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Phase 1: Natural Resource Lands

Minnesota Public Lands Impact Study

Legislative Commission on
Minnesota Resources in cooperation
with the Tax Study Commission and
Barton-Aschman Associates, Inc.

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PREFACE

The purpose of the Minnesota Public Lands Impact Study being undertaken by the Legislative Commission on Minnesota Resources in cooperation with the Tax Study Commission and Barton-Aschman Associates, Inc., can best be summarized by the legislative charge which states that "...the commission shall report to the 70th session of the legislature its findings and recommendations regarding payments in lieu of taxes on State and Federally owned lands"

This report is a summary of Phase I of the Public Lands Impact Study. Phase I focused only on State and federal natural resource lands as directed following agreement between the Legislative Commission on Minnesota Resources (LCMR) and the Tax Study Commission (TSC). Subsequent phases will address the impact of other types of tax-exempt lands. The work assignment states that the purpose of Phase I was to "Conduct research, gather and analyze information, and report findings to the LCMR concerning the effects on local units of government of land ownership by the State and Federal governments, which is held for natural resource management." Phase I research began in September, 1976, and was completed in March, 1977.

The research and analysis conducted during Phase I was completed by Barton-Aschman Associates, Inc. (BAA), under the daily direction of the LCMR and the TSC. Work tasks and study findings were continually reviewed, discussed and tested among the LCMR, TSC and BAA staff. Progress reports, proposed work programs, and preliminary findings were presented on a monthly basis to the Executive Committee of the LCMR, and a presentation was made to the LCMR midway through the Phase I work program. All research was documented on an interim basis in both "working papers" and "progress reports" throughout Phase I. This documentation has been compiled in a notebook and is available for review in the LCMR offices.

The research process also involved a review of relevant literature, contacts with numerous State, federal, county, township and field representatives/agencies, and an in-depth evaluation of conditions in two pilot areas. A special effort was made to involve all potentially affected agencies, at least on a representative basis, in this initial phase of the Public Lands Impact Study.

It is believed that this interactive study process has been very valuable in developing a factual, detailed and responsive study of natural resource land impacts in Minnesota.

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CHAPTER ONE

SYNOPSIS OF MAJOR FINDINGS

Overview of Phase I

The Laws of Minnesota for 1975 require the Legislative Commission on Minnesota Resources (LCMR) to "report to the 70th session of the legislature its findings and recommendations regarding payments in lieu of taxes on State and Federally owned lands . . ." This report summarizes the findings of the first phase of a study undertaken jointly with the Tax Study Commission (TSC) to address issues related to tax-exempt lands in Minnesota. The purpose of the first phase of the Public Lands Impact Study as stated in the work program was to "conduct research, gather and analyze information, and report findings to the LCMR concerning the effects on local units of government of land ownership by the State and Federal governments, which is held for natural resource management." Subsequent phases will address other types of tax-exempt lands which should be evaluated before definitive legislative programs are prepared. The purpose of this chapter is to summarize the principal findings of the Phase I research effort. The remaining chapters of the report provide a discussion of the research leading to these observations and conclusions.

The subject of the impacts of tax-exempt lands on local governments focuses on the governmental services required, the costs to local governments to provide these services, and the loss of property tax base and revenues to finance local government operations. It is of wide interest because:

- Nearly every governmental subdivision is affected.
- Sizeable land areas and land values are involved.
- The cost of government is increasing which is creating local financial difficulties.
- The federal government has enacted major new payments legislation after several years of debate.
- New payments legislation has been continuously introduced in the State Legislature. These proposals have often been aimed at solving individual problems, thereby running the risk of further complicating the existing system.
- State and federal land management decisions affect the demand for local governmental services.

A number of State agencies have embarked on related study programs in the past, but for one reason or another have not completed the effort. The need for this study has been strongly endorsed by State, federal and local agencies. Agencies administering State and federal lands are particularly supportive of the need to assess public land impacts on local governments.

There were four major components to the work program of the first phase of the Public Lands Impact Study. They included the following:

1. The identification and evaluation of State and county natural resource land records systems.
2. The identification of existing direct, indirect and categorical State and federal aids related to natural resource land in Minnesota.
3. The analysis of service demands, property tax revenues, and other potential impacts of State and federal natural resource lands on local units of government in two pilot areas.
4. The development of a framework for evaluating alternative approaches to payments in lieu of taxes for tax-exempt lands in Minnesota.

The study was not designed to verify all records and potential impacts on a statewide basis. Rather, two representative pilot areas (Aitkin and Winona Counties) were selected to contrast, analyze and verify records and impacts and to provide a basis for discussing the relative significance of potential impacts. The pilot area selection process is described in Chapter Five. The major findings of Phase I are outlined below. Supporting information is provided in the remaining chapters of the report.

Natural Resource Lands and Land Records

The first step in the Phase I work program focused on: (1) identifying the various types of natural resource lands, (2) determining the amount of natural resource land in Minnesota, (3) identifying agencies responsible for natural resource land management, (4) identifying and evaluating centralized State natural resource land record systems, and (5) identifying and evaluating the county land records in the pilot areas. This research is discussed in Chapters Two and Three. The principal observations and conclusions resulting from this work task include the following:

1. One-quarter of the State's land area is in State or federal ownership. Natural resource lands comprise the largest grouping of public lands. State natural resource lands total 5.2 million acres or ten percent of the State's land area; tax-forfeited lands (3 million acres) account for six percent of the land area; and federal lands (4.3 million) account for eight percent of the State's land area. The remaining one percent is made up of State lands which are not natural resource lands. The types of lands contained in the category

of natural resource lands include: national forests, State forests, national parks, State parks, national wildlife and fish areas, State wildlife and fish areas, Indian land, Corps land, land managed by the U.S. Bureau of Land Management, and all other land managed by the State Department of Natural Resources.

2. Federal natural resource lands are managed by: (a) the U.S. Department of Agriculture (U.S. Forest Service), (b) the U.S. Department of Interior (National Park Service, U.S. Fish and Wildlife Agency, Bureau of Indian Affairs, Bureau of Land Management), and (c) the U.S. Department of Defense (U.S. Corps of Engineers).
3. State natural resource lands are managed by: (a) the Department of Natural Resources (Forestry Division, Parks and Recreation Division, Fish and Wildlife Division, Minerals Division, Water Division, Soil and Water Conservation Board, and Enforcement Division), and (b) the counties (tax-forfeited land).
4. State natural resource lands are classified and aggregated in at least the following ways: (a) management responsibility, (b) acquisition categories, and (c) specific management areas.
5. State land records, land classifications, and related payments to local units of government have been developed incrementally over several decades. This has led to a confusing mix of land records, payments, and management policies and has increased the possibility for uncoordinated and inconsistent actions.
6. No composite clearinghouse exists for maintaining a comprehensive all-inclusive listing of payments to local governments. Working, composite land record systems at the State level are relatively recent efforts.
7. State natural resource land record systems include: (a) LOS--Land Ownership System (Land Bureau, DNR), (b) LCS--Land Classification System (Environmental Planning and Protection Bureau, DNR), (c) SCORP--State Comprehensive Outdoor Recreation Plan system (Parks and Recreation Division, DNR), (d) MLMIS--Minnesota Land Management Information System (University of Minnesota), (e) Minnesota Historical Society, and (f) Land Records File (Land Records Section, Department of Finance).
8. County land record systems are maintained by: (a) Land Commissioners (in only twelve counties), (b) Assessors and/or Auditors, (c) Recorders or Registrars of Deeds, and (d) zoning or planning departments.
9. All natural resource land record systems were designed for different purposes. The LCS is used for departmental land management; the LOS is used for administrative land record purposes; the MLMIS is designed for statewide land use policy planning; the SCORP system inventories only recreational facilities; and the Land Records File

is a repository of legal documents. County land records include legal documents, records for tax purposes, and records for county land management. There are both gaps and overlaps in available data. None of the record systems have been developed for the purpose of determining any differentials in service requirements by land use or management type.

10. From the point of view that each State system uses the 40-acre parcel as its basic input, all systems can be considered to be relatively compatible. However, there are enough differences among them relating to coding conventions, definition of variables, and focus to limit the free transfer of data among the systems. The usefulness of available land record systems would be greatly enhanced by improving the compatibility of existing systems.
11. Most of the systems are flexible enough to permit expansion or alterations. The limiting factors are not dependent upon the system so much as they are on the availability of information, its ease of collection, and the associated cost. Accuracy and currency of land records are directly related to the number of individuals and agencies upon which the system is dependent, as well as the amount of data that the systems require. Only the LOS is updated annually at the present time. Other land record systems would be more useful if the integrity of the data could be improved.
12. The land record systems best suited for evaluating the impacts of State natural resource lands and for use in determining any payments in lieu of taxes, if legislation were enacted, are DNR's Land Ownership System and Land Classification System. The planned merge of these two systems will reduce duplication of data gathering and coding efforts, and will clarify the ambiguities that currently exist in the LCS. Although the Minnesota Land Management Information System (MLMIS) has the most extensive data base and exhibits a great deal of flexibility, its usefulness for the purposes of this study is limited because of the aggregated form in which the data are available.
13. While property record integration is probably more efficient from a systems point of view, it is likely that the integration of records would reduce the effectiveness of the agencies using the information because direct access would be removed. Rather than integrating the existing systems into one massive data base, they should be made directly compatible with one another. Any central system should be an overview system with key information bits and format determined by and utilized by all governmental jurisdictions compiling individual record files.
14. The use of overlapping State land category systems (i.e., acquisition categories and management categories) has caused considerable confusion regarding the types of State natural resource lands and their management. Greater dissemination of information about the land categories which are used should help alleviate some of the current misunderstandings. The discontinuation of bookkeeping by acquisition

categories, except where constitutionally or federally required, also appears appropriate. This would, however, require changes in State legislation related to payments for natural resource lands. These implications are discussed in Chapter Four.

15. This study has not addressed public policy with respect to natural resource land acquisition, disposal or management. However, some observations have emerged:
 - a. Overall policies related to acquisition are being pursued and management plans for specific management areas are being developed. However, there appear to be no general stated policies related to land disposal. There also appears to be inadequate coordination among the various agencies and individuals responsible for managing various State natural resource land holdings, due in large part to unclear, unstated or conflicting management policies.
 - b. There are limited incentives and, consequently, virtually no activity to evaluate natural resource lands which could be returned to private ownership (particularly lands outside management areas). Current accounting practices which return lease payments, but not sale proceeds, to the managing public agency may artificially support property retention.
 - c. There appears to be no active, aggressive solicitation of private uses to engage in activities supportive of management plans (e.g., timber harvesting, agricultural use, etc.). These activities (and, consequently, revenues) occur mainly upon a request basis.
16. The current stated State policy is to encourage the sale of tax-forfeited land. However, the law also provides for the dedication of these lands to perpetual public use and sets forth many conditions under which the State may control or prevent the sale of certain tax-forfeited land. In addition, there is no easy means for the State to acquire clear title to these lands, when desirable, except in the case of State Parks. This situation suggests that several policy issues should be evaluated including:
 - a. Policies to discourage the sale of tax-forfeited lands already dedicated for perpetual public use.
 - b. Policies to more strongly encourage the sale of tax-forfeited lands not suitable for dedication to public use.
 - c. Policies encouraging State acquisition of clear title to tax-forfeited land located within designated areas or management areas (e.g., State Forests, wildlife areas, etc.).

Current Payments Related to Natural Resource Lands

Currently, there is no central source of information regarding payments related to natural resource lands, and a composite listing was not available. The purpose of this work task was to compile a comprehensive list of direct and indirect State and federal aids related to natural resource lands. The major findings of this work task are summarized below. More detail is provided in Chapter Four.

1. Both the State and federal governments make direct payments in lieu of taxes for specific types of natural resource lands. These payments are almost always limited to acquired lands and are tied to specific land uses. Direct State and federal payments to local governments in fiscal 1975 totaled \$1.9 million.
2. Direct long-term federal payments are made by: (a) U.S. Fish and Wildlife Agency, (b) U.S. Forest Service, and (c) U.S. Corps of Engineers. These payments equalled over \$0.6 million in fiscal 1975.
3. New federal legislation authorizes payments of 75¢ per acre minus existing payments or 10¢ per acre, whichever is greater, for acquired lands: (a) within the national park and national forest service, (b) managed by the Bureau of Land Management, (c) dedicated to water resource development projects, and (d) used as dredge disposal areas by the U.S. Corps of Engineers. Maximum payments are tied to a population index.
4. Direct long-term State payments include: (a) State Forest Fund, (b) Consolidated Conservation Area Fund, (c) Game and Fish Fund, (d) mineral royalties from tax-forfeited land, (e) rental as a condition of sale, (f) decorative tree harvesting, and (g) Wild Goose Management Areas over 1,000 acres. These direct long-term payments equalled over \$1.2 million in fiscal 1975.
5. Direct short-term State payments are made for new acquisitions for Voyageurs National Park and St. Croix Wild River State Park.
6. Most current direct payments in lieu of taxes are based on shared revenues which may fluctuate considerably from year to year. The new federal legislation suggests a trend away from this concept.
7. Most current direct payments are made to the counties and redistributed by the counties to the taxing districts where the natural resource lands are located.
8. Other special State and federal aids available on a selective basis include: (a) State aid for roads providing access to State parks, (b) federal aid for roads near federal lands, and (c) federal aid for the education of children of federal employees.
9. Under certain specified conditions, some State lands may be subject to local property taxes. In addition, all direct revenues from

county-managed tax-forfeited land go to the counties.

10. Any categorical State or federal aids which are based on equalization or need formulae indirectly support the service demands and revenue impacts of natural resource lands. One of the best examples is school foundation aid.
11. State and federal agencies also provide services which partially compensate local units of government. Examples are wildfire protection and assistance for law enforcement.
12. While State and federal indirect and direct payments for natural resource lands are substantial in combination, it is clear that government officials and individual taxpayers are unaware of many of these payments and do not understand the relationship between categorical aids and tax-exempt lands. The identification and publication of these facts should help to alleviate some of the current misunderstanding of local governments and individual taxpayers with regard to aid related to public natural resource lands.

Service Demands and Revenue Impacts of Natural Resource Lands

This portion of Phase I focused on: (1) identifying and evaluating the service demands of public natural resource lands in the pilot areas, (2) analyzing the potential effects of natural resource lands on local property tax revenues, and (3) identifying and evaluating other factors offsetting these impacts on local units of government. The evaluation methodology is outlined in Chapter Five; existing State and federal payments are described in Chapter Four; and the results of the impacts analysis are detailed in Chapters Six and Seven. The principal observations and conclusions resulting from this research are listed below.

Pilot Area Evaluations

1. The pilot area evaluations demonstrated the difficulty of precisely basing compensation on the services required and the benefits derived from public natural resource lands. An effort was made to relate service demands to land use categories or specific land holdings, but the data were either not kept at all or were incomplete.
2. Based upon the pilot area evaluations, it has been concluded that the degree of impact of public natural resource lands will vary from one area to another depending upon the amount of public land, its use, the population size, and the land area of the county. While the basic factors which must be considered in carrying out the impacts evaluation are essentially the same, further testing would be required to establish an index of counties for determining relative impacts, particularly in relation to changing conditions.
3. It is believed that this evaluation methodology may be applied to other counties throughout the State and, generally, to other types of tax-exempt public land. While the specific work program for

subsequent phases of the Public Lands Impact Study has not yet been developed, the methodology outlined in this chapter can be used as the basis for developing and refining future work programs regarding the evaluation of other types of tax-exempt lands.

Service Demands of Natural Resource Lands

1. Natural resource lands which attract people bring with them increased governmental service demands. However, these increased activities also enhance the local economy (hence tax base) and tend to increase private property values.
2. Existing records do not permit the clear separation of service demands and costs by natural resource and non-natural resource generated demands.
3. The principal local governmental services commonly provided to public natural resource land include road construction and maintenance, fire protection, and police protection. Other direct services may also be provided in some instances. The overall costs of local services may be indirectly affected by the extent of public land ownership. These service costs are at least partially compensated for through direct payments, direct services, service contracts, and indirect categorical State and federal aid.
4. Counties and townships sometimes provide road access to State and federal natural resource lands. While some special State and federal aid is available for construction, only CSAH aid is provided for road maintenance.
5. There is some evidence of increased traffic demand caused by recreationally used natural resource lands. In addition, there appears to be a trend toward increased winter recreation activities on both public and private lands. Roads which were previously not maintained in the winter must now be plowed. This reduces the overall design life of the roadway through both exposure and increased use.
6. Townships may provide some fire protection to public natural resource lands. However, the DNR is responsible for wildfire protection in most parts of the State and provides considerable fire protection services in areas with substantial forested land. In addition, DNR makes contractual payments to local units of government for fire protection assistance.
7. While public natural resource lands apparently do not demand the level of police services required by private lands, some local law enforcement services are provided without direct compensation. These expenditures may be somewhat offset by the services of State and federal conservation officers and DNR contracts for special services.

8. The counties are responsible for managing all tax-forfeited land although title to these lands is held by the State. Presently, land management expenses are paid for by revenues from the land (primarily land sales and timber leases). Land sales are made on maximum ten-year contracts, very little new land is being forfeited, and considerable acreage has been dedicated to public use. Thus, revenues are expected to drop, perhaps drastically in some counties, in the near future unless policies regarding land sales are changed or there is a very active program of land and timber leases. If this occurs, land management activities will have to be reduced or other sources of revenue must be secured.
9. State and federal agencies typically provide their own utility services and solid waste disposal or pay service charges. There may be some increased local service demands for waste disposal along access roads or for increased landfill size. However, no specific data were available to measure these potential impacts.
10. The amount of public natural resource land does not appear to directly influence the local costs of other services such as health, welfare and education. In the case of education, federal aid and State payment of real estate taxes compensate for the education of children living on public lands. Categorical aid also reflects the existence of tax-exempt land.

Local Property Tax Revenues

1. Local tax revenues are clearly affected by the existence of public natural resource lands within the pilot counties. The extent to which the existence of these lands reduces the need for services, if owned privately, and the extent to which they create increased value for private property cannot be calculated.
2. The respective pilot counties appear to be less dependent upon local property taxes than the average county in Minnesota. Property taxes accounted for 29 percent of the county revenues in Winona County and 23 percent of county revenues in Aitkin County. Local property taxes account for 36 percent of 1974 county revenues in the average Minnesota county. The trend in Minnesota is a dramatic reduction in local government reliance upon property taxes to support governmental expenditures.
3. Assuming taxes were collected on all State, federal and tax-forfeited natural resource land in the pilot areas, they would generate approximately \$862,000 in property tax revenues in Aitkin County and approximately \$61,000 in Winona County. State natural resource land portion would generate about \$516,000 (60 percent) in Aitkin and about \$43,000 (70 percent) in Winona. The tax-forfeited land portion would generate about \$319,000 (37 percent) in property tax revenues in Aitkin County. (See Chapter Seven for assumptions and calculations.) The total tax amount states the minimum in terms of possible revenues. The

amount is reduced by the fact that much land would not be privately purchased and that certain amounts of taxes go uncollected each year. There is evidence that public lands enhance private land values as well so that elimination of public properties would reduce the value of private lands. It should be noted that it would be undesirable to return much of this land to private ownership. It is also unlikely that all public lands could be returned to private ownership.

4. Assuming only acquired State and federal natural resource lands were in private ownership, they would generate approximately \$48,000 in property tax revenues in Aitkin and approximately \$60,000 in Winona. Acquired State natural resource lands alone would generate \$21,000 in Aitkin and \$43,000 in Winona.
5. When all types of State, federal and tax-forfeited natural resource lands are considered, current direct federal and State payments in lieu of taxes (including direct revenues from tax-forfeited lands) account for less than one-fifth of the potential tax revenues which might be generated from these lands, if the lands were all in private ownership. If only acquired lands are considered, direct State and federal payments account for 21 percent of potential tax revenues in Winona County and 80 percent of potential tax revenues in Aitkin County.
6. Current direct State and federal payments to the two counties represent 9 percent of 1974 county revenues in Aitkin County, and 2 percent of 1974 county revenues in Winona County.
7. Consideration of the probable loss of property taxes, as a result of natural resource land holdings alone, does not consider the public purposes being served, direct and indirect State and federal payments, or the services being provided as a result of these land holdings.

Other Factors Offsetting the Service Demands and Revenue Impacts of Natural Resource Lands

1. Tourist-travel expenditures appear to be directly related to: (a) recreational facilities (especially water-oriented recreation and hunting), and (b) population and commercial centers (e.g., urbanized areas). While there is not an exact correlation between public natural resource land acreage and tourist-travel expenditures, there is evidence that local governments do benefit through increased tourist-travel expenditures as a result of public natural resource lands in proximity to their jurisdiction.
2. Local dependence on governmental employment as an economic base appears to be directly increased by the existence of State and federal natural resource lands. Those lands which are recreationally oriented also increase employment in the tourist industry.
3. While these impacts are not quantifiable, local communities benefit from State and federal natural resource lands through: (a) increased

recreation opportunities, (b) State and federal land management, and (c) preserved amenities.

4. The State and federal governments make a number of direct payments to local governments which directly compensate for the service demands and revenue impacts of natural resource lands. These include both direct payments in lieu of taxes and financial aid for specific projects related to natural resource lands.
5. A number of categorical State and federal funds and services, while not directly labeled as payments to local governments as a result of State land holdings, are increased as a result of State natural resource land holdings. These include:
 - State and federal road aid
 - Conservation officer services
 - Land management costs
 - State and federal school aid
 - Fire fighting cost reimbursement
 - Fire fighting equipment and training support

A Framework for Payments in Lieu of Taxes

Finally, Phase I also involved a study of the overall concept of payments in lieu of taxes for tax-exempt lands in Minnesota. This research involved: (1) the identification and evaluation of alternative approaches to payments in lieu of taxes, (2) the development of principles related to payments in lieu of taxes generally, and (3) recommendations related to natural resource lands. This portion of the study is summarized in Chapter Eight. The principal observations and conclusions related to this research include the following:

1. There are a number of factors supporting the desirability of establishing a single payment system covering all tax-exempt lands if payments are to be made. Consequently, it appears desirable to examine the remaining classifications of tax-exempt property before developing definitive legislative programs.
2. The alternative approaches to payments in lieu of taxes which have been identified include: (a) payments based on shared revenues, (b) payments based on property taxes levied prior to acquisition, (c) payments based on current appraised value, (d) payments based on a flat rate per acre, (e) a graduated scale of payments taking into consideration land characteristics such as acreage, use of facilities, land use classification, location of land, land value, etc., (f) service charges, an exchange of services, or payments based on estimated service demands, (g) payments based on a rigorous cost-benefit ratio, and (h) payments based on a revenue capacity formula.

