approximately 158,300 acres, are 30% of the total DNR ownership. The Division of Fish and

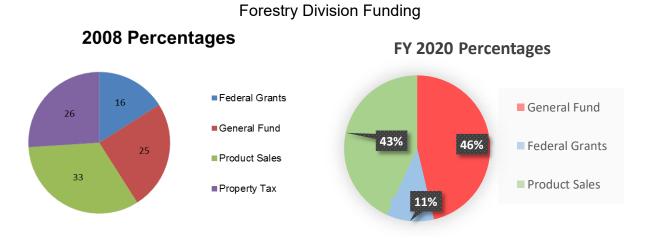


Wildlife manages 21 Fish and Wildlife Areas for a total of 153,000 acres. These lands are intensively managed for improved wildlife habitat (both game and non-game) and for hunting and fishing opportunities. The Division of Nature Preserves manages 176 nature preserves that total more than 19,970 acres to maintain viable examples of all of Indiana's natural communities. These lands are protected or managed using natural forces and minimal levels of manipulative management. The Division of State Parks manages 24 state parks and 9 reservoirs totaling 190,376 acres of land for public recreation, fishing and hunting opportunities.

The Indiana state forest system consists of 14 State Forests and 2 State Recreation Area properties containing 158,300 acres. This system was started in 1903 and was one of the first in the country. The state forests were initially created to restore eroded and worn-out lands when small subsistence farms began to be abandoned early in the century. Early state forest management focused on reforesting eroded areas, creating wildlife habitat, demonstrating good forest land management, providing public recreation, and conserving forest resources. The Division of Forestry is currently the only DNR Division that fully incorporates an active timber resource management program along with the management activities found within the other DNR landholding divisions. The Division also provides periodic assistance to other DNR lands in terms of forest health, resource management and utilization of trees and forest resources to achieve conservation goals.

This early philosophy is still a major part of our current management system. The state forests are managed for multiple uses and multiple benefits. The state forests provide outdoor recreation ranging from camping and hiking to hunting and fishing. The state forests conserve and protect all the forest resources - water, wildlife, herbaceous plants,

archaeological sites, historic features, geological features, soil, and forests. They serve as research and demonstrations of good forest stewardship for the public and help train loggers and forest landowners in proper timber harvesting methods and other sound management practices.



Forestry Division funding comes from a variety of sources. A majority comes from sources dedicated to the Division of Forestry, primarily sales of nursery and forest products and user fees. Approximately 35.5% of funds come from the State's general fund. The historic forestry property tax was lost in 2008 as a primary revenue source supporting Division programs. The federal grants are used for private landowner assistance, fire and community and urban forestry programs; no federal funds are used for management of State Forest Properties.

Revenue from state forest timber sales and recreation receipts go into the state forestry fund. Fifteen percent (15%) of the net receipts from timber sales go to the general funds of the counties in which the timber sales occurred. Fifty percent of the county receipts are available to local Volunteer Fire Departments that have cooperative fire agreements with DNR up to a maximum of \$1,000 per fire department. The remaining funds are allocated at the discretion of the county.

The Property Section will continue to follow this historic path of resource conservation, protection, and education in the future. The direction of this path will be built on the section's primary program directions in the form of goals and action items. The following goals and action steps are presented in no priority order but do represent the Property Section direction for the planning period.

GOALS and OBJECTIVES

Forest Resource Stewardship:

Goal # 1: Actively manage State Forest holdings with professional leadership in accordance with accepted scientific and forest certification standards for traditional and sustainable forest goods and services, including timber, wildlife habitat and historically

or ecologically significant resources. The Division will also consider the potential for climate change to affect forest resiliency and opportunities to incorporate climate change considerations into decision making.

- Professionally manage and produce sustainable forest products consistent with internationally recognized forest certification (sustainability) standards. Maintain State Forest certifications with Sustainable Forestry Initiative® and the Forest Stewardship Council® (FSC®-C012858) programs and continually upgrade management practices to meet evolving certification standards.
- Maintain annual timber harvest at an average of +/-12 million board feet. Current average annual growth on state forests is estimated at 24,000,000 board feet, this represents an annual harvest approximating 50% of annual growth.
- Implement forest restoration measures in conjunction with timber harvest and forest resource management programs.
- Maintain and enhance the invasive species best management program on State Forest lands.
- Increase efforts to locate and target treatment of invasive exotic species on state forests utilizing mechanical or chemical methods. Eliminate kudzu from state forest properties and, emphasize control of tree, shrub and vine species of greatest concern, including: *Ailanthus*, bush honeysuckle, autumn olive, callery pear (Pyrus calleryana), privet, burning bush, oriental bittersweet and other emerging threats.
- Assist the 'Indiana Tree Project' with expressed goal to plant 1 million trees by providing sites for tree planting and reforestation.
- Maintain a continuous forest inventory system that provides statistically significant resource data at the property level; measure 20% of field plots each year through the planning period (100% of plots visited by end year five.) Utilize this data for forest health assessments, review of harvest levels for long term sustainability and progress towards achieving a balance of forest structure and age classes.
- Work toward a long-term balance in forest stand ages and structure with 10% of forest acreage in or developing older forest conditions (e.g. nature preserves and high conservation forests) as well as 10% in early successional, young forests (0-20 years old). Many areas within the state forests have been designated for the development of older forest conditions, such as nature preserves and research sites. A similar level of commitment to the equally important establishment of early successional habitat is not currently available on state forest properties.
- Continue to use the uneven-aged system as the primary silvicultural system on the state forests while increasing the use of shelterwood and other even aged regeneration practices and management prescriptions. Where appropriate, strive to successfully regenerate oak-hickory forests and provide early successional conditions. This is to improve habitat diversity and address imbalances created under past state forest management which has resulted in a high percentage of

forest moving toward mature, closed canopy conditions at the expense of important early successional (young forest) habitat and the many species of wildlife which utilize and rely on young forest conditions.

