# DNR Management of School Trust Lands

Laws of Minnesota 2010, Chapter 361, Article 4, Section 70 (a)

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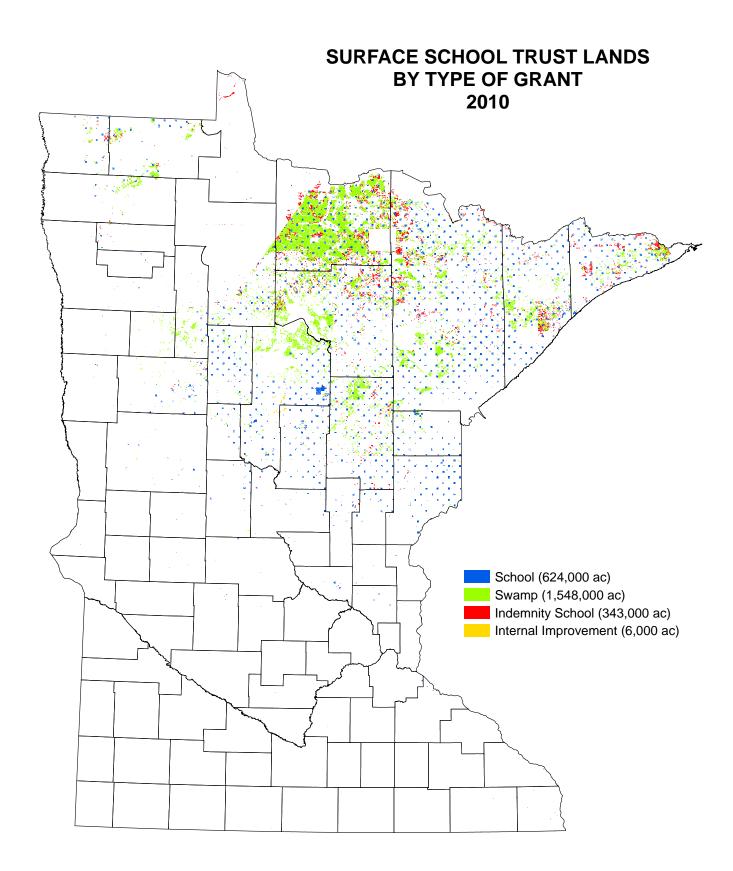
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#### **INTRODUCTION**

The information enclosed in this packet is being submitted pursuant to Laws of Minnesota 2010, Chapter 361, Article 4, Section 70. This packet includes information regarding the school trust land classifications, laws, polices, and procedures that the Department of Natural Resources (DNR) operates under in its management of the school trust lands, financial information identifying revenue generation for the school trust fund, and other information to assist in understanding the DNR's management of school trust lands.

## Section 2

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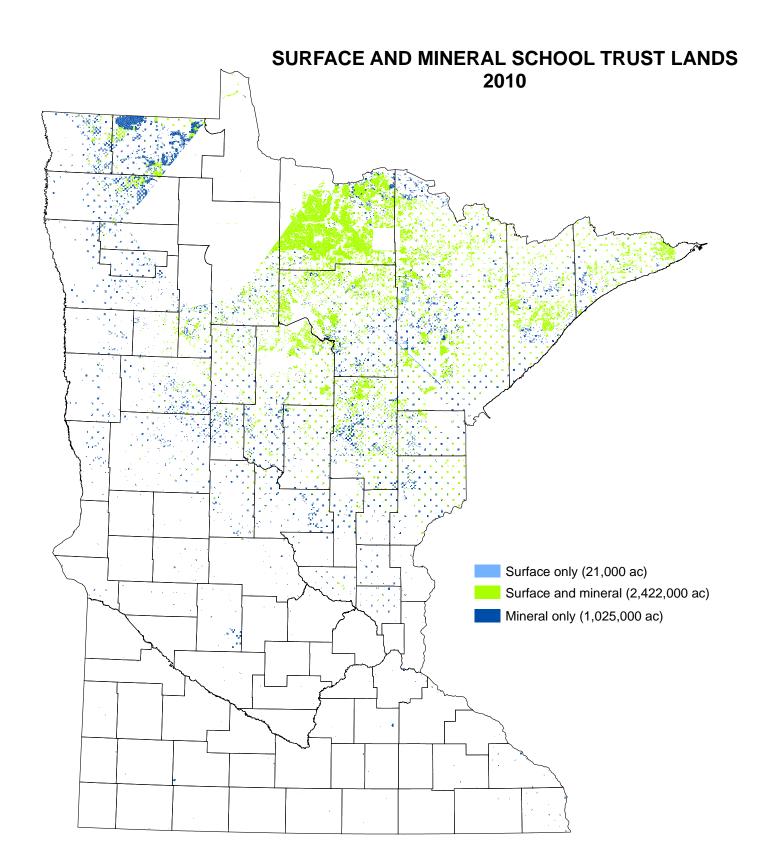


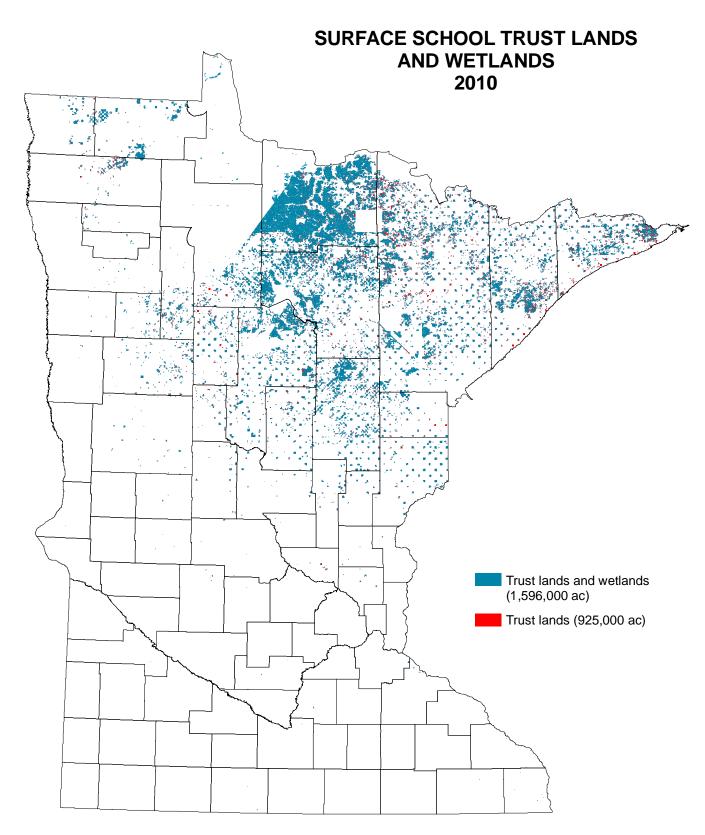
# **School Trust Land Acreage by County**

A 1777A	424040.27
ANOVA	134849.37
ANOKA	644.15
BECKER	16081.20
BELTRAMI	60839.67
BENTON	120.00
BIG STONE	93.88
BLUE EARTH	7.44
CARLTON	21851.26
CASS	150793.36
CHIPPEWA	11.25
CHISAGO	120.00
CLAY	320.70
CLEARWATER	21557.96
СООК	121760.04
CROW WING	24013.46
DAKOTA	110.06
DOUGLAS	160.00
FILLMORE	120.00
GOODHUE	227.20
HOUSTON	220.00
HUBBARD	29351.42
ISANTI	200.00
ITASCA	293644.29
KANABEC	3730.62
KANDIYOHI	200.33
KITTSON	14928.52
KOOCHICHING	854136.86
LAKE	159251.04
LAKE OF THE WOODS	4635.72
LESUEUR	80.00
MCLEOD	0.53
MAHNOMEN	7307.47
MARSHALL	22362.57
MARTIN	51.30
MEEKER	40.65
MILLE LACS	4478.48
MORRISON	2884.05
NICOLLET	0.58
NORMAN	320.00
OTTERTAIL	2562.25
PENNINGTON	2339.70
PINE	22984.52
POLK	1134.79
POPE	80.21
RED LAKE	760.00
ROSEAU	46569.02
SAINT LOUIS	481832.26

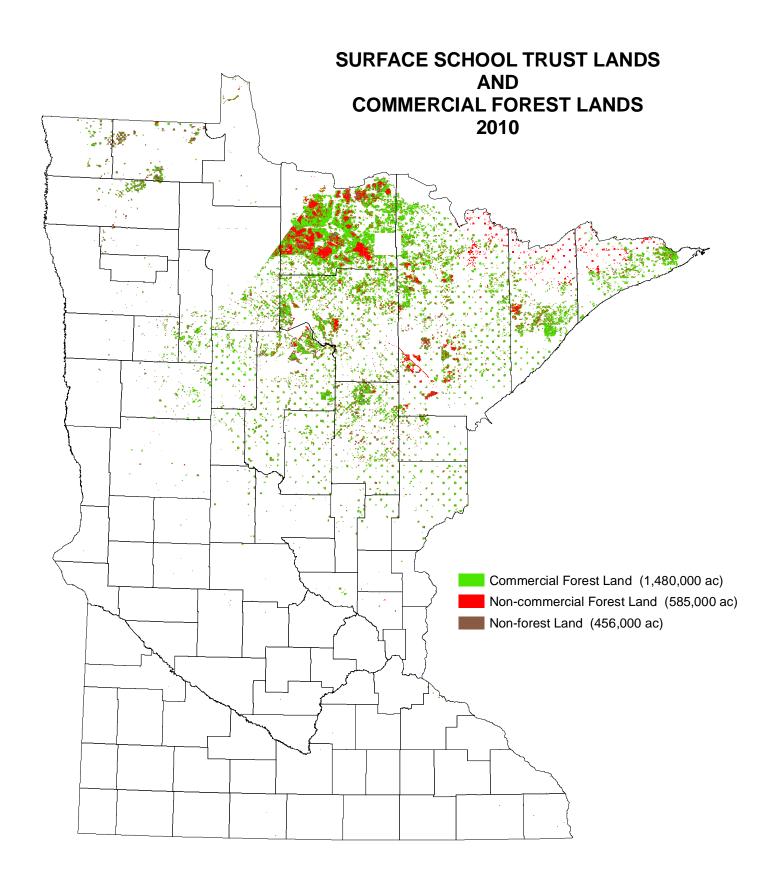
# **School Trust Land Acreage by County**

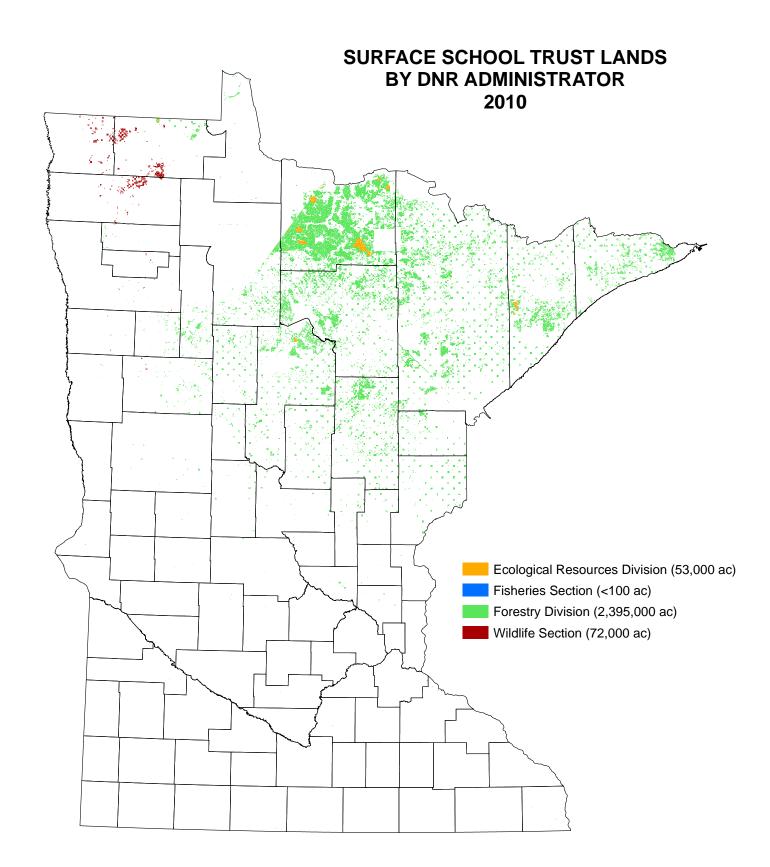
SCOTT	0.64
SHERBURNE	1115.63
SIBLEY	40.66
STEARNS	495.27
TODD	3267.32
TRAVERSE	40.00
WADENA	6128.20
WINONA	122.35
YELLOW MEDICINE	1.60
<b>Grand Total</b>	2520979.85





Wetlands from the National Wetlands Inventory (NWI), U.S. Fish and Wildlife Service





## Section 3

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## FOREST MANAGEMENT

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#### **INTRODUCTION**

### Description of School Trust Lands Administered by Forestry

The Division of Forestry administers 2.4 million acres of school trust land, which includes 1.48 million acres of commercial forest land from which is derived timber revenue. A small percentage of lands also provide income from leases for everything from gravel mining to access to private land.

The Division of Forestry is responsible for the administrative duties of managing the forest land which includes: collection and accounting of revenues, setting up and selling timber, verification of forest products removed from school trust lands, reforestation, protection, drafting certain lease terms, and other activities.

#### LAWS, POLICIES & PROCEDURES

# STATUTES & POLICIES AFFECTING SCHOOL TRUST LAND FOREST MANAGEMENT

#### **DNR Forest Management and School Trust Land**

An overlying premise of DNRs approach to forest management is that the sustainability of any one forest resource (e.g., timber, recreation, wildlife) is dependent on the sustainability of the entire system of forest resources (as defined in statute) across the state and at various landscape scales. In addition, state policy expressed in MS89A.001 and forest management policy in MS89.001 requires that DNR forest management seek to sustainably manage all forest resources, not just a select few. Another basic premise of DNR forest management is that the inherent capacity or capability of land to produce various forest resources (e.g., timber, biodiversity, clean water, etc.) is not bound or determined by artificial administrative boundaries (e.g., ownership, land status, unit boundaries). This is particularly important in Minnesota given the intermingled ownership and land status patterns in much of the forested part of the state.

