

School Trust Lands

School Trust Land Revenue Enhancement Program Report



**Minnesota Department of Natural Resources
Division of Lands and Minerals**

December 28, 2007



Executive Summary

The State of Minnesota owns 2.5 million acres of school trust land with an additional one million acres of mineral rights. Through the years, most of the revenue from these lands came through mineral leases, timber sales, land sales, and some leasing activities. At this point in the state's history, it is appropriate to look at the management of these lands, and additional options to meet fiduciary obligations in generating revenue from these lands.

In 2005, the Minnesota Department of Natural Resources (DNR) received \$300,000 for the biennium (July 2005 to June 2007) to enhance revenue generation from certain real estate related activities on school trust lands. Laws of 2005, First Special Session, Chapter 1, Article 2, Section 3, subdivision 2 provides for:

'\$150,000 the first year and \$150,000 the second year, originating from the state forest suspense account in the permanent school fund to accelerate land exchanges, land sales, and commercial leasing of school trust lands'. This appropriation goes toward meeting the provisions of Minnesota Statutes, section 92.121: 'to exchange school trust lands or put alternatives into effect when management practices have diminished or prohibited revenue generation'; and Minnesota Statutes, section 127A.31: 'to secure maximum long-term economic return from the school trust lands consistent with fiduciary responsibilities and sound natural resources conservation and management practices'.

The School Trust Lands Revenue Enhancement Program accomplished the following in FY 2006 and FY2007:

- **Completed** three land exchanges, removing trust lands from state parks and state recreation areas. The state exchanged a total of 4,980 acres out of Tettegouche, Savanna, Itasca, Nerstrand-Big Woods State Parks and Garden Lake SRA. School trust lands received a total of 10,913 acres. As a result, remaining school trust lands in state parks and state recreation areas either currently generate revenue or hold the potential to generate revenue, mostly through mining. Future management activities of the lands received include timber income, and potential for aggregate income.
- **Offered** over 1,000 acres of school trust land for sale through public auction, with 701.73 acres sold, earning net revenue of \$1,010,760. The parcels offered concentrated on those with no adjoining state-owned land, and, in many instances, no access.
- **Compiled** information and **analyzed** leasing opportunities. While further leasing opportunities exist from those currently in use, other resource concerns require analysis and discussion before proceeding with those ventures. Wind power leasing promises opportunity, as well as potential expansion of commercial leasing and development, and aggregate leasing.
- **Identified** trust land characteristics. Significant acreage of school trust lands originally from the swampland grant, and revenue generation possibilities from the wetlands (60% of the trust lands) remains limited.
- **Created and studied** two pilot areas according to their characteristics and existing usage - one in St Louis County and one in Pine County. Even with wetlands comprising a large percentage of the pilot area parcels, some targeted lands showed promising revenue generation, and potential for sale, exchange and leasing. Work continues for producing revenue from the school trust lands within these pilot areas.

- Emmons & Olivier Resources (EOR) **evaluated** four viable development sites. Each site possesses some possibility to produce income over the value of the raw land. The sites ranged in potential from \$50,000 to about \$700,000. The report contains details and limitations of these estimates. Recommendations to the State include: completing “soft improvements” such as acquiring access, and developing concept plans and preliminary plats prior to sale or leasing.
- Site specific **evaluation** to identify the areal extent, thickness, quality, volume, access and other parameters of construction aggregate deposits in order to help increase revenues for the trust.

Some of the findings to-date:

- Investment of staff time and funding successfully accelerated the exchange of school trust lands out of management units that are not generating revenue.
- Not all state land sells quickly. Lands without access can sell well if the adjoining owners show interest, but don’t sell when interest wanes. In a slowing real estate market, it would likely be necessary to offer a few lakeshore parcels to generate significant revenue through land sales.
- Further leasing opportunities remain available, but some, such as returning to leasing lands for hunting cabins, may not be acceptable uses.
- The use of varied database systems makes it difficult to compile a historic record of revenue generation on particular parcels.
- Moving into commercial leasing programs, as found in some of the western states, necessitates hiring like-kind experts.

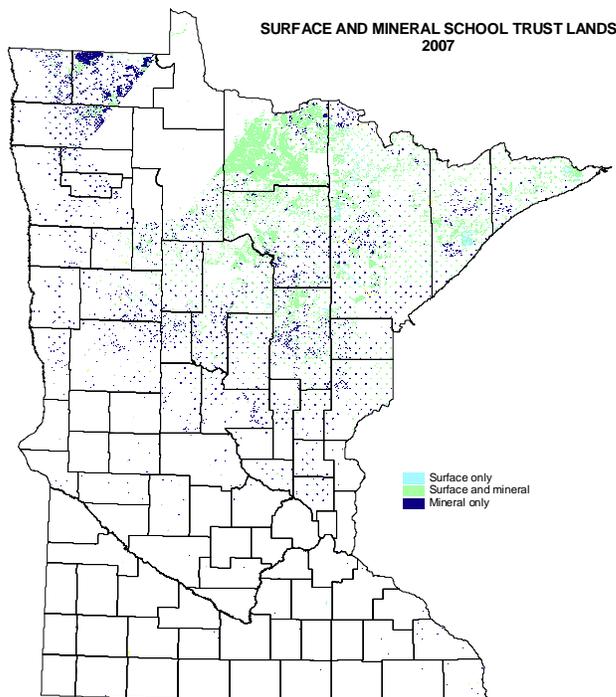
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Minnesota's School Trust Lands

Lands set aside in trust for the support of schools share a long established tradition in the United States. Minnesota received several land grants from the federal government to be held in trust for certain purposes. Through the Enabling Act of 1857, sections 16 and 36 were granted to the state for the use of schools (the School Trust lands). For any of these sections previously sold or otherwise disposed of, other lands could be chosen (the Indemnity School Trust lands). The other major type of trust lands contributing to the school trust, include swamplands/overflowed lands granted to the state in 1860 (the Swamp Trust lands). Although these lands originally paid for levees, and in draining made the lands cultivable, a constitutional amendment in 1881 stated that

the lands should be handled in a manner similar to the school trust lands. In all, the federally granted lands, now School Trust lands, involve: School, Indemnity School, Swamp, Transferred School, and Internal Improvement.



State lands sold prior to 1889 included both the surface and mineral rights as part of the sale. In 1889, the Minnesota Legislature authorized the reservation of mineral rights with the sale of certain state lands in Cook, Lake, and St. Louis counties. Starting in 1901, Minnesota reserved mineral rights for all state lands acquired under an act of the U.S. Congress.

Today, the state holds about 2.5 million acres of school trust lands and about 1 million acres of severed trust minerals (Figure 1). The state's ten northeastern counties contain about 90% of the school trust lands. The northern half of the state

contains about 99% of trust minerals lands.

TRUST LAND CHARACTERISTICS

The remaining 2.5 million acres of school trust lands originally transferred through several land grants from the Federal Government. They comprise: 24% obtained as School, 61% as Swamp, 14% as Indemnity School, and less than 1% each as Transferred School and Internal Improvement (Figure 3).