- Continuation of the forestry research/demonstration area on Yellowwood/Morgan-Monroe State Forest (Hardwood Ecosystem Experiment - HEE). The research will focus on the effects of forest management (silviculture) on oak regeneration, water quality, forest sustainability, forest wildlife interactions and endangered species concerns.
- In the area of climate change, DoF continues to review opportunities to sequester carbon through forest growth and wood utilization. Also, DoF will rely on land grant universities to provide the best scene to manage for future forest conditions and species mixes.

Goal # 2: Conserve and manage wildlife habitats, cultural resources and high conservation value areas.

- Implement and monitor a State Forest Habitat Conservation Plan for the federally endangered Indiana bat and the proposed listing of the northern long eared bat with the goal of obtaining an Incidental Take Permit from the U.S. Fish and Wildlife Service.
- Update the wildlife habitat management plan for each property which will include management of T&E species utilizing the Division of Forestry wildlife specialist.
- Continue to identify and designate forest types and exemplary communities that have High Conservation Values.
- Continue to review projects by the DoF Archaeologist to conserve and avoid significant impact on cultural and archaeological resources.
- Continue to review the heritage database in formulating forest management decisions, or conducting forest management operations, and avoid impacts to ecologically significant resources.

The Division of Forestry has stewardship responsibility of 158,300 acres of Indiana woodlands dedicated as 14 State Forests and 2 State Recreation Areas. These woodlands are managed under a multiple-use-multiple-benefit philosophy to provide traditional and sustainable working forest benefits to the Hoosier State. This management has been recognized by two international forest certification programs as meeting their stringent forest certification standards since 2007 (Forest Stewardship Council and Sustainable Forestry Initiative Programs).

State Forests make up approximately 30% of the DNR land holdings and are the only holdings implementing significant levels of forest management and other forest product utilization. To insure sustainability and demonstrate stewardship of the State's natural resources, the Division of Forestry implements scientific principles of silviculture and forest resources management.

Forest resource inventories have documented current timber volume of 1.1.53 billion board feet on 58.5 million trees. Additionally, tree volume growth is adding 24-30 million board feet annually to this total. Timber harvest levels are annually reviewed based on the latest data.

Hardwoods have been recognized as Indiana's #1 cluster of the state's agriculture economy- out pacing well known sectors, including corn, soybeans and pork (A Strategic Plan of Indiana's Agricultural Economy - 2005). State Forests contribute positively to Indiana agriculture economy by providing wood harvested from well managed forests in accordance with forest certification standards. These wood products enter the state, national and international markets as 'green certified' wood products.

State Forests will continue to provide research, recreation and other opportunities compatible with overall resource management goals.

Land Ownerships and Acquisitions:

Goal # 1: Conserve important lands through strategic acquisitions, active resource management and boundary line management. Acquire 1,500 acres of lands of strategic and/or ecological importance to the long-term conservation of Indiana's working forests in partnership with non-governmental organizations, the President Benjamin Harrison Conservation Trust Fund, the Indiana Heritage Trust, and State Forest timber revenue. The Division will continue to secure the integrity of all ownerships through boundary management and due diligence.

- Review land offerings and identify lands of strategic and ecological importance for potential acquisition only from willing sellers which will contribute positively to the State Forest system and to conservation of the working forest base of Indiana.
- Identify State Forest land holdings that are non-essential to the DNR mission for possible sale. Proceeds to be dedicated to strategic State Forest acquisitions.
- Identify and pursue lands for potential trade to reduce ownership fragmentation and improve land manageability, within the agency, and with private land-owners and non-governmental organizations.
- Protect the integrity of State land ownership through an accelerated program to document and mark State Forest property lines and dedicated efforts to resolve boundary conflicts and land encroachments.

Lands acquired since 1903 to build the State Forest system have created a patchwork of ownerships, including large blocks, irregular boundaries, and isolated holdings. Increasingly, the Division of Forestry is approached by nearby landowners offering to sell their lands to be part of the State Forest system. Many of these would alleviate ownership and boundary issues and conserve important forest lands. Unfortunately, nearly all offers are declined due to lack of funding for such purchases.

Management of the 500+ miles of State Forest boundaries with private landowners continues to challenge the agency. Private land sales and parcelization is projected to increase significantly in the coming decade (Birch1996, and Sampson and DeCoster 2000). Many boundaries remain unmarked, and many encroachments unresolved or undiscovered. Greater attention to boundaries is an overall concern for the agency.

State Forest resource management is planned and implemented with professional leadership to meet or exceed forest sustainability standards and practices. DNR continues to be recognized as meeting the stringent forest certification standards of the Forest Stewardship Council and Sustainable Forestry Initiative.

Through strategic acquisitions, improved boundary management and continued implementation of professional forest management the forests of Indiana are better positioned for sustainability, better serve the citizens of Indiana with recreational opportunities and greatly increase the integrity of lands owned by the State of Indiana.