Given these two basic premises, the following finding of the School Trust Land Program Evaluation Report (1998, Office of the Legislative Auditor) still remains accurate in describing how DNR manages school trust land within the mosaic of other state-owned lands under its authority:

"DNR applies the same broad natural resource management policies contained in state law to all types of state-owned lands, including school trust lands."

The 1998 Auditor's report also noted that "while common law fiduciary obligations apply to DNR in exercising its management responsibilities for school trust land, the department must also comply with state law." The Auditor's further noted that "School trust land is managed in accordance with the management plans for the DNR unit in which it is situated. In most, cases, the plans are consistent with the statutory goal of securing the maximum long-term economic return from trust land consistent with sound environmental and natural resource conservation principles." These observations still hold true today and provide the background for the following description of key statutes directing DNR forest land management and evolving efforts to define "sound environmental and natural resource conservation principles" or what is more commonly referred to today as "sustainable forest resource management."

#### **Key Statutes & Resulting Policies Directing DNR Forest Management**

The 1995 Sustainable Forest Resources Management Act (Minnesota Statutes Chapter 89A) provides the overarching stewardship framework for forest management in Minnesota. The statute provides that:

"It is the policy of the state to pursue the sustainable management, use, and protection of the state's forest resources<sup>1</sup> to achieve the state's economic, environmental, and social goals."

Based on this "sustainable management" policy and the associated definition of "forest resources," it is clear that the charge is broad and the challenge continues to be centered on the evolving definition of "sustainable management, use and protection."

In an early attempt to define what we today refer to as sustainable forest management, the 1982 Forest Resource Management Act (FRMA, contained within Minnesota Statutes Chapter 89) provided the following forest resource management policy:

The commissioner shall manage the forest resources of state forest lands under the authority of the commissioner according to the principles of multiple use and sustained yield. The forest resource management policy shall not supersede any existing duty or authority of the commissioner in managing forest lands, but the duties and authorities, as far as practicable, shall be exercised consistently with this policy. The forest resource management policy is not intended to exclude extractive uses of forest lands under the authority of the commissioner pursuant to state law.

"Multiple use" is defined in MS89.001 as follows:

"Multiple use" means the principle of forest management by which forest resources are utilized in the combinations that will best meet the needs of the people of the state; including the harmonious and coordinated management of the forest resources, each with the other, without impairment of the productivity of the land and with consideration of the relative values of the resources, and not necessarily the combination of uses resulting in the greatest economic return or unit output.

"Sustained yield" is defined in MS89.001 as follows:

"Sustained yield" means the principle of forest management for the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of forest resources without impairment of the productivity of the land; allowing for periods of intensification of management to enhance the current or anticipated output of one or more of the resources.

A decade later, the Generic Environmental Impact Statement on Timber Harvesting and Forest Management in Minnesota (GEIS) was undertaken to identify potential significant environmental effects under three different levels of timber harvesting. Completed in 1994, the GEIS provided a number of recommendations for forest management to mitigate potential significant effects from forest management, thus establishing a new level of definition as to what constitutes "sustainable forest management."

A decade after the GEIS, another standard for evaluating/gauging the sustainability of forest management emerged internationally, nationally and in Minnesota: forest

<sup>&</sup>lt;sup>1</sup> The 1982 Forest Resources Management Act (Minnesota Statutes Chapter 89) defines forest resources as: those natural assets of forest lands, including timber and other forest crops; biological diversity; recreation; fish and wildlife habitat; wilderness; rare and distinctive flora and fauna; air; water; soil; climate; and educational, aesthetic, and historic values.

certification. These international/national forest certification systems establish standards that define "well managed" forests. While these standards don't dictate management of DNR forest lands, DNR has accelerated efforts in a number of forest resource areas to fulfill these certification standards (see Forest Certification section).

Many of DNR's existing and evolving key forest management policies and goals in DNR forest management are the tools developed by the DNR (often with public and stakeholder input) to fulfill and operationally apply "sustainable forest management" according to DNR's statutory requirements, recommendations from the GEIS, and the standards established within the applicable forest certification systems. Examples include the DNR Old Growth Forest Guideline, DNR Extended Rotation Forests Guideline, adoption of the MFRC Site-Level Forest Management Guidelines, efforts to create more diverse forests (e.g., more selective and uneven-aged management, increasing upland conifers, balancing age-class distributions); and efforts to protect and enhance rare species and native plant communities. As noted above, the application of these policies and goals has, by and large, been applied equally to trust and non-trust land alike. Within the bounds of these policies and goals, management that might reduce short-term income generation is preferentially applied to non-trust lands whenever possible.

#### Other Key Statutes Affecting DNR Forest Management (including school trust lands)

Minnesota's Endangered Species Statute (Minnesota Statutes, Section 84.0895) and the associated Rules impose a variety of restrictions, a permit program, and several exemptions pertaining to species designated as endangered or threatened. The presence of an endangered or threatened species can affect the type or timing of forest management practices that occur in and around the location where the species is found. Of course, where such species are located is independent of land status or ownership.

**Little Shipstead-Newton-Nolan Act -** In 1930 Congress passed the Shipstead-Newton-Nolan Act to protect levels and lakeshores by prohibiting dams and restricting logging within 400 feet of recreational waterways in the then existing Superior National Forest. Three years later the State enacted similar legislation, known as the "Little Shipstead-Newton-Nolan Act," to protect State-owned shorelines within the same area. The 400-foot buffers within which timber harvest is subject to certain restrictions are established adjacent to waters (lakes, rivers, and streams) that are determined to be navigable, irrespective of the land status of these adjacent lands.

#### **DNR Forest Management Guidelines**

**Old-Growth Forest Guideline -** This policy document addresses identification, protection, and management of old-growth forests on DNR-administered lands. The intent of the original DNR old growth effort was to identify and protect the remaining high quality old growth stands on DNR lands. As such, nomination, evaluation, and designation of DNR Old Growth was done irrespective of land status. Currently there are 44,000 acres of designated old growth on DNR administered land, 18,000 acres of which is on school trust land. The DNR has begun efforts to remove old growth status from school trust lands through exchange of school trust lands with other state lands.

**Extended Rotation Forest (ERF) Guideline -** This policy is designed to ensure that adequate acreages of old forests, especially early successional types not addressed by the Old-Growth Forest Guideline, are maintained on a continuing basis on DNR-managed timberlands. Stands

identified for ERF management are managed on longer rotations before final harvest (but final harvest does still occur). Stands to be managed as ERF are identified based on the "old forest" value they specifically provide in certain locations, irrespective of land status (e.g., adjacent to old growth stands, in riparian areas, along visually sensitive corridors, significant biodiversity areas, large patches). Aside from these specific locations, school trust lands are avoided for management as ERF to the extent possible when old forest goals can be achieved on non-trust lands.

Minnesota Forest Resources Council (MFRC) Voluntary Site-Level Forest Management Guidelines - The Minnesota Forest Resource Council's Voluntary Site-Level Forest Management Guidelines for Sustaining Minnesota Forest Resources focus on mitigating the effects of timber management on wildlife habitat, riparian areas, and soil and water resources. They cover a variety of management practices that address topics such as provision of coarse woody debris, retention of leave trees, riparian zones and seasonal ponds, and rare species and rare communities. Recently they were revised to include guidelines for the removal of woody biomass associated with forest management.

#### DNR application of MFRC Site-Level Forest Management Guidelines:

These guidelines have been adopted by the DNR and by policy are not voluntary on DNR-administered lands (including trust lands). As a general rule, the DNR shall meet or exceed these guideline standards.

#### DNR PROCEDURES AFFECTING SCHOOL TRUST LAND FOREST MANAGEMENT

#### **Forest Certification**

#### **Background – What is Forest Certification?**

Forest Certification is an independent, third-party verified system that evaluates and recognizes sustainable and responsible forest management and procurement practices. In the context of Forest Certification, sustainability includes maintenance of the ecological, economic, and social components of forests and surrounding communities.

Forest Certification is widely seen as the most important initiative of recent decades to promote the sustainable management of the world's forests. Primarily a market-driven initiative, consumers began to demand "green" certified products in response to increased concerns over illegal logging and the degradation of tropical rainforests. Through chain-of-custody certification, consumers can be confident that products displaying a certified logo were grown, harvested and produced in a sustainable manner, consistent with the principles of Forest Certification.

While participation in Forest Certification within the U.S. is voluntary, for much of the global forest products industry, sourcing from certified forests and providing chain-of-custody credentials is seen by customers as a pre-requisite or license to doing business. Large retail chains such as Home Depot, Lowe's, and IKEA, that give preference to certified products by purchasing specific proportions of their wood products from certified firms or organizations; publishers; and public procurement policies are seen as the primary drivers of Forest Certification. Although consumers may not yet demand certified products explicitly, they do expect that the products they purchase are not derived illegally and do not degrade forest ecosystems. Companies that buy wood and paper products face substantial marketplace risks and targeted negative media campaigns from environmental groups if their brands are associated with poor forest management practices that have detrimental environmental or social consequences. Time Inc., one of the major corporations that was targeted in the early 2000s by environmental groups for not addressing forest sustainability issues, now has a paper purchasing standard that requires 80% to be sourced from sustainably managed, third-party certified forests.

In response to this increased market demand and the *Governor's Task Force Report on the Competitiveness of Minnesota's Primary Forest Products Industry*, MN DNR committed to, and successfully obtained, dual (FSC and SFI) third-party Forest Certification on all MN DNR Forestry and most Division of Fisheries and Wildlife administered lands in December of 2005. MN DNR currently manages 4.9 million acres of certified lands, 4.84 million acres of which are dual-certified through FSC and SFI.

#### **Benefits – Why is Forest Certification Important?**

Forest Certification of state-administered lands shows that the DNR is providing a sustainable supply of forest products and services from healthy, diverse and productive ecosystems through continuously improved forest management practices. Given the current stresses of invasive species, forest conversion, climate change, etc., managing sustainably is crucial for ensuring a long-term flow of forest products and timber revenue from School trust lands and other DNR-administered lands. Forest Certification has not changed MN DNR's priorities or management objectives, but has rather focused attention on mission-drive work and prompted action on managing sustainably by addressing biodiversity, water quality, and other issues that MN DNR was already committed to. In some cases, Forest Certification is likely to lead to increased future products and revenue as a result of improved ecological and forest health conditions. Maintaining Forest Certification demonstrates and re-affirms DNR's dedication to sustainable and responsible management.

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<sup>&</sup>lt;sup>2</sup> 2010. Price Waterhouse Coopers. Forest, Paper, and Packaging CEO Perspectives.

In the current tough economic times, certification has helped improve the global market competitiveness of Minnesota's certified forest products. Forest Certification has helped ensure strong markets for state-owned timber, thereby maintaining our ability to effectively manage our forests while also maintaining the economic vitality of many of Minnesota's forest dependent rural communities. Minnesota has experienced fewer mill closures and stronger forest product markets, compared to other regions in the country where certified forests and products are not available. Although data indicates that consumers are not willing to pay more for certified products (i.e., certificate holders are not receiving price premiums), most agree that Forest Certification has played a huge role in securing and ensuring market access.

As explained earlier, many in the global forest products industry view Forest Certification as a requirement to doing business and a necessity in order to compete with cheaper, foreign fiber sources or forest products. Forest Certification is expected to be increasingly important in the future in order to compete in the global marketplace, especially as large acreages become certified. Several green building initiatives require the use of certified fiber in order to qualify for green building credits. Most notably, the U.S. Green Building Council (USGBC) and the Canada Green Building Council (CaGBC) require that all vendors selling wood-based products to Leadership in Energy and Environmental Design (LEED) projects must be FSC CoC certified. This has been a major competitive factor, especially in the current down economy, for wood product companies who supply products for building projects and rely on the housing market for their survival.

#### **Costs of Forest Certification**

Although there are countless financial and ecological benefits associated with Forest Certification, there are necessary costs that accompany maintenance of one's forest management certificate. Most costs, beyond increased administrative and logistical costs, are difficult to track or quantify since Forest Certification has not driven specific management changes. According to the best data and analysis available, Department costs associated with MN DNR's five year forest management certificate (covering Fiscal Years (FY) 2006-2010) have totaled about \$1,050,000. MN DNR Division of Forestry's portion of these costs is \$840-850,000. This equates to an annual average of \$168,000 per year, or 3.4 cents per acre per year. (These figures include costs for all certified DNR-administered forestlands (Trust and non-Trust lands) for FY 06-10.) Proportionate to the landbase, school trust lands share about 49% of the total costs, or approximately \$82,000 per FY.

Note: While the costs of maintaining MN DNR's dual forest management certificates are certified and included when calculating the net return to the trusts, MN DNR received a \$250,000 Legislative-Citizen Commission on Minnesota Resources (LCCMR) grant to cover the annual auditing costs for FY 2006-2010. These costs were not certified against the trusts but will be as MN DNR moves forward with its Forest Certification efforts.

The fixed per-unit (acre) costs associated with Forest Certification are inversely related to the size of one's forest management certificate. This is illustrated by comparing costs with other (smaller) certificate holders and has long been recognized as the major barrier for small landowners. Combining interspersed School Trust and other DNR Administered lands into a single forest management certificate realizes the economies of scale necessary to cost-effectively provide greater global market access to School Trust and other state land forest products.

#### **Recent Growth in Forest Management Certification**

The Great Lakes States Region has been recognized by Dovetail Partners, FSC, and others, as a success story for forest certification and as a hub for certified products. Combined, the certified forestland in Minnesota, Wisconsin, and Michigan totals 14,381,041 acres, which makes up more than 50% of the FSC certified forests in the U.S. Since 2005, several other states have decided to pursue and obtain certification for state forestlands, including Maine, Maryland, Massachusetts, New York, Pennsylvania, Washington, Ohio and Indiana. Missouri and Colorado are also considering certification.

Within Minnesota, Forest Certification is continuing to grow, proof that other certificate holders are seeing economic benefits of Forest Certification thru increased competitiveness in external markets, in addition to the benefits to their sustainable management operations. Between 2008 and 2009, five counties, including Carlton, Crow Wing, Clearwater, Beltrami and Koochiching, have become dual certified. (For a map depicting all the certified acres in Minnesota visit: <a href="http://www.dnr.state.mn.us/forestry/certification/certifiedforest\_map.html">http://www.dnr.state.mn.us/forestry/certification/certifiedforest\_map.html</a>).

