



**IDNR
DIVISION OF FORESTRY
STRATEGIC PLAN
2005-07**

COOPERATIVE FOREST MANAGEMENT SECTION

Cooperative Forest Management Section Direction

The CFM Mission:

“It is the mission of the Cooperative Forest Management Section to promote the stewardship of Indiana’s privately owned forestlands by providing forest management information and technical assistance to forest owners and others insuring continued benefits, both tangible and intangible, for present and future generations.

And further, to work cooperatively with private woodland owners and related citizens' groups and governmental agencies to accomplish on-the-ground forest management practices for the benefit of the landowner, the forest resource and the citizens of Indiana.”

The CFM program exists because the Hoosier quality of life, and the health of the State and Nation depend upon the integrity, sustainability and productivity of the privately owned forests. These forests comprise 85% of the state’s commercial forestlands and 25% of the Hoosier rural landscape. They are among the world’s most productive forests and supply benefits available nowhere else. Including:

- Indiana’s private forests provide economic vitality and produce over 95% of Indiana’s wood required to fuel Indiana’s forest products economy and satisfy consumer demand for wood derived products.
- Water is indisputably cleaner where forest cover protects watersheds and riparian corridors- there is no better protector of Indiana’s watersheds.
- Wildlife, which depend on forests for all or part of their life cycle, need viable, enduring, forests.
- Indiana’s private forests are irreplaceable ecological havens, which also provide significant recreational opportunities, respites and community economic benefits.

Key Issues facing Indiana’s Forests and Existing Programs

- ✓ Indiana’s forests and forestry programs face a variety of threats to their sustainability. Including the following key threats:
 - The lack of management or inappropriate management of forest resources (e.g. high grading, BMPs, TSI, grazing).
 - Inappropriate development of forestland (i.e. The break-up of forestland into smaller, less manageable, and less sustainable tracts, conversion to other uses, water line extensions and woodland construction).
 - Inadequate economic awareness and economic incentives to retain forests, restore forests, and manage forests for the goods and services needed.
 - Poor awareness and understanding of Indiana’s forests, their potential and their proper management by landowners, users and general public.

- Invasive species, which threaten forest health and productivity.
- Inadequate coordination of efforts (public and private) to insure the sustainability of Indiana's forests.
- Short and long term availability and accessibility of public and private landowner technical assistance and resource management incentives.
- Stretched DNR manpower to service growing programs and added responsibilities.
- The high cost of owning and managing forests (long term investment).

Proposals- Environmental impact – Fiscal impact

Important Forest Sustainability issues:

- Inappropriate forest management (or lack of)
- Fragmentation of forest ownerships
- Invasive species
- Inappropriate development

Important Criteria:

- Addresses issues affecting forest sustainability/scientifically sound
- Insures program integrity
- Improves efficiency/reduces costs
- Increases program income
- Provides a quality professional service
- Improves effectiveness
- Increases appropriate program participation
- Positive impact on State economy

1) Reduce/eliminate services to small landowners and marginal forests.

- **Description:** Indiana has approximately 150,000+ private forest landowners. Approximately half of these own less than 10 acres. While these forests play an important role in the economic and environmental well being of the State, they take a disproportional amount of time to service. In general, on-the-ground technical assistance to tracts less than 10 acres in size will be eliminated, unless part of a reimbursable cost-share program. A 'small landowner' literature distribution program, demonstration forests, and outreach events will replace current efforts.
- **Environmental impact:** Elimination of services will reduce the management undertaken on small tracts and place these tracts at increased risk. This would be offset by acceleration of management on the larger more productive forests of Indiana.
- **Fiscal Impact:** Neutral impact on operational costs. Increased cost for publications and outreach.
- **Implementation timeline:** Cease small landowner service October 1, 2005 and roll out optional program in Spring 2006