State Forest Recreation:

Goal # 1: Improve State Forest recreation user experience by investing in infrastructure to bring water, wastewater treatment, camping sites, trails, education centers, lakes and other related capital assets up to market expectations with additional capital and preventative maintenance funding (Gov. Holcomb's 2019 Next Level Agenda: Maintain and Build the State's Infrastructure (trails)).

- Develop a system-wide recreation plan that provides an array of recreational opportunities and levels of development from primitive to modern, based in part on the results of user opinion surveys, and begin implementation.
- Identify state forests that have the greatest potential to provide improved forestbased outdoor recreation opportunities in current and underserved markets.
- Seek and provide necessary funding (an additional \$5 million in capital and \$2 million in preventative maintenance annually) to make the needed infrastructure improvements, correct deficiencies of high hazard dams, restore lakes, and improve user safety and guest experiences.
- Seek opportunities for watershed level conservation treatments to address lake sedimentation issues, with initial focus on the Starve Hollow Lake watershed.
- Evaluate the integrity of dams and water control structures on State Forest holdings and implement repairs as needed.
- Evaluate sediment accumulation at Ferdinand Lake, Wyandotte Lake and other State Forest lakes, and lake restoration projects to remove the accumulated sediment and conservation measures to address the primary sources of siltation.
- Continue working with the Division of Fish and Wildlife in managing fish populations, fish stocking and aquatic vegetation.

- Assess current archery ranges and add new modern shooting ranges at Clark and Morgan-Monroe State Forests; bring existing ranges up to appropriate standards for the facilities and evaluate the potential for additional facilities at other State Forests.
- Enhance State Forest campground facilities through upgraded restrooms, campsites, and camping cabins to better meet the expectations of today's outdoor recreationists. While also providing for primitive camping experience opportunities within State Forest campgrounds.
- Update Deam Lake State Recreation Area's public wastewater utility.
- Undertake a system wide initiative to correct recreation trail condition deficiencies, including a review of State Forest recreation trail management protocols and standards.
- Selectively open caves on State Forests which meet environmental protocols for the protection of endangered bat species on a user/permit basis.
- Provide enhanced and additional cross country/backpack trails and backpack camping opportunities for hikers, horseman, and mountain bikers. The goal will be to have a backpacking trail at 4-6 State Forests by the end of the planning period.
- Emphasize cross country trail connector from Deam Lake SRA to Clark State Forest recreation areas.
- Expand or improve mountain bike opportunities at select forests (trails and courses).
- Improve the hunting experience on state forests by improving and increasing access to less accessible portions of properties.
- Provide updated maps and guides to hunters that identify recent harvest locations and dedicated early successional habitat management areas on state forests where high quality game habitat and improved hunting success might be found.
- Modernize DNR Forest Learning Centers and programming at key State Forest and Recreation Areas.
- Rebrand and improve signage and promotion of recreational facilities and opportunities.
- Improve design and engineering timelines to accommodate project completion dates.

State Forests seek to provide quality forest-based recreation and learning opportunities which reflect traditional family and conservation values, such as cross-country trails, shooting ranges, healthy lakes, forest education centers, and family camping (primitive to modern).

Over the past years, the Division of Forestry has worked to stabilize the decaying infrastructure through in-house maintenance and improvement projects.

The market and demographics for outdoor recreation continues to shift at a pace faster than State Forest offerings have adapted previously. The demand for and expectation of safe and secure campground facilities with modern comforts has significantly supplanted the interest for more primitive camping experiences. Modernization of campground facilities and improvements to aging dams, reservoirs, lakes and trails are needed to meet the expectations of outdoor recreationists, and to draw people out of their homes to enjoy the great outdoors. While enhancing and modernizing facilities in general, State Forests will continue to offer unique and traditional outdoor experiences for hunters, firewood cutters, anglers, backpack hikers and the primitive camper.

Improvements in hunter access benefit both the hunting experience of state forest users and the health of our forests, particularly in the case of deer hunting. Hunting is the most effective deer population management tool available, and this is especially important on managed forests where high quality habitat is abundant. Investment in hunter access is a "win-win" situation for hunters and state forest properties alike.

New recreational facilities have not been added to the state forest system in over twenty years. Most properties have limited water access, few additional new trails, and no new comfort stations, improved camping sites, or access roads. Targeted investment in infrastructure is projected to double recreation income within five years. Appropriate funding could add new or improve recreational opportunities at Yellowwood, Morgan-Monroe, Jackson-Washington, Salamonie, Owen-Putman, and Ferdinand State Forests.

Goal # 2: Provide forest-based recreational opportunities on appropriate State Forest lands. In particular, the development and deployment of primitive forest based recreational cabins.

- Continue to develop the DNR's working relationship with the Indiana Department of Correction (DOC) in the design and construction of log camping cabins.
- Identify other State Forests where these cabins can add value to the property and to Hoosiers' outdoor experience.
- Design and build 2-3 bedroom log cabins that can be placed on appropriate properties that have the necessary water and waste water services. (e.g. Deam Lake)
- Purchase necessary harvesting and sawing equipment to expand the concept to one or possibly two more DOC facilities.
- Design and construct cabins using 'green certified' materials harvested from the State Forest lands where possible.
- Install 6-15 camping cabins each of the next four years and provide easy access via on-site or web-based cabin reservation system.

The Indiana State Forest system is managed by the Division of Forestry under a multiple use- multiple benefit philosophy, including sustainable management and utilization of timber resources, research, watershed protection, nature study and outdoor recreation. State Forests and Recreation Areas offer over 20 campgrounds with over 500 campsites, unique lodges and 140 lakes along with 500 miles of trails and over 150,000 acres of woodlands to enjoy and explore.