3. Any payments system selected ideally should be: (a) visibly tied to tax-exempt land ownership, (b) relatively simple to administer, (c) require a minimum of data, (d) related to local fiscal needs, (e) related to the service demands created by the land, (f) adaptable to changing conditions, (g) as equitable as possible, (h) predictable to local governments, (i) a reasonable cost, and (j) responsive to the special impacts of new acquisitions.
4. A case can be sustained for direct assistance to impacted local governments for natural resource lands on some uniform, easy to administer basis. This is supported by the statewide purpose served by public natural resource lands, the desirability of preserving those lands, their uneven distribution, the requirements for locally supplied services, and the reduction of taxable properties.
5. It is recommended that both acquired and non-acquired lands be included in any payments systems. The evidence suggests that there is very little difference between the two types of land with respect to service demands or potential marketability. The distinction does not reflect current conditions, but rather historical patterns.
6. All types of State owned natural resource lands (acquired, trust, and tax-forfeited) should be included in the payments system. The State should not make payments for federal natural resource lands since the federal government is already making direct and indirect payments related to these lands.
7. Any payments system for natural resource lands (if legislation were enacted) should utilize the DNR Land Ownership System, as adapted by the merge with the Land Classification System. Counties should be required to provide data to this system on tax-forfeited lands. If the payments system includes other types of tax-exempt lands, a State land records clearinghouse combining departmental land records would be desirable. This "clearinghouse" would utilize existing system files to provide comprehensive information on State lands and to determine payments.
8. Any payments system should support public land acquisition, disposal and management policies.
9. It is the explicit policy of the State to return all tax-forfeited lands not required for public purpose to private ownership. The payments system should reinforce this policy by:
 - a. Making payments for those tax-forfeited properties dedicated to perpetual public purpose or use.
 - b. Making payments for other tax-forfeited properties when the counties are making a bona-fide attempt to sell them but they have not yet been privately purchased.

- c. Requiring substantial additional payments from State agencies which are restricting the sale of tax-forfeited properties (particularly in management areas) but are not actively pursuing acquisition.
10. A hold harmless consideration should be included initially in any payments formula. This should be tied to the total payments received in some base year, not the continuation of existing payments. To continue existing payments in addition to a new formula would increase both administrative costs and the current misunderstandings related to State payments in lieu of taxes for natural resource lands.

CHAPTER TWO

NATURAL RESOURCE LANDS IN MINNESOTA

One of the first steps in Phase I of the Public Lands Impact Study was to identify the various types of public lands in Minnesota and to estimate acreage for each. This chapter will describe these lands and their distribution throughout the State. Chapter Three will describe the natural resource land record systems which are being used by State and county agencies in Minnesota.

There are at least 22 federal agencies which administer lands in Minnesota. Sixteen of these agencies manage relatively small acreages for a wide variety of administrative purposes. Three federal departments are responsible for natural resource lands: (1) Department of Agriculture (U.S. Forest Service), (2) Department of Interior (National Park Service, U. S. Fish and Wildlife Agency, Bureau of Indian Affairs, Bureau of Land Management), and (3) Department of Defense (U. S. Corps of Engineers).

State lands are used for several purposes including:

- Administrative offices
- Institutional sites (prisons, hospitals, schools, etc.)
- Highway rights of way
- Experimental areas
- Military property
- Natural resources

These lands are managed by at least eight State agencies including: (1) Department of Natural Resources, (2) Department of Administration, (3, 4) Department of Transportation (highways and aeronautics), (5) Department of Public Welfare, (6) Department of Corrections, (7) University of Minnesota, and (8) State College Board.

In addition, the counties are responsible for managing tax-forfeited land which is held in trust by the State for the taxing districts.

This phase of the Public Lands Impact Study has focused only upon natural resource lands (including tax-forfeited lands). Subsequent phases will address other types of tax-exempt lands.

Public Land Acreage in Minnesota

A preliminary estimate of public land holdings in Minnesota by county was prepared based upon composite data readily available from the Minnesota Land Management Information System, the Department of Natural Resources and the Senate Investigative Research Division (see Table 1). These composite data indicate that approximately 25 percent (12.8 million acres) of the land area in Minnesota is in State and federal ownership. The federal government manages about 4 million acres of land, or 8 percent of Minnesota's land area. The Minnesota Department of Natural Resources manages approximately 5 million acres of natural resource land (about 10 percent of the State's land area), and other State agencies administer about 281,000 acres of land (about 1 percent of the land area). The remaining 6 percent (3 million acres) is tax-forfeited land held in trust by the State for the taxing districts and managed by the counties. The distribution of these lands on the basis of percent of land area is illustrated in Figure 1. Ninety percent of the State and federal land acreage is located in only 17 of Minnesota's 87 counties. In nine counties, over 50 percent of the land area is in State or federal ownership.

Federal Natural Resource Lands

Over 4 million acres of federal natural resource lands in Minnesota are owned and managed by the following agencies:

1. The Department of Agriculture, U. S. Forest Service, administers approximately 3 million acres of land in Minnesota. These lands make up two national forests: the Chippewa National Forest and the Superior National Forest. The Boundary Waters Canoe Area, a national wilderness area, is a part of Superior National Forest.
2. The Department of Interior, U. S. Fish and Wildlife Agency, administers about 153,000 acres of national wildlife refuges, about 186,000 acres of waterfowl areas, and about 132,000 acres of easements and flowage rights needed for wildlife preservation.
3. The Department of Interior, National Park Service, administers the Voyageurs National Park in northern Minnesota and three smaller national monument sites. In 1973, the NPS owned about 1,600 acres of land in Minnesota.
4. The Department of Interior, Bureau of Indian Affairs, administers some 770,000 acres of Indian lands in Minnesota.
5. The Department of Interior, Bureau of Land Management, administers about 44,000 acres of land in the State. These lands are predominantly islands and other small parcels of public domain land which have never been in private ownership.
6. The Department of Defense, U. S. Corps of Engineers, administers about 51,000 acres of fee title land and about 48,000 acres of

ESTIMATED PERCENT OF STATE AND FEDERAL LANDS BY COUNTY (ACREAGE)

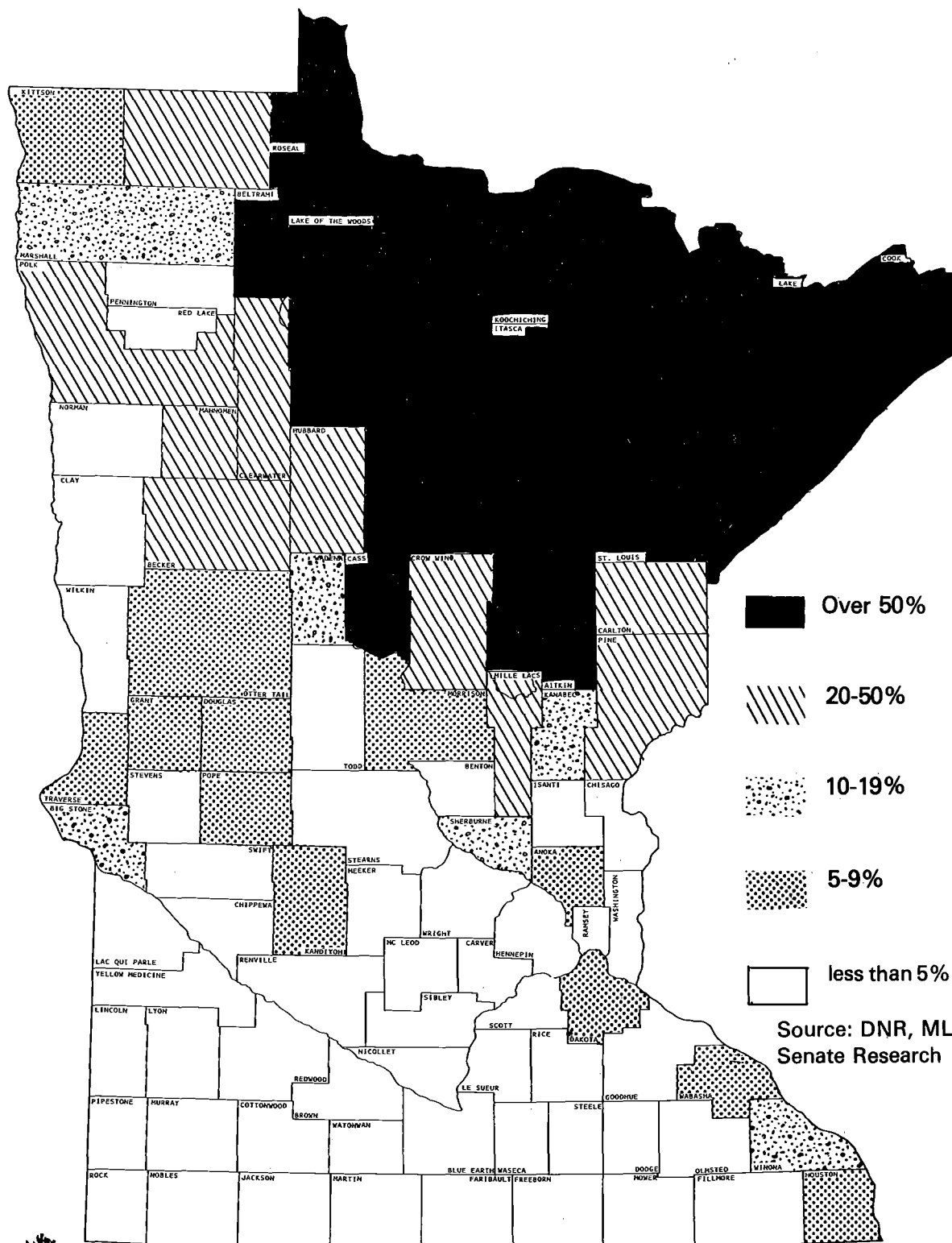


FIGURE 1
Minnesota Public Lands Impact Study

Legislative Commission on Minnesota Resources
In cooperation with the
Tax Study Commission and Barton-Aschman Associates, Inc.

Scale 1:1,000,000

0 5 10 25 50 MILES
0 5 10 25 50 KILOMETERS

LEGISLATIVE REFERENCE LIBRARY
STATE OF MINNESOTA

TABLE 1
ESTIMATED STATE AND FEDERALLY OWNED LANDS IN MINNESOTA BY COUNTY*

| County | Total Land Area (Acres) | Public Lands Acres | Percent | Federal Lands (2) | DNR Lands (3) | Other State Lands (4) | Tax-Forfeited Lands (5) |
|-------------------|-------------------------|--------------------|---------|-------------------|---------------|-----------------------|-------------------------|
| Aitken | 1,164,502 | 631,800 | 54% | 16,160 | 388,191 | 4,120 | 223,329 |
| Anoka | 273,735 | 20,435 | 7% | 0 | 15,334 | 4,569 | 532 |
| Becker | 837,688 | 193,152 | 23% | 62,040 | 54,639 | 2,331 | 74,142 |
| Beltrami | 1,608,518 | 1,110,105 | 69% | 393,520 | 566,798 | 3,281 | 146,506 |
| Benton | 257,798 | 2,310 | 1% | 0 | 1,135 | 1,175 | 0 |
| Big Stone | 316,501 | 38,800 | 12% | 30,400 | 6,802 | 1,598 | 0 |
| Blue Earth | 477,158 | 4,560 | 1% | 0 | 2,711 | 1,849 | 0 |
| Brown | 387,266 | 4,760 | 1% | 0 | 3,365 | 1,395 | 0 |
| Carlton | 550,092 | 220,971 | 40% | 9,160 | 75,385 | 8,768 | 127,658 |
| Carver | 226,810 | 2,730 | 1% | 0 | 658 | 2,072 | 0 |
| Cass | 1,302,315 | 762,167 | 59% | 314,000 | 183,896 | 4,271 | 260,000 |
| Chippewa | 370,269 | 13,126 | 4% | 3,160 | 8,155 | 1,811 | 0 |
| Chisago | 269,369 | 11,866 | 4% | 0 | 9,759 | 2,107 | 0 |
| Clay | 668,118 | 18,040 | 3% | 7,800 | 6,591 | 3,649 | 0 |
| Clearwater | 640,689 | 291,440 | 45% | 134,440 | 54,516 | 1,426 | 101,058 |
| Cook | 936,426 | 835,306 | 89% | 694,600 | 132,725 | 1,481 | 6,500 |
| Cottonwood | 407,635 | 6,792 | 2% | 720 | 4,753 | 1,319 | 0 |
| Crow Wing | 649,083 | 169,422 | 26% | 24,280 | 29,164 | 2,094 | 113,884 |
| Dakota | 365,190 | 17,742 | 5% | 2,480 | 3,495 | 11,767 | 0 |
| Dodge | 280,638 | 1,307 | - | 0 | 273 | 1,034 | 0 |
| Douglas | 401,477 | 36,203 | 9% | 27,640 | 5,621 | 2,942 | 0 |
| Faribault | 454,723 | 4,888 | 1% | 0 | 1,882 | 3,006 | 0 |
| Fillmore | 553,101 | 9,575 | 2% | 0 | 7,110 | 2,465 | 0 |
| Freeborn | 449,241 | 5,042 | 1% | 0 | 1,137 | 3,905 | 0 |
| Goodhue | 491,465 | 15,240 | 3% | 6,800 | 5,426 | 3,014 | 0 |
| Grant | 346,226 | 19,588 | 6% | 14,920 | 2,632 | 2,036 | 0 |
| Hennepin | 354,225 | 2,903 | 1% | 0 | 766 | 2,137 | 0 |
| Houston | 364,079 | 29,884 | 8% | 18,840 | 9,303 | 1,741 | 0 |
| Hubbard | 596,829 | 224,746 | 38% | 160 | 84,628 | 2,120 | 137,838 |
| Isanti | 281,302 | 6,803 | 2% | 0 | 3,603 | 3,200 | 0 |
| Itasca | 1,729,322 | 935,741 | 54% | 318,920 | 319,223 | 5,598 | 292,000 |
| Jackson | 446,068 | 7,612 | 2% | 1,960 | 2,930 | 2,722 | 0 |
| Kanabec | 337,535 | 37,281 | 11% | 0 | 23,530 | 1,459 | 12,292 |
| Kandiyohi | 497,292 | 29,659 | 6% | 21,480 | 4,694 | 3,284 | 201 |
| Kittson | 700,372 | 55,121 | 8% | 0 | 53,288 | 1,833 | 0 |
| Koochiching | 1,989,188 | 1,469,509 | 74% | 87,520 | 1,092,669 | 4,320 | 285,000 |
| Lac Qui Parle | 492,698 | 20,829 | 4% | 5,600 | 13,538 | 1,691 | 0 |
| Lake | 1,367,808 | 1,152,369 | 84% | 814,360 | 179,076 | 1,639 | 157,294 |
| Lake of the Woods | 833,821 | 603,134 | 72% | 154,600 | 447,548 | 986 | 0 |
| LeSueur | 283,692 | 4,460 | 2% | 0 | 2,904 | 1,556 | 0 |
| Lincoln | 334,365 | 6,057 | 2% | 0 | 4,835 | 1,222 | 0 |
| Lyon | 453,072 | 11,231 | 2% | 0 | 8,942 | 2,289 | 0 |
| McLeod | 311,488 | 3,356 | 1% | 0 | 1,752 | 1,604 | 0 |
| Mahnomen | 360,983 | 108,162 | 30% | 58,280 | 33,097 | 1,140 | 15,645 |
| Marshall | 1,142,622 | 179,128 | 16% | 61,120 | 115,365 | 2,643 | 0 |
| Martin | 450,521 | 4,014 | 1% | 0 | 1,443 | 2,571 | 0 |
| Meeker | 382,891 | 3,421 | 1% | 0 | 1,331 | 2,090 | 0 |
| Millie Lacs | 365,472 | 74,744 | 20% | 3,560 | 61,668 | 1,506 | 8,010 |
| Morrison | 719,593 | 60,423 | 8% | 0 | 7,207 | 53,216 | 0 |
| Mower | 453,204 | 3,889 | 1% | 0 | 1,335 | 2,554 | 0 |
| Murray | 444,657 | 8,790 | 2% | 0 | 7,367 | 1,423 | 0 |
| Nicollet | 280,866 | 3,159 | 1% | 0 | 819 | 2,340 | 0 |
| Nobles | 454,877 | 4,383 | 1% | 0 | 1,382 | 3,001 | 0 |
| Norman | 559,689 | 7,577 | 1% | 0 | 5,776 | 1,801 | 0 |
| Olmitz | 421,342 | 7,327 | 2% | 0 | 2,889 | 4,438 | 0 |
| Ottertail | 1,267,003 | 60,354 | 5% | 36,280 | 16,515 | 7,119 | 440 |
| Pennington | 391,606 | 5,833 | 1% | 120 | 2,347 | 1,206 | 2,160 |
| Pine | 906,366 | 222,645 | 25% | 960 | 173,203 | 4,207 | 44,275 |
| Pipestone | 296,887 | 2,880 | 1% | 240 | 1,456 | 1,184 | 0 |
| Polk | 1,260,513 | 26,411 | 21% | 7,560 | 13,494 | 5,357 | 0 |
| Pope | 426,102 | 37,954 | 9% | 31,800 | 4,375 | 1,757 | 22 |
| Ramsey | 101,032 | 1,901 | 2% | 0 | 245 | 1,656 | 0 |
| Red Lake | 274,619 | 2,543 | 1% | 0 | 1,764 | 779 | 0 |
| Redwood | 557,474 | 7,388 | 1% | 2,040 | 2,914 | 2,434 | 0 |
| Renville | 621,129 | 2,119 | - | 0 | 266 | 1,853 | 0 |
| Rice | 319,162 | 6,427 | 2% | 0 | 2,451 | 3,976 | 0 |
| Rock | 307,716 | 3,114 | 1% | 0 | 1,246 | 1,868 | 0 |
| Roseau | 1,073,344 | 357,261 | 33% | 32,200 | 254,188 | 2,033 | 68,840 |
| St. Louis | 4,043,532 | 2,280,772 | 56% | 817,400 | 548,875 | 7,827 | 906,670 |
| Scott | 225,900 | 4,469 | 2% | 240 | 2,617 | 1,612 | 0 |
| Sherburne | 280,525 | 31,204 | 11% | 22,960 | 5,235 | 3,009 | 0 |
| Sibley | 372,901 | 2,736 | 1% | 0 | 1,180 | 1,556 | 0 |
| Stearns | 864,521 | 12,061 | 1% | 4,280 | 2,537 | 5,244 | 0 |
| Steele | 273,455 | 3,853 | 1% | 0 | 1,263 | 2,590 | 0 |
| Stevens | 355,335 | 13,857 | 4% | 10,480 | 2,045 | 1,332 | 0 |
| Swift | 475,592 | 19,180 | 4% | 11,000 | 6,319 | 1,861 | 0 |
| Todd | 604,286 | 11,636 | 2% | 0 | 9,378 | 2,258 | 0 |
| Traverse | 363,462 | 16,733 | 5% | 15,360 | 156 | 1,217 | 0 |
| Wabasha | 344,324 | 25,317 | 7% | 13,800 | 9,969 | 1,548 | 0 |
| Wadena | 341,126 | 44,735 | 13% | 0 | 23,952 | 703 | 20,080 |
| Waseca | 268,158 | 3,585 | 1% | 0 | 1,681 | 1,904 | 0 |
| Washington | 254,868 | 8,648 | 3% | 1,680 | 3,347 | 3,621 | 0 |
| Watsonman | 277,051 | 2,106 | 1% | 0 | 942 | 1,164 | 0 |
| Wilkin | 476,389 | 8,268 | 2% | 2,400 | 3,512 | 2,346 | 0 |
| Winona | 406,320 | 42,371 | 10% | 10,720 | 28,147 | 3,504 | 0 |
| Wright | 424,387 | 7,246 | 2% | 0 | 4,538 | 2,708 | 0 |
| Yellow Medicine | 481,686 | 8,129 | - | 1,520 | 4,611 | 1,998 | 0 |
| TOTAL | 51,033,677 | 12,796,731 | 25% | 4,311,560 | 5,199,395 | 281,040 | 3,004,376 |

- (1) Source: Senate Investigative Research Division.
(2) Source: 1973 data from MLHIS.
(3) Source: 1975 data from DNR Land Ownership File (Land Bureau).
(4) Source: Senate Investigative Research Division (includes aeronautics, administration, corrections, public welfare, university, college and some highway lands).
(5) Source: County Auditors contacted by Senate Investigative Research Division (most counties have at least a few scattered parcels of tax-forfeited land).

easements. These lands are primarily reservoirs, locks and dams, and are managed principally for flood control and navigation.

State Natural Resource Lands

State natural resource lands are usually identified in land records or related reports in one of three ways:

- Designated areas or management areas
- Administrative or management categories
- Acquisition categories

Designated Areas or Management Areas. Natural resource land areas which have been established by legislation (for example, State Forests) are called "designated areas". These lands, as well as any other land area managed as a specific land holding, are also called "management areas". The most common examples are State forests, State parks and wildlife management areas. These areas usually have common names (such as Savanna Portage State Park or Whitewater Wildlife Management Area), which are familiar to most people. Some State natural resource lands are not within designated areas or management areas.

Administrative or Management Categories. Centralized State natural resource land record systems (see Chapter Three) usually do not use common names as identifiers. Rather, the lands are aggregated into general land categories. Administrative or management categories refer to the division of DNR responsible for managing the land. There are eight divisions in DNR which manage natural resource lands including: (1) Forestry Division, (2) Parks and Recreation, (3) Wildlife Section, (4) Fish Section of the Fish and Wildlife Division, (5) Mineral Division, (6) Water Division, (7) State Soil and Water Conservation Board, and (8) Enforcement Division.

Acquisition Categories. Acquisition categories generally refer to the means by which the land came into State ownership. Lands may be: (1) acquired directly from private owners through purchase or gift, (2) acquired from private owners through tax forfeiture, (3) transferred or acquired directly from another governmental agency, (4) granted to the State by the federal government for a specific purpose (usually called "trust lands"), or (5) tax-forfeited land for which the State holds a "tax title" (these lands are held in trust by the State for the taxing districts). The overlap between the acquisition and management categories used in State natural resource land records is illustrated in Table 2.

Administrative or Management Categories

State lands under DNR management are classified by administrative or management categories (the two terms are used interchangeably) in centralized natural resource land records. This classification represents

TABLE 2
COMPARISON OF ACREAGE IN MANAGEMENT/ADMINISTRATIVE CATEGORIES AND ACQUISITION CATEGORIES FOR DNR LANDS¹

| Management/ Administrative Categories | Acquisition Categories | | | | | Acquired Lands ⁽⁹⁾ | TOTAL |
|--|---|--|--|----------------------------------|--|----------------------------------|-----------|
| | School Trust Lands ⁽⁶⁾ | Swamp Trust Lands ⁽⁶⁾ | Other Trust Lands ⁽⁶⁾ | Volstead Lands ⁽⁷⁾ | Consolidated Conservation Lands ⁽⁸⁾ | | |
| State Forests | 519,916 | 1,082,827 | 13,885 | 17,785 | 899,775 | 469,265 | 3,003,453 |
| Forestry Outside State Forests ⁽²⁾ | 438,838 | 478,879 | 19,162 | 14,116 | 601,700 | 448 | 1,553,143 |
| Game Lands | 440 | 0 | 0 | 0 | 51,298 | 412,707 | 464,446 |
| Fish Lands | 0 | 0 | 0 | 0 | 0 | 25,928 | 25,928 |
| Park Lands ⁽³⁾ | 0 | 0 | 0 | 187 | 11,685 | 141,867 | 153,738 |
| Waters, Soils & Minerals | 5 | 0 | 0 | 0 | 0 | 2,068 | 2,073 |
| Law Enforcement ⁽⁴⁾ | 0 | 0 | 0 | 0 | 2 | 1,512 | 1,514 |
| Other ⁽⁵⁾ | 0 | 0 | 0 | 0 | 0 | 4,032 | 4,032 |
| TOTAL | 959,199 | 1,561,706 | 33,048 | 32,088 | 1,564,461 | 1,057,827 | 5,208,328 |

(1)Source: DNR Land Ownership system, 1976 (columns may not total exactly, due to rounding of numbers). Tax-forfeited lands are not included in this system.