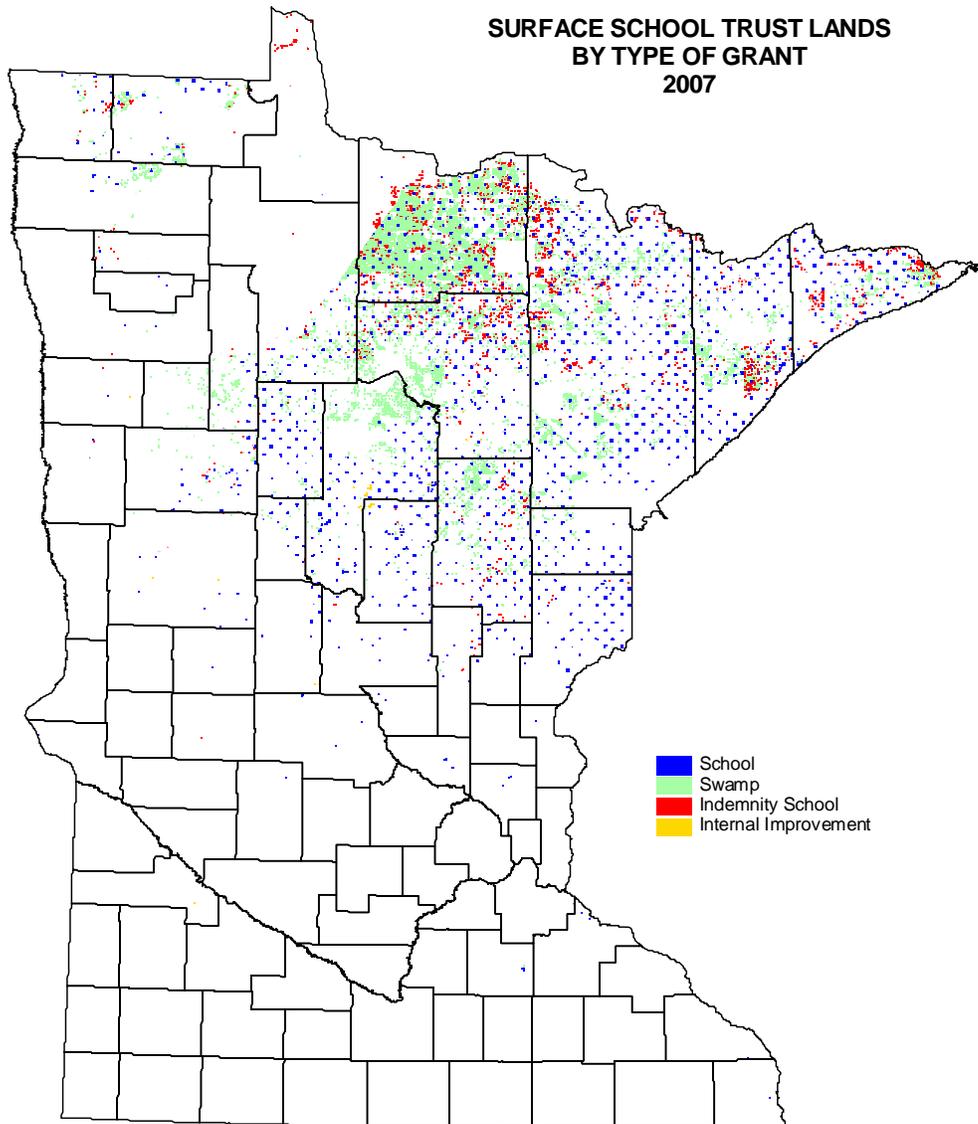
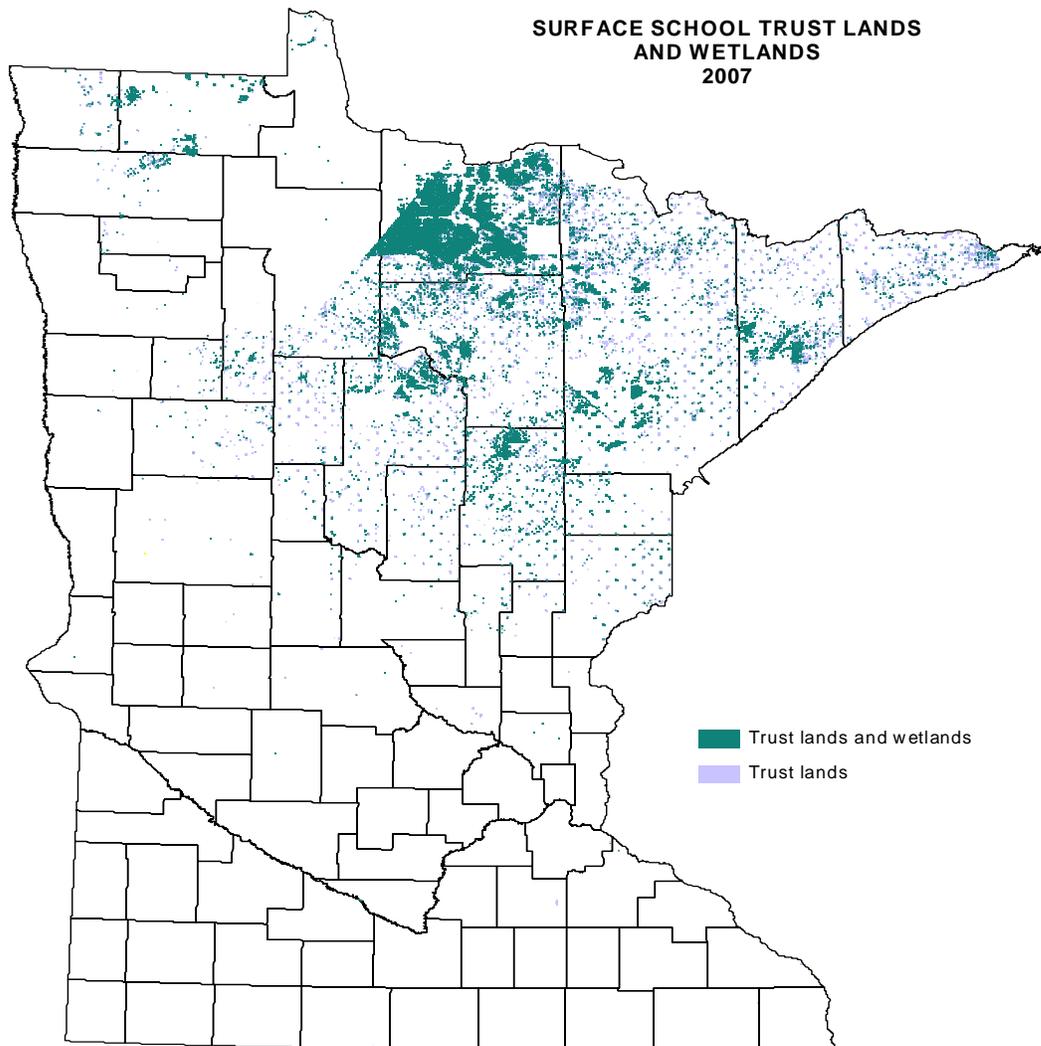


Figure 2 School Trust Land by Grant Type

Based on a spatial analysis of the school trust lands in relation to several other data layers, about 60% of the remaining school trust lands constitute wetlands, mostly awarded in the original grant of Swamp trust lands to the State of Minnesota.



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

Figure 3 Wetlands

- About 27% of school trust lands lie within 2 miles from a major highway (i.e., Interstate, US, or Minnesota highway).
- Less than 10% of the school trust lands are within 0-10 miles (as a bird flies, not via transportation routes) from cities or townships of at least 5,000 people (based on the 2000 US Census).
- Over 75% of the trust lands lie 10-40 miles from cities or townships of at least 5,000 people.

Forest management provides an important use of the trust fund lands. About 80% of the trust lands are Commercial Forest Land, meaning they have the potential to generate revenue from timber production. Timber production generates a significant net income for the school trust fund.

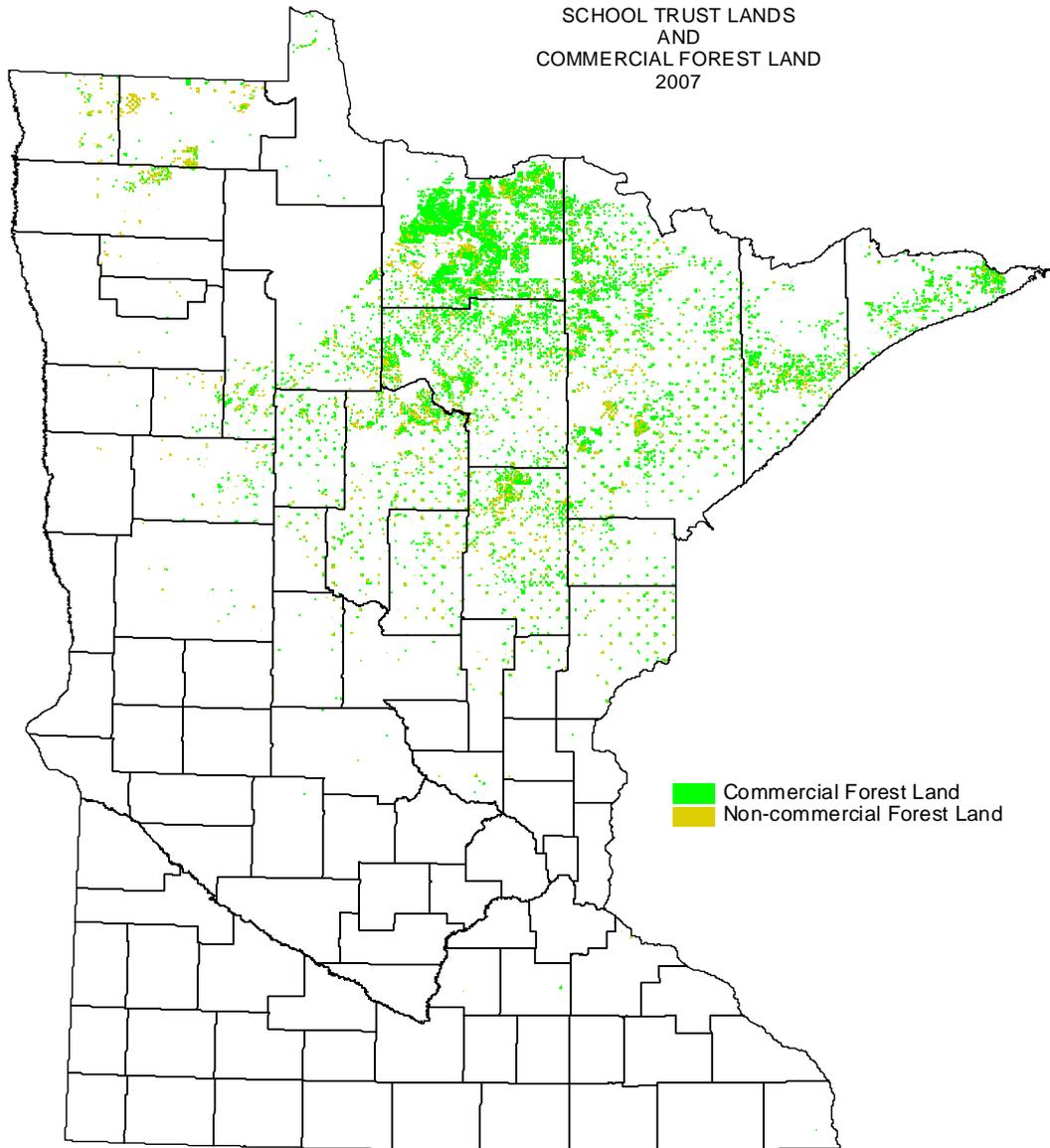


Figure 4 Commercial Forest Lands

Historically, minerals management generates the largest net income for the school trust fund with iron ore and taconite the largest producers. Other fund contributors include: leases for peat, sand & gravel, known deposits of copper-nickel-platinum group metals, and exploration for many other minerals. Figure 5 is a map of surface and minerals ownership.