The Division piloted the camping cabin project at Deam Lake State Recreation Area, which is part of Clark State Forest, in 2012. The first few years experience with this new recreational opportunity exceeded expectations. This success was replicated at Forestry's Starve Hollow State Recreation Area in 2013 and Greene-Sullivan State

Forest in 2014. Further expansion at other properties should result in similar return on investment.

Beyond the pure cost recovery, customer response is very positive. Support from DOC has been nothing short of exceptional. DOC views this partnership as a way to provide educational opportunities in the construction trade, a way to build self confidence and a way to build teamwork spirit for the offenders.

Goal # 3: Improve security and fiscal position of the State Forest properties in relation to offered recreation opportunities and user experiences. These includes general improvement of facilities and the development and implementation of entrance gates and/or pass system use for those accessing and utilizing State Forest facilities and recreational opportunities.

- Currently three State Forests have fee use areas where all or part of the forest is
 accessed by a gate pass (Deam Lake, Starve Hollow, and Ferdinand State Forest).
 Going forward, the Division would expand the fees use areas to other State Forests
 and install gates, pass systems or new technologies to allow State Forest passes to
 be purchased remotely or on-site using technology similar to ATMs.
- Identify those State Forests which will warrant the investment and research the return of investment.
- Host public meetings to discuss changes and the opportunities that the expansion of the gate process will have on recreational opportunities.
- Acknowledge that this fee use will apply to all users of the State Forest.
- Develop a strategic plan by property of how pass revenue will be used to enhance outdoor recreation opportunities.
- Changing demographics, user feedback and anecdotal evidence indicate that State Forest visitation and camping stays would increase if improvements could be made, additional opportunities existed, and adequate security was provided.
- Provide for staffing and systems necessary to achieve quality recreational experiences and facility security.

A number of State Forests are underdeveloped given their close proximity to major metropolitan areas and potential to provide recreational opportunities to Hoosier citizens. Currently, the Division's main dedicated funding source comes from timber harvest proceeds. Presently, timber revenues provide significant financial subsidies to recreation programs and non timber programs of the Division of Forestry. The division receives limited or no revenue from hunting and fishing licenses, on-line gate fees, or most recreational opportunities enjoyed by sister divisions such as the Divisions of State Parks, and Fish and Wildlife. An expanded gate and pass system provide increased revenue, along with increased safety and security for property visitors and facilities.

The Division of Forestry has sought and will continue to seek all available avenues to provide great outdoor recreational opportunities. Our long-term goal is to become less

reliant on appropriated State dollars and increasingly focused on customer needs, which will lead to increased recreational revenue.

Communications and Administration:

Goal # 1: Provide information and educational opportunities to the public and develop an improved process to determine public attitudes, needs and desires.

- Improve State Forest interpretive programs and facilities, with particular emphasis on opportunities at Deam Lake, Starve Hollow, and Morgan- Monroe State Forests.
- Utilize existing and create additional methods to solicit meaningful input from Indiana landowners or residents.
- Provide access to state forest management procedures, management plans, harvest plans, and the results of monitoring activities to the public via internet, and update regularly.
- Conduct (or fund) a user/visitor survey at one property each year through 2020 to determine the number of users, nature of use, extent of visit, opinions about the quality of facilities, needs and expectations.
- Continue open house and outreach events at properties in a manner and location convenient and of interest to the public.
- Improve State Forest communications by providing quality property maps for users, good neighbor newsletters, and enhanced web tools.
- Provide opportunities to the public to offer input on identifying, designating, and managing High Conservation Value Forests.

Goal #2: Evaluate and modify administrative procedures and organizational structure to improve management efficiency and effectiveness.

- Maintain high quality staff of professional foresters and resource managers through hiring practices and training programs. Staff the number of DoF field foresters necessary to insure that timber and other forest resource management activities remain at the highest quality possible by upgrade or reclassification of existing DoF positions.
- Implement the training plan for professional property section staff as necessary to assure that professional staff members meet the continuing education requirement of the Society of American Foresters (SAF) Certified Forester standards and explore (and implement as available) financial or other incentives to encourage professional staff to become SAF Certified Foresters.
- Staff recreational areas appropriately to provide safe, clean and secure facilities for property guests, by reallocating positions, budgets and seasonal work assignments.
- Ensure that recreation staff receives training and certifications needed in recreation management, guest services and facility maintenance to provide desired level of excellence.
- Expand and enhance volunteer opportunities at all State Forest and Recreation Area properties, including expanded campground host opportunities, adopt-a-trail programs and others.

• Seek, secure and provide funding necessary to implement and operate enhanced recreation and resource management programs.

Goal #3: Implement a multifaceted marketing program to support the science-based forest management program on the state forest lands.

- Complete an updated statewide opinion poll of forest management.
- Develop a social media program to convey to Indiana residents the value of sciencebased forest management.
- Develop a system wide outreach program to get residents more engaged and out into the state forests.

PRIVATE FORESTLANDS MANAGEMENT

MISSION

Indiana's Private Forestland Program promotes the stewardship of Indiana's privately owned forests by providing forest management information and professional services to forest owners and others to insure forest benefits, both tangible and intangible for present and future generations.

We work cooperatively with private woodland owners, citizens' groups, governmental agencies and private sector resource managers to accomplish on-the-ground forest management for the benefit of the landowner, the forest resource and the citizens of Indiana.