2) State Cost Share program- Forest Restoration Fund

- **Description:** Establish a Forest Restoration Fund to accelerate the management of private forestlands. The Fund will be supported by 17% of the State forest timber sale proceeds; Classified Forest fees and penalties; forest mitigation funds(if any); donations and other sources as may be identified. Funds may be utilized for the following purposes: forest restoration, timber stand improvement, reforestation tree plantings, forest erosion control, and program administration.
- **Environmental impact:** The fund will accelerate the management of Indiana's private forests, ensure management consistent with appropriate silvicultural principles and result in increased timber yields on forested acres. 1,000-5,000 acres/year impacted if fully implemented.
- **Fiscal Impact:** Anticipate \$500,000/year available if all related proposals are implemented. 15-20% would be utilized for program administration. Grants to landowners would require a match.
- **Implementation Timeline:** Rollout in summer of 2006.

3) Demonstration Forests

- **Description:** Develop a series of 'demonstration forests' in cooperation with Indiana Department of Agriculture, private landowners, conservation organizations, community forests and others to serve as examples of forest management. These forests would be sites of periodic outreach events. All would be on Classified Forest lands.
- **Environmental impact:** These demonstration sites and the partnerships needed for successful implementation would have positive environmental benefits. Anticipate 1,000 attendees to outreach events on an annual basis.
- **Fiscal Impact:** Set-up <\$1,000/site; Outreach events \$500-\$1,000/event. The objective would be to cover most costs from grant sources.
- **Implementation Timeline:** Rollout first demonstration forest in fall of 2005.

4) Interagency professional forestry services.

- **Description:** The CFM Section will provide technical forestry assistance to various State land holding agencies, including the Department of Transportation, Department of Corrections, and the land holding agencies within the Department of Natural Resources. A fee schedule will be developed to recover no less than actual costs incurred. Example: Timber marking and marketing services will be compensated at 10% of timber sale value or actual costs of operation.
- **Environmental impact:** Services will accelerate the management of State owned forest resources and ensure management consistent with appropriate silvicultural principles.
- **Fiscal Impact:** Allows Forestry to recover costs of services.
- **Implementation Timeline:** Implement fee schedule October 2005.

5) Timber Management on DNR Reservoir properties

- **Description:** The Division of Parks and Reservoirs manages several Reservoir properties with significant timber resources that are currently not being managed. The Corps of Engineers has approved DNR's request to implement resource management practices, including the commercial harvesting of timber, to benefit wildlife habitat on the properties. The Division of Forestry possesses the expertise to undertake this work and will provide the needed technical assistance on a reimbursable basis.

- **Environmental impact:** Services will accelerate the management of State owned forest resources and ensure management consistent with appropriate silvicultural and wildlife habitat management principles.
- **Fiscal Impact:** Gross proceeds to DNR are estimated at \$100,000/year. 10% of which would be returned to Forestry for services rendered. The Army Corps of Engineers agreement allows remaining income to be used to fund property wildlife habitat improvements (cannot be used off property or for unauthorized purposes).
- **Implementation Timeline:** Conduct first Reservoir timber sale within 3 months of plan approval by DNR and Corps of Engineers. Target winter of 2005.

6) **Streamline forest plan services**

- **Description:** Develop and implement a computer aided rapid woodland assessment and Rx type plan for initial forest inspections. These to be followed up with more intensive plans as may be required by cost share programs and participation in long-term conservation programs (CFP, Legacy, etc.). Delivery of a quality product must be a priority to ensure the high integrity and credibility of DNR as the 'go to' forestry agency.
- **Environmental impact:** Would allow for an increase in the number of landowners served and have a beneficial environmental impact if appropriate.
- **Fiscal Impact:** Neutral
- **Implementation Timeline:** Rollout February 2006 with new hand held computers and software package.