#### **Removing School Trust Land from Forest Certification**

Due to the scattered and interspersed nature of Trust lands within other DNR-administered lands, the added administrative / logistical costs of separately tracking non-certified versus certified products from timber sales that cross the line between Trust and other DNR-administered lands, may likely equal or exceed the small cost savings of removing Trust lands from the scope of DNR's dual FM Certificates.

Moreover, it is highly unlikely that FSC or SFI would allow MN DNR to remove Trust lands from the scope of its Forest Management Certificate, due to their "Partial Certification" policy which requires certificate holders to commit to, and work towards, certification of their entire landbase. This policy is intended to address environmental groups concern that allowing partial certification will result in more damage, degradation, and concentrated intensive timber harvest on the non-certified portions. Partial certification could also lead to confusion and false claims of certification in the marketplace.

In complying with Forest Certification CoC procedures and requirements, MN DNR would be required to track the non-certified fiber from Trust lands separate from the certified fiber from other DNR-administered lands, even if there were no differences in management. This would result in:

- Added tracking costs that would be purely logistical in nature and would not result in any changes in management or actual improvements on the ground.
- Increased fixed per-unit administrative costs due to loss of economies of scale. Combined, it is highly likely that the costs associated with removing Trust lands from Forest Certification would outweigh the financial savings.

Comparing the costs of MN DNR's forest management operations against other certified or non-certified forest landowners would require significant time and a detailed analysis of the similarities and differences in cost certification and financial accounting practices. For the results to be accurately interpreted, a comparative analysis of the forest land-base (size, species, forest health issues, etc.), forest management objectives, strength and diversity of the local forest products industry, and other economic factors impacting forest management, are necessary. Cost comparison data is not readily available, nor would it provide an accurate picture of the benefits and costs of Forest Certification.

**Contact:** Rebecca Barnard, Forest Certification Coordinator, 651-259-5256 http://www.dnr.state.mn.us/forestry/certification/index.html.

#### **Trust Land Timber Production Initiatives**

Over the past decade in particular, the DNR has undertaken a number of initiatives that will improve the long and short-term timber productivity (and thus revenue production) of school trust lands. Following are some specific examples:

#### 1. DNR Subsection Forest Resource Management Plans (SFRMP)

Beginning in 2000, the DNR began developing SFRMPs that have accelerated the harvest in a number of forest types (e.g., aspen, birch, jack pine) with an overabundance of over-mature acres to regenerate new young forests to improve, among a number of other things, timber productivity. The concept of "high risk-low volume" stand management was borne out of the SFRMP process to make sure the declining over-mature stands were returned to a more productive state. Since 2002, DNR has increased the amount of timber offered for sale from state lands by over 25% (compared to the previous decade). The following aspen success story demonstrates how DNR forest managers have taken significant steps to keep DNR timberlands in a highly productive state for timber, wildlife habitat and other values.

- 2. **2003** Accelerated Management Action In this initiative, the DNR provided direction to field staff to offer additional (i.e., beyond the planned amount) over-mature and declining stands for sale if they came across them in their normal course of work. This was issued over concern about losing the ability to maintain and regenerate these types of stands without immediate harvest treatment
- **3. 2009 Pine and Hardwood Thinning Initiative** Similar to the 2010 initiative below, the DNR responded to an immediate industry need for certain species of trees that were in short supply due to the significant downturn in the economy and resulting drop in timber harvest across the state. This initiative had the same effect as the 2010 initiative in accelerating the treatment of stands in need of thinning, the result of which is increased growth and timber productivity.
- **4. 2009 Directive to include biomass on state timber appraisals -** Due the growing interest in using woody biomass for energy production, the DNR issued directions to field staff to make biomass available on DNR timber sales where guidelines allow. This resulted in the capture of additional revenue from DNR forest management activities. While the woody biomass market has yet to fully develop, the DNR has established the process and procedures for doing so when the market emerges.
- **5.** 2010 Sawmill Industry Crisis Initiative In February 2010, the DNR issued directions to field staff from multiple divisions to identify additional pine and spruce thinning opportunities and offer them for sale by June 2010. This was done to address immediate shortages of timber at a number of sawmills. But the end result has been accelerated treatment of stands in need of thinning that will increase their growth and timber productivity.

6. The Aspen Resource in Minnesota. A Forest Management Success Story - Less than 25 years ago in Minnesota (largely due to a lack of markets) foresters and wildlife managers had to pay contractors to bulldoze old aspen trees into piles to regenerate stands into a young, vigorously growing condition for wildlife habitat and forest health purposes. Much of this work was done through the Reinvest in Minnesota (RIM) wildlife habitat program. These investments in habitat and forest health paid off in over a thousand acres of vigorous, young aspen forest. Since the RIM Program efforts, with development of excellent forest industry markets for aspen in Minnesota over the past 25 years, DNR has accomplished management through commercial harvest of many thousands of acres annually.

In addition to the habitat benefits, an important benefit of this management effort is that within the next 10 to 15 years, supplies of aspen for Minnesota industry will consist of younger, higher quality fiber than ever before. This could be a tremendous selling point in maintaining and attracting industry – critical to maintaining the ability to generate income for the trust through forest harvest revenues, and through property taxes paid by the industries themselves, and their employees.

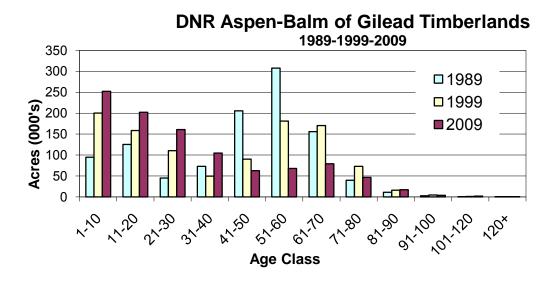


Figure X: Aspen/Balm of Gilead Forest Type Acres by Age Class

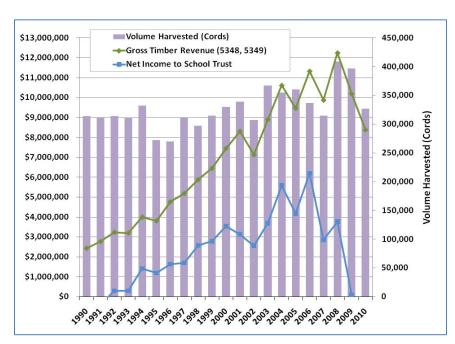
The aspen resource situation on DNR lands has changed dramatically since 1985. DNR has made tremendous progress in treating older aspen stands over the past 25 years, with resulting wildlife habitat and forest health benefits. The school trust should begin to reap the revenue benefits of this management within the next 15 years, and then for many years to come. Volumes per acre and fiber quality of aspen for industry should see significant improvement.

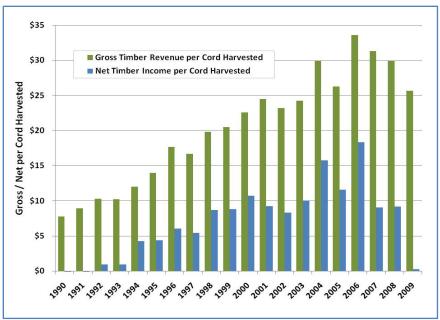
#### FINANCIAL INFORMATION

#### TIMBER GROSS / NET FROM OPERATIONS

Gross timber revenue from DNR managed School Trust land increased from \$2.4 million in FY1990 to a peak \$12.2 million in FY 2008 which coincided the peak harvest volume at 409,000 cords. In FY 2009, gross timber revenue declined to \$10.2 million on a 397,000 cord harvest. Preliminary estimates for FY 2010 are \$8.4 million on a 327,000 cord harvest (as of June 30, 2010). Net timber income to the School Trust peaked in 2006 at \$6.2 million, then dramatically declined in FY 2007 to \$2.9 million followed by another dramatic decline in FY 2009 to \$0.1 million.

Gross timber revenue and net income per cord harvested peaked in 2006 at \$34 and \$18 per cord respectively as a direct result of the housing bubble and economic scarcity of the State's aspen resource. Net timber income per cord harvested declined to \$9 per cord in FY 2007-08.





#### Market Outlook

Sales Volume and Pricing – Although paper, lumber, and oriented strand board (OSB) markets are on the rebound, stumpage pricing and sales volume continue to be impeded by localized over supply relative to market demand as indicated by the FY10 sell rate of 82 percent of volume offered. The Northeast Region was hit hardest by shrinking market demand with a sell rate of 71 percent. With an anticipated FY11 offer target of 800,000 cords plus reoffers, sales volume will most likely be similar to FY10. Sell rates and stumpage prices are expected to improve as the general economy improves.

Harvest Volume and Pricing – As a direct result of recession induced permanent mill closures in the Northeast Region, School Trust volume harvested is expected to be 2-3 percent below the long-term rate of 49 percent  $\pm$  5 percent of total DNR administered harvest volume through FY13. Based on current volume and value under contract, 2.2 million cords with a risk adjusted book value of \$43 million or \$19.30 per cord (includes sawtimber), gross School Trust timber revenue expectations are relatively flat at about 46 percent of forecast DNR timber revenues or  $\pm$  \$8.5 million per year through FY13.

School Trust Sales Value Percent of Total, FY08-10.

Fiscal Year	Sale Value	Percent by Total
	(\$ millions)	DNR Sale Value
2008	\$10.9	44.2%
2009	\$8.8	47.2%
2010	\$6.6	42.2%

School Trust Gross Timber Operating Revenue / Net Timber Income, 1990-2010.

			T		ı
	Gross Timber		Volume	Gross Timber	Net Income
Fiscal	Revenue	Net Income to	Harvested	Revenue per	per Cord
Year	(5348, 5349)	School Trust	(Cords)	Cord Harvested	Harvested
1990	\$2,433,000	\$0	314,000	\$8	\$0
1991	\$2,773,000	\$0	311,000	\$9	\$0
1992	\$3,236,000	\$291,962	314,000	\$10	\$1
1993	\$3,200,000	\$299,410	312,000	\$10	\$1
1994	\$4,000,000	\$1,408,723	332,000	\$12	\$4
1995	\$3,809,000	\$1,188,060	272,000	\$14	\$4
1996	\$4,768,000	\$1,639,207	270,000	\$18	\$6
1997	\$5,185,000	\$1,693,507	311,000	\$17	\$5
1998	\$5,884,000	\$2,575,321	297,000	\$20	\$9
1999	\$6,452,000	\$2,787,976	315,000	\$20	\$9
2000	\$7,455,000	\$3,537,864	330,000	\$23	\$11
2001	\$8,313,000	\$3,133,823	339,000	\$25	\$9
2002	\$7,133,000	\$2,563,069	307,000	\$23	\$8
2003	\$8,903,000	\$3,685,715	367,000	\$24	\$10
2004	\$10,618,000	\$5,591,990	355,000	\$30	\$16
2005	\$9,470,000	\$4,170,119	360,000	\$26	\$12
2006	\$11,330,000	\$6,192,738	337,000	\$34	\$18
2007	\$9,876,000	\$2,852,766	315,000	\$31	\$9
2008	\$12,249,000	\$3,768,861	409,000	\$30	\$9
2009	\$10,197,000	\$100,833	397,000	\$26	\$0
2010*	\$8,378,980		327,000	\$26	
*Dualina	inary as of June 20	2010			

<sup>\*</sup>Preliminary as of June 30, 2010.

#### FINANCIAL EVALUATION OF DNR MANAGED LAND & TIMBER ASSETS

**DNR Management Cost Reductions** - Forestry took a proactive approach to reduce costs by approximately \$5.4M over the biennium. The division was facing staff reductions due to retirements and attrition and made a concerted effort to keep positions vacant. The division is currently down by approximately 40 fte from 2008 and expects additional retirements in the coming years. Staff reductions naturally reduce fleet, rent, communications, and other costs associated with staff hires.

#### Why not sell the School Trust land and invest in stocks and bonds?

Since federal income tax law accelerated forest industry divestiture of land holdings in the early 1990s, public and private pension funds, private equity investments in limited partnerships (LP), commingled funds and insurance company separate accounts have all invested in timberland. In addition to wealth-building opportunities created by market changes, there are a number of other reasons to continue to include land & timber in the School Trust investment portfolio.

#### 1. Global demand for forest products is increasing.

Forest products demand is driven by population growth and economic development. Many Minnesota forest products are exported within the U.S. and globally.

#### 2. Timber is an inflation hedge.

Historically, stumpage prices have kept pace with inflation. In addition, timber increases in value "on the stump" at a greater rate than inflation because it grows in volume over time.

#### 3. Timber has low correlation to other asset classes.

Commercial timberland prices are impacted by a different set of market and economic factors than other asset classes. Because prices are not affected by the same factors, timber returns are not correlated to returns of other asset classes, such as stocks and bonds. The addition of a low correlation timberland asset increases the diversification of an investment portfolio, decreasing the overall volatility of long-term returns.

#### 4. Land is an appreciating asset.

Land supply is limited and demand continues to grow as population and economic development expands. Historically, land has increased in value at 1-2 percent greater than inflation. Depending on location, specific parcels can be targeted as "higher and better use" that can be sold to developers at a premium, providing additional appreciation benefits for timberland owners.

#### **BARRIERS TO REVENUE MAXIMIZATION**

*Market Size* – Minnesota lost 25 percent of industrial wood capacity and an estimated 15 percent of logging capacity as a result to the recession. Industrial wood utilization dropped from 4 million cords in 2005 to an estimated 3 million cords in 2009. Most of this loss was incurred in the Northeast region where the majority of School Trust land is located. With an estimated 750,000 cords industrial capacity lost in the Northeast region, the Division of Forestry has increased efforts to evaluate and adjust timber marketing strategies to the new competitive environment.

*Winter Only Access/Harvest* – An estimated 75-80 percent of the School Trust commercial timberland is limited to winter only access and/or harvest with the balance being available for summer access/harvest. Being so heavy to winter only access/harvest limits the total volume of wood that can harvested in a given fiscal year because the vast majority of harvest activity is concentrated in winter quarter (January – March).