INDIANA CODE

IC 6-1.1-6 Classified Forest & Wildlands Law 312 IAC 15 Classified Forest & Wildlands Rules IC 14-23-1-1 Duties of the Department (Forestry) IC 6-1.1-4-13 Agricultural Land

KEY ISSUES AFFECTING INDIANA'S PRIVATE FOREST

- Intergenerational transfer of land.
- The lack of management or inappropriate management of forest resources.
- Policies that encourage or accelerate forest losses through development and the subdivision of larger tracts into smaller tracts.
- Inadequate incentives to retain forests, restore forests, and manage forests for the goods and services provided.
- Inadequate public understanding of the economic potential and proper management of Indiana's forests.
- Invasive plant, pest and animal species, which threaten forest health and productivity.

- Inadequate coordination of public and private efforts to address the sustainability of Indiana's forests.
- Access to reliable forest owner assistance programs, and resource management incentives and service providers. This includes shortage of trained foresters.
- The high cost of owning and managing forests as a long-term investment.

GOALS and OBJECTIVES

Goal # 1: Retain Working Forests at Current Level.

- Strengthen the Classified Forest & Wildlands Program (CFW) by adding value for participating counties and landowners. The Classified Forest & Wildlands program provides property tax incentives to retain and manage forest lands. It is Indiana's primary program encouraging landowners to keep forests on the landscape. Participating landowners receive a property tax reduction in return for following the program's land conservation requirements. To date 757,000 acres on 15,000 ownerships are enrolled.
 - Give preferential access to cost share incentives for land management.
 - Continue to enroll forest and natural resource lands at a target rate of 12,000 acres/year.
 - For CFW enrollment, target large tracts and forests.
 - Cost recovery of district forester time spent on stewardship/reinspections, cost-share and practice plans. Since 1919, Indiana Code (IC 14-23-1-1) has directed the Division of Forestry to charge landowners for services related to forest management. The Division will work with partners and interest groups to develop a fee structure to satisfy the requirements of the law to insure funding for the administration of the Classified Forest & Wildlands Program and the private lands program overall.
 - Maintain CFW certification with the Forest Stewardship Council® (FSC®-C071226)
- Design and institute improvements to CFW program administration. The program's success has increased the administrative aspects of the program. Modernization of the program's administrative aspects is needed to keep the program sustainable, certified and of high integrity. Modernization is also needed to reflect the changing land ownership patterns and taxing structures.
 - Update support and administrative aspects of the program through law, rule and policy changes to reduce the administrative burden on landowners, DNR managers, and county officials, while maintaining high program integrity.
 - Of particular concern are land splits, enrollment and withdrawal procedures, and the problem cases brought in by 2007 merger of the Classified Wildlife Habitat (CWH).
 - Merge multi-tract ownerships to reduce report requirements.
 - Provide additional staffing to handle increased work due to new enrollments.
 - Reduce program administrative time by field foresters.
- Long term conservation agreements with forest owners can provide needed options for long term retention and care of important forests.

- Collaborate with the land trust community to conserve forestland with working forest conservation agreements.
- Work with Purdue Extension and other partners to bring estate planning programming and materials to forest owners.
- Local planning and public policies significantly affect the retention and stewardship of Indiana's private forestlands.
 - Encourage local planning and zoning officials to give due consideration to the full range of values provided by fully functional working forests.

Goal # 2: Accelerate the Restoration of Indiana's Private Forests to Insure Long Term Forest Health. Provide landowners with incentives to accelerate management of working forests, especially on Classified Forest and Wildland tracts. The health and productivity of Indiana's private forests impacts not only the current landowner- it also impacts future owners, neighboring owners, communities and the public at large. However, only a small percentage of Indiana landowners actively manage their forests.

- Insufficient financial and other incentives to undertake long term forest management and restoration are often cited as a reason for inaction.
 - Secure permanent and significant annual funding to the Indiana Woodland Restoration Program and Forest Restoration Fund. Funds would provide cash incentives for: timber stand improvement, reforestation tree plantings, forest erosion control and best management practices (BMPs), invasive plant and pest species control, and other forest restoration activities.
 - Work to secure increased funding for forestry components of USDA conservation.
- Accelerating the restoration of forests on critical non-forested areas can help address water pollution concerns in water supply reservoirs, unhealthy streams and wetlands. Restoration can also enhance wildlife habitats and mitigate air quality concerns. The environmental benefit to society of restoring forests is immediate and long lasting. However, to the landowner restoration can be costly and the economic payoff not seen in their lifetime. Additional incentives are needed to accelerate the rate of forest restoration on important lands and to restore forests where loss mitigation is required.
 - Establish incentives and enhance the Indiana Forest Restoration Fund with significant dedicated annual funding to accelerate the restoration of forests on targeted lands.

Goal # 3: Protecting Forest Resource Sustainability & Improving Forest Resource Awareness.

- Improved access to forestry knowledge and technical information. Forest owners often cite access to forestry information as a limiting factor in their ability and willingness to undertake forest conservation projects on their land. Changing owner demographics and new technologies have changed the way information is accessed. Programs must recognize and adapt to these changes.
 - Develop and utilize an expanded series of 'demonstration forests' in cooperation with private landowners, conservation organizations, community forests and others to serve as examples of good forest management.

