

LEGISLATIVE REFERENCE LIBRARY
HD243.M6 L343 1999
- Recommendations for protecting pub



3 0307 00052 8870

HD
243
.M6
L343
1999

990402

This document is made available electronically by the Minnesota Legislative Reference Library as part of an ongoing digital archiving project. <http://www.leg.state.mn.us/lrl/lrl.asp>
(Funding for document digitization was provided, in part, by a grant from the Minnesota Historical & Cultural Heritage Program.)



RECEIVED

JUN 21 1999

LEGISLATIVE REFERENCE LIBRARY
STATE OFFICE BUILDING
ST. PAUL, MN 55155

Recommendations for Protecting Public Shoreland on Minnesota Waters

Submitted by the Minnesota Department of Natural Resources

to

**Senate Environment and Natural Resources Committee
House Environment and Natural Resources Committee
Senate Environment and Agriculture Budget Division
House Environment and Natural Resources Finance Committee**

April 1999

— 1998 Minn. Laws Chap. 401
Sec. 60 Subd. 1

— 1998 Minn. Laws Chap. 389 Art.
16 Sec. 31 Subd. 1

PREFACE

With this report, the Department of Natural Resources is not advocating for legislative appropriations beyond budget recommendations for the 2000-01 biennium made by the Governor's Office.

TABLE OF CONTENTS

	<i><u>Page</u></i>
Executive Summary	3
Introduction	5
Public Shoreland Jurisdictions	5
General Status of Shoreland Development in Minnesota	5
Benefits of Undeveloped Shoreland	7
Statutes Related to Sale and Exchange of Tax-Forfeit Shorelands	8
DNR Process for Review of Proposed Sale of Tax-Forfeit Shoreland Parcels	10
Results of DNR Review of Proposed Sale of Tax-Forfeit Shoreland Parcels	11
Analysis of Transactions for DNR-Administered, Water-Oriented Lands	12
DNR Land Acquisition Criteria	15
Recommendations on Public Shoreland Issues From Interest Groups	15
Conclusions and Recommendations of the Department of Natural Resources	18
References	21
Appendix	22

EXECUTIVE SUMMARY

This report was requested by the Minnesota Legislature as a result of the continuing debate about the sale of tax-forfeit lands that have frontage on lakes and streams. These lands are highly valued for development purposes but are also of critical importance for protection of lake and stream environments. Opinions vary widely on whether these lands should be kept in public ownership or sold to private owners with the hope of economic benefit to local communities.

Public shorelands exist in a variety of settings and governmental jurisdictions. Most of the lands are in long term stable ownership and not at risk for sale. In general, state-owned shorelands are withdrawn from sale by Minnesota Statutes but there are also exceptions in statute that allow tax-forfeit parcels to be sold or exchanged. On a statewide basis, about two-thirds of shorelands are in private ownership with the remainder held by federal, state and local government. The Department of Natural Resources (DNR) has a role in the disposition of public shoreland and also acquires and manages land, including shoreland, as part of its ongoing responsibilities. Detailed criteria for land acquisition have been developed and are used by DNR disciplines.

The statutes require that before sale of certain tax-forfeit parcels of land, there must be a review by the DNR and in most cases, approval by the Minnesota Legislature. During the period 1993-1997, the counties requested authorization to sell 7,995 tax-forfeit parcels. About 2 percent (140) of these parcels had water frontage. The legislature authorized sale of 89 of these parcels by the counties. Thirty of these 89 parcels were sold by the counties to local government and the final disposition of the others is unknown.

An analysis of transactions recorded in the DNR land records system on the acquisition and sale of land parcels having water frontage for the period 1848-1997 shows that the state retains about 90 percent of the total acreage of parcels with water frontage that could have been sold during that time period. Such lands were withdrawn from sale in 1923 but the Minnesota Legislature has routinely made exceptions and allowed some sales. Data in DNR land records system were also analyzed to determine if there was a trend in the balance between the area of DNR-administered shorelands acquired and those sold during the last ten years. The analysis showed that the cumulative acreage of lands acquired exceeded the acreage sold by over 36,000 acres during the period 1988 through 1997. However, these data must be used cautiously. The land record system administered by the DNR does not systematically collect data on the length of shoreline associated with shoreland parcels, but rather, only notes if a parcel contains water frontage. The actual length of shoreline associated with these parcels is unknown.

Major recommendations include the following:

- The DNR should enhance and upgrade its record keeping system and information base on the status and trends in statewide shoreland ownership,
- There should be a greater focus on education of shoreland property owners in the use of best management practices and minimum shoreland and flood plain standards,
- The Minnesota Legislature should consider how tax policy and the taxing structure could

be changed to provide incentives for preservation of undeveloped privately-owned shorelands,

- Incentives should be developed by governmental agencies for greater use of conservation easements on privately owned shoreland,
- The DNR Bureau of Real Estate Management should upgrade its data collection and record keeping system on DNR administered shorelands to allow a more definitive interpretation of data and trends in the state ownership of shoreland,
- The sale of public shoreland parcels should continue to be reviewed on an individual basis and be consistent with the needs for protection and management of individual water bodies,
- There should be mandatory reporting to the DNR Bureau of Real Estate Management on the ultimate disposition of tax-forfeit shoreland parcels authorized for sale,
- Consideration should be given to increasing the in-lieu-of-tax payments to the counties on tax-forfeit shoreland parcels as an incentive for retaining them in public ownership,
- There should be mandatory advance notice given by the counties to the DNR Bureau of Real Estate Management by August 1 of each year for the disposition of tax-forfeit shoreland parcels. Without this advance notice, legislation that authorizes sale should be held over until the next session so there is adequate time for review and public comment,
- Where the sale of tax-forfeit shoreland parcels is expected to be controversial, the counties should hold hearings to discuss with the public before seeking authorization for sale.
- Public shoreland parcels that are sold must meet minimum shoreland and flood plain standards but should have conservation easements placed on them that are more restrictive when it is consistent with the setting and needs of the individual water body.

INTRODUCTION

During the 1998 Legislative Session the Department of Natural Resources (DNR) agreed to conduct an analysis of issues related to the sale and management of shorelands that are in public ownership and complete a report to the legislature with recommendations for the use, disposition and management of remaining undeveloped public shorelands. The need for this study was precipitated by continuing public debate about the sale of tax-forfeit lands that have frontage on lakes and streams. Views on selling these lands range from total prohibition of sale to disposing of all that have development potential. There are strong feelings among certain interests that these lands should remain undeveloped and in public ownership for lake protection purposes, and other uses, such as shore-fishing and wildlife viewing. Conversely, there are others that support sale to private interests with the hope of providing economic benefits to the local community. DNR staff from various disciplines contributed to this study with input from external stakeholders having an interest in the use and management of public shorelands.

PUBLIC SHORELAND JURISDICTIONS

Shorelands in public ownership exist as holdings in a variety of settings and jurisdictions. They occur principally in national forests, national parks, national wildlife refuges, federal waterfowl production areas, military reservations, state parks, state forests, state wildlife management areas, state aquatic management areas, county and local parks, local forests and scientific and natural areas. They also occur in other land holdings such as tax-forfeit lands, consolidated conservation lands, school trust fund lands and university trust lands. Most of this land is in stable, long term public ownership and is not considered at risk for sale. There is a statutory prohibition against selling lands in parks, state forests and other management units. In addition, there is also a statutory provision against selling state-owned land that has frontage on public waters with certain exceptions. The Minnesota Legislature has the authority and does authorize sale of shoreland in certain instances. Much of the recent controversy relates to the sale of county-administered state-owned tax-forfeit lands that have frontage on public waters. This report deals primarily with this issue but also provides information and recommendations on related shoreland issues.

GENERAL STATUS OF SHORELAND DEVELOPMENT IN MINNESOTA

The status and importance of public shorelands is related to the overall shoreland resource of the state. It is important to understand the current status of shoreland development in the state and what is likely to happen in the future. An understanding of overall trends in shoreland development helps put the sale of public shorelands in perspective.

The shorelands of Minnesota waters, and especially those of high quality recreational lakes, are intensely valued and are continuing to receive significant development pressures. This is also true in other lake regions of the United States. In recent years this factor has heightened the controversy related to the sale of shorelands that are in public ownership. There is a finite amount of shoreland in the state and as development occurs, the remaining undeveloped lands take on

greater value and significance.

The State of Minnesota does not monitor the status and development of shorelands in a systematic, reliable way. The last major effort to document the status of development of shorelands on lakes took place in 1982 and prior to that in 1967. There is no routine statewide system for reporting and collecting data on development activities. However, information is available that is useful for assessing overall trends in the development of shorelands.

<i>Owner</i>	<i>Percent Owned</i>
Privately Owned	67
Federal Government	17
State Government	10
County Government	6

* Source: Minnesota Land Management Information System, circa 1977.

On a statewide basis, approximately two thirds of shoreland on lakes and rivers is in private ownership as shown in **Table 1**. Although this information is somewhat dated, there is little evidence that it has changed significantly.

The lakeshore ownership pattern varies significantly on a regional basis as reported by Kelly and Stinchfield (1998) in Lakeshore Development Patterns in Northeast Minnesota: Status and Trends. See Table 1 and Table 2 in the appended copy of this

report. For the state as a whole, about one-third of the lakeshore is in public ownership. In Northeast Minnesota, about two thirds is in public ownership because of the large land holdings by federal, state and local government. These lands are essentially protected and development activities occur primarily on privately owned shorelands.

Although recent statewide data on lakeshore development in Minnesota have not been compiled by the Department of Natural Resources, an analysis of historical data shows that between 1967 and 1982, the statewide total number of homes on lakes greater than 145 acres in area, outside of the seven county metro area, grew by 74.1%. Seasonal homes increased by 63 percent while permanent homes increased by 99.5 percent.

Since comparable statewide data have not been compiled since 1982, regional data may have value for indicating statewide trends. Kelly and Stinchfield (1998) reported that in Itasca County between 1967 and 1982, there was a 103.4 % increase in housing built on lakeshore. Between 1982 and 1998 there was a 30.7 % increase. The annual rate of increase declined but is still significant. Data have not been compiled for other counties so it is unknown if this same reduction in the rate of growth has occurred elsewhere.

The statewide pattern of population growth may have value for indicating trends in shoreland development. From 1990 to 1997, population growth among non-metro counties was greatest in counties with the most water area. The population in non-metro counties having 6 percent or more of water area, grew by 8.8 percent and in non-metro counties having less than 1.5 percent water area, grew by 1.9 percent. During this same period, the 11 county Twin Cities Metro area (Ramsey, Hennepin, Washington, Dakota, Anoka, Carver, Scott, Chisago, Sherburne, Isanti and Wright Counties) experienced a 10.9 percent population growth. Overall, Minnesota's metro and

lake-rich counties are growing at a faster rate than the state average.