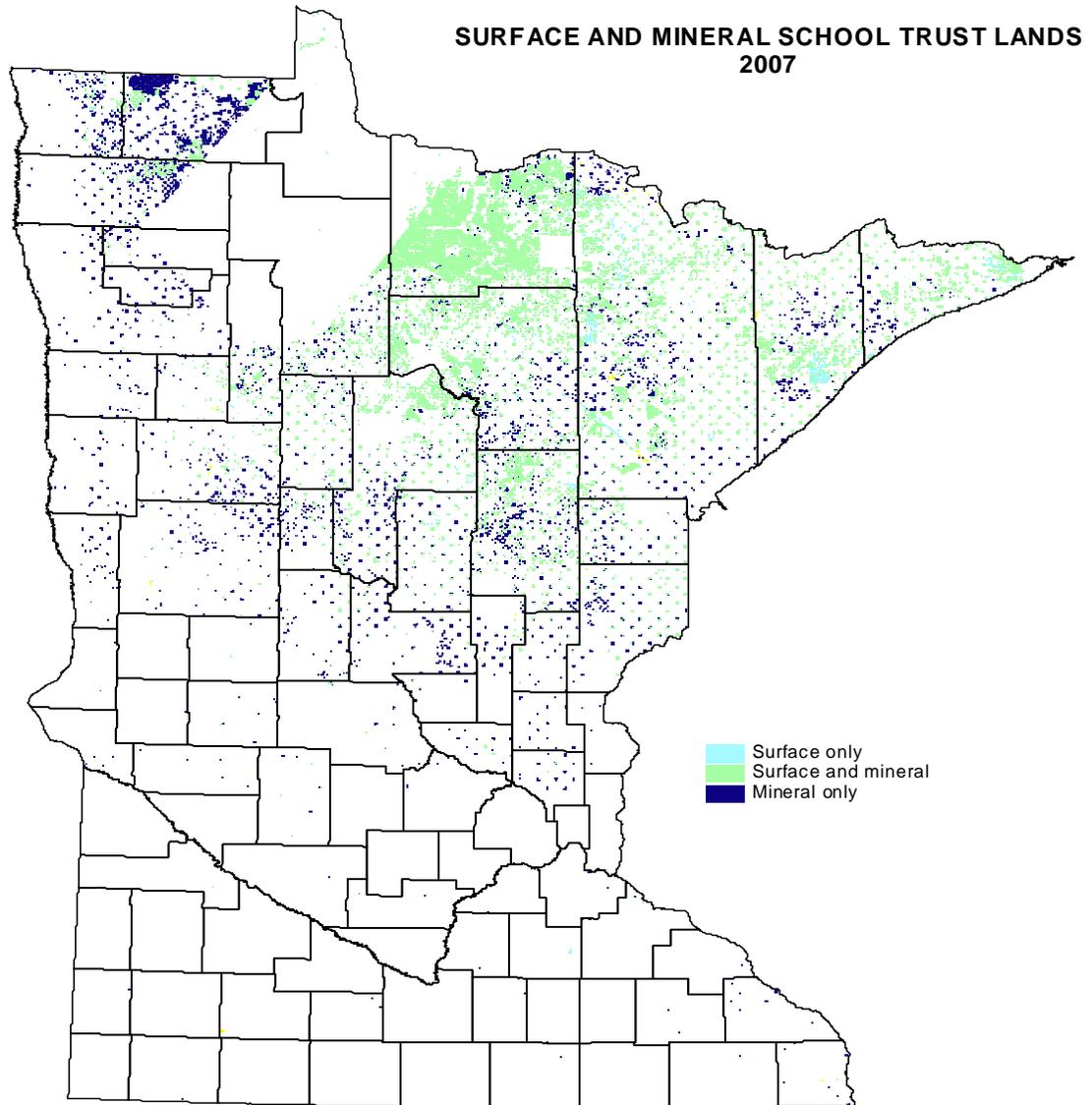


Figure 5 Minerals Ownership

Real estate management supplies another important income generator for the school trust lands. Active surface contracts number approximately 4,000 each year. Land sales also generate revenue. Recent land exchanges have removed lands from management units where there was no income generation.

Minnesota's substantial school trust lands, and the produced income, makes Minnesota similar to western states (managing significant amounts of land and mineral resources for a variety of trusts) rather than eastern states (disposing of trust lands permanently or not receiving). For example, as of 1997, of Minnesota's immediate neighbors, Iowa has no school trust lands, and Wisconsin manages less than 5,000 acres. North and South Dakota each manage over 600,000 acres of school trust land.⁸ In comparison, Montana manages 5.2 million surface acres **and** 6.3 million mineral acres. Wyoming manages 3.6 million surface acres **and** 4.2 million mineral acres.

SCHOOL TRUST FUND INCOME FROM LAND & MINERAL MANAGEMENT

In FY 2006, Minnesota's school trust fund land earned a net income of \$16.2 million. Table 1 shows a summary of the net income by sources. Each year the land holdings contribute income to the trust, and the land remains available for other public uses, and for use by future generations.

Table 1 FY 2006 Income from Land Holdings by Activity

Activity	\$
Non Ferrous Metallic Minerals Rents	\$95,614.91
Iron Ore Rents and Royalties	\$8,567,496.76
Peat Royalties	\$54,916.38
Non-Magnetic Taconite Permits	\$143,026.60
Stockpiling & Surface Leases	\$34,082.15
Interest on Short Term Investments	\$98,727.01
Loan Interest	\$79,879.67
Sale of Land	\$395,693.00
Sale of Land: Installment Payments	\$610,343.50
Forest Suspense Account	\$6,192,738.59
TOTAL	\$16,272,518.57

The State Board of Investment invests the cash portion of the Permanent School Fund. As of June 30, 2006, the Fund contained \$635 million. Annual income distribution provides for part of the school aids formula for K-12 education. FY 2006 saw \$22 million distributed.

LAND EXCHANGES

Goals of the Program

A main objective of the Trust Fund Revenue Enhancement Program was to accelerate the use of land exchanges to remove trust fund land from State Parks. At the beginning of this biennium there were 5,633 acres of trust fund land within these areas with minimal or no trust revenue realized.

The project proposed two exchanges be completed, one each year of the biennium: however, the project completed three land exchanges, and removed nearly all the trust lands from state parks and recreation areas (4,908 acres were exchanged for 10,913 acres). The remaining trust lands lie within Hill Annex State Park (with active mineral leases and a real estate lease to the park), and Cuyuna Country Recreation Area (holding aggregate and other mineral potential).

Trust Lands in State Parks and Recreation Areas Projects

PARK	COUNTY	ACRES BEFORE	ACRES AFTER
Tettegouche State Park	Lake	60	0
Savanna Portage State Park	Aitkin	3,050	0
Itasca State Park	Clearwater	1,000	0
Nerstrand – Big Woods State Park	Rice	461	0
Garden Island SRA	Lake of the Woods	337	0
Hill Annex Mine State Park	Itasca	633	633
Cuyuna Country SRA	Crow Wing	92	92
TOTAL		5,633	725

Actions Taken During the Program

All land exchanges, done on a value-for-value basis, establish the value through appraisals prepared by private, contracted appraisers.

After the exchange, former trust fund land in the state parks takes on a DNR acquired land status, and the former acquired land in the state forest takes on trust fund land status. A benefit to the exchanges of state land for state land is that land stays within the state park boundaries, and doesn't affect management of the parks. After the exchange, monies from any income generating activity (such as timber harvest) occurring on the trust fund land in the state forest get deposited in the Forest School Suspense Account.

Through exchanges #850, #853 and #857 the trust received 10,913 acres of acquired county board resolution lands in exchange for 4,908 acres of school trust land. Total land involved - 15,821 acres.

Summaries of the three land exchanges completed follow:

Tettegouche State Park (Land Exchange #850)

This project exchanged 60 acres of trust fund land in Tettegouche State Park for 60 acres of acquired land within the Finland State Forest (Lake County). Additionally, this land sits adjacent

to existing trust fund land. The new school trust land, accessible by public road, includes one-half mile of frontage on Sonju Lake. The Land Exchange Board approved this land exchange in December 2006.