- Assist in the development of a forest mentor program to utilize knowledgeable, enthused landowners and specialists to reach new forest owners.
- Improve access and usability of web-based information.
- Continue publication of the Woodland Steward, expand its distribution and improve its web accessibility.
- Improve materials related to the economics and investment aspects of forest ownership.
- Work with US Forest Service, Purdue University Extension, American Tree Farm System and other organizations to insure regular and adequate programming and research aimed at issues pertinent to Indiana's forest owners.
- Forestry Commerce web site Improving access to the forest marketplace. Landowners, natural resource managers and the forest industry offer many goods and services. They also provide a market for forest products. However, difficulties finding and accessing these services and markets hampers forest conservation efforts and limits the economic vitality of the forest products sector.
 - Improve the use of Forestry Exchange web site to advertise timber available, consulting services, forest products material wanted, services needed, etc. This site would facilitate access to technical assistance and business networking that will enhance Indiana's forest related industries and services.
- Improve Landowner Access and Scope of Forestry Assistance. The vast majority of Indiana's 100,000+ forest owners receive no professional forestry advice to guide the management of their land.
 - Develop innovative approaches to reach more landowners, especially large landholdings and new landowners.
 - Increase the number of public and private foresters in the marketplace by 10%.
 - Review the Division of Forestry structure and make improvements needed to effectively deliver and administer its programs.
 - Boost the integration of new technologies to improve program delivery. Make these new resources available to private sector forestry businesses and NGOs.
- Invasive animals, plants and pests impact the health and sustainability of Indiana's forest resources.
 - Develop with conservation partners a statewide invasive species management strategy.
 - Provide landowners and land managers with the training, tools and technical assistance to assess forest health on their lands and region.
 - Provide landowners with useful and sound information on the identification, impact and treatment of invasive species of concern.
 - Work with Fish & Wildlife agencies to develop policies and tools to manage wildlife populations at a level to support forest sustainability (e.g. deer, turkey, feral hogs).

FIRE PROGRAM

BACKGROUND

Adaptation will be key to the success of the DNR Fire Program. Incidents are becoming more complex, which in turn demands refined performance in each of the key program areas. The demand must be weighed against fiscal ability and efforts need to be delivered efficiently in order to maximize the benefits that ultimately affect the citizens on Indiana. The model under which the DNR fire program operates incorporates small staff designed to maximize the efforts of rural/volunteer fire departments and other stakeholders. The following goals should be considered to provide for the success of the program.

INDIANA CODE

- IC 14-23-5 Forest Firefighting
- IC 14-23-6 Volunteer Forest Firefighters
- IC 14-23-6.5 Indiana Rural Fire Protection Initiative
- IC 14-23-7 Emergency Fire Hazard Areas

GOALS and OBJECTIVES

Goal # 1: Operational and Technical Assistance Delivery.

- Utilize cross-trained personnel within the Division of Forestry and possibly other Divisions within DNR with greater frequency and efficiency to provide fire suppression assistance during above-normal fire season activity.
- Continue to encourage rural/volunteer fire departments to maintain cooperative mutual-aid agreements with DNR Fire Headquarters.
- Work with rural/volunteer fire departments to adapt and/or acquire firefighting equipment that is capable of efficiently or effectively battling wildfires in Indiana.
- Continue to focus DNR Fire Headquarters on complex prescribed fires on Department managed lands.
- Investigate revenue generating prescribed fire operations such as those initiated with success at the Crane naval facility.
- Train and enable DNR properties to complete low complexity prescribed fires independent of direct DNR Fire assistance.
- Develop an equipment replacement schedule that is sustainable to maintain peak operational preparedness and execution.
- Take advantage of any staffing level increase opportunities that may arise provided a sustainable funding source can be identified and established.
- Develop a Prescribed Fire Council within the state incorporating all state and federal agencies that utilize prescribed fire as well as non-governmental organization (NGO's) that share similar land management missions.

• Effectively promote positive publicity with regard to the effectiveness of the operational work that is accomplished.

Goal # 2: Rural/Volunteer Fire Department Assistance.

- Refine the combined fire department inspection of both Volunteer Fire Assistance (VFA) and Fire Firefighter Property/Federal Excess Personal Property (FEPP/FFP) equipment.
- Investigate utilization of VFA funding to facilitate transport of quality equipment made available through FEPP/FFP for strategic placement at rural/volunteer fire departments.
- Investigate multi-state collaboration in the acquisition of FEPP/FFP equipment within the Big Rivers Forest Fire Management Compact for mutual benefit.
- Seek authority for increased screening of USDA excess property (including USFS, NRCS, etc.) for distribution to rural/volunteer fire departments with the intention of improving and increasing operational capacity, efficiency and safety.
- Encourage fire departments to turn in FEPP equipment/apparatus that has become a preventive maintenance burden.
- Streamline the disposal of FEPP through scheduled sales continuing to utilize the established online sale process.
- Effectively promote positive publicity with regard to the increased capacity and success of the fire department assistance related programs.

Goal # 3: Training and Prevention Program Delivery.

- Continue the "academy" style delivery of fire National Wildlfire Coordinating Group courses that are pertinent to improving fire suppression and fire management capacity within the state of Indiana.
- Refine fire training programs offered to rural/volunteer fire departments with the focus on successful initial attack strategies and tactics based in safety, effectiveness and efficiency.
- Partner with groups such as Indiana Fire Chief's Association or Indiana Volunteer Firefighters Association to assist in developing delivery of effective wildland fire training to fire departments.
- Continue to partner with state universities to develop students with regard to fire ecology, fire management and operational insight.
- Foster inter-agency support and cooperation in promoting sound fire prevention messages during times of increasing fire danger.
- Continue to focus delivery of the fire prevention message via Smokey Bear and other facilitative tools to school-aged children.