Capturing Highest Value – In the long-run, Minnesota stumpage values are derived from market area end product value, e.g. paper and lumber, minus manufacturing costs and profit, tempered by national and global competition. While the vast majority of timber sold reaches the highest value and best use (HBU) end market, opportunities exist to improve utilization through additional sorting at the landing, particularly in pine sawbolts and hardwood sawtimber & veneer. For individual logging contractors, the most important drivers of log/bolt/pulp sorting decisions are market differentials in delivered prices paid by various mills for wood. Delivered prices paid for logs, sawbolts, and pulpwood are, in turn, driven by end product prices, e.g. lumber. However, lack of current market information at the purchaser level occasionally places constraints on utilization. The Division of Forestry - Utilization & Marketing Team has identified this topic as a high priority.

#### **NEED FOR FOREST INVESTMENT**

Forest investments include reforestation and non-commercial intermediate timber stand treatments implemented to increase long-term value by improving species composition, quality, and health and to reduce fuels hazards. The Division of Forestry invests an average \$1 million per year in School Trust land funded primarily with bonding dollars that are not included in certifiable costs. Approximately 5,000 acres of School Trust land are treated annually. Tree planting following harvest is an efficient method of reforestation for white pine, Norway pine, and white spruce. Under-planting is commonly used to regenerate oak species. All of these planted species are managed for sawtimber production with the potential to produce a 3-5 percent real annual return on investment.

Example 1. Discounted cash flow (DCF) analysis of Norway pine management.

#### **EXPENSES PER ACRE**

Activity	Year =	Expense	PV Expense
Site Prep	0	-100	-100
Seedlings & Planting	0	-175	-\$175
Release	2	-100	-\$94
Annual Costs	1-65	-4	-\$114
SUM PV Expenses			-\$383

#### **REVENUES PER ACRE**

Activity	Year =	Revenue	PV Revenue
Commercial Thinning	25	99	\$47
Commercial Thinning	35	403	\$143
Commercial Thinning	45	642	\$170
Commercial Thinning	55	932	\$183
Final Harvest (6)	65	5079	\$744
SUM PV Revenues			\$1,287

#### **FINANCIAL EVALUATION**

NPV (Net Present Value)	\$904 per acre
AEV (Annual Equivalent Value)	\$30.85 per year
IRR (Internal Rate of Return)	5.1% per year

#### **Notes:**

- 1) G&Y Model = Red Pine Yield (RP2005), USDA Forest Service GTR NC 271.
- 2) Site Index (SI) = 70 feet at age 50
- 3) Real discount rate = 3%
- 4) Trees per acre (TPA) = 600 planted with 83% survival rate at year 2
- 5) Optimal rotation length based on financial maturity criteria = 65 years for SI 70.
- 6) Current DNR policy recommendations: average normal rotation length = 100 years and extended rotation forest (ERF) guideline = 150 years for SI >65. Approximately 50% of Norway pine acres are managed as ERF.
- 7) Deer predation deterrent costs not included; may be required in certain locals.
- 8) No property or income tax effects.
- 9) Land ownership retained at end of rotation.
- 10) All dollar values constant 2009 dollars.

As previously mentioned, investments are made in non-commercial intermediate timber stand treatments designed to improve species composition, stand density, and to reduce fuel hazards. The financial benefits are to improve growth rate, volume yield, and quality, especially in red/mixed oak, Norway pine, upland northern hardwoods, and white spruce managed for sawtimber production. For example, an appropriately timed non-commercial release treatment in red/mixed oak provides marginal revenue = \$500 per acre with present value (PV) = \$114 per acre using a real discount rate of 3%, with the marginal revenue discounted 50 years to time of treatment. Assuming an average treatment cost of \$75 per acre, the PV of marginal net income is estimated at \$39 per acre for red/mixed oak. This is a conservative estimate not accounting for likely increases in oak veneer as a percentage of net volume yield. Similar returns are expected in upland northern hardwoods and Norway pine. The expected return on white spruce is slightly positive.

Example 2. Marginal analysis of non-commercial release/cleaning of overstocked stands with sawtimber management objective.

			Marginal	PV Marginal	PV Marginal
	Target	Stumpage	Revenue	Revenue	Net Income
Forest Type	Harvest Age	Price (MBF)	(per acre)	(per acre)	(per acre)
Red / Mixed Oak	80	\$250	\$500	\$114	\$39
Norway Pine (8)	65	\$175	\$350	\$107	\$32
Upland N Hardwoods	80	\$175	\$350	\$107	\$32
White Spruce	65	\$125	\$250	\$77	\$2

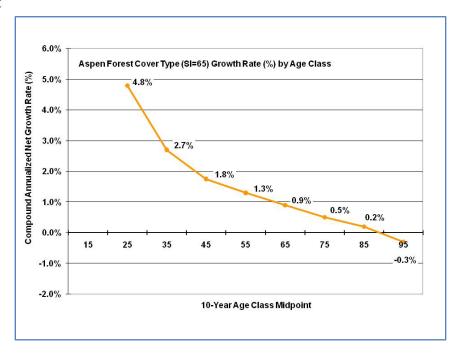
#### Notes:

- 1) G&Y Model = Forest Vegetation Simulator (FVS) Lake States Variant, USDA Forest Service, revised July 2008.
- 2) Species Site Index (SI) >= 55.
- 3) Overstocked defined as >1,250 trees per acre at stand age 20 for pine / spruce and age 30 for oak / hardwoods.
- 4) Treatment would reduce average harvest age by 20 years as compared to overstocked condition.
- 5) Average release / cleaning treatment cost = \$75 per acre.
- 6) Real discount rate = 3%.
- 7) PV marginal net income discounted at 40 years for conifers and 50 years for hardwoods.
- 8) Current DNR policy recommendations: average normal rotation length = 100 years and extended rotation forest (ERF) guidelines = 120 years for SI 55-65 and 150 years for SI >65. Approximately 50% of Norway pine acres are managed as ERF in existing forest management plans.

#### WHY SELL TIMBER IN A DOWN ECONOMY?

There are two fundamental reasons for continuing to market timber in a down economy. First, holding timber beyond normal rotation age incurs measurable costs including: reduced wood quality, lower financial returns, and less sustainable harvest volume. Given the current age-class

distribution of School Trust commercial upland timber, the average opportunity cost of holding stands past rotation age is estimated to be approximately 4 percent per year in foregone net growth and value. This estimate is the difference between 1 percent average net growth at age 65 (current average harvest age) and 5 percent average net growth at age 25.3 If we stopped harvesting timber from School Trust land for one year, the



opportunity cost of foregone net growth alone would be nearly 15,000 cords with a current market value of \$300,000. This is the primary reason the Division of Forestry intentionally reprioritized staff time to offer more wood at rotation age versus five to ten years past rotation age.

The second reason for selling wood in a down economy is to support the state's forest industry. Basically, if we lose a major mill, we also lose manufacturing output, value added, jobs, taxes paid, and the ability to manage forest land. Forest products manufacturing is the fourth largest manufacturing sector in Minnesota with \$10 billion in sales, \$3 billion in value added (gross state product) and 40,000 direct jobs. In 2008, the industry's total economic contribution was \$19 billion in sales, \$7.6 billion in value added (gross state product), and 95,000 jobs. In addition, the industry's total state and local tax contribution was estimated at nearly \$700 million. In other words, there is much more to the economic contribution picture than net timber revenues deposited in the School Trust Fund. The state's public schools benefit exponentially from forest industry generated state and local taxes paid.

<sup>&</sup>lt;sup>3</sup> Deckard, Donald L. 2008. Management Brief: Aspen Productivity – Gross versus Net Growth & Yield. St. Paul, MN: Minnesota DNR – Division of Forestry.

<sup>&</sup>lt;sup>4</sup>Bureau of Business and Economic Research, University of Minnesota, Duluth, June 2010. Preliminary findings of an economic contribution analysis contracted by Minnesota DNR, Division of Forestry.

Economic Contribution of all Minnesota Forest Products Mfg. and Related Industries, 2008.

Source	Direct Effect	Indirect Effect	Induced Effect	Total
Value Added	\$3,081,674,752	\$2,434,637,824	\$2,104,381,440	\$7,620,689,920
Output	\$10,200,973,312	\$5,007,278,080	\$3,631,587,328	\$18,839,830,528
Employment	39,278	25,911	29,089	94,278

#### Percentage of school trust timber sold in recent down market

Forest management on School Trust land is driven by the same silvicultural, sustainability, and environmental considerations as all other land classification categories that DNR Forestry manages. The percentage of School Trust timber offered and sold has remained constant at about 49 percent of total DNR timber sales, proportional to the total timber base. Annual harvest volumes and values can deviate by  $\pm$  5 percent from the long-term average because the timber purchaser chooses when to harvest a particular sale within the permit timeframe. For example, preliminary FY10 School Trust timber revenues were 44 percent of total timber revenues as compared to 52 percent of total timber revenues in FY09.

#### Private landowners support of industry in recent down market

During the national financial crisis and ensuing economic recession, all public land management agencies and corporate land managers in Minnesota continued to market similar volumes of wood as compared to pre-recession volumes. In 2009, a total 1.8 million cords of stumpage was sold by public agencies in Minnesota as compared to 1.9 million cords sold in 2008.<sup>5</sup> The only ownership category that significantly reduced timber sales volume was private family forest owners. In Minnesota, family owned forest timber sales volume peaked in 1999 at just over 2 million cords. By 2006, family forest timber sales volume had dropped to about 1.2 million cords.<sup>6</sup> While official harvest estimates are not yet available for 2007, 2008, and 2009, the best available guesstimate is that the economic recession pushed family forest timber sale volumes below 1 million cords in 2009.

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<sup>5</sup> Deckard, Donald L. 2010. 2009 Public Stumpage Price Review. St. Paul, MN: Minnesota DNR, Division of Forestry. Available at <a href="http://www.dnr.state.mn.us/forestry/timbersales/stumpage.html">http://www.dnr.state.mn.us/forestry/timbersales/stumpage.html</a>.

<sup>&</sup>lt;sup>6</sup> Jacobson, Keith L. 2008. Minnesota's Forest Resources. St. Paul, MN: Minnesota DNR, Division of Forestry.

#### WHAT IS INVOLVED IN FOREST MANAGEMENT?

Timber Sale Mechanics – How Does MN DNR Sell Timber? - Once the management areas are identified for harvest, a state forester plans the harvest and develops an estimate, or appraisal, of species, wood volume, products, decay and value. This and other relevant information is included in an appraisal report. The rights to the timber are sold in the form of a permit. Small volumes may be sold to any eligible purchaser in the form of an 'informal' permit and full payment is made when the purchaser signs the permit. But most permits are advertised through websites, legal newspapers and direct mail and offered at public oral and sealed bid auctions to eligible independent loggers and other purchasers. If sold at the auction, the purchaser provides 15% of the appraised value the day of the auction. Permits bid up more than \$5,000 also require a bid guarantee within 60 days. No timber may be cut until full security is provided, either in the form of a cash payment or as documentary credit. Once full security is provided, the purchaser is liable for both harvested volumes and any designated timber left uncut. However, if the permit expires without security, the permit is canceled, the advance payment forfeited to the state, and the permit holder has no further liability.

Before harvest may begin, the forester must meet with the purchaser or his/her qualified operator to review the sale specifications, road and landing locations, wetland areas and other areas of concern. As harvest progresses, the forester makes periodic inspections and documents all significant activity and important verbal communications. Each load hauled is marked and documented with a load ticket by the permit holder before the wood leaves the harvest area.

The term of the permit is normally three full years but may be up to five years if in the best interests of the state. Once begun, harvesting is commonly completed in one season. Permit expiration dates are not extended except in unusual or difficult circumstances. For example, the sudden and sustained decline in timber demand has necessitated extensions on many DNR timber permits.

Each quarter, the forester assesses how much wood has been harvested. The value of the harvested wood is applied against any cash which was paid up front until the cash is depleted. Actual scales that are over and above the volume estimated and paid for are then invoiced. Permits secured with documentary credit are invoiced for the value of the harvested wood immediately.

The amount included on any given invoice depends in part on how the permit was sold. If the permit was sold based on actual scaled volume, the invoice amount is from the scales of that time period. Alternatively, up to 25% of sales are sold on the foresters volume estimate and the permit holder is only liable for the value and volume estimated. All volumes are charged based on the bid up price per unit of measure, or where there was no bid up, the appraised price per unit of measure. The permit is closed after the harvest is completed, paid in full and all permit terms and conditions have been met.

#### COMPARISON OF DNR MANAGEMENT COSTS TO OTHER LAND MANAGERS

Land management revenues and costs are a function of: statutory requirements, complexity of management objectives, and scale. While detailed information is not available to undertake an agency-to-agency revenue/cost comparison, a general guide is that management costs range from highest to lowest in the following order: federal, state, county/local, then private. DNR carries additional costs that other land managers do not. By statute the DNR is charged with fire protection on all state lands. No other land manager except the federal government has this charge. Even if detailed cost information were available, the comparisons would not necessarily be meaningful because there are no universally applied cost accounting standards.

#### **COST CERTIFICATION**

(See 2009 Certification Report in the following pages)

# 2009

MN Dept Of Natural Resources

**Division of Forestry** 

# M.S. 16A.125 TRANSFER CERTIFICATION REPORT

The contents of this report identify costs certified against trust lands and how the certified costs and net revenues from trust lands are distributed

#### Contents include:

- Forestry Transfer Certification Process
- M.S. 16A.125 Transfer Certification Report

# Department of Natural Resources Division of Forestry

#### M.S.16A.125 Transfer Certification Process

Minnesota Statute 16A.125, Subd. 5 direct which costs are certified against trust fund lands and how the certified costs and net revenues from trust fund lands are distributed. Only those costs paid from the General Fund and Forest Management Investment Fund are included in cost certification. Costs charged to dedicated funds and federal funds are excluded from the cost certification process. In addition, only revenues derived from Forestry activities are included in the process. Non-forestry revenues, such as mineral royalties are excluded.