Savanna Portage State Park (Land Exchange #853)

This project exchanged 3,050 acres of trust fund land within Savanna Portage State Park for 2,439 acres that sits adjacent to existing trust fund land. Portions of the land also contain sand and gravel resources that may possess future income potential.

Itasca, Nerstrand State Parks and Garden Island SRA (Land Exchange #857)

This project exchanged 8,414 acres of acquired land in the Land O'Lakes State Forest (Cass County) for the following lands:

Itasca State Park (Clearwater County)	1,000 acres
Nerstrand-Big Woods State Park (Rice County)	461 acres
Garden Island State Recreation Area (Lake of the Woods County)	337 acres

On all three of these, trust income will be generated through the sale of timber on the newly acquired trust lands.



Red and White Pine forest cover from the Itasca State Park exchange.

Future Land Exchanges

Potential exists to continue land exchanges to remove school trust land from DNR management units that do not generate income for the Permanent School Trust Fund. In 1991, legislation created the Peatland Scientific and Natural Areas in Lake County, and incorporated

approximately 51,000 acres of school trust land into those SNA's. Other potential land exchange projects include public water access sites, old growth forests, and wildlife management areas.

Land Sales

Goals of the Program

Previously, land sales averaged approximately \$180,000 a year in trust revenue except those years when lakeshore property was offered. The Trust Fund Revenue Enhancement Program aimed to raise an additional \$300,000 for the biennium. Altogether, slightly over \$1 million of revenue has been raised for the Permanent School Fund during auctions in July 2006, October 2006 and June 2007.

Actions Taken During the Program

Since 2000, the DNR holds auctions at least once annually. Land sales took on a larger priority for the program with funding received from the legislature during the previous biennium.

Summary of Trust Land Sales for Calendar Years 2000-2007

Year	Parcels Offered	Parcels Sold	Acreage	\$ Earned
2000	5	5	88.8	\$129,072
2001	10	10	239.4	\$229,601
2002	13(1)	13(1)	65.06(1)(2)	\$872,770(1)
2003	5	5	58.19	\$106,680
2004	7	7	92.69(2)	\$173,220
2005	6	6	44.89	\$596,290(3)
2006	19	9	322.6	\$468,250
2007	28	15	379.13	\$542,510

(1) Three Legislative-Approved Lake Lots sold, accounting for 8.7 acres and \$514,340 of sales income.

(2) Plus small platted lots without acres assigned to them.

(3) Includes a 1.13-acre parcel selling for \$500,000 (\$102,530 over minimum).

Regional DNR staff selected parcels generally isolated from other state ownership with many costly to manage, and often not possessing legal access. After compiling and reviewing a list of potential sale parcels, certain ones were removed from sales consideration due to various concerns. Remaining parcels went to St. Paul staff, receiving further discussion by manager level staff. The final approved list went to the sales staff for possible inclusion in a sale.

In determining each parcel's salability, considerations included: title, resource, management, access, and other issues. All trust lands sold at public sale go to the highest bidder meeting at least the determined minimum bid price. Trust parcels not sold at auction can be re-offered at a later sale or retained.

After the July 2006 land sale auction, several additional steps assisted in stimulating the sale of trust fund lands in a slowing real estate market. They included longer marketing time, newspaper ads, and the varying of auction times and locations.

Foremost, longer marketing time on the DNR's website allowed potential bidders more time for research and consideration of purchase. The parcels included in the July 2006 auction remained

posted for sale for 45 days, while the parcels in the October 2006 and June 2007 auctions remained posted for 70 days. For parcels not sold at the July auction, “for sale” signs stayed on the property to notify potential bidders that the parcel remained for sale, and would be auctioned again.

Newspaper marketing included: ads in the Star Tribune, Duluth News Tribune, Outdoor News Magazine, and several smaller, county level papers. An information kiosk in the DNR building at the Minnesota State Fair made land sale information available as well.

The DNR also varied the auction locations and times. An evening auction held in Bemidji tried to attract potential bidders unable to attend an auction during daytime work hours.

Finally, in an effort to induce more bidding, any parcels not sold at their respective auctions were made available for purchase at a final auction in St. Paul. This effort offered another bidding opportunity. This also responded to an earlier request that parcels be made available in St. Paul for those unable to travel to other auctions.



40-acre trust land sold at auction in July 2006 for \$59,550.

Summary of Fiscal Years 2006-2007 Trust Parcels Sold at Auction

Sale #	Revenue	Sale Date	County	Legal Description	Acreage
2010	\$30,530	7/27/2006	Anoka	4-32N-25W, NESW	40
69441	\$44,700	7/26/2006	St. Louis	26-57N-18W, NWSW	40
69473	\$165,580	7/26/2006	St. Louis	36-52N-15W, NWNE	40
69537	\$43,350	7/26/2006	St. Louis	36-57N-19W, NESE	40
11264	\$48,000	10/31/2006	Cass	28-134N-32W, SWNW	40
15006	\$5,580	10/30/2006	Clearwater	20-147N-37W, SWNW	2.6
69443	\$55,630	10/30/2006	St. Louis	16-58N-15W, NWNW	40
69545	\$40,580	10/30/2006	St. Louis	4-57N-19W, SESW	40
69539	\$34,300	10/30/2006	St. Louis	16-50N-15W, SENW	40
38096	\$113,840	6/11/07	Lake	23-57N-7W, SWNW	40
16129	\$4,400	6/11/07	Cook	32-63N-4E, Pt of NESE	2.2
69533	\$18,740	6/12/07	St. Louis	19-61N-19W, SWNE	40
04137	\$91,560	6/12/07	Beltrami	16-146N-32W, NWSW	40
04144	\$34,000	6/12/07	Beltrami	14-150N-32W, GL 1	20.67
18155	\$1,000	6/13/07	Crow Wing	36-43N-29W, Pt of GL 6	0.4
18156	\$1,000	6/13/07	Crow Wing	36-43N-29W, Pt of GL 6	0.43
18157	\$1,000	6/13/07	Crow Wing	36-43N-29W, Pt of GL 6	0.24
18158	\$1,000	6/13/07	Crow Wing	36-43N-29W, Pt of GL 6	0.34
11265	\$24,800	6/13/07	Cass	7-140N-25W, Pt of GL7	24.21
01236	\$22,000	6/13/07	Aitkin	12-46N-23W, SENE	40
01237	\$41,040	6/13/07	Aitkin	18-46N-25W, GL 4	50.64
01240	\$20,000	6/13/07	Aitkin	18-48N-22W, NESE	40
30004	\$107,000	6/15/07	Isanti	16-35N-24W, SESE	40
49024	\$61,130	6/15/07	Morrison	30-41N-28W, NWSW	40
TOTAL	\$1,010,760				701.73

Future Plans for Land Sales

Currently planned – a Fall 2007 auction. This auction will include several newly offered school trust fund parcels, and unsold parcels from previous auctions.

For future sales, the potential to acquire access to trust parcels landlocked by private ownership may be considered in an effort to make parcels more attractive to a larger market of potential buyers. This should increase the value of these properties.

Leasing Opportunities

Goals of the Project

This project involved research of revenue generating activities of other states managing trust fund responsibilities, as well as the review and analysis of several active and non-active leasing programs in Minnesota. Most trust lands remaining in public ownership, scatter across counties in northern Minnesota, and primarily feature rural land with woodland, swamp, and other cover types.

Several ideas were identified for generating additional trust revenue. *These ideas are concepts for further discussion and consideration and are not recommendations.* Any of these ideas would need further development and appropriate consideration before they could be implemented.

Project Research and Findings

HUNTING LEASES ON PUBLIC TRUST LANDS

Over time, economic opportunities for generating income may emerge because of social and economic changes. Hunting ranks high among outdoor recreational activities that may hold income potential not previously available. Private landowners, such as Potlatch, currently lease some of their land holdings for exclusive hunting rights, generating additional revenue.

The School Trust, as a major landowner, could take advantage of leasing land for hunting to increase the annual trust revenue. Not all trust lands would be suitable, or accessible for hunting leases; however, leasing hunting rights on even a small portion of the current trust acreage could generate significant additional revenue to the trust account.

A modest leasing program using a small amount (1.25%) of Forestry administered trust land would involve leasing about 750 “forties”. An annual lease rate of \$400 per forty would realize a gross annual income to the trust of \$300,000.00 (750 x \$400). The rates would need to be adjusted regularly by a formula process. This income - currently not realized.

HUNTING CABIN LEASE PROGRAM

The 1950’s saw the start of a hunting cabin lease program. Initially, site leasing for private improvements of hunting cabins went for \$10/year. The 2006 lease rate for hunting cabin sites - \$310/yr. Each year, a few of the existing leases terminate because of death of the tenants, or decision by the lessee to release their interest in the lease.

Currently, 128 hunting cabin lease sites are spread out over twelve counties. Pine and St. Louis County accommodate over half of the existing leases. Lands containing hunting cabin leases include: trust land, acquired land, and Consolidated Conservation (Con-Con), with trust land currently supporting 40% of the active lease sites.

Reinstating a modified hunting cabin lease program on trust land would generate trust revenue. Increasing the number of cabin leases would generate additional income to the Permanent School Trust. For example, adding 100 new hunting cabin leases would have brought \$31,000 annual income to the trust in 2006.