Counties must provide an annual report as part of the requirements for state-funded Natural Resources Block Grants. (These grants are provided by the state to counties to partially reimburse them for administering state-mandated environmental programs). As part of its report to meet this requirement, Crow Wing County reported processing between 1200 and 2000 land use permits for private owners in shoreland areas (land within 1000 feet of lakes and 300 feet of rivers) annually between 1994 and 1998. County staff estimate that about half of these permits were for remodeling and expanding seasonal lake cabins into year-round permanent residences. This information, which is reflected in many of the counties containing the more desirable recreational lakes, shows that intensified development and use of private shoreland areas is continuing in lakeshore areas with resultant increases in property tax value. Re-development and intensification of existing private shoreland properties is expected to continue at a significant rate as long as economic conditions in Minnesota remain good.

If the rate of shoreland development is influenced by state population growth, it should show a declining rate of increase over the next 30 years. Current projections are that Minnesota will reach zero population growth in about the year 2030. However, it seems likely that lakeshore development pressure will continue, and even if at lower rates than in the past, will continue to accelerate recreational use conflicts and have potential adverse impacts on the lake resource. Because of the amount of development that has occurred already, smaller incremental increases may have greater potential to cause undesirable impacts than in the past. This increases the need for the state to have policies in place that give adequate protection to the tracts of publicly-owned undeveloped shoreland and provide incentives for protecting privately owned shoreland from development. At the same time, local needs for efficient management of the land resource must be taken into account.

BENEFITS OF UNDEVELOPED SHORELAND

Undeveloped, natural shorelands are important for many reasons. The importance becomes obvious with the changes that occur as shorelines and shorelands are modified by human activities. The impact of these changes relates in general to the intensity of modifications that occur with development. A lake that is completely ringed with homes, with elimination of natural cover from shorelands and modification of the shoreline to accommodate lake use, is a very different environment from the one that existed in a natural, undisturbed state. Each lakeshore modification adds to the cumulative effects of all the other ones and eventually treasured natural values are lost and important ecological functions modified or eliminated. Undeveloped shorelands provide valuable habitat for many species of wildlife and function as effective buffers between land and water by stabilizing soil and filtering runoff water. Also, the look and feel of natural, undeveloped shoreline is an important aesthetic consideration for most lake users.

Aesthetic appreciation can differ greatly between individuals but several surveys of lake users indicate the general importance of natural beauty to the lake-use experience. A 1970 survey of shoreline property owners in Wisconsin revealed that 62 percent considered "solitude and beauty" as the most important pleasure derived from owning shoreline property (Klessig 1973). Another

more recent survey of lake users in Wisconsin revealed that 78 percent "enjoy Wisconsin's lakes mostly for their peace, quiet and natural beauty" (Korth 1994).

In a recent survey of Minnesotans conducted by the Minnesota Sea Grant Program and Minnesota DNR, somewhat similar results were found (Anderson et. al. 1998). Respondents to the survey indicated their reasons for choosing the lake they used most. The top five reasons in rank order were: close to home, scenic, good fishing, quiet and "have gone for years". Over 90 percent of the respondents also agreed, or strongly agreed, that Minnesota lakes are important because of their fish, wildlife and other natural features and their beauty and atmosphere. Lake users were asked to identify the major factors that contribute to changes in water and scenic quality on the lakes they use most. The leading factors identified as associated with worsening water quality were runoff from lawns, fields and urban surfaces. The leading factors perceived as causing a decline in scenic quality were home construction, shoreline structure installation, vegetation removal and road construction near shore.

As shorelands become intensively developed they may lose value as habitat for fish and wildlife. A study conducted in Wisconsin by Meyer et. al. (1997) indicates changes in vegetative structure and wildlife populations along the shorelines of developed lakes in the northern part of the state. Much greater tree canopy cover, subcanopy cover and shrub cover was measured along transects at undeveloped lakes compared to developed lakes. Also, the proportion of shallow water areas having aquatic plants was found to be dramatically reduced adjacent to developed shorelines. Along with these changes in habitat, the authors found a reduction in the abundance of green frogs (used as an indicator species) and shifts in the population structure of breeding bird communities. The species composition of the bird community shifted to one more characteristic of suburban residential areas.

Water quality degradation can occur with the intensive development of shorelands. In general, the most obvious change is a reduction in water transparency due to higher production of suspended algae. As development occurs along shorelines and on watersheds, multiple factors cause greater inflows of plant nutrients, such as phosphorus, and algae blooms are stimulated. These factors include greater soil erosion, installation of impervious surfaces such as roads, loss of natural vegetative cover along shorelines, malfunctioning on-site sewage systems and runoff from fertilized lawns. In general, natural undisturbed shorelands are protective of lake water quality.

STATUTES RELATED TO SALE AND EXCHANGE OF TAX-FORFEIT SHORELANDS

The existing legal framework related to the sale and disposition of tax-forfeit lands is lengthy, complex and not easily summarized. There are several key points and statutes that relate to the sale and exchange of tax-forfeit lands that have waterfront.

The State of Minnesota holds title to tax-forfeit land in trust for taxing districts, but this land is administered by the counties. Some of these lands may not be sold by the counties as shown in **Table 2**. Under the current statutes, tax-forfeit land adjacent to or on public water or

TABLE 2. TAX-FORFEITED LANDS THAT MAY NOT BE SOLD BY THE COUNTIES

1. Lands classified as conservation lands under Minnesota Statutes, section 282.01, subs. 1 and 2, which are primarily suitable for timber production and not zoned by the county and certain lands released from the trust in favor of the taxing districts. See, for example, Minnesota Statutes, section 89.034 (tax-forfeited lands accepted by the commissioner for conservation purposes).
2. Consolidated conservation lands not classified as suitable for agriculture under Minnesota Statutes, sections 84A.08, 84A.27, 84A.37 or classified as nonagricultural under Minnesota Statutes, section 282.14. See Minnesota Statutes, sections 282.22 and 282.221.
3. Parcels becoming forfeit which are located within the boundaries of a state park. See Minnesota Statutes, section 85.012, subd. 1.
4. Parcels having greater than 50 feet of waterfront on meandered lakes and other public waters and watercourses (and the live timber growing or being thereon). See Minnesota Statutes, section 282.018. Parcels having 50 feet or less of waterfront may be offered for sale with the commissioner's prior approval.
5. Nonforested marginal land and wetlands unless restricted by a conservation easement. See Minnesota Statutes, section 282.018, subd. 2 and section 40.46.
6. Parcels designated by the commissioner as mining units or subject to mining permits or leases. The commissioner must notify the county auditor of the mining unit designation, permit or lease. See Minnesota Statutes, section 282.01, subd. 8.
7. Lands dedicated for County Memorial Forest purposes under Minnesota Statutes, section 459.06, subs. 2 and 3.
8. Lands containing commercial deposits of peat. See Minnesota Statutes, section 92.461 and Opinion of Attorney General 983m (Feb. 9, 1968) determining that the provisions of Minnesota Statutes, section 92.461 apply to tax-forfeit lands.
9. Trust fund lands that have correctly or incorrectly gone tax-forfeit. See Minnesota Statutes, section 92.214 and Opinion 700d of Attorney General (Nov. 26, 1945).
10. State-owned lands under the commissioner's jurisdiction that have been erroneously assessed for taxes and which, therefore, have erroneously become delinquent and forfeit.

watercourses is withdrawn from sale except for parcels of land with 50 feet or less of waterfront. Parcels having 50 feet or less of waterfront may be offered for sale by the counties with prior approval of the Commissioner of Natural Resources as specified by statute.

The relevant portions of Minnesota Statutes, Section 282.018 state:

Subdivision 1. Land on or adjacent to public waters. [a] All land which is the property of the state as a result of forfeiture to the state for nonpayment of taxes, regardless of whether the land is held in trust for taxing districts, and which borders on or is adjacent to meandered lakes and other public waters and watercourses, and the live timber growing or being thereon, is hereby withdrawn from sale except as hereinafter

provided...

[c] Any tract or parcel of land which has 50 feet or less of waterfront may be sold by the authority having jurisdiction over the land, in the manner otherwise provided by law for the sale of such lands, if the authority determines that it is in the public interest to do so. If the authority having jurisdiction over the land is not the commissioner of natural resources, the land may not be offered for sale without the prior approval of the commissioner of natural resources.

Also, the Minnesota Legislature may expressly authorize the sale of any parcel of tax-forfeit land on or adjacent to public water or watercourses. The review process for such legislation is set forth in Minnesota Statutes, Section 282.018, Subdivision 1[d] which states:

Where the authority having jurisdiction over lands withdrawn from sale under this section is not the commissioner of natural resources, the authority may submit proposals for disposition of the lands to the commissioner. The commissioner of natural resources shall evaluate the lands and their public benefits and make recommendations on the proposed dispositions to the committees of the legislature with jurisdiction over natural resources. The commissioner shall include any recommendations of the commissioner for disposition of lands withdrawn from sale under this section over which the commissioner has jurisdiction. The commissioner's recommendations may include a public sale, sale to a private party, acquisition by the department of natural resources for public purposes, or a cooperative management agreement with, or transfer to, another unit of government.

In addition to the sale of tax-forfeit lands adjacent to public waters or watercourses, tax-forfeit land may be exchanged under Minnesota Statutes, Section 94.342, Subdivision 3, for public or private land in the vicinity with at least equal riparian value or the legislature may expressly authorize the land exchange. The relevant portion of Minnesota Statutes, section 94.342, Subdivision 3 states:

Land bordering on or adjacent to any meandered or other public water and withdrawn from sale is Class C land. Class C land may not be given in exchange unless expressly authorized by the legislature or unless through the same exchange the state acquires land on the same or other public waters in the same general vicinity affording at least equal opportunity for access to the waters and other riparian use by the public...

DNR PROCESS FOR REVIEW OF PROPOSED SALE OF TAX-FORFEIT SHORELAND PARCELS

When a tax-forfeit parcel, on or adjacent to public waters, with over 50 feet of water frontage is offered for sale, there must be review and comment by the Commissioner of Natural Resources and specific authorization by the legislature. When a parcel has 50 feet or less of water frontage, the specific authorization for sale can be given by either the commissioner or the legislature. In either case there must be an internal DNR review process with recommendations on the

disposition of the parcel. This review process has to be expedited when parcels are proposed for sale by the legislature without advance notice to the DNR.