7) **Merging of Classified Forest program (CFP) and Classified Wildlife Habitat (CWH) programs.**

- **Description:** Sunset the existing Classified Wildlife Habitat program and amend the Classified Forest program to become the 'Classified Forest and Wildlands Program'. The revamped program would grandfather existing CWH lands and restrict future enrollments to meeting the revised program requirements, in which eligible parcels could include up to 20% non-forest wildlife compatible lands. Such a merger improves customer access to the program and simplifies program administration at County government offices. New purpose statement: "An Act to encourage the production of timber, to protect watersheds and enhance wildlife habitat."
- **Environmental impact:** Improves customer access and increases the resource management standards necessary to qualify for the program. May result in loss of some existing program participants who would be allowed an opportunity to opt out of the revised program.
- **Fiscal Impact:** Neutral to positive economic impact for DNR, but increased budget for Forestry. Requires 2 FTEs and support budget to take on the additional 90,000 acre responsibility. Will come from currently open positions in Forestry and Wildlife Divisions.
- **Implementation Timeline:** Propose complete legislative changes during the 2006 or 2007 legislative session with effective date of transition (including support budget and staffing) by July 2007 to allow for 'opt-out' period.

8) **Update the Classified Forest Program:**

- **Description:** Fine tune Classified Forest program to streamline administration and encourage more resource management, while discouraging participation only for property tax benefits. This would include:

- Increased penalties for violations and withdrawal from the program;
- Require (enforce) adherence to the forest management plan to retain program eligibility; non-compliance subject to withdrawal and corresponding penalties.
- Streamlined administrative processes
 - Require owner to submit legal description (application) of the area to remain in the program in case of partial withdrawal and land splits. (policy or rule change)
 - Abbreviate the 5 year inspection format to a quick compliance check. Inspection by a professional forester should be at least every 10 years or upon land ownership change. (policy change only)
 - Eliminate special permit requirement for compatible wildlife habitat lands. (law change)
- Eligibility : 10 acres minimum -must be at least 80% productive forest. (law change)
- Authorize the DNR Commission to establish program fees. (law change)
- **Environmental impact:** Over time should result in more timber brought to market and increased investments in forest management. However, the increased penalties and costs might slow program enrollment.
- **Fiscal Impact:** Penalty funds to be split 25:75 between the county and the “Indiana Forest Restoration Fund” –IDNR Division of Forestry (See table below).
- **Implementation Timeline:** Propose legislative and rule changes during the 2006 or 2007 legislative session with target effective date of July 2007 to allow for ‘opt out’ period.

Classified Forest Penalty Structure

(Current and Possible Future Scenarios)

(25:75 split fee split with counties)

Sample Owner	County	Current 10 year tax penalty	10 year tax penalty + higher fees
A	Lawrence	\$42.36/ac	\$42.36/ac
B	Porter	\$31.02/ac	\$31.02/ac
C	Parke	\$31.40/ac	\$31.40/ac
D	Dubois	\$31.72/ac	\$31.72/ac
Average		\$34.12/ac	\$34.12/ac
Per acre Processing Fee*		None	\$25/ac
Per Case Processing Fee*		None	\$100

Example: Average Penalty for 1 acre withdrawal		\$34	\$159
Example: Average Penalty for 40 acre withdrawal		\$1,365	\$2,465
Plus cost of survey for partial withdrawals		\$200+-	\$200+-
Annual DNR recovery Projection**		\$0	\$95,625

*These to be reviewed periodically and established by the Natural Resource Commission, collected by County and split 25:75 between the county and the Forestry dedicated fund.