(2)Managed by Forestry Division, but not within designated State Forests.

(3)Includes State Parks, trails and other recreation lands managed by the Division of Parks.

(4)All public access land, except six acres.

(5)Land not yet assigned to a management category.

(6)Granted to State by federal government for a specific purpose.

(7)Transferred or acquired directly from another government agency.

(8)Acquired from private owners through tax forfeiture.

(9)Acquired directly from private owners through purchase or gift.

divisional responsibilities within the Department of Natural Resources. The categories which are utilized are described below and the acreage in each category is indicated in Table 2.

Designated Areas or Management Areas. The land categories which are composed primarily of designated areas or specified management areas include the following:

1. State Forests. There are 3 million acres of State Forest land in Minnesota (see Table 2). These lands are designated as State Forests by legislation and may not be increased or decreased without specific legislative authorization.
2. Park Lands. These lands (154,000 acres) are managed by the Parks and Recreation Division and include parks, trails and other recreational lands. State Parks are designated as such by legislation.
3. Game Lands. 464,000 acres of game lands are managed by the Game Section of the Fish and Wildlife Division. These lands are primarily lands which have been acquired for the purpose of wildlife preservation and management and are usually called "wildlife management areas".

Non-Designated Areas. The following land categories are composed primarily of lands which are not designated areas or specific management areas.

1. Forestry Lands Outside State Forests. These lands (1.5 million acres) are managed by the Forestry Division, but are not designated by legislation as State Forests. Most of these lands are trust fund lands (see Table 2).
2. Fish Lands. 26,000 acres of fisheries are managed by the Fish Section of the Fish and Wildlife Division. These lands include uses such as spawning areas. Fish and game lands are combined into one category in some natural resource land records.
3. Water, Soils and Mineral Lands. 2,000 acres are managed by the Water, Soils and Mineral Divisions of DNR for administrative purposes of the respective divisions.
4. Law Enforcement Lands. These lands are primarily public access lands (1,508 acres), but also include a few small parcels of land (six acres) used for law enforcement purposes by the DNR.
5. Other Lands Under DNR Administration. These lands (4,032 acres) have not yet been categorized for management purposes into the above categories. New acquisitions are included in this category until they are assigned to a division of DNR for management.

Acquisition Categories

The various acquisition categories found in State natural resource lands are described below. Acreages are indicated in Table 2.

Trust Fund Lands. Trust fund lands are lands which were given to the State of Minnesota by the federal government through land grants. These lands were given to the State with requirements that receipts from the land be used permanently for certain specific purposes. As illustrated in Table 2, trust fund lands are included in various management units of the Department of Natural Resources, although most such lands are managed by the Forestry Division. The various types of trust fund lands are described below.

1. School Lands. School trust lands consisted of two sections in each township in the State and were granted to Minnesota for public school purposes. This federal grant amounted to approximately 2.9 million acres of land, and any revenue from these lands must be used for public school purposes. There are about 959,000 acres of school trust land remaining in public ownership in Minnesota (see Table 2).
2. Swamp Lands. Swamp lands were defined by the U. S. Congress as the whole of those swamps or overflowed lands which were, or might be, found unfit for cultivation. The State was originally granted approximately 4.7 million acres of land under this legislation. Income from swamp lands is deposited into the school trust fund, which must be used for public school purposes. There are about 1.6 million acres of swamp lands remaining in public ownership in Minnesota (see Table 2).

3. Other Trust Fund Lands. There are about 33,000 acres of other types of trust fund lands administered by the Department of Natural Resources. These include: (1) University Lands, (2) Territorial University Lands, and (3) Internal Improvements Lands. Territorial University Lands consisted of 72 sections granted to Minnesota by the United States in 1851. The purpose of the land grant was to support a university in the territory. University Land consisted of 72 sections granted for use in support of a State University. The State also received a grant of 500,000 acres for highway development and other similar public improvements. These lands are called internal improvement lands.

Lands Transferred from Other Government Agencies. Two land categories have been defined which are lands transferred from the federal government to Minnesota without trust requirements. These include:

1. Volstead Lands. 33,200 acres of lands were purchased from the federal government by the State in 1963. Approximately 32,000 acres of these lands remain in State ownership (see Table 2). Most of the lands are managed by the Division of Forestry. Since these lands were not taxable at the time of acquisition, they are not included in the category of "acquired" land. The name Volstead comes from the 1908 federal "Volstead Act", which authorized the federal acquisition of these lands.
2. Salt Spring Lands. Salt Spring Lands were given to Minnesota by the federal government. They are not considered trust lands because the State Legislature was given complete freedom of distribution and allocation of receipts from the lands. In 1873, the Legislature transferred these lands and their revenues to the University. Since the lands are managed by the University, they are not considered natural resource lands and are not included in natural resource land records.

Lands Acquired Through Tax Forfeiture. "Conservation Area Lands" include the Red Lake Game Preserve in Koochiching, Beltrami and Lake of the Woods Counties, and several reforestation areas in Aitkin, Mahnomon, Roseau, and Marshall Counties. They were lands originally forfeited for non-payment of ditch bond assessments. The State acquired clear title by paying the delinquent assessments, thus preventing county bankruptcies. Revenues from these lands form the Consolidated Conservation Fund (see Chapter Four), which must be accounted for in a separate land category. There are approximately 1.6 million acres of these lands remaining in Minnesota. As can be seen in Table 2, Conservation Area Lands are managed by the Forestry Division, the Wildlife Section and the Parks and Recreation Division.

Acquired Lands. All remaining natural resource land is considered "acquired" land. Lands may be acquired from private owners by purchase or gift. About 1 million acres of State natural resource lands (20 percent) in Minnesota have been acquired by the State for specific management purposes.

Tax-Forfeited Lands

Tax-forfeited lands are lands which were forfeited to the State through non-payment of taxes and are held in trust by the State for the taxing districts. Title to the land is a "tax title" and is not considered a clear, legal title of ownership. While title to the land is held by the State, tax-forfeited lands are administered by the counties. Most counties have scattered parcels of tax-forfeited lands, but 19 counties in the State have over 5,000 acres of tax-forfeited land (see Figure 2). Twelve of these counties have Land Commissioners whose primary responsibility is the management and sale of tax-forfeited lands (see Figure 2).

MSA 282.01 states, ". . .it is the general policy of this State to encourage return of tax-forfeited lands to private ownership and the tax rolls through sale. . .". Chapter 282 also sets forth guidelines for the classification and sale of tax-forfeited lands. Counties may, by resolution of the County Board, set aside tax-forfeited lands as "memorial forests" which are managed for forestry purposes. Land may be withdrawn from memorial forests for the purposes of sale, if approved by the County Board and the Commissioner of the Department of Natural Resources. In addition, all other tax-forfeited land must be classified by the County Board as "conservation" or "non-conservation" land. While the same terminology is used, these lands are not the same as Conservation Area Lands, described previously, which are fully owned by the State of Minnesota and managed by the Department of Natural Resources. Not all counties have classified their tax-forfeited lands into these respective categories.

The State exercises considerable control over the sale of tax-forfeited land, even though its stated policy is to encourage sale. DNR is required to review all proposed sales of tax-forfeited land to assure that: (1) no State land is involved, (2) the tax-forfeited land does not border a water body or water course, (3) the tax-forfeited land is not in a DNR mineral unit, (4) the tax-forfeited land is not within a State Park (if so, it goes automatically to the State Park), (5) the timber value is appraised by the county, and (6) the land is not in a memorial forest (if so, it must be removed from such status by the Commissioner of the DNR before it can be sold). If the DNR approves the proposal, the land is sold at a public auction. It may not be sold for less than its appraised value. Except in the case of State Parks and those conditions stated above, the State may acquire full title to these lands only through direct purchase from the county or through gift of the county to the State.

Principal Observations and Conclusions

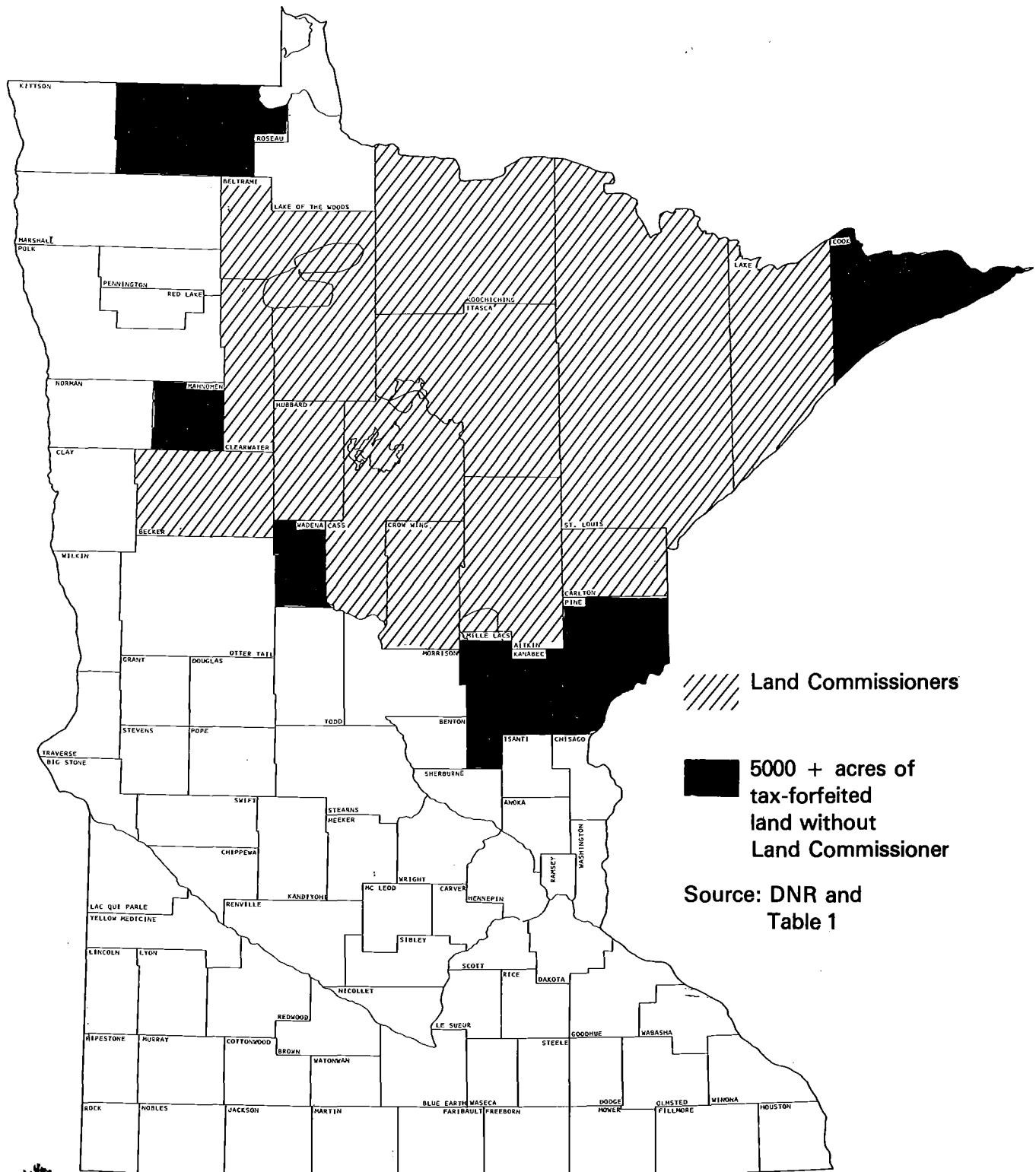
Some important issues have been raised during the first phase of the Public Land Impact Study which, while beyond the direct scope of the consideration of in-lieu-of-tax payments, are listed here for future consideration.

1. There is a need for overall coordinated State land ownership policies regarding acquisition, disposal and management of land, particularly those lands not within designated management units. Overall policies

related to acquisition are being pursued and management plans for specific management areas are being developed. However, there appear to be no general stated policies related to land disposal. There also appears to be inadequate coordination among the various agencies and individuals responsible for managing various State natural resource land holdings, due in large part to unclear, unstated or conflicting management policies.

2. The current stated State policy is to encourage the sale of tax-forfeited land. However, the law also provides for the dedication of these lands to perpetual public use and sets forth many conditions under which the State may control or prevent the sale of certain tax-forfeited land. In addition, there is no easy means for the State to acquire clear title to these lands, when desirable, except in the case of State Parks. This confusing situation suggests that several policy issues should be evaluated including:
 - a. Policies to discourage the sale of tax-forfeited lands already dedicated for perpetual public use.
 - b. Policies to more strongly encourage the sale of tax-forfeited lands not suitable for dedication to public use.
 - c. Policies encouraging State acquisition of clear title to tax-forfeited land located within designated areas or management areas (e.g., State Forests, wildlife areas, etc.).
3. The use of overlapping land category systems (i.e., acquisition categories and management categories) has caused considerable confusion regarding the types of public lands and their management. Greater dissemination of information about the land categories to be used should help alleviate some of the current misunderstandings. The discontinuation of bookkeeping by acquisition categories, except where constitutionally or federally required, also appears appropriate. This would, however, require changes in State legislation related to payments for natural resource lands. These implications are discussed in Chapter Four.
4. This study has not addressed public policy with respect to natural resource land acquisition, disposal or management. However, some observations have emerged:
 - a. There are limited incentives and, consequently, virtually no activity to evaluate natural resource lands which could be returned to private ownership (particularly lands outside designated management areas). Current accounting practices which return lease payments, but not sale proceeds, to the managing public agency may artificially support property retention.

COUNTIES WITH TAX-FORFEITED LAND AND LAND COMMISSIONER OFFICES



Land Commissioners

5000 + acres of tax-forfeited land without Land Commissioner

Source: DNR and Table 1



FIGURE 2
Minnesota Public Lands Impact Study

Legislative Commission on Minnesota Resources
in cooperation with the
Tax Study Commission and Barton-Aschman Associates, Inc.

Scale 1:1,000,000

0 5 10 25 50 MILES
0 5 10 25 50 KILOMETERS

- b. There appears to be no active, aggressive solicitation of private uses to engage in activities supportive of the management plan (e.g., timber harvesting, agricultural use, etc.). These activities (and, consequently, revenues) occur mainly upon a request basis.

CHAPTER THREE

STATE AND COUNTY NATURAL RESOURCE LAND RECORDS

Several different land record systems are currently maintained by various Minnesota state agencies. In addition, county land records related to natural resource lands vary considerably. This multiplicity of records has given rise to some conflicting information and considerable misunderstanding about the purpose and scope of each system. Previous efforts to evaluate land records systems have identified most existing land record systems and have collected data on the various types and amount of natural resource lands in the State. However, most research efforts were terminated at that point, leaving relatively little understanding of any of the available systems. Accordingly, one of the early tasks in the first phase of the Public Lands Impact Study was to conduct a more in-depth investigation of these land record systems to evaluate their accuracy, currency, comprehensiveness and compatibility. An investigation was also made of the existing county land record systems in two pilot areas (see Chapter Five). The purpose of this chapter is to summarize this research effort and suggest recommendations related to public natural resource land record systems in Minnesota.

State Natural Resource Land Records

Centralized State land record systems are presently maintained by at least the following State agencies, offices and institutions:

1. The Land Bureau, Department of Natural Resources, maintains the Land Ownership System (LOS).
2. The Environmental Planning and Protection Bureau, DNR, maintains the Land Classification System (LCS).
3. The Parks and Recreation Division of DNR maintains the State Comprehensive Outdoor Recreation Plan (SCORP) system, which is an inventory of outdoor recreation facilities and resources.
4. The Center for Urban and Regional Affairs (CURA) of the University of Minnesota currently maintains the Minnesota Land Management Information Systems (MLMIS), which was developed for the State Planning Agency. This system includes all lands in the State whether privately or publicly owned.

5. The Departments of Highways and Aeronautics, presently within the Minnesota Department of Transportation, maintain records of lands under their respective jurisdictions, namely State highways and airport rights of way. Because these lands are not natural resource lands, these systems were excluded from analysis in this first phase of the Public Lands Impact Study.
6. The Minnesota Historical Society keeps records of historical sites or cultural resources which it owns.
7. The Land Documents Section of the Department of Finance maintains the manually operated Land Records File of the legal documents for: (a) all lands which are acquired or disposed of through the Department of Administration, (b) DNR lands (except trust fund lands and tax-forfeited lands administered by the counties, and (c) highway and aeronautics lands.

In addition to these land record systems, financial records for revenues and most payments to local governments related to State natural resource lands are available through the Fiscal Section of DNR Administrative Services. Each of the State land record systems related to natural resource lands is described more fully below. The information available from each system is outlined in Table 3.

Land Ownership System (LOS). This system was initiated in 1964-65 and is used primarily for administrative purposes. The LOS includes only State-owned lands which are administered by the Department of Natural Resources. It does not include tax-forfeited lands administered by the counties, although it is designed to include data on these lands if the appropriate information were coded. Summary reports (called "sections") may be obtained for individual counties and the State and include: (1) State-owned acreage by land class broken down by management unit number, (2) mineral status of acreage owned by the State, and (3) total State-owned acreage by administrative unit and by means of acquisition. The information available from the LOS is identified in Table 3. Most information for the LOS is taken directly from transaction documents provided by the individuals handling land acquisition and disposal. Both initial coding and editing is done by the Land Bureau. Files are updated annually. It is estimated by DNR that acreage and ownership records in this land record system are accurate to within 1 percent. Because of this high level of accuracy, the LOS was used as the data base for State natural resource land ownership in the first phase of the Public Lands Impact Study.

Land Classification System (LCS). The LCS was initiated by DNR in 1969-70 as a land management planning tool. It includes all DNR-administered lands, as well as most tax-forfeited lands which are administered by the counties. Summary reports are available for townships, counties and the State and include: (1) acreage by estimated highest land use classification, ownership and use, (2) acreage by estimated next highest use

TABLE 3
COMPARISON OF CENTRALIZED STATE NATURAL RESOURCE LAND RECORD SYSTEMS¹

| Available Information | Land Ownership System (LOS) | Land Classification System (LCS) | MLMIS | SCORP | Land Records File ⁽³⁾ |
|-----------------------------|---|---|--|--|---|
| Location | County, township, range, section | County, township, range, section; latitude & longitude; location in national park | County, township, range, section; minor civil division; school district | County, township, range, section; latitude & longitude | County |
| Identification | Forty or lot location and lot number | Forty or lot location and lot number | Forty or government lot | Parcel | Internal file number; parcel, govt. lot, block, etc. |
| Acreage Description | P, F, E, R ⁽²⁾ To 100th of acre | P, F, E ⁽²⁾ To 100th acre | Forty-acre units | -- | -- |
| Ownership | Extent of State ownership | County or State and acquisition method | Public ownership (LCS) | Ownership | Department or agency involved |
| Acquisition | Funding authorization & method of acquisition | Method of acquisition | Method of acquisition (LCS) | -- | -- |
| Contract | Type of land sale contract, if any | -- | -- | -- | Type of instrument (deed, exchange, warranty deed, lease, transfer of custodial control, etc.); executioner of instrument |
| Administration/Management | Administering division of DNR | In or out of management unit | Management unit status (LCS) | Administration | Department or agency involved; purpose of property |
| Unit Identification Numbers | State forests, State parks, Game, Fish | State forests, County forests, Federal forests, Game & Fish, State and county parks, Lakes & watersheds | -- | Management area, recreation area | -- |
| Minerals | Extent of mineral ownership | Mineral lease and potential | Mineral potential | -- | -- |
| Encumbrances | -- | Permits, leases, easements, etc. | Copper-nickel leases | -- | -- |
| Intensity of Management | -- | Extensive or intensive | Highest recommended use (LCS) | -- | -- |
| Disposition | -- | Conservation, custodial, sale, exchange | Recommended disposition (LCS) | -- | -- |
| County Zoning | -- | According to local ordinances | Zoning classification | -- | -- |
| Accessibility | -- | By road, water, not accessible, etc. | Accessibility to service centers; highway orientation; water orientation | -- | -- |
| Other Information | -- | -- | Soil landscape unit; soil associations, land use, forest cover, geomorphic region, bedrock geology | 25 types of recreation facilities and resources | -- |

(1) Source: Individual managing agencies.

(2) P: part of the parcel is owned; F: fractional parcel, the parcel is not a forty and does not have a government lot number; E: acreage estimated for part of a forty; R: resurveyed parcel.

(3) Manual system (Land Documents, Department of Finance).

classification, ownership and use, (3) acreage by type of acquisition, ownership and use, (4) acreage by recommended disposition, ownership and use, (5) acreage by intensity justified, ownership and use, and (6) acreage by management of land ownership and use. Information provided by the system is outlined in Table 3. Data input originates primarily from the area foresters in consultation with district and county personnel. Data accuracy is affected by several factors, including: (1) data coding is provided by field offices, (2) several data items involve subjective judgment, (3) some data items such as land encumbrances change rapidly, (4) some data provided by counties may be unreliable or out-of-date, and (5) updating occurs only every two to four years.

Efforts are currently under way to merge the LOS and LCS. While the initial merge is expected to be completed by the summer of 1977, it is anticipated that dual systems will have to function for an unspecified period of time. Decisions have not yet been made regarding which data items in the LCS will be maintained. It is likely that some data items will be eliminated and less reliance will be placed upon data received from the field offices. While the LCS provides considerable management information and includes recommendations for disposition and future land management, it was not used as a data base for the first phase of the Public Lands Impact Study because of the variations in data accuracy at the present time.

State Comprehensive Outdoor Recreation Plan (SCORP). The SCORP inventory system was initiated in 1971 and is intended to maintain an inventory of both public and private outdoor recreation facilities and resources in Minnesota. This system is still in the developmental stages -- private recreation areas and facilities are presently being coded into the system. It is estimated that 80 percent of existing outdoor recreation facilities will be included in the system when this coding is completed. The information available is listed in Table 3. An annual report is published which summarizes outdoor recreation areas and facilities in the State by county. Computer printouts, maps and map sheets indicating the location and facilities of each area to the nearest ten acres may also be requested. Data is collected by sending forms to the managers of existing and new facilities requesting information. This information is coded by the Parks and Recreation Division and a second form is sent out for validation. While ambiguity is required in some data and the length of the form may introduce a certain amount of unreliability, the efforts to validate information should make the system relatively reliable. The first updating effort was undertaken in 1975-76, but most available data is for 1975. While this data system provides important information with regard to recreation facilities and resources in the State, its purpose is limited to only a portion of State natural resource lands in Minnesota. Therefore, it was not considered an appropriate data base for use in the first phase of the Public Lands Impact Study and would not be an appropriate system for maintaining comprehensive land ownership records.

Minnesota Land Management Information System (MLMIS). The MLMIS project was initiated in 1967 with the Minnesota Lakeshore Development Study and was expanded to its present form in 1970 with the Map Land Use Study. Its primary purpose is to improve the quality of land use and resource management decisions, and it is best suited for analysis and testing of gross assumptions and policy questions. The MLMIS contains the most extensive data base of all land record systems in the State. It is the only centralized record system which includes all types of land, both public and private.