The review process consists of the following steps.

1. The process is initiated through a request to the DNR Bureau of Real Estate Management (BREM) by a county land commissioner or county auditor, or introduction of specific legislation to sell tax-forfeit land that has waterfront. Requests to sell parcels of tax-forfeited lands occur throughout the year and legislation may be introduced with no advance notice.
2. A county's request to sell list may be approved for sale by the DNR except as provided by certain statutory exceptions. If the parcel or parcels in question may be legally approved for sale by the DNR or is being authorized through legislation, the BREM distributes a resource review packet, consisting of thirteen questions, to the appropriate Regional Realty Coordinator for the purpose of coordinating review and comment by the Regional Environmental Assessment Team (REAT).
3. The questions related to sale of the tax-forfeited lands are listed in the **Appendix Table 1**.
4. The REAT reviews the particular parcel(s) and forwards information to the DNR Regional Management Team (RMT) to approve disposal or write a recommendation that the parcels should not be sold because of factors of special significance such as mineral deposits, rare species etc.
5. When final agreement is reached on the disposition of the parcel(s) by the RMT, the DNR Regional Administrator sends them to the BREM Administrator for final action. Final action may involve resolution of disagreements on disposition of the parcel(s) before final recommendations are made to the legislature or approval given to the County Auditor for sale.

RESULTS OF DNR REVIEW OF PROPOSED SALE OF TAX-FORFEIT SHORELAND PARCELS

A long term statewide database on review of tax-forfeited land sales does not exist. The DNR BREM retains transactional records of tax-forfeited lands sales for approximately five years. The number and disposition of parcels for the years 1993 to 1997 is shown in **Table 3**.

A total of 7,995 tax-forfeit parcels were requested for sale during the period 1993 through 1997 and 140 (1.8%) of these had water frontage. After review of the 140 parcels, the BREM recommended to the legislature that some be withheld from sale and some be sold with special conditions placed on them. These special conditions are site specific and include such things as angler access easements, conservation easements, consolidation with substandard lots, etc.

TABLE 3. SUMMARY OF REVIEW AND DISPOSITION OF TAX-FORFEIT SHORELAND PARCELS

<u>Year</u>	<u>Parcels Approved by Legislature for Sale by Counties</u>	<u>Legislatively Approved Parcels Sold by Counties to Local Government</u>
1997*	-	-
1996	30	11
1995	25	7
1994	31	12
1993	3	0
Total	89	30

* During the 1997 legislative session, all parcels requested for special sale were held over until the next session.

The legislature gave approval for sale of 89 of these between 1993-1997. Thirty of the 89 were ultimately sold by the counties to local governments and the disposition of the rest is unknown. There is no formal reporting required to the DNR on the ultimate disposition of parcels once they are authorized for sale. There were several other riparian parcels, with less than 50 feet of waterfront, authorized for sale by DNR and not included in legislation during the period 1993 to 1997. The total length of water frontage associated with these parcels is unknown.

ANALYSIS OF TRANSACTIONS FOR DNR-ADMINISTERED, WATER-ORIENTED LANDS

This analysis was prepared using data from the DNR BREM Land Records System to determine if there were any long term trends in the amounts of water-oriented land that are administered by the DNR. Data for the years 1988 to 1997 are shown in **Table 4**. Information in DNR's land record system is based on acreage, rather than water frontage, and emphasizes state real estate transactions including land acquisitions, exchanges, sales, leases and contracts. Acreage information gathered for these purposes was never intended to account for the length of shoreline for a given parcel of land. The acreage of lakeshore parcels should not be confused with water frontage. It is possible to use a factor, with certain assumptions, to estimate actual frontage but the results of this methodology would be approximate at best. There is currently no method to guarantee the accuracy of an estimate derived in that manner. Consequently, there are inherent limitations in using acreage as an indicator of the trends in land transactions that involve shorelands.

There is also no description or measurement of shoreland quality included in the analysis. Although "water orientation type" is included as a descriptive qualifier for a parcel in the land records system, the information only identifies the orientation type based on the primary adjacent water body. An important part of any transaction review process is a careful evaluation of resource values to determine transaction desirability. Criteria for decisions about transactions,

including shoreland itself and other relevant resource evaluations (e.g. assessed value, habitat etc) are part of the collected review documentation of a given transaction, not part of the financial transaction record in the land records system. For this reason, acreage comparisons for land exchanges have not been included in this analysis because of inability to establish consistent means of comparison. The category of "water oriented lands" is too broad to reflect the careful evaluation of resource values inherent in the exchange process because exchange associated non-water-oriented lands are necessarily absent from the comparisons, water-oriented acreage comparisons are extremely misleading in this category of transactions.

Therefore, one should be careful about drawing detailed conclusions based upon these data. Absent a systematic effort to define, capture and summarize land and transaction information particular to shorelands and shoreland transactions, the only way to get a precise and completely accurate representation of shoreland transactions is to review the documented histories of each of the individual transactions.

The data presented in **Appendix Table 2** show the current and former acreage of state-owned water-oriented land by water orientation and land type ("Grant", "County Tax-forfeit" or "other"). Former state water frontage includes land that has been sold since originally acquired by the state. The state began getting land grants from the federal government in 1857 as a way to help fund state operations and build railroads. Some of these lands were sold into private ownership as a way to raise capital for the new State of Minnesota.

Perhaps the primary significance of **Appendix Table 2** is that it allows a general comparison of current acreage of DNR-administered water oriented lands to those that have been sold during the period of record (1848-1997). The total area of land sold in acres is about 7% of the combined current and former amount of land owned by the state during the period of record. In other words, it shows the state retains to the present day about 90% of the land with water frontage that could have been sold from about the time of statehood. It appears that much of the state-owned shoreland that was disposed of was sold in the 1800s.

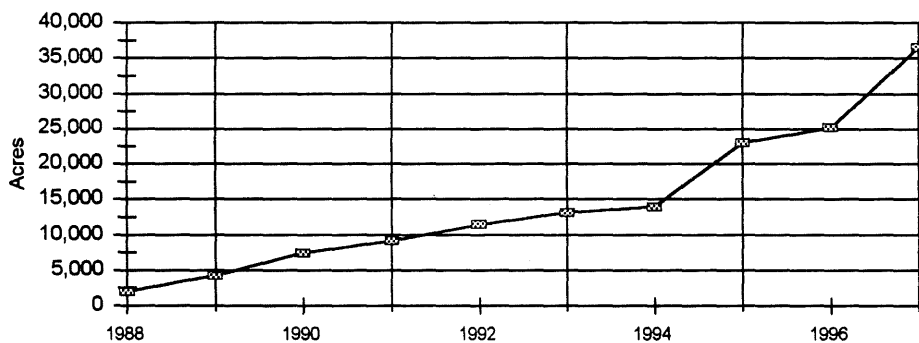
BREM data were also analyzed to determine if there was a trend in the balance between DNR administered shorelands acquired and sold for the last 10 years. **Table 4** and **Figure 1** illustrate the results of that analysis. From 1988 to 1997, acquisition exceeded sale in each year. During this ten year period, the cumulative acreage of lands acquired exceeded the acreage sold by over 36,000 acres, as shown in **Figure 1**.

Table 4. Balance of Acquisition and Sales of DNR-Administered Shorelands, 1988-1997

<u>Year</u>	<u>Acres Acquired</u>	<u>Acres Sold</u>	<u>Annual Balance Acquired Minus Sold</u>	<u>Cumulative Balance Acquired Minus Sold</u>
1988	2,104.23	123.60	1,980.63	1,980.63
1989	2,507.04	193.76	2,313.28	4,293.91
1990	3,379.73	216.43	3,163.30	7,457.21
1991	2,013.81	331.93	1,681.88	9,139.09
1992	2,833.64	510.28	2,323.36	11,462.45
1993	1,942.06	252.44	1,689.62	13,152.07
1994	1,280.12	438.18	841.94	13,994.01
1995	9,146.97	66.19	9,080.78	23,074.79
1996	2,128.49	9.27	2,119.22	25,194.01
1997	11,442.40	47.15	11,395.25	36,589.26
	38,778.49	2,189.23	36,589.26	

Source: DNR-Bureau of Real Estate Management, February 3, 1999

Figure 1. Cumulative Balance of DNR Administered Shorelands Resulting From Acquisition & Sales, 1988-1997



DNR LAND ACQUISITION CRITERIA

Within the DNR, several units have land acquisition programs and are responsible for the management of large land bases. An understanding of the criteria used for land acquisition by DNR units helps put some of the issues associated with disposition of tax-forfeit shorelands in perspective. For example, it should be expected that criteria used by DNR disciplines for developing recommendations on the disposition of tax-forfeit lands should be complementary to their own criteria. Also, there should be coordination between acquisition needs for shoreland on a given water body and decisions and recommendations made on the disposition of tax-forfeit parcels on the same body of water.

The DNR Divisions of Forestry, Fish and Wildlife, Parks & Recreation and Trails and Waterways have land acquisition programs. Within the Division of Fish and Wildlife there are active programs within the Fisheries Section for acquisition of *Aquatic Management Areas*, within the Wildlife Section for *Wildlife Management Areas* and within the Ecological Services Section for *Scientific and Natural Areas*. The Division of Parks and Recreation acquires land to consolidate public ownership within statutory park boundaries. The Trails and Waterways Division is responsible for establishment of water access sites and trails. Acquisition criteria for these programs are listed in the **Appendix Table 3** to illustrate the factors considered important in land acquisition for natural resource management.

RECOMMENDATIONS ON PUBLIC SHORELAND ISSUES FROM INTEREST GROUPS

In conducting this inquiry, DNR sought input from citizens and citizens groups which might be affected by any change in the state's policy on the acquisition and disposition of publicly held lakeshore. In the Appendix is a list of those who were contacted for comments in connection with this study. They were sent a copy of the DNR's letter to Representative Willard Munger dated February 26, 1998 so they knew the context for DNR's request (a copy of this is also in the Appendix). Several written comments and one voice mail message were received. Following were the respondents:

Don Arnosti, Minnesota Council and **Virginia Borden**, Duluth Chapter, National Audubon Society
Luci Botzek, Administrator & Legal Counsel, Minnesota Association of County Officers
Scott Elkins, Director of Outreach & Organizing, 1000 Friends of Minnesota
Jim Halloran, Legislative Committee Chair, Minnesota Lakes Association
Thomas C. Martinson, Lake County Land Commissioner
Michael McGinty, Executive Director, Minnesota Waterfowl Association
Norm Moody, Cass County Land Commissioner
Marcia Shepard, Associate Editor, *FOCUS 10,000*
Steve Taff, Agricultural Economist, University of Minnesota (voice)

All who responded were interested in the development of a policy or program on preserving public shorelands but there were several variations in perspectives. In general, the responses were

from county government and environmental / conservation groups. Some ideas were offered by more than one respondent within a group, and some views were held by both groups. There was not a great deal of disagreement between the groups as evidenced by the comments, but there were not many comments. A larger response may have reflected more difference in perspectives.