** Based on the current 1% attrition rate (100 projects, 4,700 acres)

9) Customer Feedback and Solicitation of Contribution for Services:

- **Description:** Develop a system to solicit customer feedback and voluntary contribution for services provided to private landowners. The purpose is to utilize customer feedback to increase the quality and effectiveness of services provided, and further to reap program income that could be used to offset expense or placed into a dedicated account (e.g. DNR Foundation- Forest Restoration Fund) to cost share forest restoration, acquisition and outreach activities.
- **Environmental impact:** Net gain by increased program effectiveness, and possible generation of funds to implement forest restoration activities.
- **Fiscal Impact:** Net gain, but must be deposited in dedicated fund.
- **Implementation Timeline:** Spring 2006

10) Forestry Commerce web site

- **Description:** Develop a Forestry Commerce web site (timber sales, etc.) in concert with other forestry partners to advertise timber available, consulting services, forest products material wanted, services needed, etc. This site would help provide easy access to technical assistance and facilitate business networking that will enhance Indiana’s forest related industries and services. Partnership options: Spin off to private sector; Public/Private partnership; House on the DNR Web site.
- **Environmental impact:** Net gain in land conservation activities.
- **Fiscal Impact:** Project can be kicked off with already approved federal grant funds. Future fiscal impact can range from \$10,000+/year in costs to potential profit through fees and advertising.
- **Implementation Timeline:** September 2006

11) Relocate District Foresters

- a. **Description:** Review current field workload distribution and realign districts based on this information and any newly assigned responsibilities. Where possible, locate forestry offices in existing DNR facilities or USDA Service Centers which have the advantage of reduce office space cost or improved customer access. Eliminate free standing offices.
- b. **Environmental impact:** Net gain in that field staff will be more efficiently aligned with the workload, or in locations with improved customer access.
- c. **Fiscal Impact:** moderate savings (\$3,000/yr). Only 4 offices are currently in stand alone offices and appropriate
- d. **Implementation Timeline:** Summer 2006

STATE FOREST PROPERTIES SECTION

MISSION OF THE PROPERTY SECTION

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.

The Indiana state forest system consists of 13 properties containing 150,000 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, worn-out land when small, subsistence farms began to be abandoned early in the century. Early state forest management focused on reforesting eroded area, creating wildlife habitat, demonstrating good forest land management, providing public recreation, and conserving forest resources. This is recognized in the legislation that provides the foundation for the management of state forests (IC 14-23-4-1):

“It is the declared public policy of this state to protect and conserve the timber, water resources, wildlife and top soil in the state forests for the equal enjoyment and guaranteed use of future generations. It is recognized, however, that by the employment of good husbandry, timber which has a substantial commercial value may be removed in such manner as to benefit the growth of saplings and other trees by thinnings, improvement cuttings, and harvest process and at the same time provide a source of revenue to the state and local counties and provide local markets with a further source of building material.”

This early philosophy is still a major part of our current management system. The state forests are managed for multiple uses/multiple benefits. The state forests provide outdoor recreation ranging from camping and hiking to hunting and caving. 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 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.

Revenue from state forest timber sales and recreation receipts go into the state forestry fund. Fifteen (15%) of the net receipts from timber sales go to the general funds of the counties in which the timber sales occurred. Up to 50% 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 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 seven primary program directions and their respective long-range goals, objectives, and action items.

Current Issue: Efforts over the next two years will be directed towards management of the forest resource for increased timber production and enhanced wildlife habitat. At the same time, state forests will continue to provide quality, primitive outdoor recreation opportunities and public services within a more effective cost/revenue structure. Going forward the state forest will be managed based on the best science available. The Division has prepared white papers to address issues that have surfaced from the public in the past. They include: 1) Forest Management and Water Quality in Indiana; 2) Increasing Wildlife Habitat Diversity on Forest Lands Managed by the Indiana Department of Natural Resources and 3) Forest Health Problems Impacting Forest Resources.

Proposed Change: Increase revenue from state forest timber sales from the present level of \$1 million per year to \$3-5 million per year.

At the \$1 million level, approximately 3.4 million board feet are harvested annually from state forests. At the \$3-5 million level, approximately 10 to 17 million board feet will need to be harvested annually from state forests. The average annual growth on state forests is 24,788,950 board feet, so this will represent an annual harvest of about 40 - 69% of annual growth.