Natural resource land ownership data is available for federal, State, county, and municipal governments. However, the size of the data base and its use for computerized mapping have required that data be reported in the more aggregated form of frequency counts of standardized 40-acre parcels. Data is not available for individual parcels and acreage is estimated from the "forty" frequency counts. Forties are also standardized to fit into a perfect grid for mapping purposes. The resulting error is estimated at 1.5 percent at the State level. Errors are probably greater when smaller subdivisions are considered. Information which is available from MLMIS is listed in Table 3.

The MLMIS has the capability of providing cross tabulations of any variables in terms of frequency counts. Maps are also available as computer printouts in which dots represent 40-acre parcels. These maps are coded with various symbols to represent different categories within the specified variable. Data currency for information ranges from 1962 to 1974, and almost all data are obtained from other source agencies. Most data for State natural resource lands were obtained from the LCS.

In general, the reliability of the MLMIS data depends upon the type of information, the agency involved, and the manner in which the information was gathered. No updating procedures exist at the present time because the system is still in the developmental stage. While this system is extensive and will be extremely useful in policy decision-making and land use planning, it is not considered an appropriate data base for the purposes of land administration, due to the aggregate nature of the data. However, MLMIS estimates of federal land ownership were used for the first phase of the Public Lands Impact Study because they were the only composite estimates readily available for federal lands.

Land Records File. The Land Records File is maintained by the Land Documents Section of the Department of Finance and is a manually operated system containing records of all land transactions involving sale, acquisition, exchange, lease, condemnation, and disposal of land by the Department of Administration, Department of Natural Resources and Department of Transportation, as well as State land purchases not channeled through any of these departments (for example, the Minnesota Zoological Gardens). The system's primary purpose is as a repository of legal documents. The Land Records File should contain the legal documents for all State lands, except DNR trust fund lands and county-administered,

tax-forfeited lands. The information available for each land record is identified in Table 3. This information is taken directly from the original transaction documents which are sent to the Department of Finance from the different agencies involved in land acquisition and disposal. No summary reports are available.

The Department of Finance also maintains records on all financial transactions of the State. However, these records are maintained by vendor -- no special provision exists for extracting data related to land transactions, property classifications, or payments in lieu of taxes.

Minnesota Historical Society. The Minnesota Historical Society has been in existence in its present form since 1969. The Society maintains records on land which it owns, as well as a State Registry of 171 historical sites. The records in the State Registry are currently being included in the SCORP inventory. In addition, any historical sites located on DNR-administered land are included in the LOS, LCS and SCORP systems. Therefore, the records of the Historical Society were not considered useful for the first phase of the Public Lands Impact Study.

DNR Fiscal Section. The DNR Fiscal Section maintains records of all revenues from DNR land. An annual receipt report is available as a computer printout in which the amount received is specified according to a receipt code representing the source of the revenue. The Fiscal Section also maintains records on most payments to local governments for natural resource lands.

Field Records. Land records are also maintained by DNR field offices for field management purposes. These records are limited to lands under the jurisdiction of each manager or field office. Field records are also maintained by federal field offices.

County Land Records

Records on public natural resource lands may be maintained at the county level by: (1) a Land Commissioner, (2) the County Recorder or Registrar of Deeds, (3) the County Assessor or County Auditor, and (4) the county planning or zoning department. Each of these county record systems is described briefly below. It should be noted that county land records were evaluated only in the two pilot areas (see Chapter Five). Previous studies indicate that county land records may vary widely from one county to another. A generalized summary of data available from State and county land records is presented in Table 4.

County Land Commissioner. The primary responsibility of the Land Commissioner is to manage tax-forfeited lands within the county. He is responsible for administering the sale of tax-forfeited lands and he may also assist the State in selling Conservation Area lands. Only 12 counties, including the Aitkin County pilot area, currently have Land Commissioners (see Figure 2 in Chapter Two). The Land Commissioner in Aitkin County maintains the following land records:

TABLE 4
SUMMARY OF STATE AND COUNTY NATURAL RESOURCE LAND RECORDS¹

| Data Items | State Record Systems | | | | | Pilot Counties ⁽²⁾ | | | | |
|--|------------------------------------|--------------|----------------------------|-------------|--|-------------------------------|---------------------------------|----------------------------------|-------------------------|--|
| | LCS (DNR) | LOS (DNR) | SCORP (DNR) | MLMIS | Dept. Finance | Fiscal (DNR) | Land Commissioner | Recorder or Registrar | Assessor or Auditor | Planning Director or Zoning Administrator |
| Types of Land in System | DNR & Tax- forfeited land | DNR | Outdoor Recrea- tion | All land | State acquired land ⁽³⁾ | - | Tax-forfeited land | All land | All land ⁽⁴⁾ | All land |
| Legal description/ location | X | X | X | X | X | - | X | X | X | General location |
| Acreage | X | X | X | approx. | - | - | X | - | X | - |
| Current owner | X | X | X | X | X | - | X | X | X | - |
| Previous owner | - | - | - | - | - | - | - | X | - | - |
| Type of transaction | - | Partial | - | - | X | - | In some cases | X | - | - |
| Limitations or encumbrances | X | - | - | Partial | - | - | X | If included in legal document | - | - |
| Land use | X | X | X | X | - | - | X | - | X | X |
| Facilities/structures | - | - | X | - | - | - | X | - | X | X |
| Market or appraised value | - | - | - | - | - | - | - | Purchase price in some cases | X | - |
| Revenues from public lands | - | - | - | - | - | X | From tax- forfeited lands | - | - | - |
| Services provided by local community to public lands | - | - | - | - | - | - | - | - | - | - |
| Payments related to public lands | - | - | - | - | - | X | - | - | - | - |
| Benefits to local communities | - | - | - | - | - | - | - | - | - | - |
| Use statistics | - | - | X | - | - | - | X | - | - | In some cases |

(1) The symbol "X" indicates that the data is available.

(2) Based on two pilot areas.

(3) Does not include trust land or tax-forfeited lands.

(4) May not include tax-forfeited land and certain types of tax-exempt property.

1. Copies of all leases and timber sale permits.
2. A card file on tax-forfeited land showing the location, size, record of timber sales, species, and volume of timber harvested from each 40-acre parcel. Land classification, recommendation on disposition, management data, topography, soil, and other miscellaneous data is reported for each 40-acre parcel. Much of this information comes from the DNR Land Classification System (LCS) described in the preceding section.
3. A series of one-of-a-kind township maps recording the public and private land ownership in the county.
4. A one-of-a-kind, color-coded plat book showing land ownership in the county.
5. DNR Land Classification System data is maintained and updated twice a year by the county land classification committee.
6. Payments records related to the sale of tax-forfeited and Conservation Area lands.

All of the Land Commissioner's records in Aitkin County are updated each year based upon a list of tax-forfeited lands provided by the County Auditor.

County Recorder or Registrar of Deeds. The County Recorder or Registrar of Deeds is responsible for maintaining a file of legal land transaction documents for all lands in the county. These records typically contain the original instrument, grantor, grantee, date of transfer, legal description of the property, and occasionally the sale price and/or the State deed tax. Records can usually be accessed by document number, grantor index (previous owner) or grantee index (current owner). While acreage can be calculated from the legal description of the land with some difficulty, specific data such as acreage, structures, and any other related information is usually not included in this legal document file. A "Certificate of Real Estate Value" must now be submitted to the State Department of Revenue whenever a land transaction occurs. These certificates include fairly detailed information about the land, structures on the land, land value, purchase price, and method of acquisition. Information on tax-forfeited properties is usually provided to the County Recorder by the County Assessor or the County Auditor.

County Assessor. The County Assessor's records varied in the two pilot counties evaluated (see Chapter Five). The Winona County Assessor maintains records on all public and private lands. An "assessment summary sheet" is prepared for each parcel of land describing the land, structures on the land, zoning or land use, and property values. Less data is collected for public lands than private lands. Records are updated every six years. The Winona County Assessor is also responsible for identifying and appraising tax-forfeited lands. In Aitkin County, the County Assessor does not appraise each parcel of public land. Rather, a general estimate of land value is made. Tax-forfeited land, public housing, telephone utility, and railroad properties are not included in the Aitkin County Assessor's records.

County Auditor. The Aitkin County Auditor maintains a tax list of all property in the county. This tax list records the owner (public or private), location, size of parcel, estimated market value on private land, and assessed value. Land records are the responsibility of the County Assessor in Winona County.

County Planning Department or Zoning Administrator. The County Planning Department or Zoning Administrator in the two pilot counties did not maintain official land records. However, zoning and general land use recorded on county or township maps are usually available in these offices.

Principal Observations and Conclusions

The evaluation of State and county natural resource land record systems has led to the following principal observations and conclusions with regard to land recordkeeping in Minnesota:

1. All natural resource land record systems were designed for different purposes. The LCS is used for departmental land management; the LOS is used for administrative land record purposes; the MLMIS is designed for statewide land use policy planning; the SCORP system inventories only recreational facilities; and the Land Records File is a repository of legal documents. County land records include legal documents, records for tax purposes, and records for county land management. There are both gaps and overlaps in available data. None of the record systems have been developed for the purpose of determining any differentials in service requirements by land use or management type.
2. From the point of view that each State system uses the 40-acre parcel as its basic input, all systems can be considered to be relatively compatible. However, there are enough differences among them relating to coding conventions, definition of variables, and focus to limit the free transfer of data among the systems. The usefulness of available land record systems would be greatly enhanced by improving the compatibility of existing systems.
3. Most of the systems are flexible enough to permit expansion or alterations. The limiting factors are not dependent upon the system so much as they are on the availability of information, its ease of collection, and the associated cost. Accuracy and currency of land records are directly related to the number of individuals and agencies upon which the system is dependent, as well as the amount of data that the system requires. Only the LOS is updated annually at the present time. Other land record systems would be more useful if the integrity of the data could be improved.
4. The land record systems best suited for evaluating the impacts of State natural resource lands and for use in determining any payments in lieu of taxes, if legislation were enacted, are DNR's Land Ownership System and Land Classification System. The planned merge of these two systems will reduce duplication of data gathering and coding efforts, and will clarify the ambiguities that currently exist in the LCS. Although the Minnesota Land Management Information System (MLMIS) has the most extensive data base and exhibits a great deal of flexibility, its usefulness for the purposes of this study is limited because of the aggregated form in which the data are available.
5. While property record integration is probably more efficient from a systems point of view, it is likely that the integration of records would reduce the effectiveness with which the agencies use the information because direct access would be removed. Rather than integrating the existing systems into one massive data base, they should be made directly compatible with one another. Any central system should be an overview system with key information bits and format determined by and utilized by all governmental jurisdictions compiling individual record files.

6. No composite clearinghouse exists for maintaining a comprehensive, all-inclusive listing of payments to local governments.
7. Working, composite land record systems at the State level are relatively recent efforts.
8. Any payments system for natural resource lands (if legislation were enacted) should utilize the DNR Land Ownership System, as adapted by the merge with the Land Classification System. Counties should be required to provide data to this system on tax-forfeited lands. If the payments system includes other types of tax-exempt lands, a State land records clearinghouse combining departmental land records would be desirable. This "clearinghouse" would utilize existing system files to provide comprehensive information on State lands and to determine payments.

CHAPTER FOUR

CURRENT PAYMENTS IN LIEU OF TAXES FOR NATURAL RESOURCE LANDS

Both the State and federal governments currently make direct payments in lieu of taxes to local governments for specific types of natural resource lands in Minnesota. In addition, both State and federal agencies make payments for some local services, including special aid for road construction, contractual arrangements for the provision of specific services (for example, fire protection), service charges for utilities, and payment of special assessments. In addition, residences on State lands are subject to real estate taxes under certain circumstances. Finally, a number of categorical grants provided by the State to local units of government are based upon equalization or need formulae which indirectly support services required as a result of activities on natural resource lands. It is clear that individual taxpayers are unaware of many direct payments and do not understand the relationship between State and federal aid and public natural resource lands. The purpose of this chapter is to identify and describe the various types of direct payments and indirect aid which is related to public natural resource lands.

Direct Long-Term State Payments for Natural Resource Lands

Long-term direct payments in lieu of taxes, which are currently authorized by State legislation for natural resource lands in Minnesota are summarized in Table 5. These payments include: (1) Game and Fish Fund, (2) Wild Goose Management Areas, (3) Consolidated Conservation Areas Fund, (4) State Forest Fund, (5) Mining royalties on tax-forfeited lands, (6) decorative tree harvesting, and (7) rentals as a condition of sale. Each of these long-term direct State payments is described below. Recipients of long-term State payments are identified in Figure 3 and Table 6.

Game and Fish Fund. Minnesota Statute 97.49, Subdivision 3, provides the legal authorization for the Department of Natural Resources to make payments in lieu of taxes from the Game and Fish Fund. Payments under this authorization are made for game refuges and public hunting grounds (all within wildlife management areas) and are based upon either 35 percent of gross revenues or 50¢ per acre, whichever is greater. Almost all counties receive payments from these funds based upon acreage rather than revenue (see Table 6). Monies are redistributed to the taxing districts as if the payments were taxes on the land.

Wild Goose Management Areas over 1,000 Acres. Subdivision 7 of MSA 97.49 provides the legal authorization for payments based upon appraised value for Wild Goose Management Areas over 1,000 acres. The only land in

TABLE 5
CURRENT STATE PAYMENTS TO LOCAL GOVERNMENTS IN MINNESOTA FOR NATURAL RESOURCE LANDS¹

| Name of Fund and Statute | Agency Administering Fund | Eligible Land | Basis for Payment | Allocation Formula |
|---|--|--|--|--|
| DIRECT LONG-RANGE PAYMENTS | | | | |
| - Game and Fish Fund (MSA 97.49 subd. 3) | DNR Land Bureau | Acquired land in game refuges and hunting grounds | 35% of gross receipts (permits and leases) or 50¢/acre, whichever is greater | To counties; redistributed as if payments were taxes on the land to towns and school districts wherein land lies |
| - Wild Goose Management Areas (MSA 97.49 subd. 7) | DNR Land Bureau | Wild Goose Management areas over 1,000 acres | Equivalent to taxes on land assessed on same basis as adjacent lands | To counties; redistributed as if payments were taxes on the land (monies under subd. 7 used as a credit against amount payable under subd. 3) |
| - Consolidated Conservation Areas Fund (MSA 84A.51) | DNR Land Bureau | Conservation Areas (see Chapter Two) | 50% of gross revenues, plus up to \$1,000 for administrative assistance | To counties; redistributed as follows: 30% to county development fund 40% to school district capital outlay fund from which derived 20% to county revenue fund 10% to township road and bridge fund from which derived |
| - State Forest Fund (MSA 89.036) | DNR Forestry Division | Acquired land in State Forests | 50% of gross revenues | To counties; redistributed as if payments were taxes on the land |
| - Mineral Royalties on Tax-Forfeited Land (MSA 93.283 and 93.335) | DNR Mineral Division | Tax-forfeited land managed by counties | 80% of gross royalties | To counties; redistributed 3/9 to county, 2/9 to municipalities, 4/9 to school districts |
| - Decorative Tree Harvesting (MSA 90.50) | DNR Forestry Division | DNR lands not included in above authorizations | Total amount of rental for lands leased to harvest stagnant swamp trees for Christmas trees and other decorative purposes | To counties; redistributed in proportion to mill rates |
| - Rent as a Condition of Sale (MSA 272.68) | DNR Fiscal Section | Lands rented to previous owner as a condition of sale | 30% of rental received | To County Treasurer to be distributed in the same manner as property taxes |
| DIRECT SHORT-RANGE PAYMENTS | | | | |
| - Voyageurs National Park (MSA 84B.07) | Dept. of Finance | New acquisitions for Voyageurs National Park | For newly-acquired land: 80% of last tax in 1st year, 60% in 2nd year, 40% in 3rd year, 20% in 4th year | To counties; redistributed to various taxing districts in same proportion as levy of taxing districts to total levy on property in last year of taxes |
| - Wild River State Park (Chapter 567, Section 7, 1973 Laws) | Dept. of Finance | New acquisitions for St. Croix Wild River State Park | When privately-owned land acquired for Wild River State Park, State pays 90% of last tax payment in 1st year, 80% in 2nd, 70% in 3rd, 60% in 4th, 50% in 5th, 40% in 6th, 30% in 7th, 20% in 8th, and 10% in 9th | To counties; redistributed to various taxing districts in same proportion as levy of taxing districts to total levy on property in last year of taxes |
| TAXATION OF STATE PROPERTY | | | | |
| - Residential Real Estate Taxes (MSA 272.011) | DNR Asst. Commissioner of Administration | Residences on State land used by State employees | Real estate taxes to counties based on assessed value of structure and small area of contiguous land | To counties; redistributed as other real estate taxes |
| - Special Assessments | DNR Asst. Commissioner of Administration | Improvements to public lands | Payment at discretion of State agency | To local government making improvement |
| - Leases for Businesses Conducted for Profit (MSA 272.01 subd. 2) | Counties | Property leased for certain businesses conducted for profit | Leasee may be taxed as if he were the owner | From the leasee to the State or to the political subdivisions that assess the taxes |
| - Leases over Three Years (MSA 273.19) | Counties | Properties leased for three or more years not covered by MSA 272.01 subd. 2) | Leasee may be taxed as if he were the owner | From the leasee to the taxing districts |
| REVENUES FROM TAX-FORFEITED LAND | | | | |
| - Revenues from Tax-Forfeited Land (MSA 282.02) | Counties | Tax-forfeited land managed by the counties | All revenues | To counties; redistributed as follows: - Payment for public improvements by municipalities - Special assessments - Bond issues - Remaining county may use: (a) 30% for timber development and (b) 20% for parks and recreation. Remainder of total if (a) and (b) not used: 40% to counties, 20% to municipalities, 40% to school districts |

(1) Source: Barton-Aschman Associates compilation from information provided by various divisions of DNR and Department of Finance.

RECIPIENTS OF STATE LONG RANGE PAYMENTS IN LIEU OF TAXES FOR NATURAL RESOURCE LANDS (FISCAL 1975)*

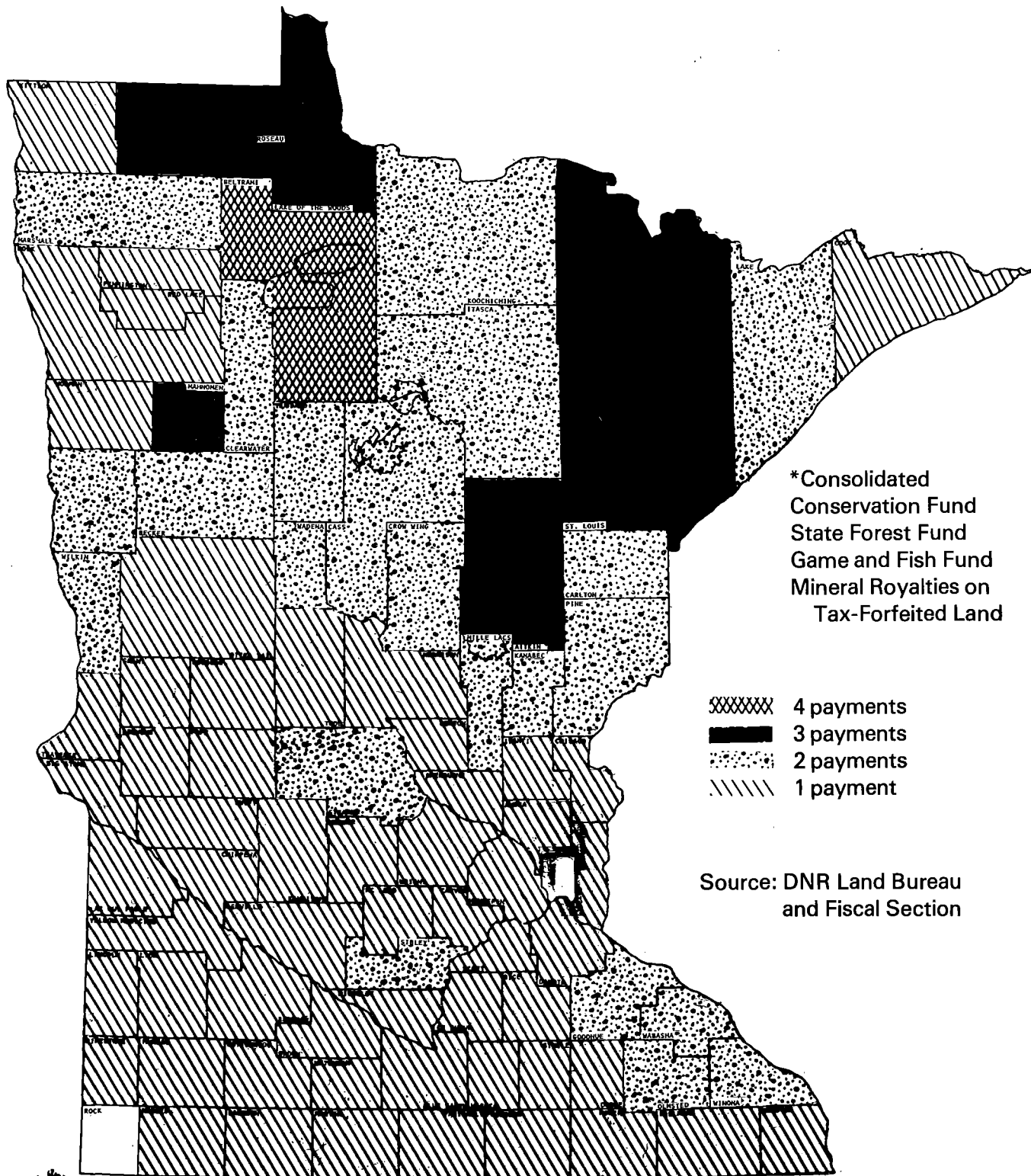


FIGURE 3

Minnesota Public Lands Impact Study

Legislative Commission on Minnesota Resources
in cooperation with the
Tax Study Commission and Barton-Aschman Associates, Inc.