PERSPECTIVE FROM LOCAL GOVERNMENT

Those representing local units of government offered the following points.

- *All Counties are not the same.* Counties throughout the state are different in the amount of public and private shoreland available in the county. They also differ in philosophy and approach about how public shoreland is acquired, disposed of and managed relative to other land within the county. For example, it is estimated that in Lake County there is less than 5% of lakeshore that is privately owned because most lakes are within the Boundary Waters Canoe Area, others are regularly acquired by the federal government to consolidate its holdings, and very little is privately owned. There is little need to protect public shoreland by acquisition or exchange in Lake County since so much is already in public ownership.

On the other hand, Cass County has developed a land asset program in which publicly held lands within the county are exchanged for privately owned lakeshore which is then put into public ownership in part to preserve natural resource values. In the words of the land commissioner, this approach “adjusts the public / private ownership patterns to maintain natural resources and to accommodate development and tax returns to the county.”

Any policy for adjusting public / private ownership would have to take into account these differences among the counties. A policy would also have to take into account impacts on:

- duties of local officials
 - local unit of government finances, and
 - taxpayer residents of the county.
- *Need for research.* As the comments from Lake County suggest, it may be useful for the state to have not only data about the amount of public lakeshore that is going into private ownership, but also to collect information on the amount of private land that is going public.
 - *Benefits from privately owned lakeshore – tax revenue and land management.* Local units’ concern here is that when lakeshore (or any parcel) is taken from private ownership, the resulting tax burden falls more heavily on private landowners. Where land is exchanged there may be a balancing of resource values and tax revenues, but this must be a conscious approach. One comment noted that because counties often do not have sufficient resources to manage public land they administer, the natural resources may be better cared for if the land is in private hands.

- *Need for the state to assist with program development and funding.* Cass County, in particular, noted the importance of developing state policy and having a program to ensure that there is adequate lakeshore to protect important natural resource values since these contribute to the tourism economy in the county. The program would have to include funding, as the county did cite the need for funds to administer an acquisition / sale / land exchange program at the county level.

PERSPECTIVE FROM CONSERVATION OR LAKE INTEREST GROUPS

Those representing an environmental, conservation or lake interest group offered the following points.

- *Advocate preservation policy and legislation.* The groups noted that it should be state policy to protect shorelands and that DNR should maintain a strong stand (one said, “inflexible”) on this policy. Undisturbed shoreland provides valuable fish and wildlife habitat, protects against erosion and sedimentation, and can provide public access for hunting and fishing if properly managed.

There were suggestions that there should be a moratorium on special legislation to sell public lands until there is a thorough process for evaluation of the proposed sale and criteria and standards developed to guide both DNR and local units of government during such sales. Some advocate a state policy of “no net loss” of public lakeshore, and that the state divest itself of land with structures and replace it with undeveloped shoreland. Another suggestion is that the state work with local units of government to determine the best use of parcels under consideration for sale or exchange.

- *Need for research.* At least one group recommended that DNR maintain an inventory of lakeshore in public ownership, and that the department conduct research on the need for long-term undisturbed shoreland for protecting natural resource and recreational values.
- *Retain easements for access.* Environmental and conservation groups were unanimous in their view that if public land should change into private ownership, the state should retain a conservation agreement or easement to insure public access to trails, control structures or to the water body itself. Criteria for these easements should be developed and then applied to all relevant situations.
- *Development of standards.* DNR should create minimum standards for the management of public shoreland by local units of government. This should include a requirement that a certain percentage of land be retained in an undisturbed state on public shoreland, and that any development on shoreland managed by local units would comply with strict shoreland management ordinance standards.
- *Improved review process.* The groups recommend creation of criteria and standards for the review of parcels proposed by local governments for sale or exchange.

- *Provide incentives to local units of government.* These groups recognize that there are implications for local units of government in the management, sale or exchange of shoreland parcels. They recommend two things. First, that an alternative source of revenue be found when private land becomes public. This could include in-lieu tax payments or some other type of tax break. Second, the state could provide technical assistance to local units for management of publicly owned land if local units do not have personnel or financial resources to manage the lands.

A letter from the Minnesota Lakes Association (MLA) commenting on public shoreland issues is included in the Appendix. The MLA serves as a statewide umbrella organization for individual lake associations.

CONCLUSIONS AND RECOMMENDATIONS OF THE DEPARTMENT OF NATURAL RESOURCES

ALL SHORELANDS

Conclusions

1. Undeveloped shorelands are desirable because they help preserve important aesthetic values, protect fish and wildlife habitat, and help protect water quality.
2. There are significant amounts of undeveloped shorelands still in private ownership. On a statewide basis, approximately two thirds of shorelands are in private ownership but the amount that is undeveloped is unknown.
3. Development pressures on private shoreland may be leveling off but are still considered significant and will continue to impact the lake resource.
4. Conversion of seasonal shoreline dwellings to permanent year-round homes is occurring but the overall rate is unknown.
5. High property taxes may be making it more difficult for private landowners to retain undeveloped shoreland.
6. There are indications of increasing interest of private landowners to retain and protect undeveloped shoreland and restore developed sites that have been degraded.
7. There is no systematic reliable monitoring being done on the statewide status of shorelands and the earlier studies of shoreland by the DNR have not been repeated.
8. No governmental unit has a comprehensive statewide inventory of public (or private) shoreland holdings.
9. Current statewide data are inadequate for making conclusive recommendations on new policies that are needed to better manage and preserve shorelands.

Recommendations related to Conclusions 1 - 9

1. There should be standardized reporting from the counties on shoreland development activities and monitoring of the statewide status of shorelands. The statewide studies of shoreland done by the DNR in 1967 and 1982 should be funded and repeated. The DNR

needs to enhance and upgrade its land information base on the status and trends of shoreland.

2. Since most shorelands in the state are in private ownership, government agencies need to focus more on education of property owners in the use of best management practices on shorelands and techniques for restoration of degraded shorelands.
3. Consideration should be given to changing the taxing structure to provide incentives for the protection of undeveloped shoreland that is in private ownership.
4. Programs that accept conservation easements on undeveloped private shoreland should include a reduction of tax assessments for lands under easement and some sort of assurance that the reduction will be permanent. Statutory changes may be needed to accommodate this reduction in assessments.

PUBLIC SHORELANDS ADMINISTERED BY THE DNR

Conclusions

1. Based on information in the DNR BREM record system, the total area of DNR-administered water-oriented lands that have been sold since statehood is about 7 % of the combined current and former amount held by the state, and indicates retention of a high percentage of water-oriented lands administered by the DNR.
2. There has been a net gain in the area of DNR - administered land that has water frontage in recent years. The exact amount of water frontage associated with this land is unknown.
3. During the 10 year period 1988 -1997, 38,778 acres of land were acquired that had water frontage while 2,189 were sold. In all of these years, the acreage of land with water frontage acquired exceeded the acreage of such lands sold.

Recommendations related to Conclusions 1-3

1. A complete inventory of the current amount of public shoreland should be done and the DNR BREM record keeping system should be upgraded to allow a more definitive interpretation of data and description of trends.
2. Although it appears there is a low overall rate of loss of public shoreland administered by the DNR, this fact should not be used as justification for sale of individual parcels. The importance of shoreland parcels remaining in public ownership should be consistent with the needs for protection and management of individual water bodies.

TAX-FORFEITED SHORELANDS

Conclusions

1. In recent years, a relatively small amount of tax-forfeit *shoreland* has actually been sold in comparison to the total amount of all tax-forfeit *land* sold.
2. During the five year period 1993 - 1997, 7,995 parcels were requested for sale by the counties and 140 (1.8%) of these had water frontage.

3. The legislature gave approval for sale of 89 of the 140 parcels.
4. Thirty of the 89 parcels were sold by the counties to local government and the ultimate disposition of the other parcels is unknown.
5. Even though the amount of tax-forfeit shoreland sold is relatively small compared to the state's total public shoreland resource, it is still critical to preserve and protect the remaining public shorelands for their many benefits.

Recommendations related to Conclusions 1-5

1. There should be mandatory reporting from the counties to the DNR BREM on the final disposition of state owned county administered riparian parcels authorized for sale by the legislature or DNR commissioner.
2. Consideration should be given to increasing in-lieu-of-tax payments to the counties on tax-forfeited shoreland as an incentive to retain them in public ownership.
3. There should be mandatory advance notice from the counties to the DNR BREM by August 1 of the year before tax-forfeit shorelands are requested for authorization for sale by the legislature, so there is adequate time for public comment and review. Without this advance notice, bills that authorize sale of these shorelands should be held over until the next legislative session.
4. Where the sale of tax-forfeit parcels is expected to be controversial, counties should hold hearings to discuss and take input from the public before seeking authorization for sale from the DNR or legislature.
5. Decisions on the sale of tax-forfeit shorelands should be consistent with individual lake management plans that have been developed cooperatively by local government, lake associations and state agencies.
6. Shoreland parcels that are sold should have conservation easements placed on them when it is consistent with the setting and needs of the individual water body and lake management plans. The easements should be consistent with accepted best management practices for shorelands.
7. Angler access easements should be placed on all those tax-forfeit parcels sold that are along designated trout streams.
8. When public shorelands are sold, the public's access to the shoreland from the water body should be maintained as a mandatory restriction on the deed. Such access should, at minimum, allow walking within a reasonably-sized corridor next to the water.

While comments from the public would not necessarily suggest total public support for all these recommendations, most of the public commenting did acknowledge need for

- A better system of researching transactions on shoreland parcels; and
- The need for the state to assist local units to maintain shoreland parcels in public use, either through technical assistance, in-lieu taxes or other incentives.

Some also acknowledged the importance of

- Retaining easements for public use; and
- Developing standards for management of public shoreland by local units of government.