State forests are managed under the uneven-aged system, with individual tree selection and very few, small regeneration openings. As a result, stand structure is moving towards mature, closed canopy with reduced biological diversity and early succession. The uneven-aged system will be modified to include more extensive individual tree selection to encourage more growth of crop trees and increased number and size (10 acres) of group openings to develop more early succession forests and wildlife habitat diversity. The board foot volume harvested per tract acre will increase, which as a side benefit should increase the price that industry is willing to pay for state forest timber.

Operational and administrative adjustments necessary to attain the increase in state forest timber sales include the following:

- Dedicate 100% of increased timber sale revenues to forestland management. This revenue will be allocated among the following new and existing project areas:
 - Post harvest management activities and reinvestment into properties. This will include timber stand improvement work, horse and walking trail maintenance and enhancement of forest recreation activities. Tree planting and plantation management will be done to a lesser extent (proposed funding level - 15 %).

- Establishment of forestry research/demonstration areas (**New initiative**). We anticipate the establishment of two sustainable forest management research forests, one on Yellowwood/Morgan-Monroe State Forest and the other at Harrison-Crawford State Forest. The research will focus on the affects of forest management (silviculture) on oak regeneration, water quality, forest sustainability, forest wildlife interactions and endangered species issues (proposed funding level - 15%).
 - Acquisition of tracts of land that are in-holdings (**New initiative**), improve access, adjacent to state forest boundaries or possess unique natural resource or recreational qualities (proposed funding level – 38%). Conservative estimates are that the Division of Forestry could purchase over 2000 acres of land annually from willing sellers if the financial resources were available. Most of these landowners would prefer to sell to the State because our sustainable management and stewardship.
 - Funding of a state cost-share assistance program (**New initiative**) to enhance the management of private forestlands (proposed funding level - 17%).
 - Payments to counties (statutory funding level – 15%).
- Streamline archaeological reviews of state forest timber sale areas.
 - Present timber sale procedure requires the successful bidder on a timber sale to provide full payment within two weeks of the bid date. This may reduce the amount bid if buyers need to wait several months prior to cutting a sale. Recommend that the timber sale procedure be changed to require 10% down at the time of the sale, and the remainder prior to cutting or 6 months after the sale date.
 - Presently, state forests use primarily 1-year timber sale contracts. This may be increased to 2 in order to obtain more bids and better prices.
 - Present timber sale procedure requires that the sale be given to the high bidder. If the high bidder does not sign timber sale agreement or later backs out of the contract, the sale must be re-bid. In this situation, we recommend that Division of Forestry be given the authority to negotiate the sale price with the next highest bidder. This may require Department of Administration approval.
 - Tornados, ice storms and insect/disease infestations are all natural disasters that call for the salvage of hundreds of acres of state forest timber on a regular basis. Dead timber loses value very fast, and salvage operations need to be conducted within the first growing season following the disaster. Timber salvage operations need to be exempted from the standard procedures of archaeological review and sealed bid. The Division of Forestry needs to be able to negotiate salvage sales with active, local timber buyers. This may require Department of Administration approval.

- Best Management Practices (BMP) audits of every timber sale will be eliminated. Instead, random audits of timber sales and BMP's will be performed.
- Making fewer, larger sales will reduce administration of timber sales. Several sales will be held on the same day. In addition, multi-forest timber sales may be held in one location to reduce the number of individual sales.

Adjustments promoting state forest management:

- Begin certification of state forests. This is a third party certification of state forest sustainability. The FY2005-07 biennial budget has a \$325,000 project to initiate this process.
- Perform forest management work with private contractors. The FY2005-07 biennial budget has a \$147,350 project for timber stand improvement.
- Establish demonstration/research areas on two state forests. These will consist of an Indiana Bat/Cultural Resources management area on Harrison-Crawford SF, and a water quality management area on Yellowwood SF. Funding for these areas will be derived from research grants and timber sale revenues.
- Coordinate with the Division of Fish and Wildlife on the management of state forests and wildlife areas. The Division of Fish and Wildlife will provide wildlife reviews of proposed timber sales, and the Division of Forestry will provide timber sales assistance on wildlife areas.