Scale 1:1,000,000

0 5 10 25 50 MILES
0 5 10 25 50 KILOMETERS

TABLE 6
ESTIMATED LONG-TERM STATE PAYMENTS TO COUNTIES BY DEPARTMENT OF NATURAL RESOURCES IN FISCAL 1975¹

| County | Consolidated Conservation Fund | State Forest Fund | Game and Fish Fund | Mineral Royalties on Tax-forfeited Lands | Total Payments |
|-------------------|--------------------------------------|-------------------------|-----------------------------|---|----------------|
| Aitkin | \$33,582 | \$ 9 | \$ 996 | - | \$ 34,587 |
| Anoka | - | - | 6,939 | - | 6,939 |
| Becker | - | 14,026 | 1,681 | - | 15,707 |
| Beltrami | 33,993 | 1,565 | 392 | \$ 26 | 35,976 |
| Benton | - | - | 495 | - | 495 |
| Big Stone | - | - | 1,430 | - | 1,430 |
| Blue Earth | - | - | 355 | - | 355 |
| Brown | - | - | 1,289 | - | 1,289 |
| Carlton | - | 3,602 | 20 | - | 3,622 |
| Carver | - | - | 132 | - | 132 |
| Cass | - | 4,063 | 588 | - | 4,651 |
| Chippewa | - | - | 10,278 | - | 10,278 |
| Chisago | - | - | 3,857 | - | 3,857 |
| Clay | - | 2 | 2,282 | - | 2,284 |
| Clearwater | - | 2,168 | 658 | - | 2,826 |
| Cook | - | 21 | - | - | 21 |
| Cottonwood | - | - | 3,069 | - | 3,069 |
| Crow Wing | - | 14 | 337 | - | 351 |
| Dakota | - | - | 784 | - | 784 |
| Dodge | - | - | 40 | - | 40 |
| Douglas | - | - | 1,891 | - | 1,891 |
| Faribault | - | - | 999 | - | 999 |
| Fillmore | - | 8,436 | - | - | 8,436 |
| Freeborn | - | - | 112 | - | 112 |
| Goodhue | - | 1,407 | 177 | - | 1,584 |
| Grant | - | - | 1,187 | - | 1,187 |
| Hennepin | - | - | 25 | - | 25 |
| Houston | - | 1,360 | - | - | 1,360 |
| Hubbard | - | 7,813 | 153 | - | 7,966 |
| Isanti | - | - | 697 | - | 697 |
| Itasca | - | 3,630 | - | 140,633 | 144,263 |
| Jackson | - | - | 2,685 | - | 2,685 |
| Kanabec | - | 516 | 1,523 | - | 2,039 |
| Kandiyohi | - | - | 1,332 | - | 1,332 |
| Kittson | - | - | 6,332 | - | 6,332 |
| Koochiching | 47,326 | 9,698 | - | - | 57,024 |
| Lac Qui Parle | - | - | 3,406 | - | 3,406 |
| Lake | - | 97 | - | 756 | 853 |
| Lake of the Woods | 53,080 | 1,858 | 260 | - | 55,198 |
| Le Sueur | - | - | 1,015 | - | 1,015 |
| Lincoln | - | - | 2,389 | - | 2,389 |
| Lyon | - | - | 3,843 | - | 3,843 |
| McLeod | - | - | 854 | - | 854 |
| Mahnomen | 7 | 2,153 | 2,029 | - | 4,188 |
| Marshall | 2,664 | - | 10,080 | - | 12,744 |
| Martin | - | - | 758 | - | 758 |
| Meeker | - | - | 608 | - | 608 |
| Millie Lacs | - | 882 | 3,855 | - | 4,737 |
| Morrison | - | - | 1,496 | - | 1,496 |
| Mower | - | - | 275 | - | 275 |
| Murray | - | - | 3,000 | - | 3,000 |
| Nicollet | - | - | 76 | - | 76 |
| Nobles | - | - | 667 | - | 667 |
| Norman | - | - | 2,470 | - | 2,470 |
| Olmsted | - | 22 | 964 | - | 986 |
| Ottertail | - | - | 3,314 | - | 3,314 |
| Pennington | - | - | 874 | - | 874 |
| Pine | - | 5,052 | 21 | - | 5,073 |
| Pipestone | - | - | 639 | - | 639 |
| Polk | - | - | 5,256 | - | 5,256 |
| Pope | - | - | 1,216 | - | 1,216 |
| Ramsey | - | - | - | - | - |
| Red Lake | - | - | 391 | - | 391 |
| Redwood | - | - | 1,450 | - | 1,450 |
| Renville | - | - | 88 | - | 88 |
| Rice | - | - | 224 | - | 224 |
| Rock | - | - | - | - | - |
| Roseau | 48,011 | 334 | 3,818 | - | 52,162 |
| St. Louis | - | 13,802 | 8 | 653,103 | 666,913 |
| Scott | - | - | 243 | - | 243 |
| Sherburne | - | - | 106 | - | 106 |
| Sibley | - | 2,226 | 275 | - | 2,501 |
| Stearns | - | 4 | 755 | - | 759 |
| Steele | - | - | 389 | - | 389 |
| Stevens | - | - | 1,007 | - | 1,007 |
| Swift | - | - | 2,061 | - | 2,061 |
| Todd | - | - | 1,896 | - | 1,896 |
| Traverse | - | - | 55 | - | 55 |
| Wabasha | - | 9,840 | 2,289 | - | 12,129 |
| Wadena | - | 3,110 | 288 | - | 3,398 |
| Waseca | - | - | 827 | - | 827 |
| Washington | - | - | 21 | - | 21 |
| Watsonwan | - | - | 453 | - | 453 |
| Wilkin | - | 588 | 1,472 | - | 2,060 |
| Winona | - | 1,496 | 10,149 | - | 11,645 |
| Wright | - | - | 1,488 | - | 1,488 |
| Yellow Medicine | - | - | 1,810 | - | 1,810 |
| TOTAL | \$ 218,664 | \$ 99,794 | \$ 138,643 | \$ 794,519 | \$ 1,251,620 |

(1) Source: DNR Land Bureau and Fiscal Section.

the State currently fitting this description is located in Chippewa County. These payments are credited against payments due under Subdivision 3 (Game and Fish Fund described in the preceding paragraph) and are distributed in the same manner. Chippewa County usually receives no additional payments as a result of this authorization, according to the DNR.

Consolidated Conservation Areas Fund. Minnesota Statute 84A.51 provides the legal authorization for payments in lieu of taxes for Conservation Areas (see Chapter Two). These lands (which include the Red Lake Game Refuge in Koochiching and Lake of the Woods Counties, and reforestation areas in Aitkin, Mahnomen, Beltrami, Marshall, and Roseau Counties) were originally established by separate legislation and payments were made separately for each. When 84A.51 was passed, these funds were consolidated and, as a result, the fund was called the Consolidated Conservation Areas Fund. Only those lands designated by law are included. Fifty percent of gross revenues from Conservation Areas are returned to the counties in which the revenues were generated. The revenues are redistributed by the county under a specific formula (see Table 5). In addition, up to \$1,000 may be paid to the county for administrative tasks related to these Conservation Areas. The primary sources of revenue are: (1) timber harvesting, (2) mining royalties, and (3) land leases. Seven counties receive payments under this authorization (see Table 6).

State Forest Fund. Minnesota Statutes 89.035 and 89.036 provide the legal authorization for payments in lieu of taxes for acquired lands in official State Forests. Trust fund or tax-forfeited lands in State Forests are not included in this authorization (see Chapter Two). Fifty percent of gross revenues from acquired lands are returned to the counties from which the revenues were generated. The counties redistribute the monies as if they were taxes on the land. The primary sources of revenue are timber harvesting, mining royalties, and land leases, with the majority of revenue coming from timber harvesting. Thirty counties received monies from the State Forest Fund in Fiscal 1975 (see Table 6).

Mining Royalties on Tax-Forfeited Lands. Minnesota Statutes 93.283 and 83.335 give DNR the legal authorization for payments in lieu of taxes for mining activities on tax-forfeited lands. Only county-managed, tax-forfeited lands are eligible for payments under this legislation. Eighty percent of royalties from State mineral leases are returned to the county which generated the revenue. Revenues are redistributed as indicated in Table 5. Four counties (Beltrami, Itasca, Lake, and St. Louis) received payments in Fiscal 1975 for mineral royalties on tax-forfeited lands (see Table 6). Any mineral royalties generated from land subject to other authorizations (for example, Conservation Areas or State Forests) are returned to the county on the basis of the payment authorizations affecting those specific types of land (see Table 5).

Other Direct Payments. Two other payments in lieu of taxes for natural resource lands are authorized by legislation but no payments are currently being made by DNR under these authorizations. MSA 90.50 authorizes the return of rent to counties for lands leased for decorative tree harvesting if the lands are not included under other funding authorizations. MSA 272.68 authorizes the return to counties of 30 percent of rentals received for residences rented to previous owners as a condition of sale when the land is not covered by another authorization. DNR attempts to acquire lands without such conditions of sale and currently is making no payments to local communities under this authorization.

Direct Short-Term State Payments for Natural Resource Lands

The above described direct payments in lieu of taxes will be made every year until the legislation is amended or repealed and, therefore, are considered long-term payments. Two other types of direct State payments are authorized which will be made only for a specified period of time. These payments are considered short-term payments and are tied to acquisitions for the Voyageurs National Park and for the St. Croix Wild River State Park. These payments are described below.

Voyageurs National Park Acquisitions. Minnesota Statute 84B.07 provides the Department of Finance with the legal authorization for payments in lieu of taxes for new acquisitions for Voyageurs National Park. These payments are based on the last assessed tax before the land was acquired and are made on a declining basis over four years (see Table 5). The County must request payment during the year the payment is due. To date, only one such payment has been requested. Only Koochiching and St. Louis Counties are eligible recipients for payments under this authorization and the total amount appropriated is \$19,000 for Koochiching and \$111,000 for St. Louis. Payments are redistributed to taxing districts on the basis of the distribution of tax levies.

St. Croix Wild River State Park Acquisitions. Laws 1973, Chapter 7, Section 7, provides the Department of Finance with legal authorization for payments in lieu of taxes for new acquisitions for the St. Croix Wild River State Park. Payments are based on the last assessed tax before the land was acquired and are made on a declining basis over nine years. The county must request payment during the year the payment is due. Chisago County is the only eligible recipient and the total appropriation is \$20,000. No payments have been requested under this authorization. Payments are redistributed as if they were taxes on the land.

Taxation of State Natural Resource Lands

Under certain conditions set forth in State legislation, local taxing districts have the authority to tax State properties. These conditions are described below.

Residential Real Estate Taxes. Minnesota Statute 272.011 provides the Department of Natural Resources with the legal basis for paying real estate taxes on residences located on State lands and inhabited by State employees. Taxes may be assessed as if the residences were privately owned, but only the structure and a small area of land contiguous to the structure is taxable. Payment is at the discretion of the State agency. Approximately 200 residences owned by DNR may be subject to taxation under this law. However, only about half of these taxes have been requested by the counties to date.

Special Assessments. Minnesota Statute 435.19 provides the authorization for the payment of special assessments for local improvements to State lands. Payment of these assessments is at the discretion of the State agency and is based upon the estimated amount of benefit to the public land as a result of the improvement. DNR has usually paid these assessments when billed by the local unit of government.

Property Leased for Business Conducted for Profit. Minnesota Statute 272.01, Subdivision 2, permits counties and other taxing districts to tax the leasee (not the State) as if he were the owner of the property if the State property has been leased for the purpose of conducting business for profit. Certain types of businesses and non-profit enterprises are specifically excluded from taxation by this legislation.

Leases over Three Years. Minnesota Statute 273.19 provides the legal authorization for local taxing districts to tax the leasee (not the State) as if he were the owner of the property if State land is leased for three years or longer but not covered under MSA 272.01, Subdivision 2, described above. Such leasees may be taxed regardless of the purpose of the lease.

Revenues from Tax-forfeited Lands. MSA 282.02 provides that all revenues from tax-forfeited lands managed by the counties are returned to the counties and redistributed under a formula provided in the legislation (see Table 5).

Indirect State Aid Related to Natural Resource Lands

In addition to the direct payments and provisions for taxation described above, local communities also receive a number of indirect State payments or categorical aid grants which are related to the existence of natural resource lands within their community. Each of these sources of State aid is described below.

State Park Road Account. MSA 162.06, Subdivision 5, establishes a State Park Road Account of \$200,000 per year which is handled jointly through the Department of Transportation and the Department of Natural Resources. Under this law, the State may reimburse counties for the cost of "establishment, location, relocation, construction, reconstruction, and improvement" of County State-aid Highways which provide access to the headquarters or

principal parking lot of a State Park. Funding is at the discretion of DNR. The funds may not be used for maintenance.

Service Contracts. The Department of Natural Resources has established contracts with local units of government for specific local services provided to DNR lands. DNR also pays service charges for utilities provided by local units of government or private firms.

Two examples are contracts for fire protection services and contracts for assistance in law enforcement. Law enforcement contracts are usually for a specific type of assistance. For example, Winona County receives approximately \$800 a year through a contract to assist the DNR in enforcing State snowmobile laws. Fire protection contracts are used more extensively by DNR which has the legal responsibility for wild fire detection, prevention and protection on both public and private lands in most areas of the State (see Chapter Six). At the present time, DNR has signed formal contracts with about 150 local fire departments. The basic types of contracts which are used are described below.

1. A contract may involve a flat annual fee (usually around \$500). In this type of contract, the rural fire department is responsible for responding to the fire call and receives the annual fee regardless of the number of fires it responds to or the number of hours spent fighting wild fires. This type of contract is normally used in the northwestern portion of the State where, historically, fire hazard has been relatively low due to the agricultural character of the land.
2. A contract may be established whereby the local fire department responds to a wild fire only if DNR specifically requests response to that fire. In this case, payment is made on the basis of a per-hour rate which varies from one district to another. This type of contractual or cooperative agreement is typically used in the northeastern and north central portions of the State where there is better fire coverage by DNR personnel.
3. A contract may be established with local fire departments whereby the rural fire department responds to all wild fire calls without request from DNR, is responsible for staying with the fire, and is compensated on a per-hour, per-run basis. This type of contract is used in southeastern Minnesota; the rate of pay varies from one district to another. In Winona County, for example, \$60 is paid for the first hour of each run and \$35 is paid for each additional hour.
4. In some cases, no formal contracts have been established to support cooperative response to wild fires although there may be an informal cooperative agreement between DNR and the local fire department. Compensation may be made by DNR without a contract if a voucher is submitted to DNR requesting payment. The amount of compensation is at the discretion of DNR.

Trust Funds. The different types of trust lands in Minnesota were described in Chapter Two. These lands were granted to the State of Minnesota by the federal government for specific purposes and all monies from these lands must be used for those specific purposes. Special "trust funds" have been established for revenues from these lands. Three trust funds related to natural resource lands are described below.

1. Permanent School Fund. Article VIII, Section 4, of the Minnesota Constitution establishes the Permanent School Fund which consists of revenues from school trust lands, revenues from swamp lands, and all cash and investment previously credited to either the school or swamp fund. These trust fund lands may be sold through public sales, but any revenues from the sale of the lands must be returned to the Permanent School Fund. By constitution, the principal of the Permanent School Fund "shall be perpetual and inviolate for ever." All interest from the Permanent School Fund forms the "School Endowment Fund" (MSA 124.08). The School Endowment Fund is apportioned semi-annually to school districts on a per-pupil unit basis using the same formula as the categorical Foundation School Aid described in the following section.
2. Permanent University Fund. Monies from University trust lands and Salt Spring lands are placed in the Permanent University Fund which is administered by the University Board of Regents subject to limitations in the Minnesota Constitution, Article VIII, Section 5, and MSA 137.022. University trust lands are administered by DNR; Salt Spring lands are administered by the University. Any income from the Permanent University Fund is subject to appropriation by the legislature.
3. Internal Improvement Land Fund. Article IV, Section 32(b), of the Minnesota Constitution establishes the Internal Improvement Land Fund. As in the other trust funds, the principal may not be touched. All interest from this fund is credited to the County State-aid Highway fund (MSA 162.05) and is distributed according to the CSAH allocation formula described in the following section.

Categorical State Aids. Categorical State aids (for example, aid for road construction, education, welfare, etc.) which are based on equalization or need formulae also indirectly support the service demands and revenue impacts of natural resource lands. This is especially true of aid formulae which take maximum levy limits and taxable value in the respective taxing districts into account. Categorical State aid for county state-aid highways and school foundation aid are described below.

1. Foundation School Aid. The foundation school aid formula clearly reflects the extent of tax-exempt land in each taxing district. Basically, school aid is determined by multiplying a specified amount of aid per pupil unit (which is based on average operating costs in the State) minus 29 mills times the adjusted taxable (assessed) value

in the school district.⁽¹⁾ Capital outlay and debt service are not included in determining operating costs. While there are many other laws and special grants related to State school aid, it can be generally assumed that those areas with low taxable land area or low land values will receive higher state aid.

It was also suggested by some individuals surveyed during Phase I of the Public Lands Impact Study that school transportation costs may be increased by public land ownership. However, special State aid is provided for school transportation costs. The basic formula for this aid is net operating costs per eligible pupil times the number of eligible pupils minus 1 mill (times the assessed value of the district) plus one year's depreciation for the school bus fleet.⁽¹⁾ Except in those cases where school enrollment has dropped drastically, the school district should have costs equivalent to one mill regardless of the amount of tax-exempt land within the school district.

2. County State-aid Highways. State legislation limits the CSAH system to 30,000 miles. CSAH systems are selected on the basis of spacing, importance to the county, and continuity with Trunk and other CSAH highways. Traffic volumes and total road mileage in the county are not selection criteria. CSAH funding is determined by an allotment formula as follows:
 - a. Ten percent of the available funds is divided equally among the 87 counties.
 - b. 30 percent of the available funds is allocated based on CSAH mileage.
 - c. 10 percent is allocated based on motor vehicle registrations in the county.
 - d. 50 percent is allotted based on a "money needs factor" to bring the CSAH system up to standard. The needs assessment is done by the county.

Sixty percent of CSAH funds must be used for construction and 40 percent must be used for maintenance. Since half of this aid is based on a county needs assessment, the formula may indirectly reflect the existence of public lands within the county.

Direct Federal Payments in Lieu of Taxes for Natural Resource Lands

Counties in Minnesota currently receive payments in lieu of taxes for natural resource lands from the U.S. Fish and Wildlife Service, the U.S.

⁽¹⁾ This is an over-simplification of the school-aid formula.
124 for further detail.

Forest Service and the Corps of Engineers (see Table 7). These payments are described briefly below.

U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife Service makes payments for their land holdings on the basis of: (1) $\frac{3}{4}$ of one percent of appraised value of acquired land or 25 percent of revenues on acquired lands, whichever is greater; plus (2) 25 percent of net receipts from public domain land (public domain lands are those lands which have never been in private ownership). Revenues from these lands are generated primarily by grazing, haying, timber and trapping activities. Payments to Minnesota counties in Fiscal 1975 are tabulated in Table 7.

U.S. Forest Service. The U.S. Forest Service makes payments to counties on the basis of $\frac{3}{4}$ of one percent of appraised value for acquired BWCA lands (wilderness land) plus 25 percent of revenues generated by forest lands. Revenues are generated primarily by timber sales, recreational campground fees, special use permits and mining leases. As can be seen in Table 7, six counties received payments from the U.S. Forest Service in Fiscal 1975 for federal natural resource lands within their boundaries.

Corps of Engineers. The Corps of Engineers returns $\frac{3}{4}$ of the revenue from acquired Corps land to the county in which the land is located. Revenues are generated primarily by land leases for agriculture, recreation, private cottage and commercial uses. Fiscal 1975 payments to counties in Minnesota from the Corps of Engineers are tabulated in Table 7.

Bureau of Land Management. The Bureau of Land Management returns 25 percent of net receipts from its lands to counties. However, no such payments are currently made to counties in Minnesota due to lack of revenues from the 44,000 acres of BLM land in the State.

Proposed Federal Payments. Public law 94-565 (HR 9719) was passed in the 1976 session of the U.S. Congress. This legislation does not appropriate funds but authorizes payments of 75¢ per acre minus existing payments or 10¢ per acre, whichever is greater, for acquired federal lands including: (1) lands within the National Park System and the National Forest System including wilderness areas within each, (2) lands administered by the Bureau of Land Management, (3) lands dedicated to the use of water resource development projects of the United States, and (4) dredge disposal areas owned by the United States under the jurisdiction of the Army Corps of Engineers. Payments are not authorized for lands which were owned or administered by State or local units of government and exempt from real estate taxes at the time the title was conveyed to the United States. In addition to the flat payment per acre, new acquisitions for natural parks or wilderness areas would involve a payment for one percent of assessed value for five years after the acquisition. Payment ceilings tied to a population formula are also established in the legislation. Since appropriations have not yet been made, actual recipients of these payments cannot be determined. However,

TABLE 7
ESTIMATED FEDERAL PAYMENTS TO LOCAL GOVERNMENTS IN MINNESOTA FOR
NATURAL RESOURCE LANDS IN FISCAL 1975¹

| County | U. S. Fish and Wildlife | U. S. Forest Service | U. S. Corps of Engineers | Total |
|-----------------|----------------------------|-------------------------|-----------------------------|------------------|
| Aitkin | \$ 3,854 | \$ -- | \$ -- | \$ 3,854 |
| Becker | 19,740 | -- | -- | 19,740 |
| Beltrami | -- | 7,241 | -- | 7,241 |
| Big Stone | 9,068 | -- | -- | 9,068 |
| Cass | -- | 33,252 | 1,815 | 35,067 |
| Clay | 5,427 | -- | -- | 5,427 |
| Cook | -- | 117,815 | -- | 117,815 |
| Cottonwood | 1,631 | -- | -- | 1,631 |
| Douglas | 4,991 | -- | -- | 4,991 |
| Goodhue | -- | -- | 19 | 19 |
| Grant | 6,659 | -- | -- | 6,659 |
| Hennepin | 44 | -- | 6,622 | 6,666 |
| Houston | 2,802 | -- | -- | 2,802 |
| Itasca | -- | 35,222 | -- | 35,222 |
| Jackson | 2,863 | -- | -- | 2,863 |
| Kandiyohi | 10,665 | -- | -- | 10,665 |
| Koochiching | -- | 57 | -- | 57 |
| Lac Qui Parle | 16,155 | -- | 150 | 16,305 |
| Lake | -- | 149,666 | -- | 149,666 |
| Mahnomen | 2,457 | -- | -- | 2,457 |
| Marshall | 14,916 | -- | -- | 14,916 |
| Ottertail | 8,616 | -- | -- | 8,616 |
| Pine | 383 | -- | -- | 383 |
| Polk | 3,736 | -- | -- | 3,736 |
| Pope | 3,663 | -- | -- | 3,663 |
| Ramsey | 265 | -- | 19 | 284 |
| St. Louis | -- | 110,561 | -- | 110,561 |
| Sherburne | 27,687 | -- | -- | 27,687 |
| Stearns | 7,337 | -- | -- | 7,337 |
| Stevens | 6,609 | -- | -- | 6,609 |
| Swift | 4,543 | -- | -- | 4,543 |
| Traverse | 3,011 | -- | -- | 3,011 |
| Wabasha | 1,193 | -- | 19 | 1,212 |
| Wilkin | 774 | -- | -- | 774 |
| Winona | 790 | -- | 308 | 1,098 |
| Yellow Medicine | 95 | -- | -- | 95 |
| TOTAL | \$169,974 | \$453,814 | \$8,952 | \$632,740 |

(1) Source: Barton-Aschman Associates compilation from individual federal agencies.