REFERENCES

- Anderson, K. A., T. J. Kelly, R. M. Sushak, C. A. Hagley, D. A. Jensen and G. M. Kreag. 1999
Public perceptions of the impacts, use, and future of Minnesota lakes. Results of the 1998
Minnesota lakes survey. A joint publication by the University of Minnesota Sea Grant
Program (SH2) and Minnesota Department of Natural Resources, Office of Management
and Budget Services. 89 pp.
- Kelly, T. J. and J. Stinchfield. 1998
Lakeshore development patterns in northeast Minnesota: status and trends. Minnesota
Department of Natural Resources, Office of Management and Budget Services. 12pp.
- Klessig, L. L. 1973
Recreational property owners and their institutional alternatives for resource protection:
the case of Wisconsin lakes. University of Wisconsin-Madison. PhD dissertation. 683 pp.
- Korth, R. M. 1994
Why do we enjoy Wisconsin's lakes?: survey results. *Lake Tides* 19(2):3.
- Meyer, M., J. Woodford, S. Gillum and T. Daulton. 1997
Shoreline zoning regulations do not adequately protect wildlife habitat in northern
Wisconsin. A joint publication by the Wisconsin Department of Natural Resources,
Rhinelander, Wisconsin and Sigurd Olson Environmental Institute, Northland College,
Ashland, Wisconsin. Final Report of USFWS State Partnership Grant P-1-W Segment 17.
82pp.

CONTENTS OF APPENDIX

Tables

- Table 1 - Questions Used In DNR Review Of Proposed Sale Of Shoreland
- Table 2 - Acres of DNR-Administered Shorelands By Water Orientation and Land Type
- Table 3 - Examples of DNR Land Acquisition Criteria

Materials

Stakeholders Asked for Comments on Public Shoreland Study, October 1998

DNR Letter to Representative Willard Munger, February 26, 1998

Letter from Jim Halloran, Chair of Legislative Committee, Minnesota Lakes Association, to DNR commenting on public shoreland issues, January 7, 1999

Lakeshore Development Patterns in Northeast Minnesota: Status and Trends, Minnesota Department of Natural Resources, July, 1998.

Appendix Table 1 - Questions Used in DNR Review of Proposed Sale of Shoreland

Questions Used by DNR to evaluate sale of tax-forfeited lands with water frontage consist of the following.

1. Does the parcel in question meet the dimension and performance standards of the county/city shoreline zoning or floodplain ordinance?
 2. How much shoreline frontage is involved in the parcel(s)?
 3. Are parcels developed? What type of improvements?
 4. Do parcels have public water and sewer?
 5. If not, do parcels have conforming on-site sewage treatment systems?
 6. If parcels are undeveloped, do they have a building site and adequate area for conforming sewage treatment systems?
 7. Is there adequate public access to public water involved?
 8. Are there situations where two or more adjacent non-conforming parcels of record could be combined in order to create conforming lots?
 9. Are parcels to be sold subject to the conservation requirements of Minnesota Statutes, section 282.018 subd. 2 relating to their status as marginal land or wetland?
 10. Are there some special problems associated with any parcels such as flood damage, special assessments in a high proportion to land value, or limited development potential under zoning regulations?
 11. Do parcels have potential public use benefits if retained in public ownership?
 12. Do undeveloped parcels contain any mineral deposits, have archeological significance, endangered flora and fauna, eagle nests, rookeries etc.? Have any investigations been made to determine this?
 13. Will parcels be sold at public sale?
-

**Appendix Table 2. Acres of DNR-Administered Shorelands
By Water Orientation and Land Type**

Water Orientation	Current Water Oriented Area				Former Water Oriented Area				Combined Current and Former			
	Grant	Other	Co TF	Total	Grant	Other	Co TF	Total	Grant	Other	Co TF	Total
Covered by Water	8,661	21,111	9,463	39,234	7,406	82	1,006	8,494	16,067	21,193	10,468	47,728
Island or Part of Island	4,661	2,318	1,116	8,096	105	76	174	355	4,767	2,394	1,290	8,451
Meandered Lake	101,795	70,371	59,688	231,854	37,598	5,747	5,428	48,773	139,393	76,118	65,117	280,627
Non-Meandered Lake	49,132	49,397	84,983	183,513	3,538	780	4,129	8,447	52,671	50,177	89,112	191,959
Non-Meandered Pt, Meandered Lake	0	110	267	377	14	120	4	138	14	230	271	515
Meandered River	30,750	39,716	31,914	102,380	7,523	2,201	2,742	12,466	38,273	41,917	34,656	114,846
Pond or Marsh, 10+ acres	62,164	133,984	181,562	377,710	3,706	1,780	13,966	19,452	65,870	135,764	195,528	397,161
Subtotal	257,164	317,006	368,993	943,163	59,890	10,787	27,448	98,125	317,054	327,793	396,441	1,041,288
Percent of Combined	81%	97%	93%	91%	19%	3%	7%	9%	30%	31%	38%	100%
Non-Meandered River, Stream, Ditch	216,790	319,718	177,709	714,216	19,486	5,699	14,006	39,190	236,275	325,416	191,714	753,406
Pond or Marsh, <10 acres	87,268	244,302	99,135	430,705	22,329	3,630	13,201	39,160	109,597	247,932	112,336	469,865
Intermittent Stream or Creek	113,472	95,743	115,266	324,481	5,759	1,782	8,542	16,083	119,231	97,525	123,809	340,564
Subtotal	417,530	659,762	392,110	1,469,402	47,574	11,110	35,749	94,433	465,104	670,872	427,859	1,563,835
Percent of Combined	90%	98%	92%	94%	10%	2%	8%	6%	30%	43%	27%	100%
Total	674,694	976,769	761,103	2,412,565	107,464	21,897	63,198	192,558	782,157	998,665	824,300	2,605,123
Percent of Combined	86%	98%	92%	93%	14%	2%	8%	7%	30%	38%	32%	100%

Type of Land:

- Grant - Federal grant lands (i.e., school, university and swamp trust lands, etc.) administered by DNR.
- Other - All other DNR-administered lands, including land acquired from private ownership and DNR-administered tax-forfeit (consolidated conservation) land.

County

- Tax-Forfeit - County-administered, tax-forfeit land

Source: DNR Bureau of Real Estate Management, December 14, 1998

Appendix Table 3 - Examples of DNR Land Acquisition Criteria

DIVISION OF FORESTRY

Lands are acquired by the Division of Forestry to facilitate management of forest resources under multiple use principles. Isolated parcels are sometimes purchased if they have unique values and will help facilitate land exchanges that will help consolidate Forestry Division land holdings. However, the primary criteria for purchase are that the parcel be inside the statutory boundary of a state forest or, if not, within a block of state-owned land. Additional criteria for purchase are the same ones used in the unit forestry resource planning process. During this process, all lands within an area are reviewed on a township basis to determine their long-term suitability for forestry purposes. The evaluation criteria used during the review process are based on the definition of "prime forest land" contained in the Land Suitability Interim Report, (Minnesota DNR, 1983). Prime forest land is forest land under the authority of the Commissioner that has been identified in the unit forest resource plans as satisfying one or more of the following standards and criteria.

<i>Type of Land</i>	<i>Criteria</i>
1. Lands which have the best combination of site productivity, proximity to users, accessibility and land ownership pattern for producing forest crops which will contribute to the economic well-being of the people of Minnesota	Best combination of factors that result in maximum benefits to the state
2. Lands which have significant recreational value	Areas on which recreational development currently exists or areas where such development is proposed for the future
3. Lands which have significant fish or wildlife habitat value	Areas where significant fish or wildlife conditions, such as deer yards or bald eagle nests exist
4. Lands which have significant rare or distinctive flora or fauna	Areas or specific sites identified by the Natural Heritage Program.
5. Lands which have significant watershed protection value	Designated shorelands and areas where continuation of watershed vegetation is of primary importance
6. Lands which have significant educational value	Areas or specific sites designated as school forests, demonstration plots, or scientific (experimental) sites
7. Lands which have significant historical value	Areas containing historic sites identified by the Minnesota Historical Society or any of its cooperating agencies
8. Lands which have significant wilderness value	Lands which have been designated as natural areas or wilderness, or are being considered for such designation

DIVISION OF FISH AND WILDLIFE - WILDLIFE MANAGEMENT AREAS

Purchase of land for a proposed Wildlife Management Area must meet the following criteria:	Priorities for acquisition of the site are determined using the following primary criteria
a. Contains quality habitat or the potential for development of quality habitat for desired wildlife species	a. Presence of high quality habitat that is threatened with destruction
b. Is of sufficient size to permit appropriate natural resource management	b. Presence of critical habitat for endangered, threatened or species of special concern
c. Is capable of being managed for public hunting, trapping, fishing, or other appropriate recreational or educational activities	c. Wildlife production capability
d. A minimum of two-thirds of the total wildlife management area acreage within a county must be open for public hunting	d. Capacity of the site to satisfy the habitat needs of select species and communities
e. Permanent public access must be secured	e. Capability of the site to provide needed high quality hunting or other wildlife-related recreational opportunities
	f. Whether the site is high quality and open to the public and is threatened with a change in ownership that will preclude public access
	g. Uniqueness of wildlife habitat features within an area
	h. Cost of acquisition
	i. Amount of management and development a site will require
	j. How the site complements other wildlife habitat in the vicinity
	k. The future impact of potential adjacent land use changes on the site

DIVISION OF FISH AND WILDLIFE - SCIENTIFIC AND NATURAL AREAS

<p>The establishment of Scientific and Natural Areas must meet the following two basic criteria:</p>	<p>Each proposed Scientific and Natural Area is evaluated using the following criteria.</p>
<p>a. They shall feature elements of natural diversity of exceptional scientific and educational value.</p>	<p>Areas selected shall have one or more of the following features as specified in Minnesota Statutes, section 86A.05, subd. 5 which include but are not limited to:</p>
<p>b. They should be large enough to preserve inherent natural values and permit effective research or educational functions.</p>	<p>a. Natural formations or features which significantly illustrate geological processes</p>
	<p>b. Significant fossil evidence of the development of life on earth</p>
	<p>c. An undisturbed plant community maintaining itself under prevailing natural conditions typical of Minnesota</p>
	<p>d. An ecological community significantly illustrating the process of succession and restoration to natural conditions following disruptive change</p>
	<p>e. A habitat supporting a vanishing, rare, endangered, or restricted species of plant or animal</p>
	<p>f. A relic flora or fauna persisting from an earlier period</p>
	<p>g. A seasonal haven for concentrations of birds and animals, or a vantage point for observing concentrated populations, such as a constricted migration route.</p>
	<p>Area selection is based on priorities dictated by one or more of the following criteria:</p> <p>a. Rareness on a national, state, or landscape region scale</p> <p>b. Excellence and completeness of the natural features found in the area</p> <p>c. Representativeness of the area in relation to the landscape regions of the state</p> <p>d. Degree to which an area or its elements are threatened with incompatible use</p> <p>e. Degree of protection afforded similar elements elsewhere in the landscape region.</p>

DIVISION OF FISH AND WILDLIFE - AQUATIC MANAGEMENT AREAS

A relative ranking is given to parcels after considering these criteria and they are included in a statewide database that is used to prioritize expenditure of available funds.