Modification of a hunting cabin lease program could help to avoid past issues surrounding rent increases and tenant entrenchment. Modifications to the program could include: prohibiting permanent improvements, except for campers, trailers and temporary structures; establishing lease rates through a public bidding process for the term of the lease (5 years); and requiring public re-bidding on all leases - no automatic renewals.

WIND POWER LEASING

The expanding wind energy industry creates many possibilities offering additional forms of energy, and benefit to local communities and economies. Some of the major advantages of wind energy include:

- Offering a source of renewable, clean, and locally produced energy
- Diversifying the energy portfolio
- Creating economic development in the form of new jobs, and new industry, with new and increased revenue through electricity sales as well as tax revenue for communities.

The potential of wind power can be harnessed either through local or community owned wind projects (farmer-owned, tribal owned or school owned wind turbines), as well as through private ownership.



A small wind turbine located on a farm.

Several key factors dictating the success of wind power projects include: location, power transmission availability, and public/private interest. Minnesota hosts several ideal areas for wind power turbines. Most obvious - the southwest region (Rock, Nobles, Jackson, Pipestone, Murray, Cottonwood, Lincoln and Lyon Counties).

Another key factor in wind power possibility points out public demand and interest in such energy forms. Rising energy costs = rising consumer demand for renewable sources = more attraction for wind power. According to the MN Dept. of Commerce, 11% of electricity in Minnesota currently flows from renewable sources. The state stands to increase that number.

Property leasing for a wind power use site can be financially beneficial. According to sources such as the American Wind Energy Association, and Windustry, a typical lease can generate \$2,500 to \$4,000 per turbine per year. The Iron Range area of Minnesota harbors several viable sites for successful wind energy projects.

Major factors to be considered before proceeding are the amount of revenue to be generated if state lands are leased and the environmental impacts.

EXPANDED AGRICULTURAL LEASING OF TRUST LANDS

Rural areas comprise most of the remaining trust lands; therefore, additional revenue may be generated through an expansion and intensification of leasing suitable trust lands for agricultural uses. The potential exists to increase this revenue through more active management of agricultural leasing opportunities, and by identifying and offering for lease, lands suitable for agriculture. Currently 67 active agricultural leases covering approximately 2,600 acres of trust lands generate annual trust revenue of \$28,450.

County established rate schedules for agricultural leases, based on data relating to leases by private landowners, vary from county to county. In the northern part of the state, location of most of the trust land, annual lease rates for tillable land or upland hay vary from \$15/acre to \$48/acre. Agricultural leases for lowland hay or pasture carry a percentage of this rate.

Doubling the acreage leased for agricultural use could generate additional annual revenue to the trust of approximately \$30,000. The precise revenue increase depends upon the location, quality, and demand for additional lands leased.

EXPANDED WILD RICE LEASING PROGRAM

The wild rice leasing program in Minnesota currently involves six wild rice leases generating revenue of approximately \$6,000.00 per year (\$5,920.34 in 2005). Like other leases with extensive tenant improvements, such as lakeshore lots, wild rice farmers expend a significant investment in modifying state lands for wild rice paddy agriculture. Previously, a legislative authorized all existing wild rice leases on non-trust land be sold to tenants after exchange with tax-forfeited lands.

Profitability for wild rice farming in Minnesota significantly decreased in recent years due to the increased production of wild rice in California. While Minnesota embraces many lands that may be suitable to convert to wild rice farms, the cost of doing so can be very high due to equipment purchasing, and acquiring permits to draw and displace water from wetland areas.

COMMERCIAL LEASING & DEVELOPMENT

Several states in the southwestern part of the United States have had success with commercial leasing and development of trust fund lands, i.e. New Mexico and Arizona generating millions of dollars for their trust funds through these practices. Some of the common themes leading to success for these states include: an abundance of trust fund land near rapidly expanding populations, and entire bureaus with staff dedicated to commercial leasing and development.

Not only do these states manage 5-10 million acres of trust fund land, but often this land sits in areas over-run with a growing population, unlike Minnesota trust lands which sit mostly in rural, wooded lands in the northern part of the state. According to Brian Bingham, Commercial Resources Director for the New Mexico SLO, the great demand for these lands makes marketing efforts only minimally necessary.

New Mexico and Arizona initiate potential developments through an application process. Commercial and residential builders compete against one another for the best land, and in turn bid up land parcels. A modest potential for increased income exists when some development activities occur on a parcel prior to sale or lease.

Minnesota contracted to develop a four-example development project with Emmons & Olivier Resources who completed the project titled “Potential Development Sites on School Trust Fund Land.” A more detailed description of the report follows in a later section of this report.

INCREASING LEASE RATES

Another area of potential revenue enhancement for trust lands involves increasing the rental income for existing leases. Currently, for many lease situations, the lease rate is set through a table. Examples include: the agricultural lease rate tables, the minimum lease fee schedules, and the gravel royalty rate tables. Additionally, there remains a long-term policy of distributing/requiring a rent-return from the lessee equal to 9% (Private) or 6% (Government) of the estimated market value of the leased property. The 6% return is required for leases to other governmental agencies. This discount appears to reflect the public use of leased areas for governmental agencies. The State applies the 9% or 6% policy for all of the DNR leased lands - trust and non-trust.

Lease rate determination schedules provide a handy reference for area managers and potential tenants. Correctly used, they save time and administrative costs, and simplify leasing activity; however, they do not always reflect “market rent.” Minimum lease rates and schedules don’t always make a good substitute for negotiation or open bidding. More aggressive negotiation of lease rental rates for existing leases would be expected to increase lease revenue, and possibly eliminate some of the low-valued, convenience-type of lease activity, but would likely increase lease rental discussions and conflicts with the lessees.

AGGREGATE LEASING

The Division of Lands and Minerals received an additional appropriation for the current biennium in order to enhance revenue generation from the sale of construction aggregates on school trust lands. This project resulted in an increase in income of \$177,000 from \$284,000 in FY 05 to \$461,000 in FY06.

A cornerstone of this effort - the site-specific evaluation. This identifies the real extent, thickness, quality, volume, access and other parameters of the deposit that affect the resource value and the site management (reclamation) plan. Five new sites evaluated include: Adolph, Industrial Township, Hidden Valley Northwest Corner, Ball Club Road and Coleraine. These sites contain over 2.5 million cubic yards of aggregate.

This more aggressive program of identifying gravel resources on trust lands and actively marketing these resources produces higher revenues and carries significant potential for further revenue increases. In the past, the Division of Lands and Minerals gravel leasing practices generally transpired on a request basis. Recent practices increased marketing directed at the Minnesota Department of Transportation (MnDOT). Further results can be reviewed in the report titled “Construction Aggregate Resources Inventory and Revenue for Permanent School Trust Fund Lands During Fiscal Years 2006-07” listed in the appendix.

These ideas are offered for further discussion and consideration and are not ready for implementation.

Non-Leasing Revenue Generating Opportunities

Goals of the Project

This section of the project focused on research revenue generating possibilities that do not directly involve leasing, but might hold potential for additional income to the school trust fund. *These ideas are concepts for further discussion and consideration and are not recommendations.* Any of these ideas would need further development and appropriate consideration before they could be implemented.

Project Research and Findings

IN LIEU OF PAYMENT TO THE TRUST

Montana, currently, appears to be the only state charging a fee for the use of public lands for hunting or recreational use. The Montana Department of Natural Resources and Conservation estimates hunting and fishing comprise 95-96% of the recreational use of public lands. In response, Montana charges a conservation license fee of \$2 as a prerequisite to any other license purchased. This fee compensates the school trust for the value associated with recreational use of state lands.

The proof of the success of this fee for recreational uses in Montana translates into increased revenue for their school trust fund, and could prove to be a valuable tool for Minnesota as well. If the state of Minnesota decided to create such a program, the Montana system and experience would serve as a good guide for instituting a similar program. Montana's experience also offers some insight into potential problems and complaints from the public.

Introduced in 1992, initially as a graduated fee scale program depending on the age of the license holder, this system only covered hunting and fishing uses, and the fee ranged up to \$10. After numerous complaints from hunters and anglers about the high cost, the state of Montana settled on a flat fee of \$2, and expanded its definition of recreational use to include other activities such as hiking, biking, etc. Since inception, the fee raised over \$1 million of compensation to the trust.

PERCENT OF TAX

A significant portion of recreational activity that occurs in Minnesota is on Minnesota's trust lands. Some of this activity generates tax revenue. For example, hunting activity in Minnesota generates sales, fuel and income tax revenues.

A calculation could be done based on user activity in comparison to taxes generated by type of recreational activity on the land. It appears that if only a small portion of this tax revenue was dedicated to the trust, there would be hundreds of thousands of dollars generated each year.

CARBON CREDIT PROGRAM

Recently, the Minnesota Farm Bureau announced an agreement to participate with the Iowa Farm Bureau in the Carbon Credit Aggregation Program. This program allows farmers to register and sell carbon credits that are traded on the Chicago Climate Exchange (CCX). Currently underway, a four-year pilot project allows companies to purchase carbon credits to offset greenhouse gas emissions.