PROBABLE RECIPIENTS OF AUTHORIZED FEDERAL IN-LIEU PAYMENTS*

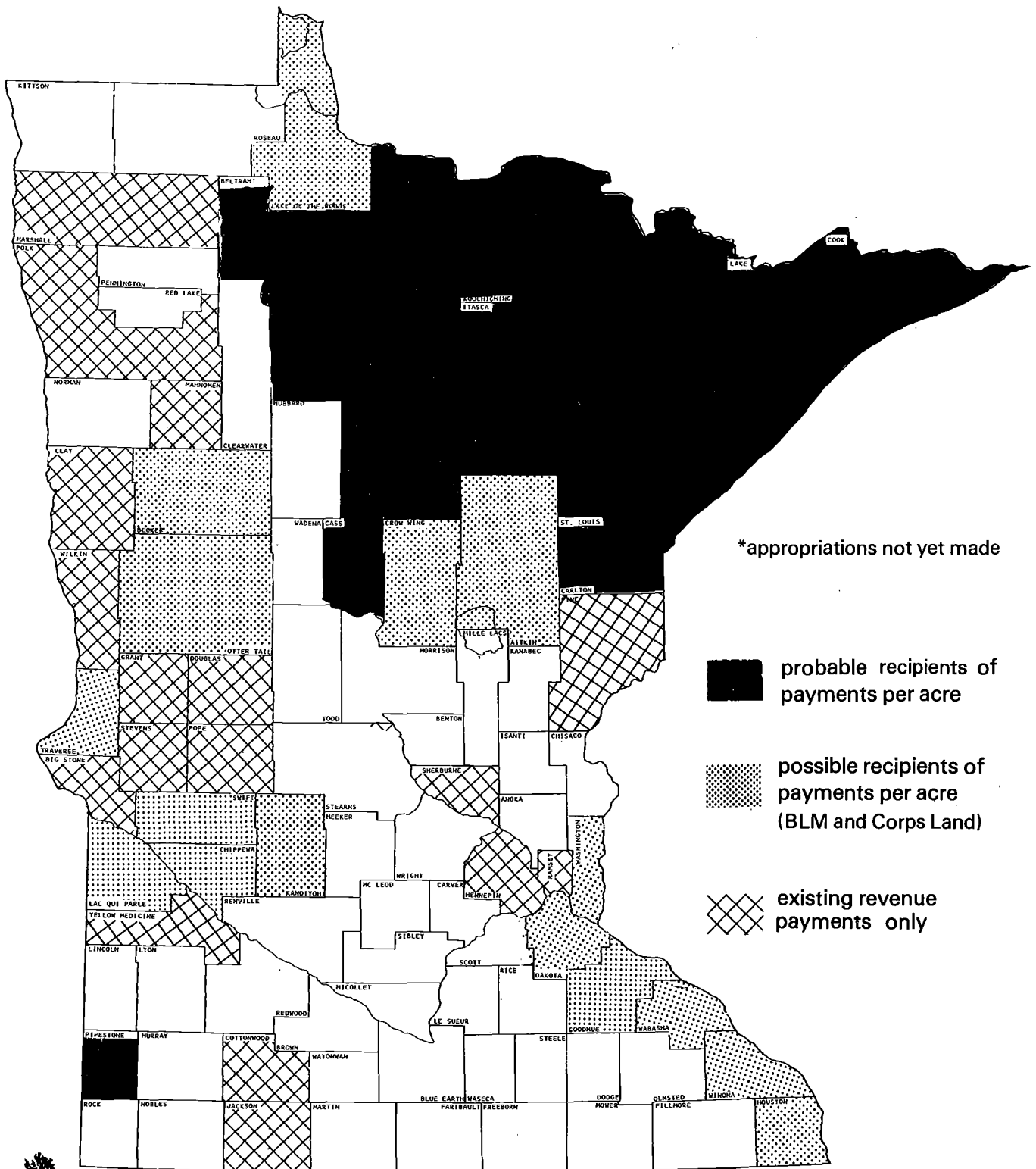


FIGURE 4
Minnesota Public Lands Impact Study

Legislative Commission on Minnesota Resources
in cooperation with the
Tax Study Commission and Barton-Aschman Associates, Inc.

Scale 1:1,000,000

0 5 10 25 50 MILES
0 5 10 25 50 KILOMETERS

the counties in Minnesota most likely to receive payments under this legislation are illustrated in Figure 4.

Other Federal Aid Related to Natural Resource Lands

The federal government also makes some payments for services provided to natural resource lands which are not direct payments in lieu of taxes. These funding aids include the following:

1. Public Land Fund. The public land fund in Minnesota is about \$450,000 per year and is made available for the construction of roads near large federal land holdings. These monies are allocated to counties by the Minnesota Department of Transportation and must be used for construction or reconstruction. The counties are responsible for maintenance of these roads.
2. Bureau of Indian Affairs. The Bureau of Indian Affairs also provides funding for selected road construction in areas with large amounts of Indian lands. These monies are also allocated to the counties by the Minnesota Department of Transportation and must be used for construction or reconstruction. The counties are responsible for maintenance of the roads.
3. Federal Impact Payment Program. The federal impact payment program provides compensation for the education of children of federal employees living on federal land. These payments are made directly to the school districts.

Principal Observations and Conclusions

The above compilation of direct and indirect payments has led to the following observations and conclusions regarding payments in lieu of taxes for natural resource lands in Minnesota.

1. Both the State and federal governments make direct payments in lieu of taxes for specific types of natural resource lands. These payments are almost always limited to acquired lands and are tied to specific land uses. Direct State and federal payments to local governments in fiscal 1975 totalled \$1.9 million.
2. Most current direct payments in lieu of taxes are based on shared revenues which may fluctuate considerably from year to year. The new federal legislation suggests a trend away from this concept.
3. In addition to direct payments in lieu of taxes, both the State and federal governments make some direct payments for local services including aid for road construction, fees for special services, service charges for utilities, payment of some real estate taxes, and payment of some special assessments.

4. Categorical State aids which are based on equalization or need formulae also indirectly support the service demands and revenue impacts of natural resource lands.
5. While State and federal indirect and direct payments for natural resource lands are substantial in combination, it is clear that government officials and individual taxpayers are unaware of many of these payments and do not understand the relationship between categorical aids and tax-exempt lands. The identification and publication of these facts should help to alleviate some of the current misunderstandings of local governments and individual taxpayers with regard to aid related to public natural resource lands.

CHAPTER FIVE

PILOT AREA EVALUATIONS

Phase I of the Public Lands Impact Study focused on an evaluation of the impacts of public natural resource lands. The focus of the evaluations was on the examination of policy issues on the basis of representative facts rather than on attempting to develop a statewide composite of data. After considerable discussion of several quantitative and qualitative selection criteria, it became clear that the study of public land impacts involved a number of issues which could be more effectively evaluated by comparing areas with significantly different characteristics. In particular, the special issues related to tax-forfeited lands, proposed new acquisitions, and geographic location seemed to require comparison between areas. Accordingly, two pilot areas with contrasting characteristics were selected for evaluation: Aitkin and Winona Counties. The purpose of this chapter is to describe the selection and evaluation process, the existing public natural resource lands in the two pilot areas, and the methodology and data sources used for the impacts analysis related to the service demands and the revenue impacts of public natural resource lands.

Selection Process

Selection Process. Four basic steps were followed in evaluating counties as potential pilot areas as follows:

1. Probable candidate areas were identified and discussed based upon a set of quantifiable factors. Primary consideration was given to the amount of public land and the variety of State land uses in the county.
2. Several qualitative factors representative of conditions affecting the evaluation were discussed related to the demonstration capabilities of the probable candidate areas.
3. Two contrasting probable candidate areas were selected for recommendation to the Executive Committee of the Legislative Commission on Minnesota Resources.
4. The selection criteria and the recommended candidate areas were reviewed and approved by the Executive Committee.

Selection Criteria. While a number of quantitative and qualitative selection criteria were considered in evaluating counties for potential

pilot areas, the most important factors leading to selection as candidates were: (1) a significant percentage of public land area (over 10 percent), (2) a variety of State natural resource land uses, (3) contrasting characteristics related to tax-forfeited land, proposed State acquisition, and geographic location within the State. Other factors which were also considered included federal land uses, current mining activities, quality of county land records, payments per acre, and payments per capita at the present time. The counties selected as most probable candidate areas based upon the quantitative criteria are identified in Table 8. After considerable discussion, the two counties of Aitkin and Winona were selected as pilot areas for the first phase of the Public Lands Impact Study. The location of these counties in relationship to regional development districts and the major metropolitan areas in the State is illustrated in Figure 5. The types of public natural resource lands in each of the two pilot counties are identified in Table 9.

Aitkin County

Aitkin County was selected as representative of those northern counties meeting all of the quantitative criteria for the following reasons:

- It has over 10 percent public land (54 percent).
- It has a variety of State and federal land uses.
- It has a significant amount of tax-forfeited land (223,000 acres).
- No major State acquisitions were proposed for the 1975-77 biennium.
- No major mining activity is currently underway.
- It has good land records and a Land Commissioner's office.
- It has been highly cooperative in previous State land study efforts.

The distribution of public natural resource lands in Aitkin County is illustrated in Figure 6.

Winona County

Winona County was selected as a pilot area primarily for contrast to the Aitkin pilot area. It was selected for the following reasons:

- It is the only southern county meeting the two principal selection criteria of having over 10 percent public land and having a variety of State public natural resource land uses represented.
- It has very little tax-forfeited land.
- Three types of State acquisition are currently proposed in the county (additions to a wildlife area, a State forest and a State park).

RELATIONSHIP OF PILOT AREAS TO METROPOLITAN AREAS AND DEVELOPMENT REGIONS

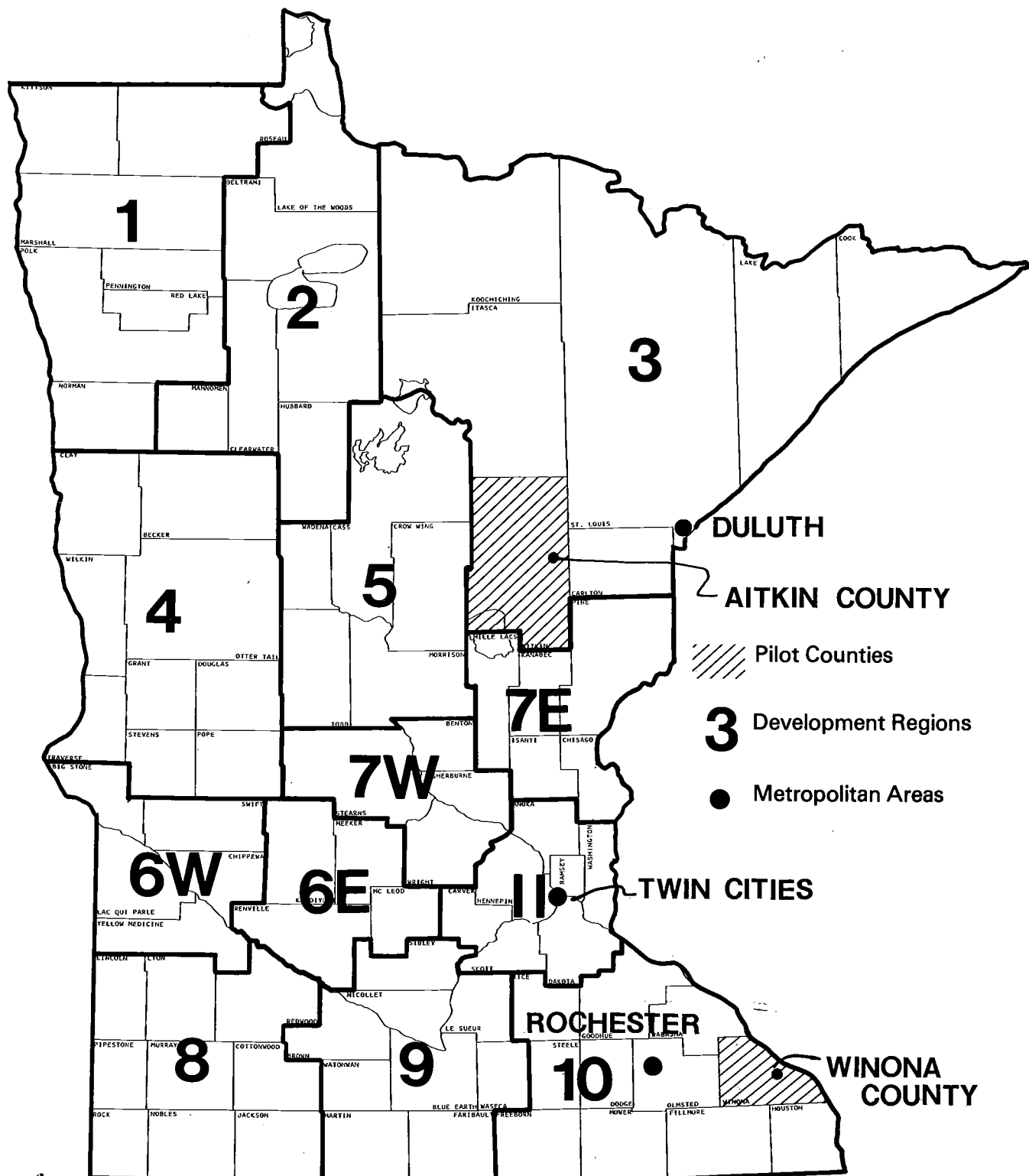


FIGURE 5

Minnesota Public Lands Impact Study

Legislative Commission on Minnesota Resources
in cooperation with the
Tax Study Commission and Barton-Aschman Associates, Inc.

Scale 1:1,000,000

0 5 10 25 50 MILES
0 5 10 25 50 KILOMETERS

TABLE 8
MOST PROBABLE COUNTY PILOT AREA CANDIDATES

| County | Over 10% Public Land ⁽¹⁾ | Tax-forfeited Lands ⁽¹⁾ | 3 of 4 Major DNR Uses ⁽²⁾ | 2 of 4 Major Federal Uses ⁽³⁾ | Major State Acquisitions Proposed in 1975-77 ⁽⁴⁾ | DNR Payments Per Acre ⁽⁵⁾ | DNR Payments Per Capita ⁽⁵⁾ |
|-------------------|--|---------------------------------------|---|---|--|---|---|
| Cook | 89% | Yes | Yes | Yes | No | 0.00 | 0.01 |
| Lake | 84 | Yes | Yes | No | Yes | 0.00 | 0.06 |
| Koochiching | 74 | Yes | Yes | Yes | No | 0.04 | 3.33 |
| Lake of the Woods | 72 | No | Yes | Yes | No | 0.09 | 13.84 |
| Beltrami | 69 | Yes | Yes | Yes | No | 0.03 | 1.36 |
| Cass | 59 | Yes | Yes | Yes | No | 0.01 | 0.27 |
| St. Louis | 56 | Yes | Yes | Yes | No | 0.29 | 3.02 |
| Aitkin | 54 | Yes | Yes | Yes | No | 0.06 | 3.03 |
| Itasca | 54 | Yes | Yes | Yes | No | 0.15 | 4.06 |
| Clearwater | 45 | Yes | Yes | No | No | 0.02 | 0.35 |
| Carlton | 40 | Yes | Yes | Yes | No | 0.02 | 0.13 |
| Hubbard | 38 | Yes | Yes | Yes | No | 0.04 | 0.75 |
| Roseau | 33 | Yes | Yes | Yes | No | 0.16 | 4.51 |
| Mahnomen | 30 | Yes | Yes | Yes | Yes | 0.09 | 0.74 |
| Crow Wing | 26 | Yes | Yes | No | No | 0.00 | 0.01 |
| Pine | 25 | Yes | Yes | No | No | 0.02 | 0.30 |
| Becker | 23 | Yes | Yes | Yes | No | 0.12 | 0.64 |
| Polk | 21 | No | No | No | No | 0.39 | 0.15 |
| Millie Lacs | 20 | Yes | Yes | Yes | Yes | 0.07 | 0.30 |
| Marshall | 16 | No | Yes | Yes | No | 1.11 | 0.98 |
| Wadena | 13 | Yes | No | No | No | 0.08 | 0.27 |
| Bfg Stone | 12 | No | No | No | No | 0.21 | 0.18 |
| Kanabec | 11 | Yes | No | No | No | 0.06 | 0.21 |
| Sherburne | 11 | No | No | No | Yes | 0.02 | 0.01 |
| Winona | 10 | Yes | Yes | No | Yes | 0.42 | 0.26 |

(1)Source: MLMIS, DNR and Senate Research Data (see Table 1).

(2)Forestry inside State forests, forestry outside State forests, fish and game lands, and park lands (source: DNR).

(3)Forestry lands, fish and game lands, park lands, Indian lands (source: MLMIS).

(4)Single acquisition over 1,000 acres or multiple acquisitions totaling over 1,000 acres (Source: DNR Resources 2000).

(5)Rounded to nearest cent.

TABLE 9
STATE AND FEDERAL NATURAL RESOURCE LANDS IN PILOT AREAS

| Type of Land | Aitkin County (Acres) | Winona County (Acres) |
|------------------------------------|-----------------------------|-----------------------------|
| Federal Land⁽¹⁾ | | |
| U. S. Fish and Wildlife | 15,320 | 10,200 |
| U. S. Corps of Engineers | 14,280 | 3,520 |
| Bureau of Indian Affairs | 600 | 6,680 |
| | 440 | 0 |
| State Land⁽²⁾ | | |
| State Forests | 388,191 | 28,147 |
| Forestry outside State Forests | 255,710 | 6,024 |
| | 105,682 | 219 |
| Game and Fish | | |
| Park Land | 16,767 | 20,458 |
| Law Enforcement | 9,989 | 1,446 |
| | 43 | 0 |
| Tax-Forfeited Land | | |
| County Memorial Forests | 223,329 ⁽³⁾ | -- ⁽⁴⁾ |
| County Parks | 116,000 | 0 |
| Other | 11,000 | 0 ⁽⁴⁾ |
| | 96,329 | -- |
| TOTAL NATURAL RESOURCE LAND | | |
| | 626,840 | 38,347 |

(1)Source: MLMIS (see Table 1 in Chapter Two) -- does not include easements.

(2)Source: LOS (see Table 1 in Chapter One).

(3)Source: Aitkin County Land Commissioner (breakdown is approximate).

(4)Some tax-forfeited land exists, but acreage is unknown.

PUBLIC NATURAL RESOURCE LANDS IN AITKIN COUNTY



FIGURE 6
Minnesota Public Lands Impact Study

Legislative Commission on Minnesota Resources
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Tax Study Commission and Barton-Aschman Associates, Inc.



PUBLIC NATURAL RESOURCE LANDS IN WINONA COUNTY

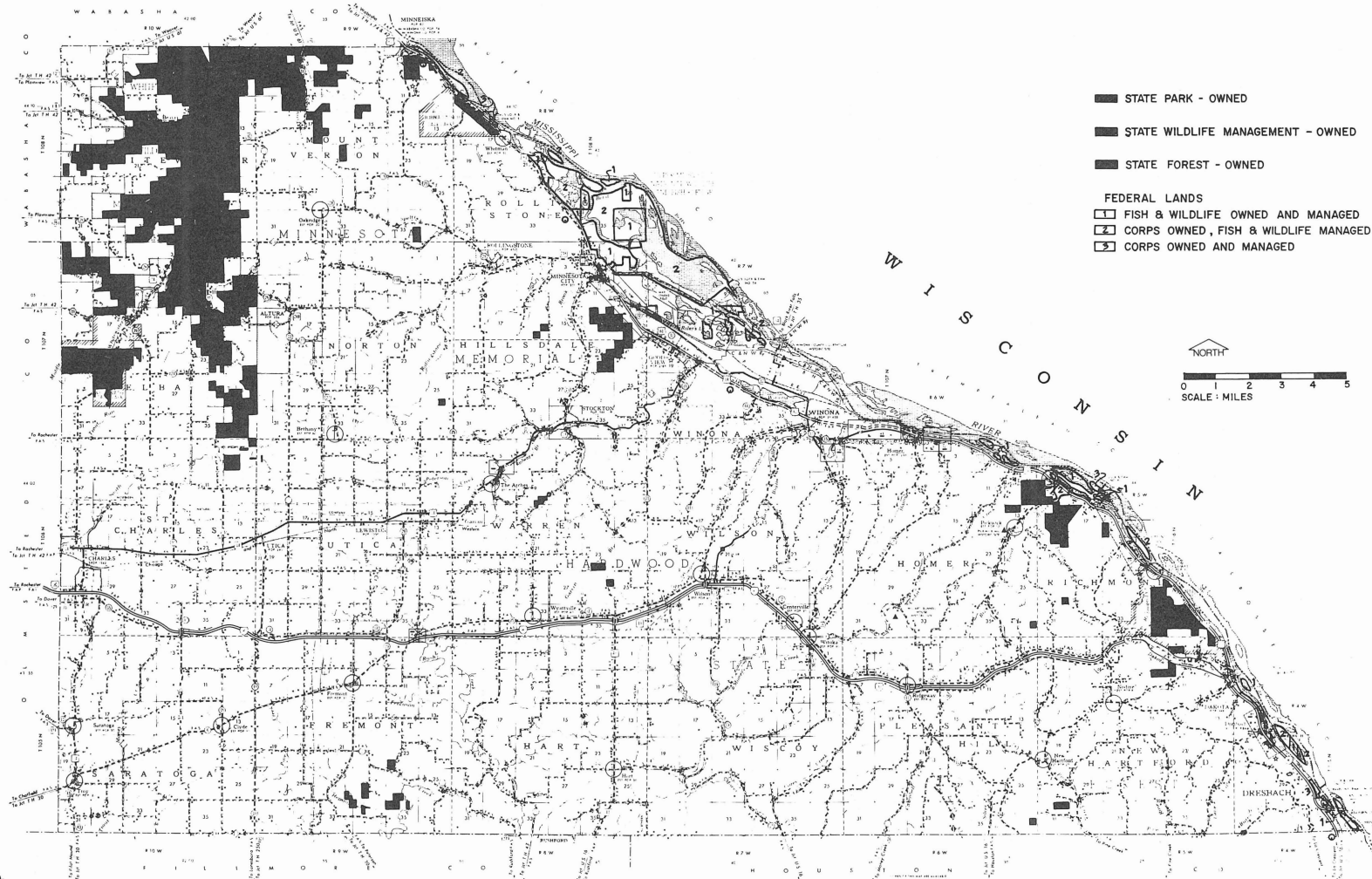


FIGURE 7

Minnesota Public Lands Impact Study

Legislative Commission on Minnesota Resources
in cooperation with the
Tax Study Commission and Barton-Aschman Associates, Inc.



- It has significantly different geological characteristics and development pressures than Aitkin County.
- Its land records were reportedly representative of the average county in Minnesota.

The distribution of public lands in Winona County is illustrated in Figure 7.

Methodology and Data Sources for Evaluating Impacts of Public Natural Resource Lands in the Pilot Areas

The results of the pilot area impact analyses are detailed in Chapters Six and Seven of this report. The methodology and data sources used to evaluate these impacts are outlined in Table 10. The basic steps which were used to collect data and conduct the impact analysis include the following:

1. Discussions were held with State, county and, where appropriate, township agencies to identify local services being provided to public lands, to estimate the cost of those services, and to develop an understanding of the perceived positive and negative impacts of State and federal natural resource lands on local communities.
2. Discussions were held with individuals responsible for managing the individual natural resource land holdings (for example, Park Managers, County Land Commissioners, Area Foresters, etc.) to identify local services being provided to public lands and to understand the perceived positive and negative impacts of State and federal natural resource land holdings on the local community.
3. Natural resource land ownership, land acreage, land management, and land uses were identified and mapped. This information was compared to information available from centralized State records systems.
4. Information was collected regarding county land and financial records, including existing revenues and payments related to State and federal natural resource lands. These records were also compared to centralized records to determine variations in data and problems of perception at the local level.
5. Available data were collected on local property tax revenues and the potential property taxes on natural resource lands were calculated.
6. Based upon the discussions described above and other available data, services were identified which are being provided by local governments to public natural resource lands. Where possible, expenditures and revenues related to these services were also identified. Where data were not available, an effort was made to estimate the cost of these service demands.

7. Through the discussions described above, State and federal policies and procedures related to compensation for local services were identified. Where actual payments were made, the amount of payment made to the county was determined or estimated.
8. Using available data, tourist-travel expenditures by county were estimated. While an effort was made to collect more detailed data on tourism, such data were not available.
9. Data were collected and analyzed regarding the counties' dependence upon government as a source of employment.
10. Data were collected regarding State and federal land management policies, as well as county management policies related to tax-forfeited lands. The cost of county and State land management was estimated, especially with regard to the management of tax-forfeited lands.
11. Based upon the above information, the probable overall impacts of State and federal natural resource lands were evaluated and general conclusions regarding these impacts were developed.