Purchase of land parcels for creation of an Aquatic Management Area must meet one or more of the following criteria described in Minnesota Statutes, section 86A.05 subd. 14:	Where the parcel is purchased to protect critical habitat the following criteria are used for evaluation purposes:
a. Provides angler or management access	a. Chance for habitat destruction if the parcel is not purchased
b. Protects fish spawning areas, rearing areas or other unique habitat	b. Amount of this habitat available particularly in respect to projected losses
c. Protects critical shoreland habitat	c. Proximity of the parcel to an existing management unit or other existing state lands or waters?
d. Protects aquatic wildlife feeding and nesting areas	
e. Provide a site for research on natural history.	

DIVISION OF PARKS AND RECREATION

The following guidelines are used by the Division of Parks and Recreation to prioritize land for acquisition that is within a statutory park boundary or will expand a park boundary and where there is a willing seller.

1. Quality and quantity of associated natural and cultural resources
2. The urgency for acquisition related to development pressure on the parcel
3. Recreation needs of the park including planned facilities and trails
4. Whether the parcel of land has water frontage
5. The location of the parcel in relation to roads, access points and park operation sites
6. The potential of the land for education and interpretation sites and activities
7. Aesthetic, visual and scenic qualities of the parcel
8. Presence of features that are especially unique
9. Safety concerns that may be associated with the parcel of land
10. Factors related to funding the purchase such as bargain price or availability of outside funds

DIVISION OF TRAILS AND WATERWAYS - WATER ACCESS SITES

The Division of Trails and Waterways acquires land for water access sites to provide and maintain free and adequate public access to Minnesota's lake and river resource. It is the general policy to prioritize waters for establishment of access sites on the basis of their ability to accommodate recreational use; locate access sites on public waters where there is no access or it is inadequate; consider the use of public property in establishing access sites and to minimize use problems, development costs and long term maintenance of public accesses.

The following policies and criteria are used in the selection & location of water access sites:

1. Statewide priorities for the establishment of water access sites will be developed based on recreational use and demand survey data
2. **Lakes** will be prioritized for the provision of water access using all of the following criteria which assess the recreational potential for watercraft-based recreation:
 - A Proximity to population centers
 - B Proximity to areas of concentrated use
 - C Location in areas of high demand
 - D Characteristics of lake or river ranked in order of importance
 1. Area
 - a. Greater than 1000 acres
 - b. 500 to 1000 acres
 - c. 150 to 500 acres
 - d. Less than 150 acres and managed intensively for fisheries
 - E. Fish or wildlife type (to be considered separately with priorities within each)
 - a. Fish
 - Game fish
 - Game fish/rough fish
 - Waters subject to winterkill of fish
 - b. Wildlife
 - Waterfowl
 - c. Water clarity
 - (1) Fish lakes
 - Very clear (Secchi disc 10 feet and greater)
 - Clear (Secchi disc 6 to 10 feet)
 - Intermediate (Secchi disc 2 to 6 feet)
 - Turbid (Secchi disc less than 2 feet)
 - (2) Wildlife lakes
 - Suitability for hunting, trapping and wildlife observation.

3. **Rivers and streams** will be prioritized for the establishment of water accesses based upon their proximity to population centers, concentrated summer use and areas of high demand.
4. The adequacy of the shoreland parcel to provide **parking** for the particular lake or stream based on area or length of the water and type of access provided (trailer boat, car top boat or walk-in).
5. Surrounding land ownership, existing and expected recreational use, recreation survey data and other appropriate **factors are used to determine the type of access** (trailer boat, car top boat or walk-in).
6. The **ownership** of shoreland by other units of government on the body of water under consideration for a public access site.
7. Location of proposed access sites will be **coordinated with other units of government** including other Divisions of the DNR if they administer land suitable for public access establishment.
8. When establishing water access sites the DNR will:
 - a. Attempt to acquire a lot size of at least ½ acre but not in excess of 7 acres
 - b. Provide adequate area at sites to meet established standards for turn around, buffer, ramp, roadway and parking
 - c. Attempt to acquire access sites adjoining existing public roadways
 - d. Acquire sites that allow for safe public access to public roadways
 - e. Acquire, to the extent possible, sites that do not require extensive dredging or filling, have minimum slope, have upland soils and require a minimum of shoreland alteration
 - f. Attempt to acquire sites having the least potential for disturbance to existing land uses and natural resources in the vicinity.

**STAKEHOLDERS ASKED FOR COMMENTS
ON PUBLIC SHORELAND STUDY
October 1998**

<u>Name</u>	<u>Organization</u>	<u>Location</u>
Don Arnosti	MN Audubon Council	St. Paul
Kim Austrain		St. Paul
Peter Bachman	MN Center for Environmental Advocacy	St. Paul
Judy Bellairs	Sierra Club	Minneapolis
Ray Bohn	Ray Bohn Media & Government Affairs	St. Paul
Gary Botzek	Botzek Associates	St. Paul
Luci Botzek	MN Association of County Officials	St. Paul
Glenn Dorfman	MN Association of Realtors	Edina
Dave Fricke	MN Association of Townships	St. Michael
Dorian Grilley	MN Parks & Trails Council	St. Paul
Jane Harper	Washington County Government Center	Stillwater
Renay Leone	MN Land Trust	St. Paul
Rob McKim	The Nature Conservancy	Minneapolis
Norm Moody	Cass County Land Department	Backus
Cordelia Pierson	Trust for Public Land	Minneapolis
Michael Pressman		White Bear Lake
Marcia Shepard	Focus 10,000	Aitkin
Remi Stone	League of MN Cities	St. Paul
Steve Taff	Applied Economics - University of Minnesota	St. Paul
Dave Weirens	Association of MN Counties	St. Paul
Donna Peterson	MN Lakes Association	Richville



Minnesota Department of Natural Resources

OFFICE OF THE COMMISSIONER

500 Lafayette Road

St. Paul, Minnesota 55155-4037

The Honorable Willard Munger
Chair, Environment and Natural Resources Committee
Minnesota House of Representatives
479 State Office Building
St. Paul, Minnesota 55155

February 26, 1998

RE: DNR Study on Preservation of Public Shoreland

Dear Representative Munger:

I am sorry that the House Supplemental Budget bill does not include language mandating the department to develop recommendations on how to proceed with a policy which would preserve our remaining public shoreland. I and my staff have been committed to seeing progressive action taken to preserve our remaining undeveloped shoreland habitat statewide. As you know, my staff worked with you enthusiastically from the outset of this session to try to develop language which would accomplish this goal. I was personally involved in the development of the various approaches we discussed with you. We supported your final language and testified to the need for this analysis and recommendations for the 1999 session.

We would like to see the language in statute, if that is possible. However, I want to personally commit to you that we will continue the work we have set out to do on this project, and will accommodate all of the mandates in your amended bill.

Specifically:

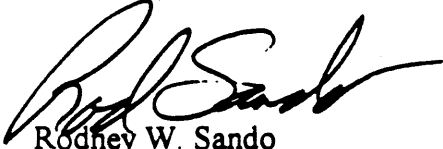
1. Review the sale of publicly owned shoreland authorized by statute.
2. Recommend standards that can be adopted to retain sustainable public shoreland under the appropriate type of government management.
3. Recommend public uses of public shoreland that is sold to private interests.
4. Recommend statutory changes that can result in retaining public shoreland in public use.
5. Recommendations on appropriate development limits that may take place on public shoreland parcels.
6. Recommendations for alternative methods for revenue incentives to local units of government which manage state owned lands to retain and preserve undeveloped public shoreland.

We feel, as I am sure you do, that to find workable proposals on these complex issues, it is necessary to work with local governments, interest groups committed to public lakeshore habitat preservation, and others. I have asked my staff to re-allocate internal resources to put this analysis as a top priority for us so that we can meet your desired deadline of a report to the Legislature by January 15, 1999. We will do all that we can to complete this study in the fall of 1998 so that the necessary recommendations can be incorporated into the Department's legislative agenda for 1999.

It is clear that the Department will benefit from a thoughtful analysis of our shore land property management. We also will have recommendation from a Legislative Audit of our School Trust Fund program relative to the lakeshore leases. I would like to incorporate recommendations on the future management of those properties in this study as well.

Thank you for your continued leadership on this important issue. I am sure that we will have a strong package of recommendations for your consideration in the next session.

Sincerely,



Rodney W. Sando
Commissioner

cc: Senator Bob Lessard, Chair, Senate Environment and Natural Resources Committee
Senator Steve Morse, Chair, Senate Environment and Agriculture Budget Division
Representative Tom Osthoff, Chair, House Environment and Natural Resources
Finance Committee
Senator Jerry R. Janezich

January 7, 1999



Mr. Jack Skrypek
Director of Lakes Policy
Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155-4037

P.O. Box 321
Brainerd, MN 56401

Phone 218-825-1909
800-515-LAKE (5253)

E-mail: lakes@mnlakesassn.org
Website: www.mnlakesassn.org

Dear Mr. Skrypek:

MLA is deeply concerned about the proper utilization and preservation of public shorelands including wetlands and pristine natural environmental properties. Although publicly owned shoreland cannot be sold, every year there seems to be special legislation that allows for sales of choice locations.

This is becoming more serious each year as developers continue to pressure for development of the few remaining public shoreland areas. Too often these requests and special legislation are based on local political and/or developer pressure with a primary objective of additional tax base and not necessarily the best utilization of the property, especially in the areas of water quality control.

MLA would like to recommend a moratorium be placed on the sale of public shoreland until a specific set of standards or guidelines be established for any and all available properties. Local authorities with the direction and guidance of the DNR, MPCA, and BWSR would determine the best utilization of the property on a long-term basis. This would include a proper program for landscaping, preservation of natural environment, protection from erosion, measures to protect water quality, preservation of wetlands, proper management practices to protect the natural ecosystems on shore and within the immediate water area, on-site wastewater guidelines, and wherever possible the natural preservation of the property.