COMMUNITY AND URBAN FORESTRY

MISSION

The Division's Community & Urban Forestry (CUF) Program provides statewide leadership to increase public awareness of the value of trees and associated natural resources in urban areas. We assist Indiana cities, towns, and non-profits and encourage resident involvement in protecting, expanding, and improving our community forests.

GOALS and OBJECTIVES

Goal # 1: Promote awareness of urban forestry issues. Only 11.6 percent of Indiana's 567 cities and towns participate in the Tree City USA program. Tree City and Tree Campus participation is a tremendous opportunity to raise awareness and increase broad based support.

- Promote the Tree City USA program utilizing new technologies.
- Empower and utilize partners to promote the Tree Campus program.
 - Connect Tree City and Tree Campus in municipalities who have capability of dual participation.
 - Advance the participation of Tree City and Tree Campus to the establishment of sustainable urban natural resource programs utilizing urban forestry.

Goal # 2: Protect, enhance, and expand urban forests and related natural resources. Over 70% of Indiana's population now lives in urban areas. This urbanization impacts the amount and health of the urban forest. Urban trees benefit communities in many ways, including reducing energy consumption, reducing pollution and soil erosion, and increasing economic prosperity of all communities. For these reasons, the Indiana CUF Program promotes the management and increase of the urban forests in Indiana.

- Encourage and assist Indiana communities in developing comprehensive urban forestry programs.
- Increase the availability of all types of urban forestry technical assistance.
- Increase tree canopy cover in urban, suburban, and ex urban areas to complement strategies identified from the State Resource Assessment.
- Develop Best Management Practices for Urban Forestry.
- Assess the current condition of Indiana's urban forests on a periodic basis.
- Develop new and provide existing tools to empower the development and adoption of comprehensive urban forest ordinances at the municipal and county levels.
- Support and cooperate within the parameters of the State Strategic Plan to encourage native plantings, reduce the use of exotics, and control of invasive plants in urban woodlands and edges.

Goal # 3: Improve the communication of urban forestry Best Management Practices (BMPs). Urban forestry is a field with rapidly changing technologies and new information. By providing education and opportunities to share information, and new research technologies, urban forestry practitioners and advocates will be able to increase their effectiveness.

• Communicate Indiana urban forestry best management practices.

- Promote public knowledge of and use of qualified/certified tree care professionals and ANSI standards when using professionals in the arboriculture or nursery trades.
- Connect to and provide technical training and other assistance using BMP guidelines for urban forest management for all interested customers.
- Provide training, access to training, and current educational materials for urban forestry and arboricultural practices.
- Support research efforts and communicate with researchers to learn about innovations and new practices.
- Disseminate current research information in an understandable manner to appropriate audiences.

Goal # 4: CUF and its partners will seek additional sources of urban forestry funding. CUF and its partners can no longer rely solely on funding from the USDA Forest Service Northeastern Area. By seeking and securing other sources of monetary and material funding, CUF and its partners will raise awareness of the importance of the urban forest and be able to expand programs statewide.

- Seek non-traditional funding for specific initiatives.
- Increase funding stream for the state program and its partners.

Goal # 5: Encourage and facilitate communities and organizations to develop and maintain self-sustaining Urban Forestry Programs. Grant programs are important in providing seed money to help communities initiate and develop urban forestry programs. Communities must be able to develop reliable local support to fund a successful long-term effort.

- Encourage communities and organizations to develop self-sustaining urban forestry program defined by Best Management Practices for Urban Forestry.
- Promote and encourage local governments to place the urban forest alongside other community infrastructure and include urban forestry in the budget.
- Empower and encourage partners to inform and educate state, local, and county law makers on the importance of urban forests and the role of public funding.
- Investigate and promote the use of funding from other "local" sources for funding urban forestry projects.

Goal # 6: Promote networking and partnership building among public and private entities. Government agencies, businesses, utilities, non-profit organizations and citizen groups are involved in urban forestry issues. Working to establish links will generate interest and support for urban forestry. This will enable those involved in the partnerships to exchange expertise, ideas, and support.

- Develop shared mission between CUF and current and potential partners.
- Identify and develop CUF and partner shared needs and shareable partner list to fill need.
- Expand CUF communication base to move conservation groups and land trust nonprofits toward at least one common urban forestry natural resource goal.
- Improve IDNR interagency communication regarding goals, grants, projects, and shared staff expertise.

CONSERVATION EDUCATION

MISSION

The Forestry Education Program facilitates and promotes objective education concerning the natural environment and its management. This is accomplished by preparing educators to deliver factual information and effective techniques to the audiences they reach.

BACKGROUND

The Division of Forestry is recognized as a state leader in the field of conservation education. Its approach has been based on two general premises: 1) given limited personnel and financial resources, the most efficient means of achieving our goals is to train educators rather than working directly with students; and 2) our forests are part of an interdependent natural system which should not be addressed as an isolated entity. Therefore, our approach must be holistic, to include all natural resources and their management.

Goal # 1: Provide educators with training that will help them better prepare students for environmental stewardship.

- Work cooperatively with other agencies and organizations to offer pre-service and in-service training to preK-12 educators.
- Facilitate local workshops to share successful environmental education teaching techniques.
- Provide environmental education programs at association meetings and conferences.
- Encourage and assist in the development and use of outdoor labs on school sites.
- Work cooperatively with the Department of Education to better integrate forestry education into school curricula and correlate forestry education with state standards.