The data sources and information used to conduct these analyses are outlined in Table 10. The results of the impact analyses in the pilot areas are detailed in Chapters Six and Seven.

Principal Observations and Conclusions

The following observations have been made with regard to the pilot area approach utilized in the first phase of the Public Lands Impact Study.

1. The pilot area evaluations demonstrated the difficulty of precisely basing compensation on the services required and the benefits derived from public natural resource lands. An effort was made to relate service demands to land use categories or specific land holdings, but the data were either not kept at all or were incomplete.
2. Based upon the pilot area evaluations, it has been concluded that the degree of impact of public natural resource lands will vary from one area to another depending upon the amount of public land, its use, the population size, and the land area of the county. While the basic factors which must be considered in carrying out the impacts evaluation are essentially the same, further testing would be required to establish an index of counties for determining relative impacts, particularly in relation to changing conditions.

3. It is believed that this evaluation methodology may be applied to other counties throughout the State and, generally, to other types of tax-exempt public land. While the specific work program for subsequent phases of the Public Lands Impact Study has not yet been developed, the methodology outlined in this chapter can be used as the basis for developing and refining future work programs regarding the evaluation of other types of tax-exempt lands.

TABLE 10
METHODOLOGY AND DATA SOURCES FOR EVALUATING THE POTENTIAL IMPACTS OF STATE AND FEDERAL NATURAL RESOURCE LANDS IN
PILOT AREAS

| Component | Necessary Information | Measurement | Methodology | Recommended Sources |
|---|--|---|---|---|
| I. <u>Land ownership</u> | <ul style="list-style-type: none"> -Total land area of county -Federal natural resource land by category -State natural resource land by category -Tax-forfeited land by designation -Acquired land acreage | <ul style="list-style-type: none"> -Acres by category and owner -Percent of total acres | <ul style="list-style-type: none"> -Record (and map, if desired) acres of natural resource land by owner and land category (e.g., State forests) -Determine % public land by dividing total land area by public acreage | <ul style="list-style-type: none"> -Individual federal agency field offices for accurate federal data; MLMS county summary for very general estimate -DNR Land Ownership System County summary for State data (DNR Land Bureau) -County Land Commissioner for tax-forfeited land (County Auditor or Assessor if no Land Commissioner) |
| II. <u>Land management and characteristics</u> | <ul style="list-style-type: none"> -Existing and proposed facilities (especially recreational) -Management plans -User data -Revenues from tax-forfeited lands | <ul style="list-style-type: none"> -Number of facilities by type -Number of users -Percent of users by distance traveled | <ul style="list-style-type: none"> -Record facility and user data as available -Review existing data regarding potential impacts, proposed development, etc. | <ul style="list-style-type: none"> -Management plans for specific management areas (e.g., a State park) are available from the area manager and the St. Paul Central Offices (specific divisions) -Environmental assessments for specific management areas are available from the area manager and the St. Paul Central Office (specific divisions) -"1974 Minnesota State Comprehensive Outdoor Recreation Plan" (DNR Parks Division) -"Minnesota 1974 State Park Users Survey" (DNR Parks Division) -County Land Commissioner for tax-forfeited lands. |
| III. <u>Current payments in lieu of taxes</u> | -Fiscal 1975 payments by type | -Total dollars by payment source | -Record total dollars by payment source | -DNR Fiscal Section |
| A. Forest Fund, Game and Fish, Consolidated Conservation Fund | | | | -DNR Minerals Division |
| B. Mineral royalties from tax-forfeited lands | | | | -Department of Finance |
| C. Voyageurs and Wild River Acquisitions | | | | -DNR Asst. Commissioner of Administration |
| D. Residential taxes and special assessments | | | | -Individual federal agencies (field or central) - Corps of Engineers, Forest Service, Fish and Wildlife |
| E. Federal payments | | | | |
| IV. <u>Financial Data</u> | | | | |
| A. <u>Counties</u> | <ul style="list-style-type: none"> -1974 expenditures by type -1974 disbursements by type -1970 population | <ul style="list-style-type: none"> -Total dollars by type of expenditure -Per capita expenditures and disbursements | <ul style="list-style-type: none"> -Record total expenditures by type -Determine per capita costs by dividing expenditures by population | <ul style="list-style-type: none"> -Summary data by county available from State Auditor's Office -Financial Statement available from County Auditor |
| B. <u>Townships</u> | <ul style="list-style-type: none"> -1974 expenditures by type -1970 population | <ul style="list-style-type: none"> -Total dollars by type of expenditure -Per capita expenditures | <ul style="list-style-type: none"> -Record total expenditures by type -Determine per capita costs by dividing expenditures by population | <ul style="list-style-type: none"> -Summary data available by county and township in "Report of the State Auditor of Minnesota on the Revenues, Expenditures, and Debt of the Towns in Minnesota" |
| C. <u>School Districts</u> | -1974-75 costs per pupil unit | -Cost per pupil unit in county | -Record available data | -Department of Education Statistical Division - "Update Special Report", Vol. 10, No. 2., Spring, 1976. |

TABLE 10 (continued)
METHODOLOGY AND DATA SOURCES FOR EVALUATING THE POTENTIAL IMPACTS OF STATE AND FEDERAL NATURAL RESOURCE LANDS IN
PILOT AREAS

| Component | Necessary Information | Measurement | Methodology | Recommended Sources |
|--------------------------------------|--|---|--|--|
| V. Local Services | | | | |
| A. Road construction and maintenance | -State and federal funding policies -CSAH and County Road mileage -1974 County and township expenditures -1976 State-aid -1976 Federal aid | -Total miles -Total costs -Costs per mile -Costs per capita -Total state-aid -State-aid per mile of CSAH | -Record mileage, total costs and aid -Determine per mile costs by dividing total costs by: (a) CSAH miles and (b) CSAH and County Road miles -Determine state aid per mile by dividing CSAH aid by CSAH miles -Review State funding policies | -"County State-Aid Highway: History, Apportionment, Accomplishment" MHD Planning and Programming Division, 1969 -County Engineer for mileage and aid data -1970 Census for population -Summary aid tables for 1976 from MHDOT -Financial data described in Section IV above. |
| B. Fire Protection | -State and federal policies -Payments made to fire departments in county -Contracts in effect in county -Township expenditures | -Total expenditures -Payments received -Expenditures per capita | -Record costs and payments -Determine per capita costs by dividing costs by population -Review State policies and contracts used in counties | -DNR Fire Protection Unit -Regional Forester -Financial data described in Section IV above -Additional data might be available from individual rural fire departments |
| C. Police Services | -State and federal policies -Total expenditures -Total calls -Calls on public lands (or general estimate of percent of time) | -Total costs -Cost per call -Percent of costs for calls on public land -Costs per capita | -Record total costs and number of calls -Determine cost per call by dividing total costs by total calls -Determine costs for public lands by multiplying public land calls by per call cost -Determine cost per capita -Review State and federal policies | -Area Forester or Conservation Officer -Federal area managers -County Sheriff -Financial data from Section IV -Conservation Officer in area |
| D. Solid waste disposal/sanitation | -State and federal policies -Total expenditures | -Total costs -Costs per capita | -Record total costs and determine per capita costs as above | -State and federal area managers -Financial data from Section IV |
| E. Utilities | -State and federal practices -Special assessments paid by State | -Assessments paid | -Record practices and assessments paid | -State and federal area managers -DNR Asst. Commissioner of Administration |
| F. Education | -Cost per pupil unit -State funding policies -Federal aid | -Cost per pupil unit | -Review State/federal funding policies -Record per pupil unit costs | -Department of Education, State-Aid Division -Financial data from Section IV -"School Assistance," Federal Register Vol.40, No. 235, 1975. -Financial data from Section IV |
| G. Welfare | -Total expenditures | -Total and per capita costs | -Record total costs -Determine per capita costs as above | -Financial data from Section IV |
| H. Health | -Total expenditures | -Total and per capita costs | -Record total costs -Determine per capita costs as above | -Financial data from Section IV |
| VI. Property Tax Revenues | | | | |
| A. Land Ownership and Acreage | -Acres by owner -Acquired acres by owner | -Acres | -Record available data | -see Section I |
| B. Appraised valuation | -Appraised value, if available, of public natural resource lands -Standard values per acre by land type | -Total appraised valuation -Appraised value per acre | -Record appraised value per acre if available -Estimate acreage subject to standard rates -Multiply acres by standard rates and add to determine total value -Divide valuation by acres to determine per acre value -Delete trust, tax-forfeited and other public domain lands from calculation to determine value of acquired lands | -County Assessor for appraised value or standard rates and land type assumptions |
| C. Taxable Valuation | -Appraised value of natural resource land -Taxable value of private lands -Taxable ratios | -Taxable value of natural resource lands -Total taxable value | -Record taxable value of taxable lands -Select ratios and apply to appraised value to determine taxable value | -MSA 273.13 for taxable ratios -County Assessor or State Auditor for taxable valuation of private lands |

TABLE 10 (continued)
METHODOLOGY AND DATA SOURCES FOR EVALUATING THE POTENTIAL IMPACTS OF STATE AND FEDERAL NATURAL RESOURCE LANDS IN
PILOT AREAS

| Component | Necessary Information | Measurement | Methodology | Recommended Sources |
|----------------------------------|---|--|--|---|
| C. Potential taxes | -1975 average rural mill rate for county -Taxable valuation for total and acquired lands -Taxes for private lands | -Total potential taxes -Potential taxes for acquired land -Adjusted mill rate | -Multiply mill rate by total value and add to private taxes for total potential taxes -Multiply mill rate by acquired value for potential acquired taxes -Divide private taxes by total value (public and private) to determine adjusted mill rate | -Average rural mill rates from "Property Taxes Levied in Minnesota," Dept. of Revenue Property Tax Bulletin No. 4. -Current mill rates available from County Assessor -Taxable valuation and assessed taxes from County Assessor or State Auditor |
| D. Current Payments and Revenues | -Revenues from tax-forfeited lands -Total payments | -Percent of potential taxes | -Divide revenues plus payments by total potential taxes (not private) -Divide payments only by potential acquired taxes | -See Section III for payments -Land Commissioner for tax-forfeited revenues |
| VII. Local Economy | | | | |
| A. Tourist-travel expenditures | -Total expenditures -Gross sales -Resident population -Park user distribution | -Total expenditures -Percent of gross sales -Expenditures per resident -Percent park users from 50+ mile radius | -Record available data | -Minnesota Research Bulletin #06 "Economic Distribution of Tourist Travel Expenditures in Minnesota by Regions and Counties," Department of Economic Development, 1976 -"Minnesota 1974 State Park Users Survey" (DNR Parks Division) |
| B. Employment | -1970 government employment | -Percent employed in government | -Record available data | -1972 County-City Data Book, Table 2, Item 44. |
| C. Developmental Expenditures | -Local employment and expenditures for equipment and materials | -Number of local employees -Total local expenditures | -Record available data | -Data usually not available -Some data may be available in area management plans or environmental assessments (see Section I) |
| VIII. Land Management and Use | | | | |
| A. Recreational opportunities | -Deficiencies in recreational acres and facilities -State priorities (SCORP) -County park and recreation expenditures | -Number of acres -Number of facilities by type -Per capita expenditures | -Record available data -Divide expenditures by population | -1974 Minnesota SCORP (DNR Park Division) -See Sections I and IV for additional data |
| B. Land Management costs | -County costs to manage tax-forfeited land -Land Commissioner personnel -State Forestry personnel | -Total costs -Number of foresters | -Record available data -Determine average acres covered per forester | -County Land Commissioner -Area Forester |

CHAPTER SIX

SERVICE DEMANDS RELATED TO NATURAL RESOURCE LANDS

The most important question addressed in the first phase of the Public Lands Impact Study was related to the types and costs of local services provided to State and federal natural resource lands in Minnesota. The purpose of this chapter is to summarize the results of this research effort. Since most State and federal natural resource lands are located outside municipalities, the impact analysis in the first phase of the Public Lands Impact Study focused primarily on county and township government. It should be noted, however, that some peripheral impacts may accrue to municipalities in both service demands and benefits related to public natural resource lands. The general types of local services provided in rural areas and the responsible agencies are identified in Table 11. The need for these services is directly related to the use of natural resource land by people. The primary activities on public natural resource land are: (1) recreation, (2) agriculture (private leases), (3) logging (leases), and (4) employee residence. Local service expenditures are categorized in county summary budgetary reports as follows:

- Road construction and maintenance
- Fire protection
- Law enforcement
- Sanitation or solid waste disposal
- Utilities
- Education
- Welfare
- Health
- General government

The expenditures for county services in 1974 for the two pilot areas are identified in Table 12. The expenditures for services in 1974 for selected townships in the two pilot areas are listed in Table 13.

TABLE 11
SUMMARY OF MAJOR RESPONSIBILITY FOR LOCAL SERVICES IN RURAL AREAS¹

| Service | State ⁽²⁾ | County | Township | School District | Private Companies |
|-----------------------------------|----------------------|--------|----------|-----------------|-------------------|
| General government | - | X | X | - | - |
| Road construction and maintenance | X | X | X | - | - |
| Fire protection | X | - | X | - | - |
| Police services | - | X | - | - | - |
| Welfare | 0 | X | - | - | - |
| Health | - | X | - | - | - |
| Education | 0 | - | - | X | - |
| Sanitation | - | X | - | - | X |
| Utilities | - | - | - | - | X |

(1) X indicates primary responsibility.
0 indicates major funding assistance provided.

(2) State also provides general funding assistance.

TABLE 12
COMPARISON OF COUNTY EXPENDITURES FOR COUNTY SERVICES IN 1974¹

| Type of Expenditure | Total Expenditures (\$1,000) | | | | Expenditures Per Capita | | | |
|-------------------------------|------------------------------|---------------|-----------------|---------------|-------------------------|------------------------|---------------------------|------------------------|
| | State Total | Aitkin County | Hennepin County | Winona County | State Total (3,804,971) | Aitkin County (11,403) | Hennepin County (960,080) | Winona County (44,409) |
| General Government | \$ 69,815 | \$ 337 | \$ 9,770 | \$ 603 | \$ 18.35 | \$ 29.55 | \$ 10.18 | \$ 13.58 |
| Public Safety | 43,695 | 120 | 15,781 | 272 | 11.48 | 10.52 | 16.44 | 6.12 |
| Conservation | 7,542 | 2 | 50 | 41 | 1.98 | .18 | .05 | .92 |
| Highways | 97,576 | 1,496 | 4,761 | 1,938 | 25.64 | 131.19 | 4.96 | 43.64 |
| Sanitation | 1,844 | 0.3 | 374 | 12 | .48 | .03 | .39 | .27 |
| Health | 20,363 | 7 | 8,595 | 135 | 5.35 | .61 | 8.95 | 3.04 |
| Welfare | 361,297 | 1,309 | 121,884 | 2,057 | 94.95 | 114.79 | 126.95 | 46.32 |
| Schools | 7 | 0 | 0 | 0 | .002 | .00 | .00 | .00 |
| Culture/Recreation | 14,936 | 31 | 4,052 | 20 | 3.92 | 2.72 | 4.22 | .45 |
| Miscellaneous | 61,149 | 189 | 23,577 | 262 | 16.08 | 16.58 | 24.55 | 5.90 |
| TOTAL COUNTY EXPENSES | \$678,226 | \$3,491 | \$188,846 | \$5,340 | \$178.25 | \$306.15 | \$196.70 | \$120.25 |
| CAPITAL OUTLAY | 105,376 | 143 | 27,248 | 190 | 27.69 | 12.54 | 28.38 | 4.28 |
| TRUST & AGENCY ⁽²⁾ | 1,169,874 | 4,625 | 323,572 | 20,395 | 307.46 | 405.60 | 337.03 | 459.25 |

(1) Source: State Auditor's Office.

(2) Monies distributed by county to townships, cities and school districts.

TABLE 13
COMPARISON OF 1974 EXPENDITURES FOR SELECTED TOWNSHIPS IN THE PILOT AREAS¹

| | State Total (\$1,000) | Aitkin County | | | All Townships (\$1,000) | Winona County | | All Townships (\$1,000) |
|--------------------------------|-----------------------------|-------------------|--------------------|--------------------|-------------------------------|------------------------|--------------------|-------------------------------|
| | | Jevne Township | Turner Township | Verdon Township | | Whitewater Township | Wiscoy Township | |
| Population (1970) | 826,586 | 212 | 77 | 75 | 8,419 | 237 | 330 | 10,998 |
| <u>Expenditures</u> | | | | | | | | |
| - General government | \$ 6,162 | \$ 911 | \$3,899 | \$ 491 | \$ 77 | \$ 2,092 | \$ 1,966 | \$ 84 |
| - Fire | 1,989 | 0 | 0 | 0 | 15 | 387 | 166 | 27 |
| - Road and bridge | 19,317 | 8,477 | 1,704 | 430 | 205 | 11,170 | 16,106 | 338 |
| - Capital and other | 2,721 | 0 | 0 | 35 | 15 | 0 | 61 | 12 |
| - Total | \$30,189 | \$9,388 | \$5,603 | \$ 956 | \$ 312 | \$13,649 | \$18,229 | \$ 461 |
| <u>Expenditures Per Capita</u> | | | | | | | | |
| - General government | \$ 7.45 | \$ 4.30 | \$50.63 | \$ 6.55 | \$ 9.14 | \$ 8.83 | \$ 5.96 | \$ 7.64 |
| - Fire | 2.41 | 0 | 0 | 0 | 1.78 | 1.63 | 0.50 | 2.45 |
| - Road and bridge | 23.37 | 39.98 | 22.13 | 5.73 | 24.35 | 47.13 | 48.81 | 30.73 |
| - Other | 3.29 | 0 | 0 | 0.47 | 1.78 | 0 | 0.18 | 1.09 |
| - Total | \$ 36.52 | \$44.28 | \$72.76 | \$12.75 | \$37.05 | \$ 57.59 | \$ 55.45 | \$ 41.91 |

(1) Source: State Auditor's Office.

Total Expenditures for County and Township Services

County Expenditures for Services. Total county expenditures, as well as expenditures by general service category, were evaluated in the two pilot areas on the basis of cost "per capita" and compared to: (1) the statewide average cost per capita, and (2) costs per capita in an urban county (Hennepin County was used for this purpose). The per capita measure was selected for comparative purposes because service demands are usually generated by people. Comparisons to the statewide average help to identify high or low costs per person for various services in the pilot areas which may suggest increased or decreased service demands caused by the existence of public natural resource lands. A comparison was also made to expenditures in an urban area (Hennepin County) to help identify cost increases or decreases which might be related to population density. (Density may be indirectly affected by the amount of public natural resource lands in the area.)

County budget summaries typically categorize disbursements as expenses, capital outlay, and trust and agency funds (which are monies distributed by the county to townships, school districts and municipalities). This analysis deals only with county expenses (see Table 12) which are more directly related to service demands. Since detailed data which were comparable for all counties were extremely difficult to obtain, generalized financial data from the State Auditor's Office were used for all counties in this analysis.

This general analysis suggested that certain types of per capita expenditures may be increased somewhat by the existence of large acreages of public natural resource lands. Expenditure levels also appear to be related to population density. The statewide average total per capita county expenditures in 1974 was \$178 (see Table 12). Aitkin County spent nearly twice that much per capita (\$306) while Winona County spent somewhat less per capita (\$120). Aitkin County had above average per capita expenditures for: (1) general government, (2) highways, and (3) welfare, while Winona County had above average per capita expenditures only for highways. As discussed in previous chapters, Aitkin County has a high percentage of public natural resource lands (54 percent), a large land area (1,164,502 acres), and a small population (11,403). Winona County has ten percent public land, 406,320 acres of total land area, and a population of 44,409. In contrast, Hennepin County has only one percent public lands, a land area of 354,225 acres, a population of 960,080, and above average per capita expenses for public safety, health, welfare, and culture/recreation (see Table 12).

Township Services. It was suggested by some local officials surveyed that townships were the governmental unit most negatively impacted by public natural resource lands. Township expenditures are primarily for roads, fire and general government. An attempt was made to evaluate township expenditures by: (1) comparing the statewide average to the pilot areas, and (2) comparing selected townships within the respective pilot areas. In Winona County, Whitewater and Wiscoy Townships were selected because Whitewater has the most public natural resource land and Wiscoy has none. In Aitkin County, three townships were selected because expenditures vary considerably without obvious relationship to the amount of public natural resource land. Jevne Township was selected because it has very little public land and Turner and Verdon Townships were selected because they have extensive public natural resource lands, similar population size, but very different expenditures.

In the brief analysis done, no direct relationship could be established between the level of township expenditures and the amount of natural resource land although in Winona County, Whitewater Township had higher per capita expenditures than either Wiscoy or the county average (see Table 13). Those townships in Aitkin County which have the most public natural resource lands tend to be unorganized townships for which the county has assumed responsibility. In addition, township fire expenditures are considerably less in Aitkin County where the State provides substantial wildfire protection.

Direct Local Services to Natural Resource Lands

Not all services for which counties and townships make expenditures are services which are provided directly to public natural resource lands. Those services which could be identified as having a direct relationship to natural resource land include:

- Road construction and maintenance

- Fire protection
- Law enforcement
- Solid waste collection and disposal
- Utilities

Each of these services, as provided in the pilot counties, is described below.

Road Construction and Maintenance. Road construction and maintenance was identified by both county and township officials who were surveyed as one of the major expenses they have related to public natural resource land. The officials surveyed believe increased use on their roads requires higher design standards and more frequent maintenance. However, data are not available to determine what proportion of vehicular travel is directly related to natural resource holdings. The State does not have rigorous minimum design standards for rural roadways, especially county and township roads which are not receiving State financial aid. Furthermore, neither State nor local records are kept in such a way as to permit the identification of local expenditures which are directly related to the existence of public land. Therefore, the impact analysis focused on overall policies of road construction, maintenance and funding as well as the relative costs for these services in the respective pilot counties.

Four elements which are commonly used to describe roadway systems are illustrated in Figure 8 and include:

1. Functional classification or the purpose, location and spacing of the facility.
2. Jurisdictional responsibility for construction and maintenance of the facility.
3. Design characteristics of the facility.
4. Aid systems or financial resources available for construction and maintenance of the facility.

Roadway access to State and federal natural resource land may be provided by federal, State, county or township roads. Primary access (that is inter-county travel to the vicinity) is usually provided on U.S. and State trunk highways which are entirely the responsibility of the Minnesota Department of Transportation. Direct access into or through public lands is frequently provided by County State-aid Highways (CSAH), county roads and/or township roads. These local roads usually also serve residences near the public land. Roads within the public natural resource land holdings are usually provided by the managing agencies but are sometimes township or county roads. Counties and townships may abandon or stop

maintenance on roads which serve only public land. In those cases where an internal or local road has been officially abandoned and is considered necessary for the purposes of the State land, the Department of Natural Resources will maintain the road.

There is some evidence of increased traffic demand caused by recreationally used natural resource lands. On the average, nearly three-quarters of weekday state park visitors and two-thirds of weekend visitors are from outside a 50 mile radius of the park. Eighty-eight percent of weekday and 95 percent of weekend visitors to Savanna Portage State Park (Aitkin) in 1974 were from outside a 50 mile radius; 83 percent of weekday and 80 percent of weekend visitors to Whitewater State Park (Winona) were from outside a 50 mile radius. Approximately one-third of the hunters in the White-water Wildlife Management Area come from outside a 25 mile radius. In addition, there appears to be a trend toward increased winter recreation on both public and private recreation lands. Therefore, roads which were previously not maintained in the winter must now be plowed. This reduces the overall design life of the roadway through both exposure and increased use.