We are also concerned that presently the program of wetlands preservation is being compromised in many areas by allowing an exchange of wetland acreage for other now adjacent areas. The overall concern is that wetlands are the necessary filter for our lakes and river. Exchange for non-wetland property can create a serious future problem.

There is a continuing and increasing demand for public park areas, public rest and picnic areas, and public shoreland fishing areas, and public fishing piers. In many areas this would be very beneficial utilization of many of our available public shorelands.

To overcome the pressure to develop public shorelands for additional tax base, a program could be established giving tax credits to those local governments who preserve the publicly owned shoreland, forest and/or wetlands, possibly with the responsibility of management. Although at first glance this may appear costly, we also must realize the eventual development of homes and/or business of our shrinking shorelines will have a long-term negative economic effect, plus creating more pollution problems for our air and water.

MLA would also like to recommend that if and when shoreland property is available, after proper utilization standards have been established, there must be a greater effort to make it available to the general public. Current policy of legal description, small type ad in local designated newspaper, is inadequate. The available properties should be advertised in bold print with legal description and location prominent in all area media at least three weeks previous to the sale. This would allow the general public a greater opportunity to participate.

We are concerned about the continued development of lakeshore and the need to preserve for future generations some of our pristine shoreland, woodland, and wetland areas.

Sincerely,

A handwritten signature in cursive script that reads "James Halloran".
Jim Halloran
Chairman, MLA Legislative Committee

JH:mdw

Lakeshore Development Patterns in Northeast Minnesota: Status and Trends

Minnesota Department of Natural Resources
Office of Management and Budget Services

Prepared by Tim Kelly and Joe Stinchfield

July 1998

CONTENTS

<u>Topic</u>	<u>Page</u>
Summary of Findings	3
Introduction	4
Status of Lakeshore Development	5
Trends in Lakeshore Development	7
Outlook for Lakeshore Development	10
References	12

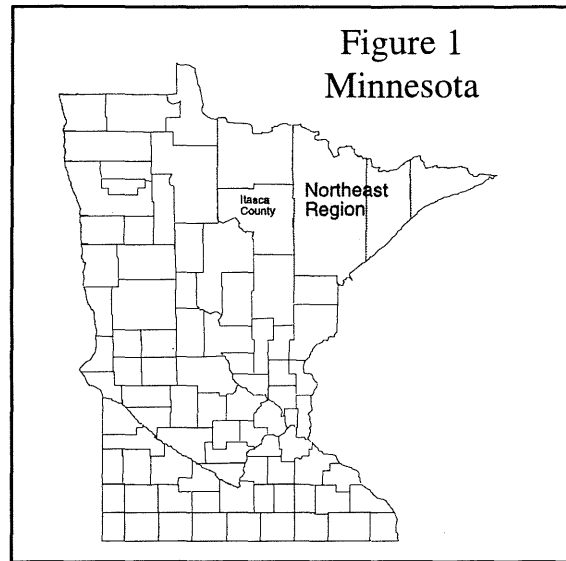
SUMMARY OF FINDINGS

- The large stock of publicly-owned lakeshore in Northeastern Minnesota (both inside and outside the Boundary Waters Canoe Area Wilderness) will help ensure that many lakes in this region retain their natural character, because public lakeshore is not readily available for private development such as housing.
- Private lakeshore is the focus of housing development. Most housing is concentrated on a small portion of the privately-owned lakeshore, leaving the remaining lakeshore in a much less developed state. In 1982 in Northeast Minnesota, 84 percent of all housing was concentrated on 19 percent of the privately-owned lakeshore.
- The high growth rates in lakeshore housing experienced between 1967 and 1982 do not appear to have continued after 1982. The growth rates since 1982 seem to have fallen a fair amount. The growth rates since 1982, however, are not negligible.
- One of the major factors influencing lakeshore housing development is population growth. Minnesota population growth is projected to slow over the coming years, reaching zero growth in about 30 years. The Northeast Region is expected to grow at a slower rate than the state. In other words, population growth (by itself) should slow, rather than accelerate, the rate of lakeshore development.

INTRODUCTION

A heightened interest in lake and lakeshore issues seems to be emerging throughout Minnesota, including the Arrowhead (Northeast) Region (Figure 1). Most of these issues concern the level of lakeshore development and effects of development on the health of lakes and on the sustainability of benefits people derive from lakes.

Minnesota does not monitor lake development in any reliable way, so many of the development-related issue discussions occur without development information. The last major effort to measure lake development took place in 1982; prior to that it was 1967. Without recent data, it is difficult to verify assumptions regarding supposed changes in development patterns since 1982. It is probably time to again measure lakeshore development, and to consider establishing a routine system for periodically updating development data.



In the absence of current and comprehensive data on lakeshore development, this paper attempts to gauge, in general terms, the direction of lakeshore development since the early 1980s using a variety of readily available information sources. The paper focuses on Northeast Minnesota, but many of the conclusions are applicable statewide. In addition, the paper presents some background information on lakeshore development patterns that are key to understanding development in the Northeast and anywhere in the state. Lastly, the paper examines the outlook for one of the major factors (population growth) that will influence the direction and rate of lakeshore development.

For those seeking a more comprehensive treatment of lakeshore development patterns—including analyses of the various resource and locational factors that influence development patterns—the assessment following the 1982 lakeshore development study is a good place to start (see MN DNR, 1984).

STATUS OF LAKESHORE DEVELOPMENT

Public shoreline is a common feature on lakes in Northeast Minnesota (Figure 1). Nearly two-thirds of all lakeshore is owned by federal, state or local governments (Table 1). For the state as a whole, publicly-owned lakeshore is less common and accounts for about one-third of all shoreline.

In the Northeast, about half of the public lakeshore is located in the Boundary Waters Canoe Area Wilderness (Table 2). Outside the Boundary Waters, lakeshore is split evenly between public and private ownership.

Public shoreline is, for all practical purposes, not on the market for private development (such as vacation homes) in the foreseeable future. The large stock of public lakeshore will help ensure that many lakes in the Northeast retain their natural character.

Private shoreline, on the other hand, is the focus of development pressures, primarily housing development. Not all lakeshore is equally appealing to the housing market place. Factors such as road access, city proximity, lake size, soil type, and forest cover differentiate the housing desirability of one lake lot from another.

The interplay of these housing development factors has produced a lakeshore housing pattern that is characteristic of urban development. Most shoreland housing is concentrated on a small portion of the shoreline, leaving the remaining lakeshore in a much less developed state. For Minnesota rural lakes over 145 acres in size, 77.4 percent of all housing in 1982 was concentrated on the 15.7 percent of the lakeshore with densities exceeding 20 housing units per mile of private shoreline (Table 3). On the low end of the density range, 57.1 percent of private lakeshore was developed at densities less than 2.5 housing units per mile of shoreline.

Table 1

Ownership of Lake Shoreline*

	Public (percent)	Private (percent)	Total (percent)
Minnesota	34.5	65.5	100.0
Northeast MN	65.1	34.9	100.0

* Source: Minnesota Land Management Information System.
Ownership data are circa 1983.

Table 2

Ownership of Lake Shoreline in Northeast MN*

	Percent
Private	34.9
Public:	
Inside BWCAW	30.9
Outside BWCAW	34.2
Total	100.0

* Source: Minnesota Land Management Information System.
Ownership data are circa 1983.

Table 3

1982 Development Density on Privately-Owned Lake Lots*

Development Density Classes (1982 housing units per mile of private shoreline on lake lots)	Minnesota		Northeast MN		Itasca County	
	Private Shoremiles (percent)	Housing Units (percent)	Private Shoremiles (percent)	Housing Units (percent)	Private Shoremiles (percent)	Housing Units (percent)
2.5 or less	57.1	0.9	61.0	1.5	54.1	1.7
2.6 to 5.0	11.3	4.0	11.8	6.3	16.4	9.8
5.1 to 10.0	7.5	5.6	8.0	8.6	10.5	12.8
10.1 to 20	8.4	12.2	8.7	18.6	10.2	25.0
more than 20	15.7	77.4	10.5	65.0	8.8	50.7
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0
Total Miles or Units	9,154	89,979	2,259	14,743	664	3,842

Note: The data are for lakes over 145 acres in size that are outside of municipal areas and the seven-county Twin Cities metro area.

* Source: MN DNR, 1982 Shoreland development data.

This housing development pattern applies to Northeast Minnesota and to Itasca County. In Northeast Minnesota, 10.5 percent of the lakeshore—developed in 1982 at densities exceeding 20 housing units per mile of shoreline—contains 65.0 percent of all housing. That means that the remaining 90 percent of shoreline contains only 35 percent of lake homes and most of this private shoreline was lightly developed, if it was at all developed.

Another way to look at this housing concentration is by lake. For Itasca County in 1998, it is evident that a few lakes are very popular to the lake home housing market. A small portion of lakes contain most of the lake homes (Table 4).

From a natural resource perspective, concentrated development has pluses and minuses. On the minus side is the concentration of all the potential erosion, shoreline alterations, and sewage problems that can possibly overwhelm a resource. On the plus side, high

Table 4

Concentration of Lakeshore Housing in Itasca County, 1998* (includes all lakes in Itasca County)

Lakes with the Largest Amount of Housing	Percent of Housing Units	Percent of Lakes
Top 1 Lake (Pokegema)	12.4	0.1
Top 5 Lakes	26.4	0.5
Top 10 Lakes	35.2	1.1
Top 20 Lakes	46.1	2.1
Top 50 Lakes	65.5	5.3
Top 100 Lakes	82.8	10.6
Total Houses or Lakes	7,416	945

* Source: Itasca County Assessor Office, June 1998.

densities expand central sewer possibilities. Also, concentrated development leaves the remaining lake shore with little development and fewer resource impacts.

TRENDS IN LAKESHORE DEVELOPMENT

Minnesota has conducted two censuses of lake home development: one in 1967 and one in 1982. The two censuses focused on the larger rural recreation lakes (over 145 acres in size) with privately-owned lakeshore located outside the seven-county Twin Cities metropolitan area. As a group of nearly 2000 lakes, these lakes are the most appealing to the lakeshore housing market, and they form the backbone of Minnesota's water-related tourism economy.

Between 1967 and 1982, shoreland housing burgeoned (Table 5). Seasonal (or vacation) lake homes increased 63 percent statewide, and permanent homes increased at an even faster rate (99.5%). Overall, total lake homes grew 74.1 percent. In the Northeast, growth was equally as impressive, and total lake homes nearly doubled between 1967 and 1982. Itasca County growth was consistent with the statewide seasonal growth rate and the higher Northeast permanent home growth rate.