MS16A.125, Subd 5 states:

#### Subd. 5. Forest trust lands.

- (a) The term "state forest trust fund lands" as used in this subdivision, means public land in trust under the Constitution set apart as "forest lands under the authority of the commissioner" of natural resources as defined by section 89.001, subdivision 13.
- (b) The commissioner of management and budget shall credit the revenue from the forest trust fund lands to the forest suspense account. The account must specify the trust funds interested in the lands and the respective receipts of the lands.
- (c) After a fiscal year, the commissioner of management and budget shall certify the total costs incurred for forestry during that year under appropriations for the protection, improvement, administration, and management of state forest trust fund lands and construction and improvement of forest roads to enhance the forest value of the lands. The certificate must specify the trust funds interested in the lands. The commissioner of natural resources shall supply the commissioner of management and budget with the information needed for the certificate.
- (d) After a fiscal year, the commissioner shall distribute the receipts credited to the suspense account during that fiscal year as follows:
- (1) the amount of the certified costs incurred by the state for forest management, forest improvement, and road improvement during the fiscal year shall be transferred to the forest management investment account established under section 89.039;
- (2) the balance of the certified costs incurred by the state during the fiscal year shall be transferred to the general fund; and
- (3) the balance of the receipts shall then be returned prorated to the trust funds in proportion to their respective interests in the lands which produced the receipts.

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# Department of Natural Resources Division of Forestry

The Division of Forestry identifies hours paid and dollars expended using a set of cost codes. The cost codes identify charges based on a specific activity (e.g. fire suppression, forest inventory, etc.) that created the expenditure. These activities are grouped into 5 main categories; protection, improvement, roads, management, and administration. Once costs are determined, both on trust and non-trust lands, then we prorate these costs on a per acre basis between school and university. Total state acres subject to forest management activities are ~5.6 million. Of this amount, ~2.4 million acres is attributable to trust fund lands. The certification process only applies to activities that generate forestry related net revenues. Activities, such as recreation and private land management are excluded from the process.

Five types of activities have an allocation process.

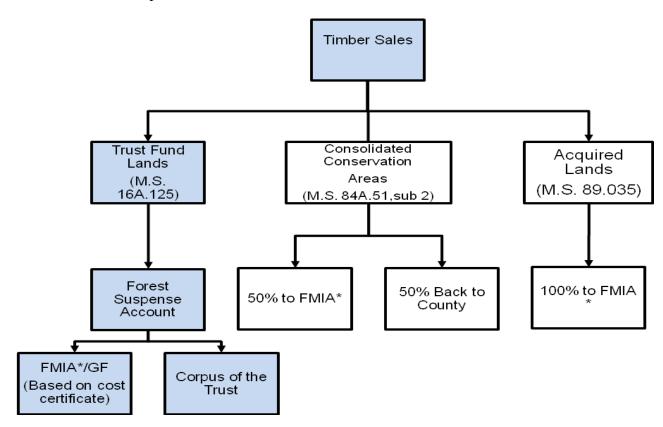
- 1. Fire Protection: We protect 22.8 million acres against wildfires. The cost of protecting Trust lands against wildfire is determined by multiplying trust land acres on a cost per acre basis.
- 2. Forest Roads: State forest roads provide access to some trust lands. Those lands that are within one-quarter mile of the road are served by the road. Each year, we calculate the cost of maintaining roads on a per acre basis. The cost of road maintenance for Trust lands is the number of acres of Trust land within one-quarter mile of a state road multiplied by the per acre cost of road maintenance.
- 3. Management: Management costs are allocated to all lands in proportion to the revenues received from those lands. Management costs consist of activities like inventory, and insect and disease. These costs are charged on a per acre basis based on a percent of trust vs. non-trust lands. Timber activities consist of timber sales preparation and administration. These timber activities can be directly tied to the revenue generated on trust lands. In FY 2008, 48 percent of all timber revenue was generated on Trust Lands, so the cost of managing them is calculated at 48 percent.
- 4. Forest Improvement: Each year, we calculate the amount of money we spend on improving the activities of forestland that we manage. These activities may include site preparation and stand improvement. The cost of improving forests is applied to the ratio of trust lands to non-trust lands.
- 5. Administration: Each year, we calculate the amount of administrative costs attributable to trust lands. A percent of administrative costs are charged to trust lands on a per acre basis.

[11/25/2009] Page 3

General Operations: In addition, general operations costs are "the cost of doing business", the record keeping and other activities that support day-to-day operations. Support services, such as bill paying, training, and personnel management allow the certifiable activities above to be performed. Costs for support services, however, are difficult to tie to any specific activity. Therefore, we prorate general operations costs back to activities based on the percent of expenditures in each activity (ie: management, improvement, roads, and administration). Thus, if maintaining forest roads accounts for 5 percent of all expenditures, 5 percent of general operations costs are included in the cost of maintaining forest roads. Fire Protection is excluded from this calculation because these activities are charged directly to fire.

Finally, the trust land certification process was reviewed in FY1993 and FY1997 by the Office of Legislative Auditor (OLA). In the final reports issued by the OLA, the methods and process used were found "to be reasonable". Directives and suggestions for change and improvement have been implemented.

The purpose of this graph is to identify how Timber Sales revenue on Trust Lands flows through the suspense account and to provide a historical summary on the account. Per M.S. 16A.125, Subd 5., certified costs for administration and protection are transferred to the general fund. Costs for management, improvement and roads are transferred to FMIA. The balance is transferred to the corpus of the trust.

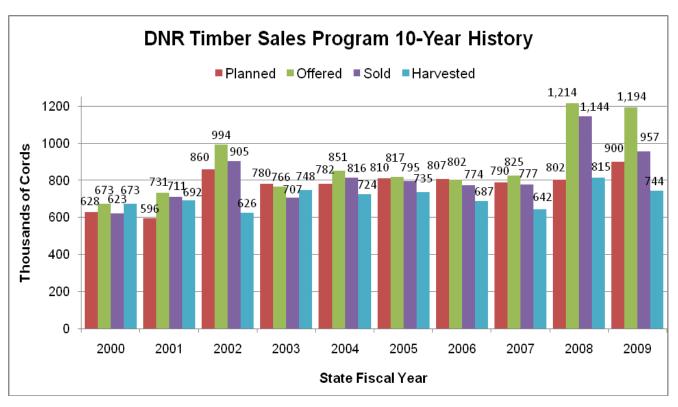


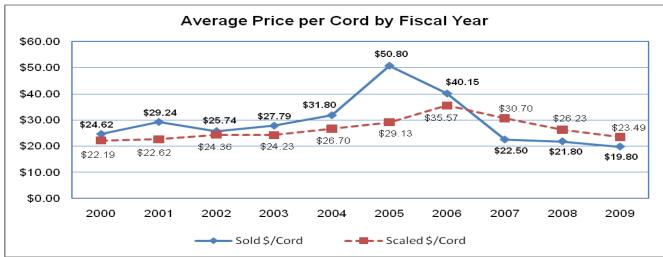
Forest Suspense Account History (in thousands) FY 2004-2009										
2004 2005 2006 2007 2008 2009 5 Yr Avg										
Total Timber Sales	20,635	20,930	25,518	22,582	25,315	19,561	22,781			
Sales on Trust Lands	11,640	10,483	12,497	10,937	13,226	11,430	11,715			
Transfer to GF	5,979	1,796	1,954	4,094	4,154	4,067	3,213			
Transfer to FMIA	er to FMIA - 4,450 4,120 3,971 5,221 7,110 4,974									
Transfer to Trust	5,816	4,362	6,362	3,091	3,813	231	3,572			

Note: FY2005 is the first year of the Forest Management Investment Account

M.S.16A.125, Subd.5(d)-Costs certified in FY09 are actually transferred in FY10.

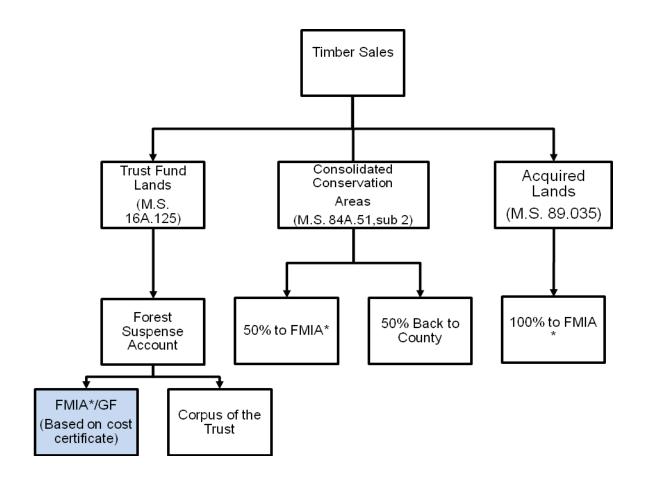
The purpose of the top graph is to show the historical trend for cords planned, offered, sold and harvested. The bottom graph shows the historical trend of the average price sold per cord and the average price received for cords scaled.





Due to the timber market collapse that began in August of 2006, the average price per cord sold for state timber dropped 60% in FY2009 compared to the value received in FY2005. The subsequent revenue for cords scaled remained relatively flat rising slightly in FY2005 and FY2006, but declined in FY2007-2009.

\*The purpose of this chart is to identify a historical perspective on certified costs.



Forestry Certified Costs (in thousands) FY 2004-2009										
2004 2005 2006 2007 2008 2009 5 Yr Avg										
Protection	1,583 1,114 1,616 2,753 2,224 1,844									
Forest Management	2,633	2,912	2,907	2,940	4,400	6,010	3,834			
Forest Improvement	nt <mark>1,219</mark> 1,491 798 949 780 1,026									
Administration 521 682 719 1,342 1,930 2,223 1,37										
Forest Roads	<b>23</b> 47 34 81 41 74 55									
Total	5,979	6,246	6,074	8,065	9,375	11,177	8,187			

M.S.16A.125, Subd 5(d)

#### LEASES AND OTHER CONTRACTS ON LAND

The DNR leases school trust land for agricultural, commercial, governmental, recreational, hunting cabins, lakeshore cabins, agricultural, and other purposes. In addition to leases, DNR also issues and administers easements and utility licenses on school trust land.

The Division of Lands & Minerals determines the terms and conditions of the contracts, conducts real estate appraisals, and executes the contracts. The Division of Forestry is responsible for timber appraisals, inspections, enforcement, and other field work related to these contracts. The Division of Fish and Wildlife works through Lands & Minerals and Forestry when contracts on school trust lands that it administers are issued. Most of the revenues generated are deposited in the Forest Suspense Account. The revenues from forest campgrounds, wild rice leases, lease late fees, sale of standing timber related to contracts, and water crossing licenses are deposited directly into the permanent school fund. Until FY2010, the water crossing license revenues went to the Forest Suspense Account. A 2009 legislative change requires the water crossing license revenues to go directly to the permanent school fund.

The tables below summarize the number of contracts by type, the acres leased, and revenues generated in 2008 and 2009. The tables below illustrate that leases are issued for a variety of purposes. Revenues from easements, licenses, leases, and other contracts for FY2001-2010 can be found in the Revenue section of this packet.

#### **Rates and Payments**

DNR requires cash returns for all uses of school trust land. DNR leasing policies requires that all leases on trust fund lands must be charged the full cash rental. This means that cooperative farming agreements that do not involve a cash payment are not allowed on school trust land. Departmental policies also require cash payment for grant-in-aid trails and right-of-way access permits.

The DNR uses different lease rates depending on the lease. As a guideline, on most leases the annual lease fee to a governmental entity is 6 percent of land value and 9 percent of land value to an individual or private entity. If the market rate for the lease is determined to be greater than the above stated rates, then the DNR will adjust the annual lease fee. The DNR will not charge less than \$50 annually for any lease. The minimum lease fee of \$50/year applies the same to government, individuals, or private entities. The DNR will be reviewing its current lease rate structure.

The lease rate for lakeshore lots is required by the legislature to be only 2 percent of appraised values (see Laws of Minnesota 2003, First Special Session, Chapter 9, Article 1, Section 52). In 2003 the legislature froze the appraisal value for the three remaining lakeshore leases, with the 2003 appraised value adjusted annually based on a government price index. Hunting cabin

leases have been recently renewed. Rental payments substantially increased to \$500/year with modest rates increases during the 10 year term of the lease.

Payments for easements and licenses are made once, for the life of the contract. Easements granting access to, but not ownership of, trust land are provided for highways, roads and trails, flowage for development of wildlife resources, flood control, and other purposes. Easements may be temporary, lasting several months or years, or permanent. Revenues from easements are lump sum payments, usually equal to 100 % of the appraised value of the land. Temporary easements are also issued. These temporary easements have a term of a few years and are charged at 50% of the appraised value of the land.

<u>Tables</u>

Current contracts and acres (June 2010) (School Trust Lands):

Contract type	Number of	Acres
	contract	
Agricultural leases	60	1,766.95
Wild Rice Leases	5	534.40
Aggregate leases	36	488.60
Home site leases	6	3.24
Hunting cabin leases	47	25.32
Lakeshore cabin leases	3	3.30
Misc. commercial leases	29	1,955.73
Misc. government leases	18	136.55
Misc. private leases	33	95.63
Misc. leases, combined	236	2,469.74
Easements	762	5,699.21
Land crossings licenses	537	11,419.90
Water crossings licenses	2,675	N/A
Subtotal:	4,452	24,598.57
Grant-in-Aid permits	104	N/A
Management access permits	65	N/A
Subtotal:	169	N/A
Total:	4,621	24,598.57

### Revenues FY2008-2009 (School Trust Lands):

Contract type	FY08	FY09
Easements	\$57,875	\$92,315
Land crossings	\$35,145	\$23,986
Water crossings	\$154,724	\$224,807
Leases: aggregate	\$219,416	\$344,294
Leases: agricultural	\$12,795	\$16,114
Leases: miscellaneous	\$294,978	\$282,481
Leases: other		
(boathouse, lakeshore,		
etc.)	\$6,189	\$12,615
Leases: hunting cabins	\$15,627	\$16,864
Wild rice farming A	\$3,693	\$3,693
Late fees on DNR land		
leases A	\$94	\$98
Permits	\$63,060	\$13,710
Resource Management		
Access Permits	\$0	\$1,000
Total	\$863,597	\$1,031,977

<sup>&</sup>lt;sup>A</sup> Deposited into the State Forest Suspense Account, but is not subject to cost certification.