According to Dave Miller, the Research and Commodity Director for the Iowa Farm Bureau, a possibility to earn \$10-30/acre per year for forested land exists. For a simple example, if the

State enrolled 1,000 acres of forested trust land, it could generate as much as \$30,000 for the trust.

To enroll in this program land must host plants or trees that are capable of aiding in the sequestering of carbon dioxide in the atmosphere. The program requires a five year contract in which the participant would be restricted from cutting or farming the enrolled area.

Currently, this program mainly targets farmers with continuous no-till and grasslands. Future endeavors though, could soon include forestry projects throughout the Midwest. The current program focuses on land in Minnesota, south of Interstate 94.

WETLAND CREDIT REVENUE

The Wetlands Conservation Act provides for the establishment of wetland credits that can be developed and sold as mitigation for construction projects that remove wetland areas. This procedure creates local markets for the sale of “credits” to those needing them for planned projects.

While trust lands contain thousands of acres of wetlands, only those trust lands containing drained wetlands would be eligible for the wetland credit program. Existing wetland areas are not eligible.

Under the wetland credit program, landowners obtain “wetland credits” through the restoration and encumbrance of restored wetlands, with an agreement insuring that land remains wetland. For those needing credits for proposed construction projects, established wetland credits can be found through local coordinating governmental units in a “wetland credit bank.” Project developers purchase needed credits from landowners holding qualifying wetland credits.

Locally established, the value of wetland credits depends upon the supply of credits, the construction activity and demand for them, and the value impact of the wetlands to the projects. Other factors affecting value include: an abundance, or lack of, wetlands in the project area.

To establish wetland credits on trust land, first comes documentation of eligible drained wetlands, followed by restoration (and associated costs) of these wetland areas.

UTILITY LICENSE

Utility lines crossing school trust lands and public waters require issuance of utility licenses in 25 or 50 year permits, generating income to the Permanent School Trust. License fees, determined and regulated by specific rules, vary, depending on the length, width and type of utility crossing. Utility license issuance results as a reaction to utility company needs and expansion matters rather than an initiative program for school trust lands.

Changes in this system, to generate a greater income from utility use of trust lands, requires legislation. Legislative proposals replacing the current term license permit process with permanent utility easements could significantly increase revenue for utility crossings of state trust lands; an increase equivalent to the amount utility companies might pay private landowners.

As a hypothetical example: A 50-year utility license for an electrical distribution line running across the edge of a forty, 25 feet in width would generate a utility license fee of \$218.84,

assuming the forty's land value to be \$1000/acre. A permanent easement at 80% of the land value for the encumbered right of way would generate a onetime easement payment of \$606.00, an increase of 2.7 times the current hypothetical license fee.

Revenue from Land/Water Crossings by Calendar Year

Year	Type of Crossing	Revenue Generated
2005	Land Crossing	\$5,552.54
	Water Crossing	\$130,589.40
2004	Land Crossing	\$9,918.14
	Water Crossing	\$92,999.90
2003	Land Crossing	\$12,435.00
	Water Crossing	\$103,219.00

EASEMENT REVENUE

Minnesota Statutes, Sec. 84.63 provides for the issuance of easements to governmental units for roads, trails, and certain other uses. This conveyance of easements over school trust land generates income.

Compensation to the trust equals the value of the easement interest conveyed. For existing roads this compensation includes the value of the original right of way if previous reimbursement to the state cannot be shown.

The issuance of easements over school trust land comes about as a response, dictated by the demand for new roads or improvement of existing roads crossing trust land. The DNR takes no initiative to encourage easement sales.

Revenue from Easement Crossings by Calendar Year

Year	Revenue Generated
2005	\$50,324.37
2004	\$78,440.54
2003	\$186,102.43*

* 2003 Easement revenue includes \$151,000 for a flowage easement

These ideas are offered further discussion and consideration and are not ready for implementation.

Pilot Area Projects

Goals of the Project

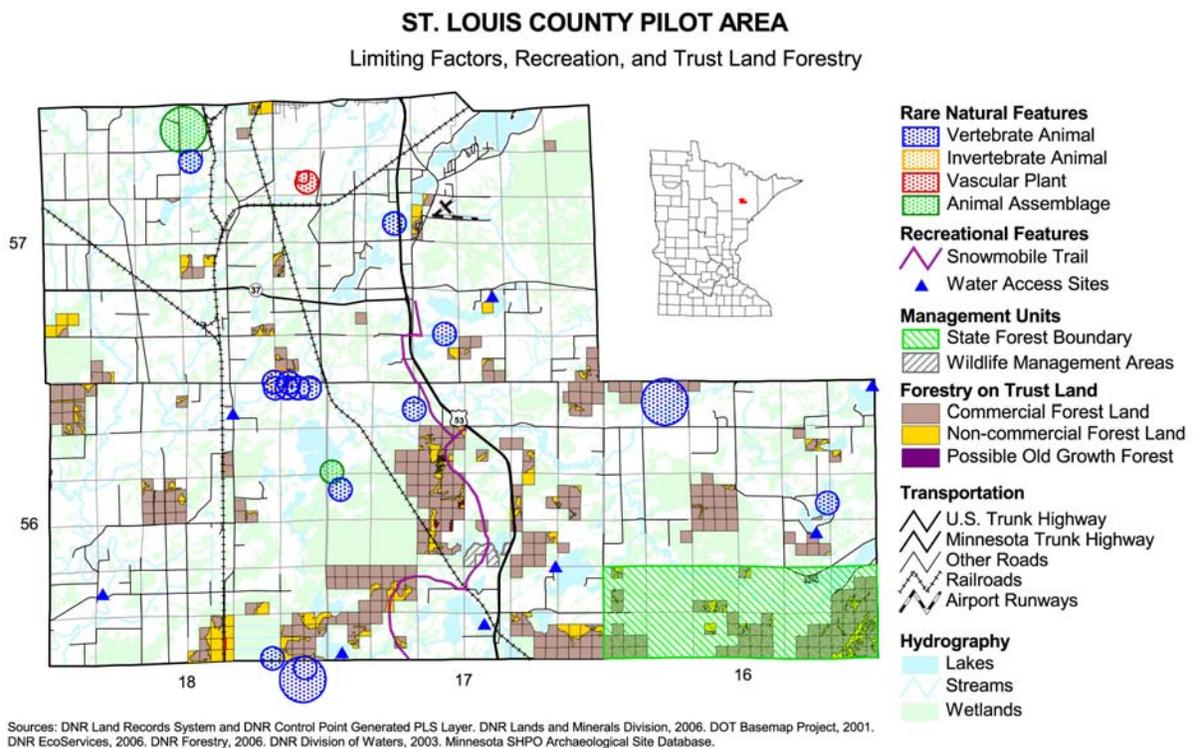
An initial project under the Trust Fund Revenue Enhancement Program saw the creation and identification of two pilot areas to be used for study and analysis. The goal in creating these pilot areas was to determine whether it would be helpful to do statewide inventory of school trust lands in detail as to resource needs, uses, and income generation opportunities. The project

produced ideas and recommendations for enhancing revenue on trust lands, either through leasing, sale, exchange or other management opportunities.

Actions Taken During the Project

The two pilot areas created represent a broad mix of DNR management units such as state forests, wildlife management areas, and state parks. Also considered - transportation corridors. The Pine County pilot area contains a wide variety of DNR management units. The St. Louis County pilot area contains a high concentration of trust lands.

After the selection, DNR staff organized a comprehensive data gathering effort, and scheduled meetings with local team members in the pilot areas. Through discussion and feedback, the local staff provided the trust fund revenue enhancement team additional information and opportunities. Following data collection and analysis, the trust fund team concentrated on different or additional land management strategies for enhancing long-term revenue maximization for the trust fund. Members of the revenue enhancement group, regional staff, and the area forester closely examined trust lands on a parcel-by-parcel basis with various sale, exchange, and leasing opportunities identified.



Map of the St. Louis County pilot area showing resource values, management units, and major transportation.

Project Results and Potential Future Actions

The St. Louis county pilot area controls 348 trust parcels totaling approximately 13,500 acres of which 190 parcels come from the swamp land grants. The group identified 27 parcels with potential for exchange; three parcels with potential for commercial leasing due to close proximity to transportation and population; three parcels along Highway 53 as possible candidates for a billboard leasing arrangement; and nine parcels with potential for aggregate

resources. Parcels with past timber sales and ongoing timber resource management were also identified. Additionally, two 40-acre parcels identified for sale sold within the pilot area.

The Pine county pilot area controls 202 trust parcels totaling just less than 8,000 acres. Although none of the parcels hold the classification as Swamp Trust, many prove low or swampy in nature. The group identified three parcels with exchange potential; nine parcels with frontage on Interstate 35 as possible candidates for a billboard leasing arrangement; twenty-five parcels with crushed stone potential; four parcels with sand and gravel potential; five parcels with dimension stone potential; and one parcel as a possible location for a leasing arrangement with a canoe outfitter similar to the arrangement at Interstate State Park on the St. Croix River.

Identified parcels have been referred to the Northeast Regional Management Team for further discussion and decisions.