Goal # 2: Provide educators the resources that will better prepare students for environmental stewardship.

- In cooperation with classroom teachers and administrators, develop sequential interdisciplinary units for outdoor experiences.
- Develop environmental education materials that closely link science and language arts, basing these supplements on Project Learning Tree.
- Approach various subject areas through curricular supplements, using popular environmental topics and basing these supplements on Project Learning Tree.
- Increase educator awareness of integrated curricular supplements and emphasize low or no cost.
- Correlate all materials used to science, language arts, math and social studies state academic standards.
- Continue annual summer Forest Teachers Institute week-long training event.

Goal # 3: Establish mechanisms to make delivery of our programs and materials efficient and effective.

- Assist in developing partnerships between educational institutions, public lands and private lands entities to identify where projects might be initiated.
- Maintain cadre of IN PLT facilitators through annual professional development (including Facilitator Retreat 2013) and train 5-10 new IN PLT facilitators annually.
- Encourage publication of articles on environmental education in a variety of newsletters and magazines.
- Evaluate extent of use of PLT throughout Indiana and encourage past environmental education workshop participants to assist in promoting environmental education curricular supplements.
- Employ and maintain mechanisms such as Arbor Day, Weird Tree Search, Big Tree Register, etc. to generate interest about trees and forest management.
- Use Division of Forestry website as an outreach tool for educators and others who have an interest in forestry education.
- Pursue multimedia such as television, DVD and CD production, and software as a means of delivering educational content.

Goal # 4: Support the work of other local, state and national organizations that advance forestry education.

- Assist the FFA in carrying out forestry career development events at their national annual convention.
- Work cooperatively with national initiatives such as Walk in the Forest, the Children and Nature Network, Green Ribbon Schools, Kids in the Woods, and others to strengthen these programs while enhancing our own.
- Maintain a strong network of communication with county soil & water conservation districts, solid waste districts, Purdue Extension, etc.

NURSERY

The nursery section consists of 2 programs: Nurseries and Tree Improvement. The nursery program distributes between 3 and 4.5 million seedlings annually, to approximately 5,000 Indiana landowners. The tree improvement program manages seed orchards to provide improved seed of selected high value hardwood species, to provide seed which is difficult to collect and is responsible for the procuring of all commercial seed sources.

MISSION

To grow and distribute to Indiana landowners' high-quality plant materials for conservation plantings. Conservation plantings include plantings for timber, wildlife, windbreaks, soil and water protection, reclamation, carbon sequestering and education.

INDIANA CODE

IC 14-23-1 Duties of the Department-Tree Nursery IC 14-23-9 Planting Seedlings-Distribution to Every Third Grade Student

IC 2-3-7 Distribution of Trees to Legislators for Planting

BACKGROUND

The Indiana State Nursery section is known throughout the Midwest for its quality planting stock. We produce the highest quality stock that our knowledge and resources permit. We produce a diverse group of species from the best seed sources available, which includes progeny tested seed orchards. Seedlots are mixed to ensure that each customer receives the highest quality and most diverse stock available. An inventory of 3.5 - 4.5 million seedlings are made available for sale each year. Seed orchards are established and maintained, for a future source of seed, in order to become self supporting on our seed needs.

Goal # 1: Develop and grow additional avenues for increases in revenue.

- Look to grow and distribute larger balled stock for Forestry properties as well as other divisions, to plant in recreational settings.
- Continue to produce and harvest grain crops in field rotations where seedling stock is produced.
- Look at growing historical, native, Indiana seedlings.
- Reduce costs so revenue recovers 90%+ of nursery budget.
- Explore production and sale of pollinator plants for use in restoration projects on both public and private lands.

Goal # 2: Continue Seed Orchard expansion on State owned land.

- Currently 12-15% of our annual seed needs come from our own orchards. Future production should take into account 100% of our seed needs many years into the future.
- Look into available acreage at both nurseries and open acreage at nearby State Forests for ease of maintenance and seed collection.
- Work with Hardwood Tree Improvement and Regeneration Center (HTIRC)/Purdue University on various species, difficult to acquire in our seed quotas, within the state each year.

Goal # 3: Find alternative ways to process and lift seedlings to decrease our dependence on seasonal labor.

- Continue to strive to develop a Seedling Harvester which mechanizes the seedling lifting process.
- Discuss with other nurserymen their process in times of tight budgets.

• Innovative thinking.

Goal # 4: Educate the public, while promoting tree planting.

- Use programs such as Arbor Day, Earth Day and various field days to promote the need for tree planting and its benefits to the environment.
- Work with the CFM section to promote tree planting to landowners and state and federal agencies.
- Use internet websites and other social media avenues to promote the benefits of planting trees to meet conservation initiatives.

Goal # 5: Continue to build our Partnership with Department of Corrections (DOC).

- Develop an annual memorandum of understanding with DOC to provide offenders for daily work assignments within the nursery system.
- Provide 47-50 offenders daily between Vallonia Nursery, Jasper Pulaski Nursery, and Starve Hollow Rec. Area from various DOC facilities.
- Daily work assignments assist with bringing in revenue from these various facilities, while providing a positive service to the citizens of Indiana.
- A healthy partnership will ensure high quality, yet affordable, nursery stock that will be available to all Hoosiers for conservation plantings.