#### LAND EXCHANGES OF SCHOOL TRUST LAND

#### **Statutory and Constitutional Direction**

As the legislature may provide, any of the public lands of the state, including lands held in trust for any purpose, may be exchanged for any publicly or privately held lands with the unanimous approval of the governor, attorney general and the state auditor. Lands so acquired shall be subject to the trust, if any, to which the land exchanged therefor were subject. The state shall reserve all mineral and water power rights in lands transferred by the state. (Minn. Const., Art. XI, Sec. 10)

The commissioner of natural resources shall exchange permanent school fund land located in state parks, state recreation areas, wildlife management areas, scientific and natural areas, or state waysides or on lands managed by the commissioner as old growth stands, for other lands as allowed by the Minnesota Constitution, Article XI, Section 10, and Minn. Stat., section 94.343, subdivision 1, that are compatible with the goal of the permanent school fund lands in Minn. Stat., sec. 127A.31, when, as a result of management practices applied to the permanent school fund lands and associated resources, revenue generation has been diminished or prohibited and no alternative has been put into effect to compensate the permanent school fund for the income losses. (Minn. Stat., sec. 92.121)

#### **Procedures**

The procedures for land exchanges of school trust lands are found in Minn. Stat., secs. 94.341 to 94.346.

#### **DNR Land Exchange Process**

Any exchange of public lands of the state must be approved by all three members of the state Land Exchange Board. The Land Exchange Board consists of the Governor, State Auditor, and Attorney General and meets quarterly. The DNR is required to present proposed land exchanges of school trust land to the Land Exchange Board for approval.

When the Land Exchange Board approves a land exchange involving school trust lands, the PSFAC is appointed as the temporary trustee of the school trust lands for purposes of the exchange. The PSFAC is then requested to approve the land exchange. The PSFAC shall be provided independent legal counsel from the Attorney General's Office to review the exchanges. (Minn. Stat., sec. 94.342, subd. 5)

Land exchanges start with a proposal from a landowner, a county, the federal government, or from DNR staff. A land exchange proposal is reviewed within the region. If approved by the Regional Director, the formal application is submitted for handling by the DNR Lands and Minerals Division.

The lands to be exchanged are valued by appraisal. In any exchange the lands to be exchanged for school trust lands must be of substantially equal value or greater. If the exchange lands are of greater value then the school trust lands then the difference in appraised value can be waived. In this instance the school trust lands would get higher value property then is being exchanged. If the school trust lands are of greater value, the difference cannot be waived.

#### **Recent Focus of Land Exchange Program**

The Trust Fund Revenue Enhancement Program, originally funded in FY2005, first focused its land exchange projects on exchanging school trust land from the state parks and state recreation areas. At the start of the effort, 5,633 acres of school trust land were located in state parks and state recreation areas. Of these lands 4,908 acres were exchanged for 10,913 acres of state acquired lands. Today, 633 acres of school trust lands remain within the Hill Annex Mine State Park and 92 acres of school trust lands remain within the Cuyuna Country State Recreation Area. For Hill Annex State Park, revenue generation is occurring for the school fund from mineral leases, a railroad lease, and a real estate lease to the park. The Cuyuna County Recreation Area has potential for aggregate resources and other mineral potential.

The DNR is now focusing on the next areas for land exchanges of school trust lands. Approximately 20,000 acres of old growth forest have been identified on school trust lands. A pilot exchange of 998 acres of school trust land for 1,429 acres of Division of Forestry administered Consolidated Conservation has been presented to the PSFAC for review and approval. (See Internal Land Exchanges – Land Exchange 886 below.) The next priorities are water access sites and wildlife management areas, and the DNR is starting the process to identify revenue generating state lands for exchange.

There are currently 8 land exchanges in various stages of process that involve school trust land. The combined acreage of school trust land totals 4,881 to be exchanged for 6,273 acres of private, tax forfeited land, or other DNR land. If completed, these exchanges will consolidate state administered land holdings and provide additional income generation of timber production for the permanent school fund.

In FY2010 two land exchanges involving school trust land were completed. Land Exchange 874 involved land in Cook County and exchanged 320 acres of school trust

land for 440 acres of private land. Land Exchange 881 also involved land in Cook County and exchanged 32 acres of school trust land for 40 acres of private.

#### **Internal Land Exchanges**

#### **Land Exchange 886**

Land Exchange 886 involves 998 acres of trust land and 1,429 acres of Division of Forestry administered Consolidated Conservation located in Koochiching County. The school trust land in this exchange has designated old growth forest stands situated on them. This exchange is being accomplished pursuant to Minnesota Statutes, section 92.121, which requires the DNR to exchange lands when the ability to generate revenue has been diminished or prohibited as a result of management practices and no alternative has been put into effect to compensate the permanent school fund.

#### Land Exchange 890

Land Exchange 890 involves 89 acres of school trust lands and 160 acres of Division of Forestry acquired lands located in Cass County. Currently the school trust land is being leased to the Longville School District. The purpose of this exchange is to resolve a use of the lands that limit revenue generation activities. In 1997, the Longville School Forest was created on 80 acres of School trust land in Cass County via a certificate of establishment from the commissioner of natural resources. Since then, the Longville School District has operated a school forest site on the parcel. They have developed the site with trails, shelters and docks.

The DNR would like to convey the school trust lands to the Longville School District, however because school trust land can only be sold by public auction the school trust land needs to be exchanged with non-trust lands to allow a direct sale to the Longville School District. The DNR plans to seek special legislation during the 2011 session authorizing a direct sale to the Longville School District.

The school trust will benefit from this exchange because the timber on the parcel that is to become school trust land is accessible and can be harvested to generate income. Also, the current school trust lands are mostly low lying parcels with water, providing few opportunities for timber production.

Exchanges 886 and 890 have had extensive review and analysis. The PSFAC has been appointed by the Land Exchange Board and the next step is to get approval of the exchanges from the PSFAC. The approval was requested at the July 12, 2010 PSFAC

meeting. At this meeting the PSFAC tabled the exchanges, and requested additional information on each exchange.

### **Land Exchange History (School Trust Lands)**

	Number of Exchanges	School Trust Acreage	State Value	Exchange Land Acreage	Exchange Land Value
FY01*	9	489.33	\$13,594,600.00	6184.34	\$13,594,600.00
FY02	7	1906.94	\$1,179,600.00	1766.9	\$1,180,000.00
FY03	4	43.59	\$717,000.00	261.12	\$724,400.00
FY04	7	859.51	\$1,161,250.00	1130.54	\$1,159,550.00
FY05	2	437.00	\$428,700.00	536.04	\$428,500.00
FY06	0	0	0	0	0
FY07**	8	5,149	\$8,867,500.00	11,199	\$8,868,500.00
FY08	3	110	\$102,225.00	96.47	\$119,268.75
FY09	1	17	\$22,000.00	20	\$22,000.00
FY10	2	352	\$767,344.00	480	\$768,000.00

<sup>\*</sup>Lakeshore Lease Lot exchanges.

<sup>\*\*</sup>Includes two large state park exchanges.

#### SALE OF SCHOOL TRUST LAND

#### **Statutory and Constitutional Direction**

The commissioner of natural resources is required to hold public sales of school and other state lands when it is advantageous to the state and to intending buyers. (Minn. Stat., sec. 92.13). No portion of school trust lands shall be sold otherwise than at public sale, and in the manner provided by law. (Minn. Const., Art. XI, Sec.8).

#### **Procedures**

The procedures for offering school trust lands for sale are found in Minn. Stat., secs. 92.06 to 92.29.

#### **DNR Sale Process**

DNR typically holds one or two public land sales a year. Most parcels are identified for sale through a regional review process, with approval by the Regional Director. Proposed sale parcels are submitted to the DNR Lands and Minerals Division for further review, including a determination that legislation would be needed prior to sale (e.g., the parcel borders water). Final parcels selected for sale are reviewed and approved for sale by the commissioner of natural resources.

Before offering a parcel for sale, a minimum bid is established for each parcel. The minimum bid is the value of the land, the value of any merchantable timber, any survey and appraisal costs, advertising costs, deed tax, and recording fee. Notice of sale is published in each county containing land to be sold and in the county where the sale is to be held. Electronic notice of sale is also provided by the DNR. A property data sheet, that provides specific information on the sale parcel, is prepared and available on-line or upon request.

At the public auction, parcels are sold to the highest bidder. The high bidder must pay 10% of the amount bid at auction, with the remaining payment due within 90 days. A patent is issued for school trust lands to the buyer, except that a quit claim deed is issued when the school trust lands have been in private ownership before becoming state lands (e.g., school trust lands acquired through land exchange).

#### FY2010 Land Sales

In FY2010 the DNR offered 15 school trust parcels and sold 6 school trust parcels of land totaling 122.85 acres. These sales generated \$358,128 in land sales revenue to the school trust.

#### **Land Sale History of School Trust Parcels (Calendar Year)**

Year	Parcels Offered	Parcels Sold	Acreage	Net Revenue
2001	10	10	239.4	\$229,601
2002	13	13	65.06	\$872,770*
2003	5	5	58.19	\$106,680
2004	7	7	92.69	\$173,220
2005	6	6	44.89	\$596,290**
2006	19	9	322.6	\$468,250
2007	28	15	379.13	\$542,510
2008	21	4	84.5	\$75,565
2009	19	6	150.65	\$312,860
2010***	3	1	7.5	\$83,419

<sup>\*</sup> Three Legislative Approved Lake Lots were sold accounting for 8.7 acres and \$514,340 of sales income.

<sup>\*\*</sup> Includes a 1.13-acre parcel that sold for \$500,000 (\$102,530 over minimum).

<sup>\*\*\*</sup>Sales through June 30, 2010.

#### AGGREGATE RESOURCES

Substantial deposits of construction aggregate resources exist on school trust lands. The DNR makes great effort to try and convert the aggregate resources on school trust lands into revenue for the school trust fund through the leasing of construction aggregates. The process often involves planning, marketing, inventory fieldwork, development of a site-specific management plan to both manage the resources and protect the environment, legal access, and drafting of a lease. The DNR conducts lease bid sales on some aggregate deposits. Once an aggregate deposit site is leased and mining operations begin, there are many years of revenue potential available to the school trust.

The DNR keeps an inventory of aggregate deposits on school trust lands. This inventory allows the DNR to make certain that the school trust is compensated whenever a school trust aggregate resource is encumbered. For example, if school trust land is suggested for sale or exchange, an aggregate review is completed to be certain that the school trust is compensated for this resource.

The DNR also submits comments to and/or attends county meetings, or any other types of public meetings, to protect the rights and the aggregate resources of the school trust lands. Without this participation the future revenue to the school trust would be diminished.

Specific tasks that were accomplished by the DNR on school trust land aggregate deposits during FY2010 are listed below:

- 1. Marketed construction aggregates to contractors based on knowledge from MNDOT projects and other road projects. Received approximately \$98,000 revenue from the Soring Pit aggregate lease site near Grand Rapids as a result of one of a one-time (summer 2009 highway US 2) road project.
- 2. Required that the school trust be compensated for a new pipeline crossing in the state. The pipeline crosses school trust lands. The construction of the pipeline prohibits the mining of the aggregate resource and therefore the school trust was compensated \$874,155 for the encumbrance of the aggregate resource.
- 3. Developed a new DNR web page with a map for the purpose of marketing the construction aggregates on school trust lands to generate revenue for the school trust lands.

#### MINERALS MANAGEMENT

The Division of Lands & Minerals administers about 3.5 million acres of mineral rights on school trust land, which includes about 1 million acres of severed mineral rights. School trust mineral rights represent about 28 percent of the 12.4 million acres of state-owned mineral rights. Most of the school trust land mineral rights are in the northeastern part of the state.

Rents and royalties from iron ore/taconite leases are the largest contributor of revenue to the school trust fund. On average the percentage of revenues that comes from iron ore/taconite leases is approximately 96 percent of the total mineral lease revenue. In addition to iron ore and taconite leases, the Division of Lands & Minerals administers metallic minerals, peat, and industrial minerals leases. In FY 2009, 64% of all state mineral revenues came from school trust lands

The Lands & Minerals Division obtains rental and royalty income for school trust and other state land by comparing its rental and royalty rates with those provided by other landowners. As the mineral leases are renegotiated, the division analyzes the royalty rates received by private owners of mineral rights. This results in negotiated royalty rates for state-owned iron ore and taconite ore comparable with those received by the private sector.

The Division of Lands & Minerals is responsible for the administrative duties of managing mineral resources which includes: collection and accounting of revenues, drafting of leases, verification of minerals removed from school trust lands, and many other activities related to managing minerals. The DNR is also responsible for lease sales and negotiating mineral leases.

The DNR typically conducts at least one metallic mineral leases sale a year. This year 14,935 acres of school trust lands were leased at the January 2010 Metallic Mineral Lease Sale. School trust lands accounted for approximately 32% of all acreage leased at this sale.

As of June 2010 there were almost 46,000 acres of school trust lands under metallic mineral lease and 5,588 acres of school trust lands leased for iron ore/taconite. Of the total state metallic mineral leases approximately 31% is on school trust lands and approximately 51% of state iron ore/taconite leases are on school trust lands.

#### **Metallic Minerals**

One objective of the Lands & Minerals Division is to promote and market the state's metallic mineral assets, including the school trust minerals. In marketing of the metallic minerals, Lands & Minerals does not distinguish between school trust and other state owned minerals. The school trust minerals are widely dispersed throughout the northeast part of the state. The school trust land minerals are often within the same section as other state owned mineral rights, and if not in the same section they are often in a near-by section. Thus any promotion of metallic mineral resources is a promotion of school trust land minerals.

The Division of Lands & Minerals also manages mineral potential information and drill core samples. This effort directly benefits the school trust by providing mineral resource information which encourages mineral exploration in the state.

Metallic mineral mining on school trust land is believed to be the best opportunity for greatly increased revenues to the school trust. It is estimated that \$1.4 billion could be generated from certain deposits on school trust over the 20 to 25 year operation of a mine. (See attached Fact Sheet.)

#### **Minerals Management Account**

The current practice as to mineral management costs started in Fiscal Year 2006. The 2005 Minnesota Legislature enacted a law (Laws of Minnesota 2005, First Special Session, Chapter 1) that created a minerals management account. Twenty percent of the payments made under state mineral leases are credited to the minerals management account as costs for the administration and management of the state mineral resources by the commissioner of natural resources. Money in the minerals management account is appropriated by the legislature to the commissioner of natural resources for mineral resource management and projects to enhance future mineral income and promote new mineral resource opportunities.