Potential Development Sites on School Trust Fund Land, A Contract Report by Emmons & Olivier Resources

Goals of Project

The State contracted Emmons & Olivier Resources, Inc. to study the pre-development steps and development potential of trust lands if developed for commercial, industrial or residential purposes.

Actions Taken During Project

EOR conducted research, and interviewed DNR staff and staff of western states. They prepared for, and held a one-day seminar for DNR staff on preliminary findings, and made modifications to those findings before submitting the final report.

Findings of Report

EOR prepared products in the following four areas:

- Developed parcel screening and an evaluation methodology to sort out and evaluate land parcel development potential.
- Evaluated possible development potential on four case study parcels.
- Prepared an overview of trust land programs in Minnesota, Arizona, Montana, Utah and Wyoming.
- Recommended programmatic framework for a MN trust land sales/development program.

PARCEL SCREENING & METHODOLOGY

The three-tier parcel screening process included: initial sorting (Tier I), resource evaluation (Tier II), and parcel suitability (Tier III). For Tier I, parcels rank according to their development potential (high, moderate, low). For Tier II and III, a weighted scoring system applied, with scores computed separately for each tier. Higher scores indicate a more suitable parcel for the suggested development use. For example, a high score for the resource valuation indicates (Tier II) low resource values exist on the site, and thus development impacts would be lower.

EVALUATION OF POSSIBLE DEVELOPMENT POTENTIAL ON FOUR CASE STUDY PARCELS

The project team selected four case study parcels. Each parcel received a general development scenario based on its characteristics and location. The three development scenarios considered include: residential, resort/recreational, and commercial.

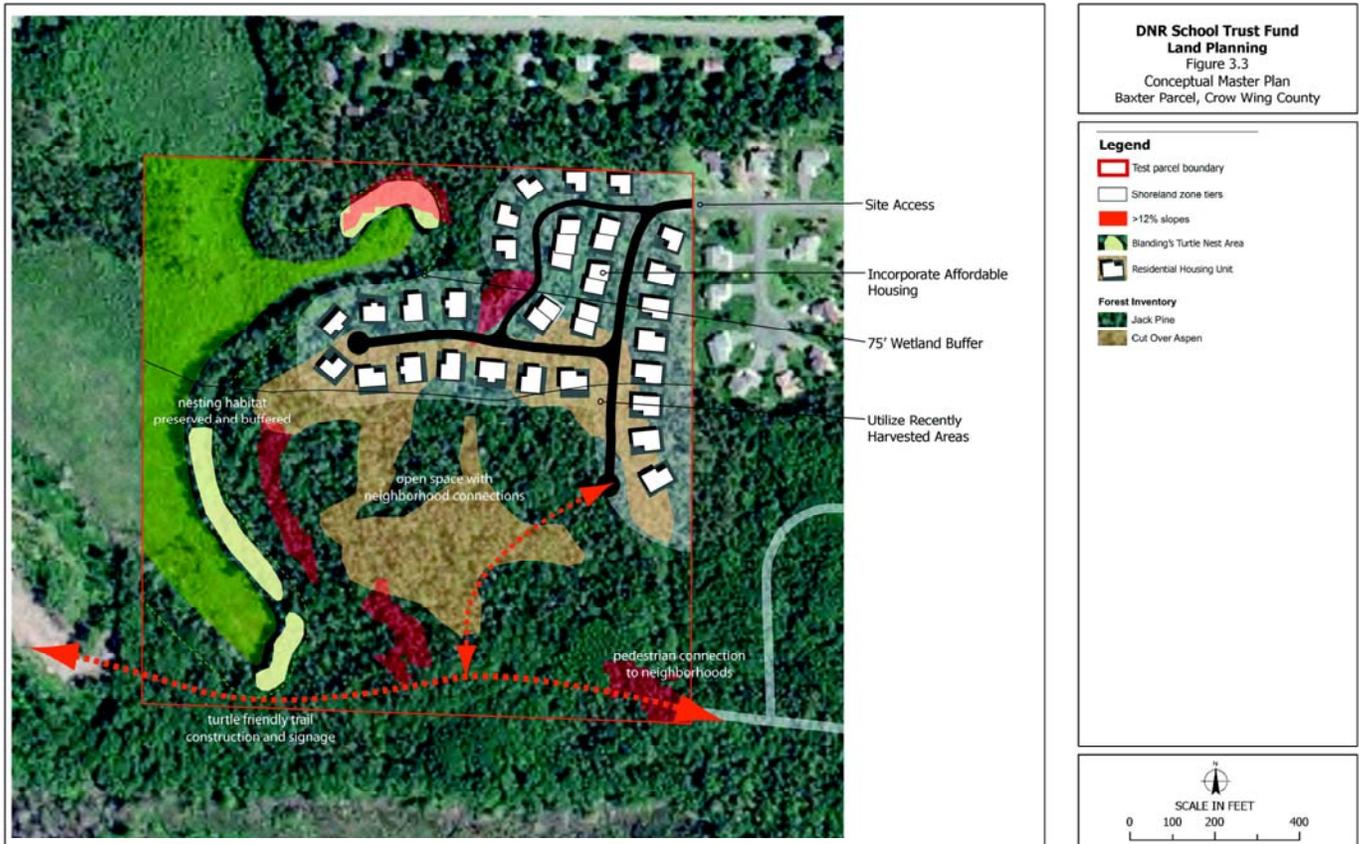
The process for each parcel included:

- **Completion** of narrative describing parcel with considerations and assumptions relevant to the chosen development scenario.
- **Compilation** of site analysis maps, concept plans, and illustrations.
- **Preparation** of a market analysis that evaluated potential values, assessments of local markets, and highest and best use of property, which sometimes differed from the development scenario.
- **Computation** of development costs and net revenues.

Although unnecessary to purchase trust fund lands, as would be the case with private developments, raw land values must be factored in to the estimated net revenues for each case study parcel. Results of this analysis follow:

Location	Acreage	Possible Development	Net Revenue
City of Baxter	40	Residential	\$225,050.00
Lake George	368	Residential/Commercial	\$704,300.00
Clearwater County	60	Resort/Recreational	\$50,000.00
Highway 53/37	143	Residential/Commercial	\$338,000.00
TOTAL	611		\$1,317,350.00

The case studies contain many more details about each site in the main report and the Executive Summary, and should be referred to before making any conclusions. For example, the Lake George site would seem to show limited demand for this development, at this time, prompting phasing of development. The total value of the land, if it was sold, plus completed soft improvements described below, would likely be the raw value of the land plus the estimated net revenue.



Map prepared by EOR of a potential development on school trust land in Baxter, MN.

TRUST LAND PROGRAMS: MINNESOTA, ARIZONA, UTAH & WYOMING

Along with a phone survey and research of trust land programs in four western states, EOR completed a review of the Minnesota land sales program. The four western state trust land programs generally operate to optimize revenue for trust fund beneficiaries, while in Minnesota, management of trust fund lands benefit both the School Trust Fund and natural resources. A detailed evaluation and comparison can be found in the report. A few conclusions follow:

- Except for Wyoming all of the western states developed long-range plans that guide disposal of trust lands. Characteristics of most of the lands identified for disposal include: isolated, high management costs, and within or near areas experiencing urban growth.
- Trust land programs generally focus on soft improvements (e.g., planning, due diligence, entitlements) rather than infrastructure improvements.
- Depending on the project and staff workloads, program staff roles might include: management of consultants and contracts, or completing all soft improvements in-house.
- Strong political support enables the trust land program greater effectiveness in generating revenue for the Trust Fund by limiting political interests, providing resources, and implementing legislative changes.
- The Trust Land program should be developed around the land resource to be managed.

KEY RECOMMENDATIONS FOR TRUST LAND SALES/DEVELOPMENT PROGRAM

The key question concerns what level of involvement in the development process is appropriate, and what level of involvement will most benefit the School Trust Fund. Examples of steps in the

development process that can be taken with emphasis on “soft inputs” rather than infrastructure improvements include:

- Complete basic site assessments and research to support more effective marketing.
- Increase access to land locked parcels.
- Develop a concept plan to gain informal approvals from the city/county and, where necessary, apply for rezoning.
- Complete preliminary platting process.
- Advertise aggressively through multiple media.

Construction Aggregate Resources Inventory and Revenue for Permanent School Trust Fund Lands During Fiscal Years 2006-07

Goals of the Project

The goal of this project is to increase revenues generated to the Permanent School Fund in accordance with directives in the Minnesota Constitution and Minnesota Statute 127A.31 (Goal of the Permanent School Fund) by identifying and selling (via lease) sand and gravel or crushed stone, called construction aggregates resources from Permanent School lands. A cornerstone of this effort is the site-specific evaluation to identify the areal extent, thickness, quality, volume, access and other parameters of the construction aggregates deposit that affect the resource value and the site management and reclamation plan.

Project Research and Findings

Based upon fiscal data from sand and gravel leases as of January 2007, there was an increase in annual revenue to the Permanent School Trust Fund (PSTF) of \$177,000 from FY2005 revenue of \$284,000 to FY 2006 revenue of \$461,000. The revenue total was not maintained in FY 2007. Annual revenue will vary from year to year as the general construction business cycle varies, as highway projects that happen to be near the PSTF construction aggregates pits are active, and other general economic factors in northern Minnesota. Because construction aggregates are a low-cost, but heavy commodity and haul costs are expensive, the location of the pit relative to the market is very important. The closer the pit is to the market end-user, the more valuable are the aggregate resources. The long-term approach to increase revenue is to have PSTF sites available for lease when an opportunity arises to sell those resources.