Proposed Change: Adjustments in recreation on state forests

- State forests will continue to provide primitive outdoor recreation opportunities, which includes hunting, hiking, horseback riding, picnicking and primitive camping. Clark State Forest provides a shooting range. An archery range is provided on Greene-Sullivan SF. Archery ranges are provided on other state forests where local archery groups volunteer to help construct and maintain the ranges. There are archery ranges on Clark SF and Jackson-Washington SF that local archery groups have abandoned.
- Division of Forestry manages two modern recreation areas – Starve Hollow and Deam Lake. Use of Starve Hollow SRA has been steadily increasing over the past couple of years. The fishing lake, campsites on the lake and beach are the reasons that people come to the property. Camping at Starve Hollow could be increased by adding electricity to the Class B lake sites. Unfortunately, the lake is gradually deteriorating. Built over 50 years ago, the lake has become increasingly filled with sediment from adjacent agricultural fields. The lake is becoming increasingly filled with weeds and algae. We will propose a dredging project in our FY07-09 biennial budget CR&R request.
- The Deam Lake SRA campground is under-used and rarely full. It is adjacent to the 80 mile horse trail system on Clark State Forest. We will convert a portion of the existing Class A campground to a horse campground which will increase use and generate more revenue.

Approximately 70 horse camping sites would be developed along with stables with horse stalls. Campers would be required to rent and keep their horses in the stalls.

Environmental/Social Impacts: Some environmental groups will view an increase in state forest timber sales as a negative environmental impact. Other groups such as hunters and forest product industries will view increased state forest timber sales as a positive environmental impact.

The negative aspect of increasing state forest timber sales will be the increased presence of timber harvesting activities and short-term reduction in aesthetics of harvested areas. The long term positive environmental impacts of increasing state forest timber sales is increased bio-diversity, increased wildlife habitat and continued healthy and productive forests.

Indiana Division of Forestry
Estimated Sawtimber and Veneer Value
by State Forest Property
From
2005 System-wide Inventory

<u>Property</u>	*Calculated Ave \$/BdFt	<u>Est. Range \$/BdFt</u> (+ 20% calc. Value)	** Calculated total value/property	<u>Estimated Range Total Value/Property</u> (± 20% calc. Value)
Harrison-Crawford SF	\$0.187	0.150 – 0.224	\$31,703,280	\$25,362,624 – 38,043,936
Greene-Sullivan SF	\$0.096	0.077 – 0.115	2,923,380	\$2,338,704 -- 3,508,056
Morgan-Monroe SF	\$0.209	0.167 – 0.251	45,960,240	\$36,768,192 – 55,152,288
Yellowwood SF	\$0.194	0.155 – 0.233	45,380,450	36,304,360 – 54,456,540
Selmier SF	\$0.160	0.128 – 0.192	620,350	\$496,280 – 744,420
Salamonie SF	\$0.190	0.152 – 0.228	1,183,599	\$946,879 – 1,420,319
Clark SF	\$0.190	0.152 – 0.228	34,197,500	\$27,358,000 – 41,037,000
Pike SF	\$0.241	0.193 – 0.289	6,892,726	\$5,514,181 –8,272,271
Owen-Putnam SF	\$0.176	0.141 – 0.211	9,696,078	\$7,756,862 – 11,635,293
Jackson-Washington SF	\$0.169	0.135 – 0.203	24,734,320	\$19,787,456 – 29,681,184
Martin SF	\$0.207	0.166 – 0.248	12,754,480	\$10,203,584 – 15,305,376
Ferdinand SF	\$0.151	0.121 – 0.181	9,293,360	\$7,434,688 – 11,152,232