The minerals management account was designed to create a \$3 million principal that could be drawn upon in the event that future income generation drops. The \$3 million level was reached in Fiscal Year 2007. At the end of each fiscal year the amount exceeding \$3 million is distributed to the Permanent School Fund and Permanent University Fund in proportion to the revenue contributed to the minerals management account by these two land types. (See Minn. Stat., secs. 93.22 and 93.2236).

#### Minerals Revenue FY94-FY10 (School Trust Lands)

	Gross	Net
FY94	\$1,116,000	\$1,116,000
FY95	\$1,235,000	\$1,235,000
FY96	\$1,644,000	\$1,644,000
FY97	\$1,462,000	\$1,462,000
FY98	\$6,542,000	\$6,542,000
FY99	\$2,425,000	\$2,425,000
FY00	\$2,197,000	\$2,197,000
FY01	\$5,430,000	\$5,430,000
FY02	\$4,668,000	\$3,781,000
FY03	\$6,705,000	\$6,705,000
FY04	\$5,595,094	\$5,595,094
FY05	\$11,564,785	\$11,564,785
FY06	\$11,159,642	\$8,993,864
FY07	\$16,549,280	\$15,023,885

FY08	\$20,972,274	\$19,203,341
FY09	\$16,880,832	\$14,979,536
FY10*	\$10,454,112	

<sup>\*</sup>Preliminary number as of June 30, 2010

### **Mineral Revenue Sources FY08-FY09 (School Trust Lands)**

	FY08	FY09
Taconite and Iron ore	\$20,729,068	\$16,106,868
rents/royalties		
Non-ferrous metallic minerals	\$178,421	\$249,891
Stockpiling/Surface leases	\$30,049	\$10,530
Peat	\$1,020	\$81,214
M-leases	\$31,528	\$339,651
Industrial Minerals	\$2,189	\$4,719
Taconite Encumbrance		\$87,957
Total	\$20,972,274	\$16,880,832

## 2008 POLICY FACT SHEET Potential School Trust Royalty Income from

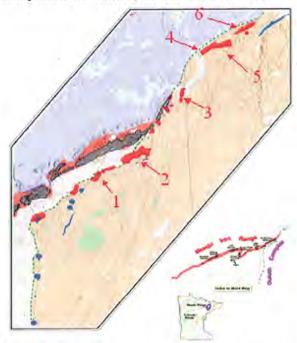
#### Potential School Trust Royalty Income from Identified Mineral Deposits in the Duluth Complex

### POTENTIAL SCHOOL TRUST ROYALTY INCOME

Although the future of non-ferrous metallic mineral mining in Minnesota is uncertain, the potential for generating significant royalty income for the Permanent School Trust Fund is apparent. Three mineral deposits on school lands in the Duluth Complex contain inferred resources that could generate royalties of \$1.4 billion at today's metal prices if permitted and mined over a period of 20 to 25 years.

#### MINNESOTA DULUTH COMPLEX

Mineral exploration companies are currently focusing on copper, nickel and platinum group elements (PGEs) at six deposits within the Duluth Complex, a 1.1 billion year old intrusive body.



From southwest to northeast, the deposits include:

- 1. NorthMet PolyMet Mining Corp.
- 2. Mesaba Teck Cominco Metals Ltd.
- 3. Birch Lake Franconia Minerals Corp.
- 4. Maturi Franconia Minerals Corp.
- 5. Nokomis Duluth Metals Ltd.
- 6. Spruce Road Franconia Minerals Corp.

#### **Exploration History**

Copper-nickel deposits were discovered in the Duluth Complex in the 1940s. In 1980s, the Division of Minerals began sampling and assaying existing drill core for PGEs. In the course of the work, geologists identified a zone of PGEs. The division's work coupled with industry interest in PGE for catalytic converters triggered interest in PGE exploration in the state at that time. However, because the PGEs were associated with copper and nickel in polymetal deposits, and the only available commercial processing technology at that time involved smelting, interest in Minnesota PGEs waned due to environmental concerns associated with smelting.

#### Advances in Hydrometallurgical Processes

In the mid-1990s, as hydrometallurgical processes advanced and replaced smelters, exploration interest heightened in the Duluth Complex again. Teck Cominco Metals Ltd. developed proprietary hydrometallurgical processes for the refining of both copper and nickel concentrates to their respective metals. Concurrently, a second proprietary process, PlatSol, which extracts both the base and precious metals, has been developed; PolyMet is planning to utilize this process in conjunction with their development of the NorthMet deposit.

#### World Demand for Raw Materials

Most significant in generating interest in the Duluth Complex is the recent, dramatic growth in world demand for metals -- spurred mostly by growth in Asia and emerging markets. Prices of almost all mineral commodities are at record highs and demand remains strong.

## ADVANCED Cu-Ni-PGE PROJECTS ON SCHOOL TRUST FUND LANDS

Five companies hold 121 state mineral leases, encompassing 33,000 acres, in the Duluth Complex. About 44% of the acreage covered by state leases is School Trust land. The following three Cu-Ni-PGE deposits include eighteen state leases, which have significant School Trust land and mineral ownership.

#### Duluth Metals Limited - Nokomis Project

Duluth Metals is planning an underground mine with a production rate of 7.0 million metric tonnes per year. The company's estimate of inferred resources is 172 million tones over 25 years at a crude ore grade of 0.70% Cu, 0.22% Ni, 0.01% Co, 0.10 ppm Au, 0.42 ppm Pd and 0.19 ppm Pt.

#### Franconia Minerals Corporation - Birch Lake

Franconia plans to develop the Birch Lake deposit in conjunction with the Maturi deposit. Franconia is planning an underground mine with a production rate on the order of 3.5 million metric tonnes per year. Franconia's preliminary estimate of inferred resources is 88.5 million tonnes over 25 years at a crude ore grade of 0.56% Cu, 0.18% Ni, 0.08% Co, 0.14 ppm Au, 0.63 ppm Pd and 0.31 ppm Pt.

#### Teck Cominco Metals, Ltd. - Mesaba Project

Teck-Cominco holds leases on the Mesaba deposit, the largest in the Duluth Complex. Teck Cominco's inferred resources include 1.14 billion tonnes with 0.404% Cu, and 0.089% Ni plus a small amount of Au and PGE. The estimate encompasses mining 858.4 million tonnes over 30 years.

Exploration continues on these deposits and their size is increasing.

#### Other Exploration

These eighteen leases, and the remaining 103 state leases, are currently generating rental income for the Permanent School Trust Fund. Exploration may also lead to additional deposits identified.

Company	Leases	Acres
Duluth Metals	32	9,189
Encampment Minerals	56	14,436
Kennecott Exploration	12	1,440
Lehmann Exploration	3	743
Total	103	18,608

#### SCHOOL TRUST ROYALTY

Using resource calculations of the three deposits, the DNR estimates royalties generated from school trust lands may be significant. DNR has reviewed these estimates and further calculated mine life royalties using current metal prices from the *American Metal Market*, February 2008.

Understanding the forward-looking nature of these estimates, the future value of State School Trust Fund royalties for life-of-mine production from the Mesaba, Birch Lake, and Nokomis deposits, using current metal prices, would be about \$1.4 billion.

#### For further information contact:

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#### MINNESOTA STATUTES AND SESSION LAWS

The following is a list Minnesota Statutes and Sessions Laws that are applicable to school trust lands.

#### **Minnesota Statutes, sections:**

#### • <u>1.0451</u>

This statute focuses on the state's rights to the lands and waters within the BWCAW. The law also explains how the State gained ownership to the school trust lands from the federal government.

#### • <u>11A.16</u>

This statute explains how the permanent school fund is to be managed. The permanent school fund is to be managed by the commissioner of finance and invested by the State Board of Investment. The statute also explains the calculation and disposition of income from the Permanent School Fund.

#### • 16A.06, subd. 11

This statute requires that the commissioner of finance biannually report to the Permanent School Fund Advisory Committee and the legislature on the management of the Permanent School Fund.

#### • 16A.125

This statute explains how revenue and costs from the state forest trust lands are managed. Revenue from the forest trust fund lands is deposited into the Forest Suspense Account. The costs for managing trust lands are certified by the Department of Finance. Allowable costs are for protection, improvement, administration, and management of forest lands; and for construction and maintenance of forest roads. The general fund is reimbursed for protection and administration costs. The Forest Management Investment Account is reimbursed for improvements, management, and forest roads. The balance is deposited into the Permanent School Fund.

#### • <u>84.027, subd. 18</u>

This statute provides that the commissioner of natural resources has the responsibility of administering the school trust lands. This statute requires the

commissioner of natural resources to biannually report to the Permanent School Fund Advisory Committee and the legislature. This statute specifies goals for management of the lands.

#### • <u>84.085, subd. 1(d)</u>

This statute allows the commissioner of natural resources to accept for and on behalf of the Permanent School Fund a donation of lands, interest in lands, or improvements on lands.

#### • <u>92.025</u>

This statute defines school trust land:

"School trust land" means land granted by the United States for use of schools within each township, swampland granted to the state, and internal improvement land that are reserved for permanent school fund purposes under the Minnesota Constitution, article XI, section 8, and land exchanged, purchased, or granted to the Permanent School Fund.

#### • 92.03, subd. 1

This statute sets the minimum sale price for school trust lands at \$5 an acre, including the value of timber reproduction. No more than 100,000 acres of school trust lands may be sold in one year.

#### • **92.12**

This statute explains the valuation and appraisal requirements for offering trust lands for sale. Also, it requires the commissioner of natural resources to hold frequent sales of school trust and other state lands.

#### • <u>92.121</u>

This statute requires the commissioner of natural resources to exchange school trust lands when management practices diminish or prohibit revenue and no alternative has been put into effect to compensate the Permanent School Fund for income losses. The focus of exchanges is on school trust lands within state parks, state recreation areas, wildlife management areas, scientific and natural areas, or state waysides or on lands managed by the commissioner as old growth stands.

#### • <u>92.13</u>

This statute requires the Commissioner of Natural Resources to hold public sales of school and other state lands when it is advantageous to the state and to intending buyers and settlers.

#### • <u>92.145</u>

This statute states that school trust lands cannot be sold over-the-counter after a public auction if the lands were not bought at public auction.

#### • <u>92.46</u>

This statute pertains to lakeshore leases lots on school trust lands. This provides that no new leases may be issued for state lands bordering on or adjacent to meandered lakes and other public waters for cottage or camp purposes. For leases on school trust lands, in fiscal years 1999 and 2000 100%, and thereafter, 50% of the revenues from lakeshore lease lots shall be deposited in the lakeshore leasing and sales account of the permanent school fund the remaining 50% is deposited in the permanent school fund. The costs of survey, appraisal, and associated costs of selling, leasing, or exchange shall be paid for out of this account and the remainder is to be deposited in the Permanent School Fund.

#### • <u>93.22</u>

Twenty percent of income generated from mineral leases on state-owned lands is directed to the Minerals Management Account; the remainder is distributed as directed by law. (For school lands, 80% of the mineral lease revenue goes to the corpus of the Permanent School Fund.)

#### • <u>93.2236</u>

When the Minerals Management Account exceeds \$3 million at the end of a fiscal year, the amount exceeding \$3 million is distributed to the school and university trust funds in the same proportion as total mineral lease revenue received in the previous biennium from school and university lands. Money in the minerals management account is appropriated by the legislature to the commissioner of natural resources for mineral resource management and projects to enhance future mineral income and promote new mineral resource opportunities.

#### • 94.342, subd. 5

When school trust land is being exchanged with other state land under the control of the commissioner of natural resources, the Permanent School Fund Advisory Committee must be appointed as temporary trustee for the exchange. The Committee is provided with independent legal counsel to review the exchange.

#### • <u>126C.21</u>, subd. 1 (repealed)

The amount of money received by a district from the permanent school fund is reduced from the general education aid earned by the district for the same year. This deduction is repealed for fiscal year 2010 and later. (Laws of 2008, Chapter 363, Art. 2, Sec. 52 (a))

#### • <u>127A.30</u>

This statute establishes the Permanent School Fund Advisory Committee to advise the DNR on the management of the school trust lands. This statute also provides who the members of the Committee are and how the chair of the Committee is elected. The members of the Committee shall not be compensated.

This statute requires the Committee to review the policies of the DNR and statutes related to the school trust fund lands and at least annually recommend necessary changes to the same. The Committee is required to submit a report to the legislature by January 15th of each year. The report may include recommendations on how the school trust lands can be managed more efficiently, by reducing expenditures and maximizing revenue for the school trust. The report may also include ways to better manage the school trust lands to maximize long-term economic return while maintaining sound natural resource conservation and management principles.

#### • 127A.31

This statute states the goal of the Permanent School Fund is to: "secure the maximum long-term economic return from the school trust lands consistent with the fiduciary responsibilities imposed by the trust relationship established in the Minnesota Constitution, with sound natural resource conservation and management principles, and with other specific policy provided in state law."

#### • <u>127A.32</u>

This statute establishes a school endowment fund that consists of income from the permanent school fund. The commissioner of education is allowed to accept gifts of cash or marketable securities for the permanent school fund.

#### • <u>127A.33</u>

This statute provides that the commissioner of education shall apportion the school endowment fund semiannually in proportion to the number of pupils in average daily membership in each school district during the preceding year.

#### • <u>473.666</u>

This statute allows the State Board of Investment to purchase bonds for the Permanent School Fund.

#### • <u>477A.12</u>

This statute pertains to payment-in-lieu of taxes (PILT) payments on DNR administered lands. Subd. 1(a)(4) is the provision that applies to school trust lands.

#### **Session Laws:**

#### • Laws of Minnesota 2009, Chapter 176, Article 3, Section 12

This law required the DNR to enter into a state land lease on school trust lands with Mountain Iron Economic Development Authority for installation of up to four wind turbines and access roads by August 30, 2009.

#### • Laws of Minnesota 2009, Chapter 176, Article 3, Section 13

This law required the commissioner of natural resources to grant easements across state land administered by the commissioner to private landowners on Bass Bay on the north shore of Lake Vermilion to access Mud Creek Road (County Highway 408). This easement will cross school trust lands. Any landowner granted an easement under this law is required to grant a reciprocal easement to the state.