We identified a total of approximately 6.8 million cubic yards of construction aggregates in 10 deposits. We can now promote nine of those sites for the long-term management, marketing, and sale of the aggregate resources. The 10th site will likely be a condemnation sale or easement to the Minnesota Department of Transportation.

There are five general categories of aggregate resource revenue that have been identified:

- 1) continuous year-to-year operation and sales of construction aggregates from a site that contains a large resource near a market area,
- 2) single-season sales of construction aggregates from a new site or an inactive site for a nearby highway or construction project,
- 3) periodic, small local sales of construction aggregates,
- 4) a land transaction such as a land sale, exchange, new pipeline license or road easement that encumbers the aggregate resource, or

5) miscellaneous activity such as a lease for deposition of excess soils from highway construction or development. A lease was designed to accept and deposit excess highway construction bedrock outcrop material and regular cut and fill earthen material. Some of that material may be marketable in the future, so the site was designed with that in mind. This lease has served as a template for one new lease on a parcel near Virginia.

One component to achieve the increased revenue goal on a long-term basis is to continue to have a few new pits available for lease when old pits become depleted. The DNR is identifying potential new sites that contain aggregate resources and making them available for future lease sales. Another component to achieving increased revenue is to market the PSTF construction aggregates resources to the ever-changing highway projects. A third component is to have a larger number of inactive pits available for lease in order to capture some of the available highway projects that change location from year to year. We are marketing the available aggregate resources through the Minnesota Department of Transportation bid information and local governments to potential lessees who build highway projects. Finally, improved site management plans are being developed as new sites are opened so that sites are reclaimed to create post-mining land value.



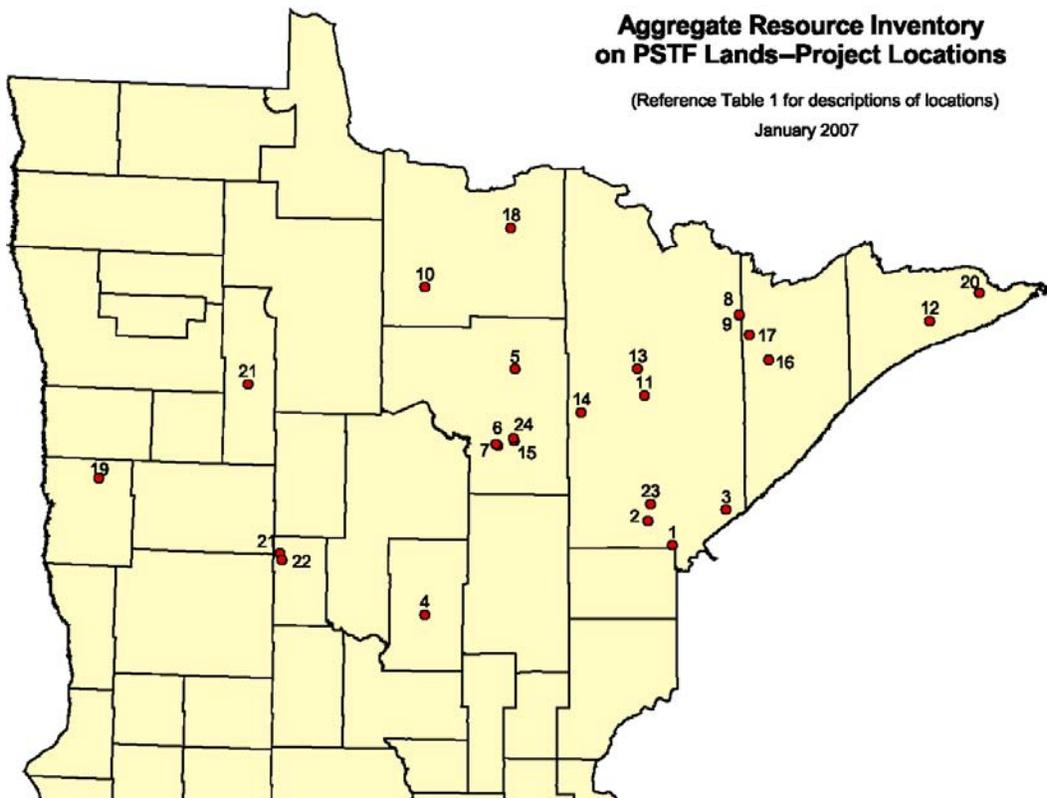
Searching for buried construction aggregate layers with a drill truck (orange in background) on a Permanent School Trust Fund parcel near Gemmill (see map site # 10). The result is the delineation of a significant expansion in the extent of the gravel deposit in this area.

Twenty-four Permanent School Trust Fund sites were worked on during FY2006-07 (see map). It quickly became clear that we needed to prioritize the many opportunities, so reconnaissance work was done at many sites and marketing or facilitation was done for other sites to enable the lease process to proceed in a timely manner. Facilitation activities included communication of the inventory findings and coordination with the land administrator, lessee, and/or others during the lease process; developing post-mining land use reclamation options for the site management plan and review process; communications during the DNR review process; and communications during any land transaction process that involved aggregate resource values.

Five new Greenfield sites were evaluated. They contain over 2.3 million cubic yards of aggregate. In our original work plan we expected to study 2 to 4 new Greenfield sites. A

Greenfield site is considered to be one where a new pit is opening, rather than where an existing gravel pit is simply expanding.

We also now perform a review of all PSTF parcels that are involved in land sales, exchanges, easements or encumbrances. We determine if previously unrecognized aggregate resources exist on the parcels and whether there is a value that must be considered in the transaction. Land transactions may include a road easement, utility license or condemnation that prevents mining, or a land sale or exchange where the PSTF parcel contains construction aggregates that should be included in the appraisal. The land transactions review work and uncommon activities generated prospects for future revenue, but they also took away from our time to work on Greenfield sites. Six land transaction reviews or uncommon activities sites became projects that were inventoried or otherwise worked on.



One of our objectives is to receive fair market value for the construction aggregate resources that are sold. To achieve this the Lands and Minerals Division established in 2002 a recommended price rate sheet for various construction aggregates sold and updated it in 2004. In the case of a land transaction that will preclude future sale of the construction aggregates resource, the DNR negotiates a payment for the resource encumbered. The Division provides technical support to achieve this objective.

Future Plans and Action

Another objective is to create a “pipeline of projects” to generate future revenue as the resources at some old sites become depleted. Many sites require one to three years of lead-time prior to the actual lease offering.

The DNR conducted fieldwork to get 9 sites into the “pipeline” for future lease sales. Some of these require additional work to get to the point of the lease offering, such as for a parcel with no legal road access.

We obtained Mn/DOT’s 5-year highway construction plans and map and then searched DNR information for PSTF pits near the highway projects. We also worked with Mn/DOT to market PSTF resources to contractors who bid on the road projects last year. This work with Mn/DOT and discussions with contractors will help market these materials for future sales.

We also collected bedrock samples and had lab tests done to identify potential new sites for crushed rock quarries. As natural gravel resources in local areas become depleted, there is a clear trend toward development of bedrock crushed stone quarries.

A list of known gravel reserves in the ground is slowly being built that can be marketed for future sales. The biggest challenge is to screen 2.5 million acres of PSTF lands to identify and perform a field check of those parcels that contain marketable aggregate resources. Location, access, and local demand are important to marketability.

Staff also provided strong representation for the PSTF in all land transactions to protect future revenue by screening for parcels that have aggregate resources. For example, one block of land parcels selected in Carlton County for the Savannah Portage State Park land exchange may provide future sales of aggregate to the Duluth market.

Another activity is to do more site-specific management plans and incorporate those into the DNR lease document for new lease sites and when leases are renewed. These plans should provide for better achievement of reclamation objectives. The deposit data collected during the site evaluation, such as areal extent of the aggregates, is very important to development of a site management plan. We also developed a Checklist for Earth Materials Leases, which strives to conserve resources, to enhance reclamation & public safety, to reclaim sites for higher post-mining land value, and to increase internal DNR communications on development issues. The Checklist promotes consistency and quality in the development of lease conditions, which naturally vary from site to site across the state. Several improvements have been made to the Checklist during the last two years.

References

“Minnesota’s School Trust Lands, Biennial Report, Fiscal Years 2004-2005” for additional facts and statistics.

“1998 Legislative Auditors Report” Department of Natural Resources: Statewide Audit – Selected Audit Areas For the Year Ended June 30, 1998, No. 99-8, February 1999.

“Potential Development Sites on School Trust Fund Land” by Emmons & Olivier Resources Inc., as contracted by the Department of Natural Resources, June 22, 2007.

“Construction Aggregate Resources Inventory and Revenue for Permanent School Trust Fund Lands During Fiscal Years 2006-07” by Dennis Martin, Division of Lands and Minerals, Department of Natural Resources

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