From the perspective of the early 1980s, it seemed possible that this rapid growth would accelerate through the 1980s and 1990s. The reasoning behind these expectations was the bulge in the population (known affectionately as the baby boomers) that was reaching family-formation and higher income years, both of which were traditionally associated with second home purchases. In other words, if the baby boomers followed the life-cycle patterns of their parents, the lake home construction would accelerate.

	Seasonal/Vacation Housing (percent increase)	Permanent Housing (percent increase)	Total Housing (percent increase)
Minnesota	63.0	99.5	74.1
Northeast MN	70.4	183.8	93.8
Itasca County	65.6	195.9	103.4

* Source: MN DNR, 1982 Shoreland development data; and U of M, 1967 Lakeshore development data.

A lake home census has not been conducted since 1982, so there is no comparable data source to assess any acceleration in the development of lake homes. There are, however, information sources that provide good indications about general trends.

One such information source is the U.S. Census. Between 1970 and 1980, the Census recorded a rapid increase in the housing categories that are primarily seasonal/vacation homes in Minnesota (Table 6). The Census 1970 to 1980 growth rates are largely comparable to those of the 1967 to 1982 lake home studies, after adjusting for the differing lengths between the counts in the Census (10 years) and the lake home studies (15 years).

Between 1980 and 1990, however, the growth rates from the U.S. Census fell sharply throughout the state. Nearly every county in Minnesota with a large number of seasonal/vacation homes experienced a drop in growth rates. The reasons for this decline have not been explained, but some have speculated that the high interest rates, high unemployment, and economic recession of the early 1980s were major contributors.

	1970 to 1980 Increase (percent)	1980 to 1990 Increase (percent)
Minnesota	48.0	7.5
NE Minnesota	57.7	19.5
Itasca County	73.7	4.7

Note: The 1990 housing figure is "seasonal/recreational/occasional use", which in 1980 was reported as "seasonal or migratory" and "held for occasional use". The 1970 housing figure is "seasonal or migratory", which was reported the same way in 1980. In 1980, the "held for occasional use" category was 17% the size of the "seasonal or migratory" category.

* Source: U.S. Bureau of the Census.

County assessor records are another source of trend information. Many of these records are now computerized. For both the 1967 and 1982 lakeshore studies, county assessor records formed the basis for the lake home counts; all of the records were accessed manually in 1967 and 1982.

Itasca County, which was typical of the state in terms of lake home growth rates in the 1970s, was selected to try to update housing counts using a comparable source of information from county assessment records. DNR staff, familiar with the 1967 and 1982 studies, examined the computerized Itasca records and determined that they form a reasonable basis for comparison.

The results of this comparison for Itasca show the same pattern of change evident in the U.S. Census numbers. The growth rates experienced between 1967 and 1982 fell into the 1982 to 1998 period (Table 7). The drop was not only in a relative terms (percent terms), but also in absolute terms (number of homes added annually). Similar to the U.S. Census findings, the reasons behind these figures have not been explained.

Table 7
Itasca County Lakeshore Housing Growth*

<u>Type of Housing</u>	<u>1967 to 1982 Increase (percent)</u>	<u>1982 to 1998 Increase (percent)</u>	<u>1967 to 1982 Average Annual Increase in Housing Units</u>	<u>1982 to 1998 Average Annual Increase in Housing Units</u>
Seasonal/Vacation	65.6	26.4	69	39
Permanent	195.9	32.9	83	34
Total*	103.4	30.7	152	78

Note: The data are for lakes over 145 acres in size that are outside of municipal areas.
 The 1967 to 1982 change is assessed for all housing units in lake adjacent public land survey parcels.
 The 1982 to 1998 change is assessed only for those housing units that have lake frontage.
 In Itasca County in 1982, just 4.1% of housing in lake adjacent parcels did not have frontage.

+ In 1998, a small amount of housing (1.2%) could not be classified as 'permanent' or 'seasonal'.
 The Total row contains this unclassified housing for 1998.

* Source: The 1967 and 1982 data came from the initial and update studies of shoreland development conducted by the U of M and MN DNR, respectively. The 1998 data came from the Itasca County Assessor Office in June 1998.

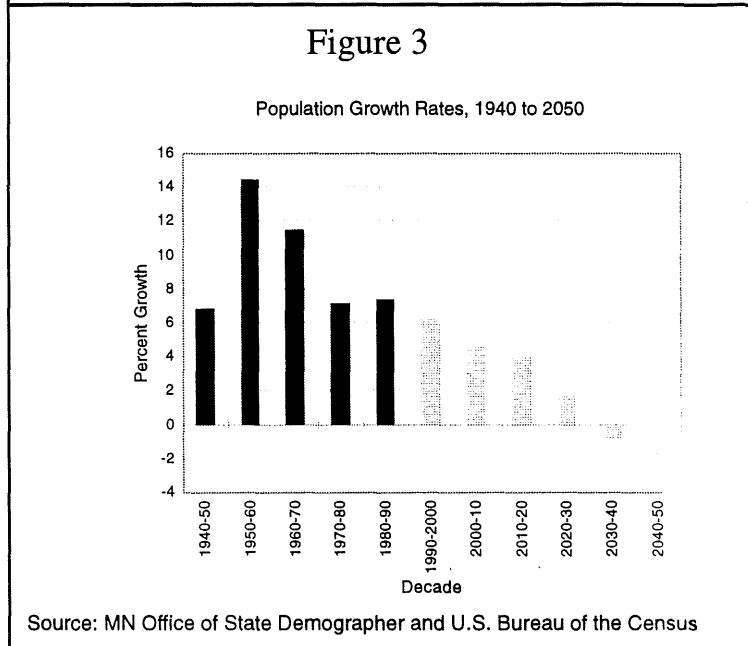
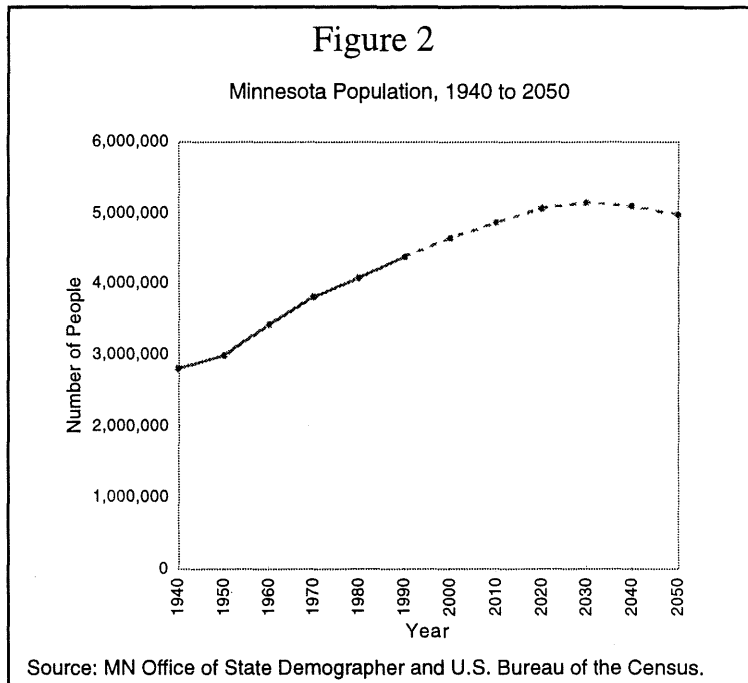
What seems reasonable to conclude at this time, from available information, is that lake home growth not only did not accelerate after the 1967-1982 period, but that growth rates fell a fair amount.

OUTLOOK FOR LAKESHORE DEVELOPMENT

Without an adequate explanation of past trends, it is difficult to speak with confidence about how the future will unfold. There are numerous factors to consider in any future assessment, from housing preferences, to saturation of popular lakes, to retirement at the lake home, to footloose industries locating in high-amenity lake areas, to general population growth, and so on. Of these many factors, only the general population growth forecast is available in quantitative terms.

The long-term outlook for population is for declining rates of growth for Minnesota and the U.S. as a whole. Minnesota is forecast to reach zero population growth sometime in the next 30 or so years, after which the forecast is for a slow decline (Figures 2 & 3). If realized, these population trends would contribute to a corresponding decline in the growth of the regional market for lakeshore housing in Northeast Minnesota.

The preceding long-term forecast is not broken down geographically to the specificity required to examine the local market for lake homes in Northeast Minnesota and Itasca County. The local market can be examined through recent county population estimates and shorter-term population forecasts that were prepared after the 1990 U.S. Census. In both



the recent estimates and projected changes, Northeast Minnesota and Itasca County have growth rates below the statewide rates, which (as noted above) are project to decline over the next 30 years (Table 8). If realized, the local market will grow less rapidly (and lose population sooner) that the state as a whole.

It is interesting to note that the projections made following the 1990 U.S. Census are lower than recent estimates by about the same amount for the state and Northeast, and by a larger amount for Itasca County.

Table 8

Recent Population Estimates and Project Population Change*

	1990 to 1997 Percent Change (based on 1997 <u>population estimates</u>)	1990 to 1997 Percent Change (derived from projected <u>growth from 1990 to 2000</u>)	1990 to 2020 Percent Change (based on projected growth <u>from 1990 to 2020</u>)
Minnesota	7.1	4.4	15.5
Northeast MN	0.5	-2.4	-11.2
Itasca County	6.6	-2.9	-10.4

* Source: Office of the MN State Demographer, 1993, for population projections from 1990 to 2000 and 2020.
U.S. Census Bureau, 1998, for 1997 population estimates.

REFERENCES

- Itasca County Assessor Office. June 1998 computerized records of residential housing on lakes.
- Minnesota Demographer's Office. 1993. Population projections for Minnesota, 1990 to 2020.
- Minnesota Demographer's Office. 1997. Population projections for Minnesota to 2050.
- Minnesota Department of Natural Resources. 1984. Shoreland Development Trends. Shoreland Update Project Report 4. By Philippe Cohen and Joe Stinchfield.
- Minnesota Department of Natural Resources. 1982 lakeshore development data (computerized data file).
- Minnesota Land Management Information System. Public land ownership data (circa 1983) available in EPPL7 files.
- U.S. Bureau of the Census. Minnesota census counts from 1940 to 1990, and county population estimates for July 1, 1997.
- University of Minnesota, Department of Geography and Center for Urban and Regional Affairs. 1967 lakeshore development data (computerized data file; available from MN DNR).