# • <u>Laws of Minnesota 1997, Chapter 216, Section 151; Laws of Minnesota 2003, First Special Session, Chapter 9, Article 1, Section 52; Laws of Minnesota 2004, Chapter 262, Article 2, Section 9</u>

All of these laws pertain to lakeshore lease lots on Horseshoe Bay in Cook County. All of the lakeshore lease lots on Horseshoe Bay are on school trust lands. These laws, along with Minnesota Statutes, section 92.46 (see above), place obligations and restrictions on the DNR's management of school trust lands by requiring that the property be leased, setting the rental rate at 2% of appraised value as of 2003 for the life of the leases (adjusted for inflation), allowing transfers to two persons within the second degree of kindred, setting the term of the lease at the lifetime of the lessee or transferee, and requiring the purchase of improvements upon termination from the revenues received.

Intentionally left blank.

62 School Trust Revenue FY2001-2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010*
Minerals	\$5,430,000	\$4,668,710	\$6,705,304	\$5,955,094	\$11,564,785	\$11,159,642	\$16,549,280	\$20,972,274	\$16,880,832	\$10,454,112
Timber	\$8,325,409	\$7,153,040	\$8,911,910	\$10,622,966	\$9,478,811	\$11,344,463	\$9,915,391	\$12,258,017	\$9,058,572	\$8,405,199
Land Sales	\$934,709	\$862,405	\$1,268,910	\$648,405	\$505,253	\$1,099,937	\$774,524	\$1,028,848	\$169,367	\$248,609
Leases/Licenses/Easements/Permits**	\$812,129	\$865,965	\$728,614	\$726,218	\$733,533	\$956,976	\$759,120	\$863,597	\$1,031,977	\$2,022,454
Campground Fees	\$145,281	\$127,924	\$136,580	\$143,067	\$111,767	\$121,341	\$113,134	\$150,172	\$116,591	\$148,781
GROSS TOTAL	\$15,647,528	\$13,678,044	\$17,751,318	\$18,095,750	\$22,394,149	\$24,682,359	\$28,111,449	\$35,272,907	\$27,257,340	\$21,279,155
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Minerals	\$5,430,000	\$3,781,000	\$6,705,304	\$5,955,094	\$11,564,785	\$8,993,864	\$15,023,885	\$19,203,341	\$14,979,536	
Forestry	\$3,133,822	\$2,563,000	\$3,686,000	\$5,590,000	\$4,170,000	\$6,390,000	\$2,740,000	\$3,768,861	\$100,833	
Land Sales	\$934,709	\$862,405	\$1,268,910	\$648,405	\$505,253	\$1,099,937	\$774,524	\$1,028,848	\$169,367	
NET TOTAL	\$9,498,531	\$7,206,405	\$11,660,214	\$12,193,499	\$16,240,038	\$16,483,801	\$18,538,409	\$24,001,050	\$15,249,736	

<sup>\*</sup>Preliminary FY2010 revenues as of June 30, 2010.
\*\*FY10 includes a one-time aggregate damage charge of \$874,155 paid by Enbridge for pipline right-of-way.

#### LEGISLATIVE REQUIREMENTS FOR RESOURCE MANAGEMENT

#### Minnesota Statutes, section 127A.31

Minnesota Statutes, section 127A.31 states the following:

The legislature intends that it is the goal of the permanent school fund to secure the maximum long-term economic return from the school trust lands consistent with the fiduciary responsibilities imposed by the trust relationship established in the Minnesota Constitution, with sound natural resource conservation and management principles, and with other specific policy provided in state law.

This statute recognizes that a sustainable natural resource base is essential for long-term revenue generation from the school trust lands and that maximizing returns for short term gains could deplete the revenue generating potential of the school trust lands. This statute requires the DNR to maximize revenue generation from the school trust lands, while managing the lands with sound natural resource conservation and management principles. To comply with this statute the DNR must balance the goal of maximizing revenue generation with the goal of sound natural resource conservation.

#### **Peatland SNAs**

#### Statutes and Rules

The Wetland Conservation Act of 1991 legislatively established the boundaries of the eighteen Peatland Scientific and Natural Areas (SNAs) (See Minnesota Statutes 84.036) and established direction for Peatland Protection. "The legislature finds that certain Minnesota peatlands possess unique scientific, aesthetic, vegetative, hydrologic, geologic, wildlife, wilderness, and educational values and represent the various peatland ecological types in the state. The legislature finds that it is desirable and appropriate to protect and preserve these patterned peatlands as a peatland management system through establishment and designation of certain peatland core areas as scientific and natural areas." (Minnesota Statutes, section 84.035; Subd. 2)

Minnesota Statutes, section 86A.05 establishes the purpose, resource and site qualifications for SNAs and outlines how these sites shall be administered and designated.

Minnesota Rules parts 6136.0100 to 6136.0600 "provides for the management of Scientific and Natural Areas for public use, educational and research purposes in such manner and by such means as will leave them conserved for future generations."

#### School Trust Lands & Revenue Generation

The only school trust lands within SNAs are those acres designated by statute as peatland scientific and natural areas. These total approximately 51,000 acres. In Koochiching County a

total of 838 parcels, 34,700 acres, of trust fund land have been identified as having all or a portion of the parcel designated as SNA.

Currently there are Grant-in-Aid snowmobile trails on three peatland SNAs: East Rat Root River, West Rat Root River, and Pine Creek, which generate income to the trust. Otherwise, the Peatland Protection statute prohibits commercial activities such as removal of peat, sand, gravel, or other industrial minerals, exploratory boring or other exploration or removal of oil, natural gas, radioactive materials or metallic minerals; and commercial timber harvesting. (Minnesota Statutes, section 84.035; Subd. 5)

To address additional revenue generation, exchanges would be allowed by the SNA program; however, all other lands administered by the SNA program also have similar limits on revenue generation. (See Minnesota Statutes, section 84.035 subd. 9). Leasing lands within SNAs is not an alternative as the statute still would not allow commercial uses. Condemnation of the trust would be allowed by the SNA program; however, funding would need to be appropriated to pursue this action. (See Minnesota Statutes, section 84.035 subd. 9). Approximately 10 years ago the DNR proposed legislation that would appropriate money to compensate the school trust for the lands within the Peatland SNAs, but was unable to get such legislation passed.

#### **Horseshoe Bay Leases**

There are three lakeshore lease lots that remain on school trust lands. The legislature has passed multiple laws that affect the management and revenue generating potential on this school trust land. (See Minnesota Statutes, section 92.46, Laws of Minnesota 1997, Chapter 216, Section 151; Laws of Minnesota 2003, First Special Session, Chapter 9, Article 1, Section 52; Laws of Minnesota 2004, Chapter 262, Article 2, Section 9). These laws have required the DNR to continue leasing school trust lands for use as lakeshore lease lots. The DNR is only allowed to charge two percent of appraised value as of 2003 for the lifetime of the leases, adjusted for inflation, for these lake lots and is required to set aside 50% of revenue from these lots to purchase the improvements on the lots when the leases are terminated. (See Minn. Stat., sec 92.46). The rental rate of two percent of appraised value is believed to be well below market value. Legislation has also mandated that the leases can be transferred to two persons within the second degree of kindred. After such a transfer the lease shall remain in effect for the lifetime of the transferees.

#### Minnesota Statutes, section 92.45

Minnesota Statutes, section 92.45 withdraws from sale all state lands, including school trust lands, which border public waters. The DNR may sell land that borders public waters only after receiving specific legislation to conduct such a sale. Recently, the legislature has decided to not pass certain legislation that would allow the sale of specific school trust lands. Without this legislation the DNR cannot sell the land or generate revenue for the school trust from the sale.

#### **Inability to Invest Revenue in High Income Generating Real Estate**

Currently, the revenue generated by the DNR from school trust lands is deposited into the permanent school fund and invested in stocks and bonds by the State Board of Investment (SBI). The DNR does not have the ability to invest revenue from school trust lands into other real estate that would have the potential for a high rate of return. Currently almost all of the school trust lands are in low population rural areas with limited revenue generating potential. The DNR would like to have the option to invest some school trust land revenues into lands surrounding urban areas that have a high potential for appreciation and revenue generation. The revenue to the school trust could be maximized if the DNR was given the ability to invest in real estate in urban areas, including commercial and residential development sites.

#### **MAXIMIZING REVENUE**

#### Land Development - St. Mary's Lake

The DNR is planning to plat a 26.5 acre parcel on the east side of St. Mary's Lake. A plat would create a number of valuable lakeshore lots. The parcel is south of Eveleth just west of the Eveleth-Virginia Municipal Airport. Currently the DNR has created two possible plat designs for the parcel and is working on a third possibility. The third possibility being considered is a conservation design plat. After all plat designs have been completed, the DNR will determine which plan, if any, will maximize revenue to the school trust. The DNR plans to utilize a market analysis to assist in making this determination. As the DNR works through this process it will determine how far into the development process it should go before selling the property. The DNR will work with Fayal Township and St. Louis County while developing this project.

#### **New Sources of Revenue to the School Trust Fund**

Enbridge Energy is in the process of constructing pipelines across Minnesota to expand its existing liquid petroleum pipeline system. The Enbridge Energy project stretches from the North Dakota border through Clearbrook, Bemidji, and Grand Rapids to Superior, Wisconsin, including the Chippewa National Forest. The project crosses school trust lands. The Permanent School Trust Fund received \$874,155 in FY10 for aggregate resources that would be precluded from mining as a result of the pipelines. The funds were deposited directly into the Permanent School Trust Fund.

In March 2009, the Department of Natural Resources, issued a 40-year state surface lease to the Itasca County Regional Railroad Authority (ICRRA). This lease is for the construction and operation of a short line railroad to service a steel plant to be built by Essar Steel Minnesota LLC in Itasca County. The proposed 40-year lease covers 37.21 acres in Itasca County. Of the parcels to be leased, 1.76 acres are School Trust Fund lands. In addition to lease fees, the DNR required the ICRRA to pay \$87,957 to the State of Minnesota on behalf of the Permanent School Fund for mineral resources precluded from mining during the 40-year term of the lease. The mineral encumbrance of \$87,957 was deposited directly into the Permanent School Trust Fund as mineral revenue.

#### **Hill Annex State Park**

The Hill Annex State Park is an inactive natural ore mine located on Minnesota's Mesabi Iron Range in Calumet, Minnesota. The mine is located on one of the section 16 parcels of school

trust land that was granted to the state by the federal government upon statehood. The history of mining at the Hill Annex dates back more than a century. The land was originally leased for mineral exploration in 1892. Mining began in 1913 and continued until 1978. The Hill Annex Mine produced 63 million tons of iron ore, and was the sixth largest producer in the state.

The Hill Annex State Park was created in 1988. The legislation creating the Park recognized that mining could again be conducted on property within the Park. In 2004 the DNR leased 160 acres of school trust land within the Park for the mining of taconite. In addition, the DNR may also lease stockpiled lean natural iron ore materials from these school trust lands for the ultimate production of steel.

Within the Park there are also stockpiles that can be used for building roads and other construction projects. In order to enhance revenue generation for the school trust, public funds were used in 2008 to build an access road, allowing aggregate materials within the stockpiles to be more readily removed, without interfering with the public's use of the State Park.

The Hill Annex State Park is designated as a national historic site. The DNR and the Minnesota Historical Society recently entered into an agreement to ensure that this historical designation is taken into account and that mitigation measures are taken during future mining of the stockpiles and taconite.

#### Wind Energy Leasing

The DNR has entered into its first wind energy lease on school trust lands with Mountain Iron Economic Development Authority. The lease was issued pursuant to Laws of Minnesota 2009, Chapter 176, Article 3, Section 12. The total rental amount will depend on the size and number of turbines placed on the school trust land.

The DNR will continue to consider lease requests on school trust lands for wind energy projects. However, the best wind resource in Minnesota is in the southwest part of the state, while the majority of the school trust lands are in the northeast part of the state. Because of the lack of wind resource in the northeast, the school trust lands will not likely be the best lands for wind energy projects. Except for the lease mentioned above, the DNR has received little interest from wind energy project developers.

#### **BWCAW**

Approximately 86,000 acres of school trust lands are inside the BWCAW. Since the establishment of the BWCAW, the school trust lands within its boundaries have not been able to generate revenue.

Since mid-2009 the DNR has been working with the Sale & Exchange of Property and BWCAW Subcommittee of the Permanent School Fund Advisory Committee and the U.S. Forest to have the school trust compensated for the lands within the BWCAW. The Subcommittee and the DNR have had three meetings with the U.S Forest Service to discuss this issue.

Following the efforts of these parties, the Minnesota Legislature passed Minnesota Session Laws 2010 - Resolution #1. This resolution adopted the recommendation of the Permanent School Fund Advisory Committee to pursue the sale and exchange of the school trust lands inside the BWCAW with the U.S. Forest Service. The negotiations are to be aimed at a hybrid model that will provide for both the sale and exchange of school trust lands inside the BWCAW for U.S. Forest Service lands outside the BWCAW. The PSFAC recommended that the hybrid model consist of a 1/3 exchange and 2/3 sale.

The DNR has identified approximately 97,000 acres of U.S. Forest Service lands that it is willing to accept in an exchange. The U.S. Forest Service is currently taking a look at these lands to determine which parcels are acceptable. The DNR will continue to work on this effort. Considerable revenue will be generated for the school trust fund if this exchange and sale is completed.

#### **INTERNET RESOURCES**

The following is a list of internet sites with school trust land reports and information:

#### **Biennial Reports:**

http://files.dnr.state.mn.us/lands\_minerals/0002\_school\_trust\_report.pdf

http://files.dnr.state.mn.us/lands\_minerals/schooltrustreport2005.pdf

http://files.dnr.state.mn.us/lands minerals/school trust report FY0607 as of 110608.pdf

http://files.dnr.state.mn.us/lands minerals/school trust lands biennial report fy 0809.pdf

#### **2007 Revenue Enhancement Program Report:**

http://files.dnr.state.mn.us/lands minerals/new trust report 122807 final.pdf

#### 1998 OLA - Program Evaluation Report:

http://www.auditor.leg.state.mn.us/ped/1998/pe9805.htm

#### **Permanent School Fund Advisory Committee website:**

http://www.dnr.state.mn.us/aboutdnr/legislativeinfo/school lands/index.html