System Totals			\$221,339,763	\$180,271,810 – 270,408,275
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* Average \$/BdFt for each property was calculated using Hoover’s 2004 survey of average stumpage prices per species, multiplied by the total sawtimber and veneer volume/acre by each species, then summed the total per acre value of all species and divided by total sawtimber and veneer volume/acre/property. (Note: This value/BdFt is significantly lower than the average bid price received for timber marked for harvest because it includes all species and all trees > 11” DBH)

** The value of all standing sawtimber and veneer per property was calculated using Hoover’s 2004 survey of average stumpage prices per species, multiplied by the total sawtimber and veneer volume/acre by each species, then summed the total per acre value of all species. This per acre value for each property was then multiplied by the total acres for that property (includes nature preserve acres, old forest acres, recreation area acres, etc).

Every \$1.00 of timber value sold in the woods generates about \$10.25 in additional direct revenue into the Indiana economy. Currently the Division sells approximately \$1,000,000 of standing timber. Increasing that to \$4,000,000 annually will add an additional **\$30,750,000 annually into Indiana’s economy.**

Fiscal Impact: Following is the cost/revenue projection for increased timber sales on state forests:

<u>Projected Expenditure</u>	<u>Cost</u>		
	<u>July-June 06</u>	<u>July-June 07</u>	<u>July-June 08</u>
Upgrade of four Assistant Property Manager 4 Positions to Resource Specialist 3 positions	\$6,322	\$12,644	\$12,644
Dedicate 85% of Timber Sale Revenue to Forest Management <i>(Including Payments to Counties)</i>	\$1,493,678	\$2,487,356	\$3,400,000
Totals	\$1,500,000	\$2,500,000	\$4,000,000
<u>Projected Revenue</u>	<u>Total Timber Sale Revenue Production</u>		
	<u>July-June 06</u>	<u>July-June 07</u>	<u>July-June 08</u>
Increase Timber Sale Volume on State Forests by 50% in the first year, 150% in the second year, and 300% in the third year	\$1,500,000	\$2,500,000	\$4,000,000

Notes: Revenue projection includes the historic \$1,000,000 level of annual timber revenue.

**STATE FOREST
TIMBER SALES
150,000 acre base**

10 Year Summary

Fiscal Year	Acres Harvested Tract Acres	Acres Harvested Marked Acres	Volume Sold MBF	Revenue
2003-04	2,417	1,660	3,422,287	\$897,313.00
2002-03	3,251	1,998	3,458,199	\$1,096,377.75
2001-02	1,254	844	1,245,926	\$386,369.00
2000-01	1,888	1,287	1,931,046	\$572,340.51
1999-00	3,176	2,180	3,073,745	\$860,225.41
1998-99	2,913	2,063	3,599,759	\$1,119,589.98
1997-98	1,109	924	1,187,236	\$391,753.50
1996-97	2,413	1,313	2,205,512	\$646,037.20
1995-96	2,607	1,476	2,215,734	\$539,154.41
1994-95	2,960	1,965	3,237,300	\$854,561.38
Totals	23,988	15,710	25,576,744	\$7,363,722.14

Nursery Section

Nursery Production

1. The nursery section consists of 2 programs; the nursery program and tree improvement program. The nursery program grows and distributes between 5 million and 6 million seedlings to approximately 5,000 Indiana landowners each year. The tree improvement program manages seed orchards to provide improved seed of selected high-value hardwood species, manages seed orchards of other species where seed is difficult to collect, and is responsible for the purchase of seed from all commercial seed sources.
2. Currently we operate 2 nurseries, the Vallonia Nursery and the Jasper-Pulaski Nursery. The Vallonia Nursery has 100 acres of seedbed area with an annual production capacity of 5.5 million seedlings. The Jasper-Pulaski Nursery has 40 acres of seedbed area with an annual capacity of 1.5 million seedlings. The tree improvement program manages 83 acres of seed orchards. The following chart shows the acreage in the various species.

Black walnut	- 28 acres
Red oak	- 12 acres
White oak	- 12 acres
Black cherry	- 3 acres
Tulip tree	- 6 acres
Other tree and shrub species	- 22 acres

3. The most important current issue is the need to address the impact of a reduced level of seedling demand on nursery operations. The lower level of demand is the result of reduced tree planting under Farm Bill programs and reduced demand for reclamation plantings. Historically this is a normal part of the cycle of demand as various tree planting programs are initiated and completed.

Sales of surplus seedlings to private landowners in other states is another issue that has been addressed by reducing production and tentatively deciding to not accept orders from out of state customers. However, this issue may need to be reexamined as we begin selling improved seedlings separately.

4. We are proposing that the best response to reduce demand is to lower production goals to 5 million seedlings. Because 5 million seedlings is well within the capacity of the Vallonia Nursery, it is operationally more efficient to produce all of the seedlings at the Vallonia Nursery. The seedbeds at the Jasper-Pulaski Nursery will be kept in cover crops with the option to return to seedling production at this nursery if high levels of demand return in the future.

Because 40% of our annual production is shipped from the Jasper-Pulaski Nursery, we will keep this nursery open for stock distribution to customers in the northern half of Indiana, for seed collection to insure that we include northern Indiana seed sources in the seed pool, and for production of seed from seed orchards of genetically improved parents. These changes will allow us to meet production goals while eliminating 5 salaried positions as listed below in savings.

5. The environmental impact of these changes will be minimal.
6. The estimated savings from the proposed changes listed above are as follows:.

SALARIES – \$211,000

EQUIPMENT – \$50,000

SUPPLIES– Savings due to reduction in production goals by 1,000,000 seedlings annually from 6 million to 5 million -\$85,000.

SUPPLIES – Savings due to greater efficiency -\$30,000

TOTAL SAVINGS - \$376,000

7. Some of the savings listed above, may be needed to adjust salaries of positions that will have increased responsibility as a result of these changes. An estimate would be \$30,000. In addition, over a period of several years the cost of maintaining more acreage in seed orchards will increase. However, this will be moderated by reduced cost for purchasing seed. Also, if seedling demand increases, some of the savings for nursery supplies will be needed to produce the additional seedlings.
8. An additional benefit of these changes is that program costs and revenues would be easier to balance thereby reducing the need to increase seedling prices in the future.

IMPROVED SEEDLING PRODUCTION

The nursery section will begin production of improved seedlings in the fall of 2005, with seedlings for sale in 2006. This is a new developing market and Indiana can become a leader in the production and distribution of improved hardwood seedlings. Tree species that will be of early focus include black walnut, red and white oak, butternut and American chestnut. The number of improved seedlings will be small in the initial years, but should develop as seed orchards mature and yield improves

A special effort will be made to focus on improving current seed orchard mother trees and introducing new lines as they are developed. New seed orchards will be established at the Vallonia Nursery. The Jasper-Pulaski Nursery will become a second seed orchard

site. Two sites will increase the odds of not suffering total seed loss due to environment conditions. In most years, a given species will produce in one location and not the other.

This initiative will become a partnership with Purdue University and the Hardwood Tree Improvement and Regeneration Center (HTIRC). Seed and germ plasm from improved trees will be trademarked and protected. Material coming from the HTIRC will be purchased and a royalty paid. Additional income from the improved lines will be reinvested back into research and production at the HTIRC as well as in the Division's tree improvement program. A long-term goal (7 years) is have the tree improvement program become self-supporting from improved seedling sales.

This concept will be a partnership with the Indiana Department of Agriculture as improved seedlings are an important part of their forestry strategic plan. Net revenue growth to the Division will approach \$50,000.00 annually.

There will be opportunities to sell improved seedlings as well as generic stock beyond the state boundaries. Out-of-state sales have presented problems in the past with private nurseries. We will address this issue in the following way. The price for out-of state seedling sales will be brought in line with private nursery prices so as to not under cut their cost of production.