As indicated in Figure 8 and in Chapter Four, counties receive direct State and federal aid for the construction and maintenance of county state-aid highways and federal-aid secondary highways. Aid which is based on needs, especially vehicular traffic, at least partially compensates for non-resident traffic. In addition, limited aid is available through the turnback account. Townships receive no direct State or federal aid for roads except limited assistance for bridge repair or as otherwise provided by counties, general revenue sharing, or special grants. Limited special aid is also available to counties at the discretion of the DNR or the Minnesota DOT through the State Park Road Account, the federal public land fund and monies from the Bureau of Indian Affairs (see Chapter Four).

The statewide average per capita county expenditures for highway construction and maintenance in 1974 were \$25.64. Aitkin County spent \$131.19 per capita, and Winona spent \$43.64 per capita. In contrast, Hennepin County spent only \$4.96 per capita for road construction and maintenance in 1974 (see Table 12). The per capita costs for townships are also higher in both pilot areas than the State average (see Table 13). Both counties spent more per mile of county state-aid (CSAH) highways and county roads than the average county in Minnesota (see Table 14). Aitkin County provides more miles of road per person than the State average but provides significantly less miles of road per acre than the statewide average. In both pilot areas CSAH system state-aid accounted for a significantly lower percent of total county expenditures for road construction and maintenance than in the State as a whole (see Table 14). While the actual costs incurred as a direct result of public natural resource lands cannot be calculated, it appears that both counties and townships have expenditures for road construction and maintenance which are related to public lands. Counties receive at least partial reimbursement for construction costs through both special grants and CSAH aid.

Fire Protection. Fires are generally categorized as "wildfires" or "structure fires." In rural areas, local fire protection responsibility rests with the townships who usually contract for services with rural volunteer fire departments in nearby rural cities. Counties assume this responsibility in areas without organized township governments. By law (MSA 88) the Department of Natural Resources is responsible for wildfire protection and prevention in all "forested" areas of the State (defined as any county with at least 1,000 contiguous acres of tree cover). Almost all counties in the State meet this criterion (see Figure 9). The law further directs that townships and municipalities "shall cooperate with and be under the general supervision and direction" of the DNR. The forestry division and fire protection unit of the DNR carry out these responsibilities through direct fire protection activities or through cooperative arrangements with federal and local agencies. Federal agencies normally provide fire protection on federal lands unless a cooperative agreement has been made with the DNR or local agencies. DNR is responsible for wildfire detection, prevention and protection on both public and private land in all areas of the State except the southwest quadrant (see Figure 9). Even in this region, the DNR assists local fire

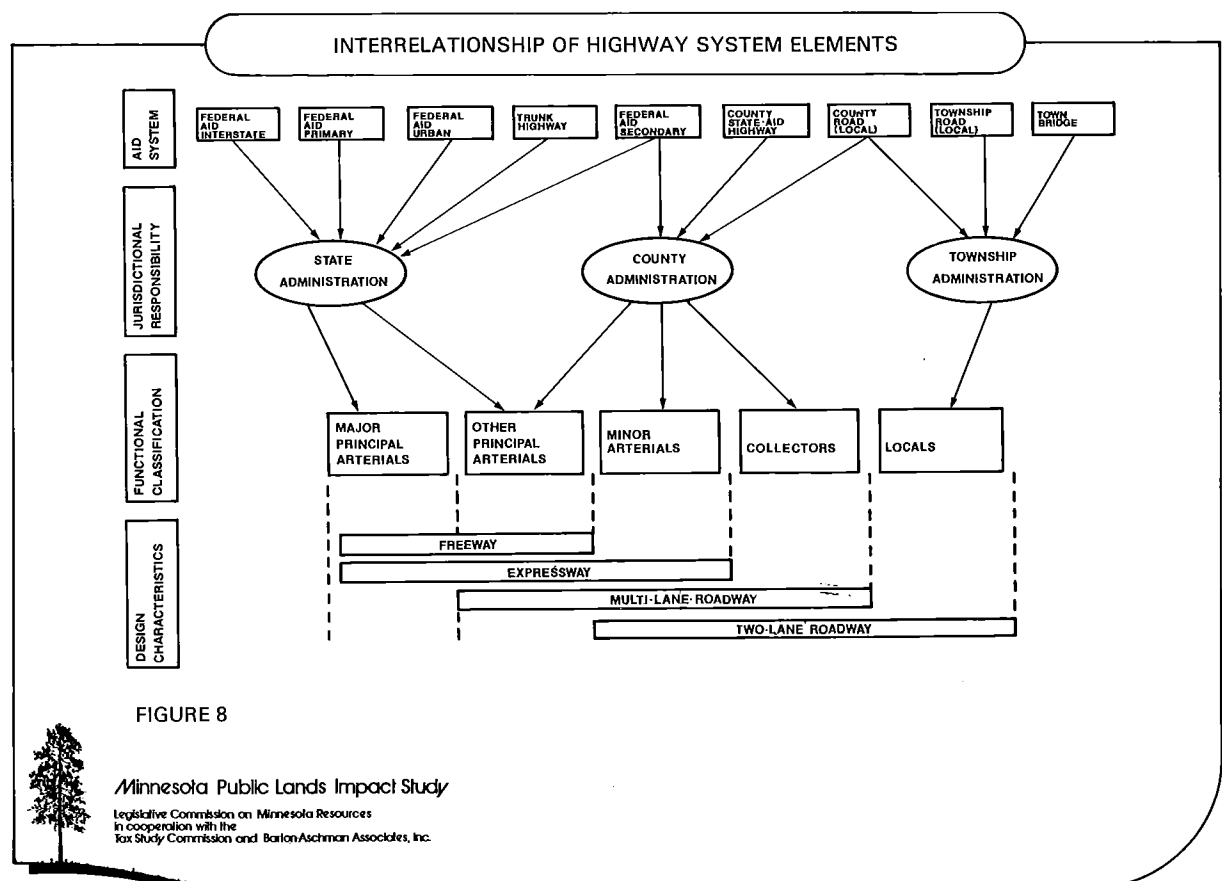


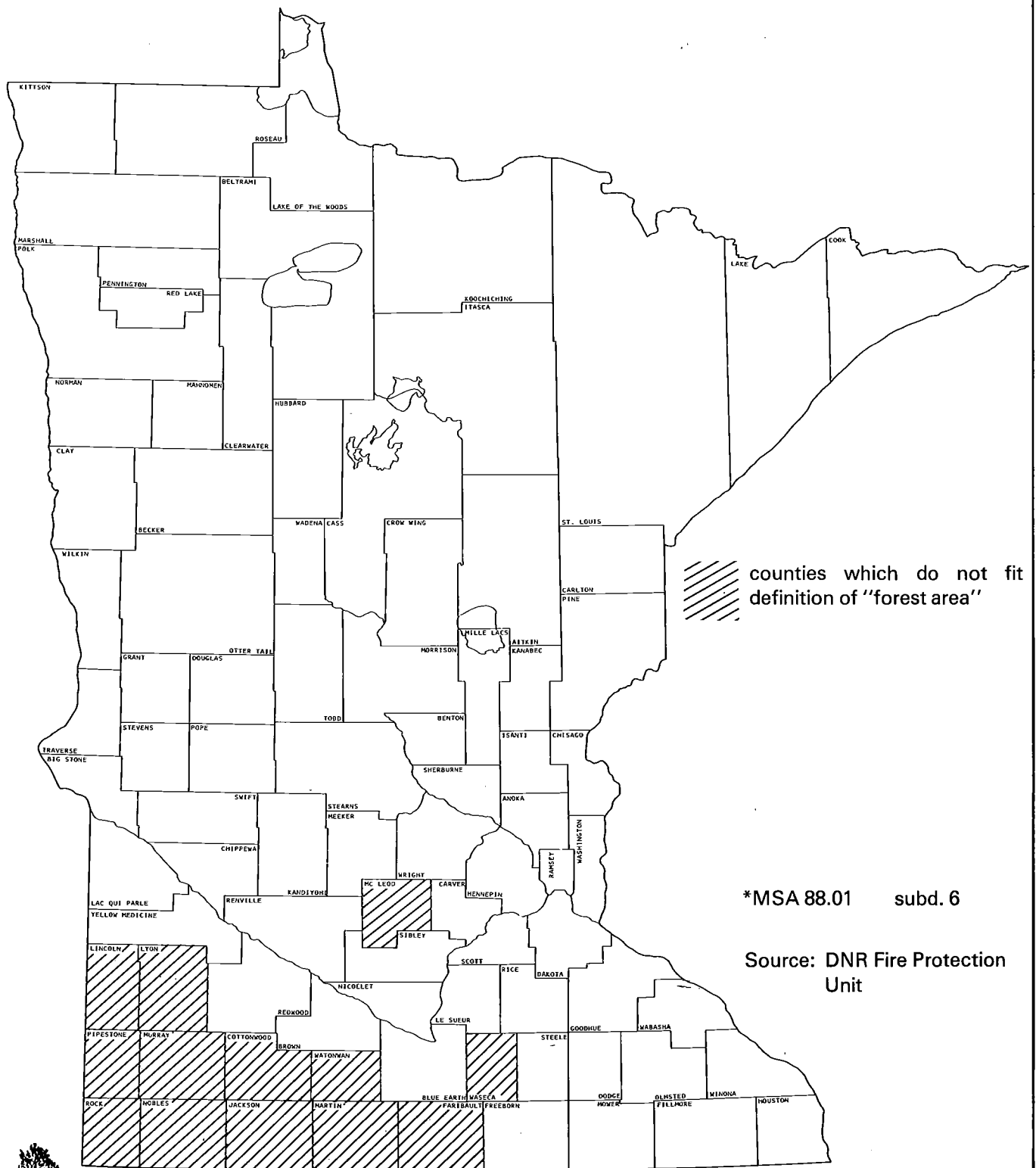
TABLE 14
COMPARISON OF ROAD EXPENDITURES AND STATE AID IN PILOT COUNTIES

| Factor | Total State | Aitkin County | Winona County |
|---|---------------------------|---------------------------|--------------------------|
| Land Area (acres) | 51,033,677 | 1,164,502 | 406,320 |
| Population (1970) | 3,804,971 | 11,403 | 44,409 |
| CSAH and County Road Mileage | <u>45,722</u> | <u>511</u> | <u>437</u> |
| - CSAH | <u>29,671</u> | <u>365</u> | <u>360</u> |
| - County Roads | 16,051 | 146 | 77 |
| CSAH and County Road Miles Per Acre | 1 mile per 1,116 acres | 1 mile per 2,279 acres | 1 mile per 930 acres |
| CSAH and County Road Miles Per Capita | 1 mile per 83 people | 1 mile per 22 people | 1 mile per 102 people |
| Total 1974 Expenditures ⁽¹⁾ | | | |
| - Total | \$97,576,000 | \$1,496,000 | \$1,938,000 |
| - Per Mile of CSAH and County Roads | \$2,136 | \$2,928 | \$4,435 |
| - Per Mile of CSAH only | \$3,289 | \$4,099 | \$5,383 |
| 1976 CSAH State Aid ⁽²⁾ | | | |
| - Total | \$68,892,738 | \$735,868 | \$899,512 |
| - Aid Per CSAH Mile | \$2,322 | \$2,016 | \$2,499 |
| - Percent of Total County Expenditures | 71% | 49% | 46% |

(1) Source: State Auditor's Office (1976 expenditures probably higher).

(2) Source: Minnesota Department of Transportation.

FORESTED AREAS SUBJECT TO DNR WILDFIRE PROTECTION*



*MSA 88.01 subd. 6

Source: DNR Fire Protection Unit



FIGURE 9
Minnesota Public Lands Impact Study

Legislative Commission on Minnesota Resources
in cooperation with the
Tax Study Commission and Barton-Aschman Associates, Inc.

Scale 1:1,000,000

0 5 10 25 50 MILES
0 5 10 25 50 KILOMETERS

departments and gives technical advice upon request. Structural fires are primarily the responsibility of the local fire fighting units. DNR currently has formal service contracts with approximately 150 of the total 750 rural fire departments in Minnesota (see Chapter Four for a description of contract types).

Fire protection costs may be financed in several ways as described below:

1. State funding for DNR fire protection comes from general fund appropriations. The federal government will reimburse up to 50 percent of expenditures from DNR's Emergency Fire Fund (which is about \$100,000 per year).
2. Counties, towns and municipalities may levy taxes for fire protection. County levies are subject to overall county levy limitations. Fire levies in towns and municipalities are not subject to overall levy limitations and may be levied in any amount to cover deficits from previous fire contracts. Supporting legislation includes MSA 88.04, 368.85 subd. 4, 368.86, 365.243, and 275.50 subd. 5L. Towns and cities may also charge service charges for fire protection (service charges are not regulated by state law). If these charges are not paid, a special assessment may be issued (MSA 429.101).
3. DNR may charge a private landowner for fire protection services if the person is determined to be responsible for the fire (MSA 88.75). Such cases may also be handled by charging the person with a misdemeanor and allowing the courts to determine the fine or sentence.
4. Rural fire departments are eligible for federal "Title IV" assistance through the 1972 Rural Development Act. These grants are 50/50 matching funds for upgrading of equipment. Rural fire departments may also receive old equipment through the federal excess property program. The State plays an active role in obtaining and allocating the equipment which must be maintained at federal standards.

Townships in Winona County spent approximately \$27,000 for fire protection in 1974 (see Table 13) while Aitkin townships spent approximately \$15,000. \$995 was paid to rural fire departments in Winona County by DNR in 1975 (3.7 percent of 1974 costs). Aitkin County rural fire departments received \$465 in 1975 (3.1 percent of 1974 costs). Winona County fire departments received \$4,556 in direct payments for wildfire protection from DNR in 1976 and Aitkin County fire departments received \$15,015. It should be noted that the incidence of wildfires was extremely high in 1976 and, therefore, 1976 figures are not considered to be representative of the average costs and direct payments related to fire expenditures. The DNR also provides direct fire fighting services, especially in the northern areas of the State. These services account for the substantially lower local expenditures for wildfire protection in Aitkin County.

While available data do not show the exact portion of costs attributable to public land, it is clear that: (1) local services are being provided, and (2) direct compensation is made through contractual payments and DNR services on both private and public land.

Law Enforcement. An increased demand for police services related to public natural resources land has been reported by some local officials surveyed during the first phase of the Public Lands Impact Study. Law enforcement problems related to public lands are handled by State, federal and local officials. The State Conservation Officer (previously called the game warden) is responsible for enforcing State laws on both public and private land related to: (a) game and fish, (b) water, and (c) snowmobiles. These officers attempt to handle all problems on State land but they do not have arrest powers except for the State laws identified above. These officers are armed and occasionally assist local law enforcement officers by detaining suspected criminals, drunk drivers, etc., in circumstances where they do not have arrest powers. Federal officials attempt to handle all law enforcement on federal natural resource lands but they also have limited arrest powers.

County sheriffs also have the authority to enforce game and fish, water and snowmobile laws on both public and private lands. Clearly, if there were no Conservation Officers the full responsibility for enforcing these laws would rest with the County sheriffs. Usually the County Sheriff and the Conservation Officer provide cooperative assistance to each other in law enforcement activities. In addition, the County Sheriff must be called in for civil matters and most crimes on public land.

The Aitkin County Sheriff responded to a total of about 2,100 calls last year at an average cost of about \$55 per call using 1974 data. About 100 calls (or 5 percent of the total) were on public land. This is equivalent to a cost of about \$6,000. These calls peaked significantly in the summer suggesting a relationship to increased tourist and recreational activities (see Figure 10). The Aitkin County Sheriff believes that additional problems are caused by public land users outside public land but the actual number of such cases cannot be determined from available data. The Winona County Sheriff has not encountered or identified any similar secondary law enforcement problems. He estimates that less than 1 percent of his staff time is spent on problems related to public lands. Using 1974 expenditures this would indicate an annual cost of less than \$2,700.

On an acre by acre basis, public natural resource lands apparently do not demand the level of police services required by private lands. However, since direct payment is usually not made for local police services to public land, local communities may have somewhat increased law enforcement costs. These increased expenditures may be somewhat offset by the services of the Conservation Officers and occasional contracts from the DNR for special services such as snowmobile law enforcement.

Sanitation/Solid Waste Disposal. Counties bear the primary local responsibility for solid waste disposal in rural areas. However, State and federal agencies surveyed indicated that they provide their own sanitation services. These services are usually provided directly by the agency or through contract with private companies. It is possible that some increase in cost for waste disposal may result due to increased service demands in nearby areas and along access roads, or increased landfill size requirements. No specific data is available to measure these potential impacts. Since counties have complete responsibility for tax-forfeited lands, the costs related to these lands are borne by the county. Collection costs along roads are included in road maintenance costs.

The statewide average costs per capita for county sanitation services in 1974 was \$0.48. Aitkin County spent only \$0.03 per capita, Winona County spent \$0.27 and Hennepin County spent \$0.39 -- all less than the statewide average and apparently more related to population density than to the amount of natural resource lands in the area.

Utilities (Water, Gas, Electric, Sewer, etc.). All federal and State agencies surveyed indicated they either: (1) provided utilities themselves, or (2) paid a service charge to private utility companies or local communities. State law provides that State agencies may be levied special assessments for improvements (see Chapter Four). The State agency estimates the benefit it receives from the improvement and pays that portion of the assessment it feels is appropriate. Few such improvements are made to natural resource lands except for some office buildings, residences, etc. DNR has usually paid these assessments.

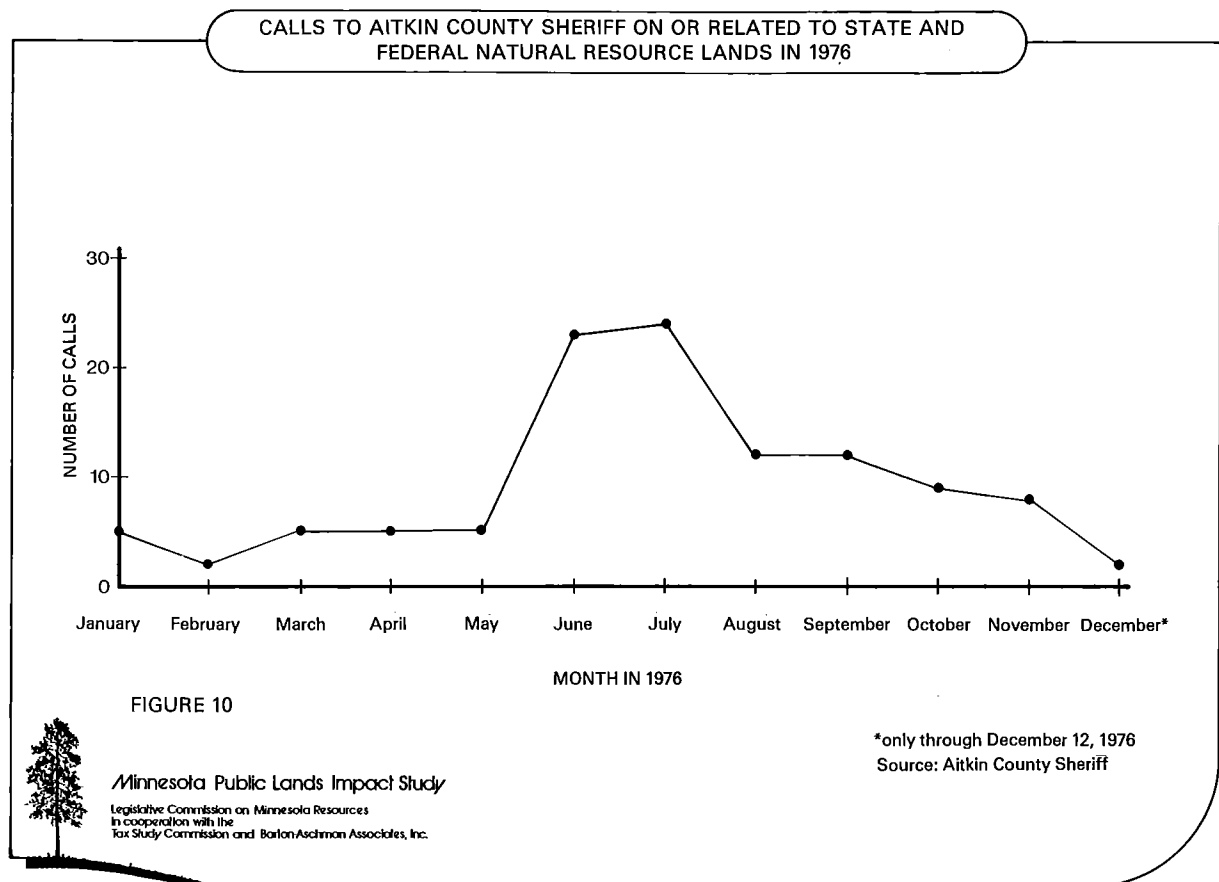
Other Local Expenditures for Services

Local governments also expend considerable amounts of money for:

- Education
- Health
- Welfare

These expenditures do not usually involve direct service demands by public natural resource lands. Overall expenditures for these services and their relationship to natural resource lands are discussed below.

Education. School districts rather than counties or townships bear the primary responsibility for education expenditures. Since residences on State lands are subject to real estate taxes, local school districts do not provide education services to natural resource lands without compensation. The federal government provides compensation for the education of the children of federal employees living on federal land through the Federal Impact Payment Program (see Chapter Four). Categorical State aid (foundation school aid) also indirectly reflects the existence of tax-



exempt land (see Chapter Four). In general, those areas with low taxable land area or low land values receive higher school aid from the State. In addition, transportation costs for school children are essentially limited to one mill (see Chapter Four).

The average cost per pupil unit in 1974-75 for education in Minnesota was about \$1,442 while the average cost per pupil unit was only \$1,380 in Aitkin and \$1,337 in Winona. In contrast, the average cost per pupil unit in Hennepin County was \$1,581. The State provided approximately 54 percent of school revenues in the average Minnesota county in 1974-75 while Aitkin County received about 63 percent state aid and Winona County received about 59 percent.

Welfare. There is no indication that there are increased welfare costs in counties which can be directly attributed to the existence of public natural resource land. However, due to economic conditions in many counties with large acreages of natural resource land, costs per capita may be somewhat higher. A direct correlation is not obvious from available data. The average 1974 per capita county welfare costs in Minnesota were \$94.95. Aitkin County spent nearly \$115 per capita and Winona County spent over \$46 per capita. In comparison, Hennepin County spent \$127 per capita during that year (see Table 12).

Health. While it is possible that local governments may occasionally provide health services on public lands for which they are not compensated, such services usually involve charges to the individual served. Again, a comparison of per capita costs may be more informative. Statewide average per capita county expenditures for health in 1974 were \$5.35. Per capita expenditures in Aitkin were \$0.61, in Winona \$3.04, and in Hennepin \$8.95. These expenditures appear to be more directly related to population density than to the existence of public natural resource land within the counties.

Factors Which May Offset Costs Related to Natural Resource Lands

Factors which are commonly mentioned as potential impacts offsetting the service demands of public natural resource lands include:

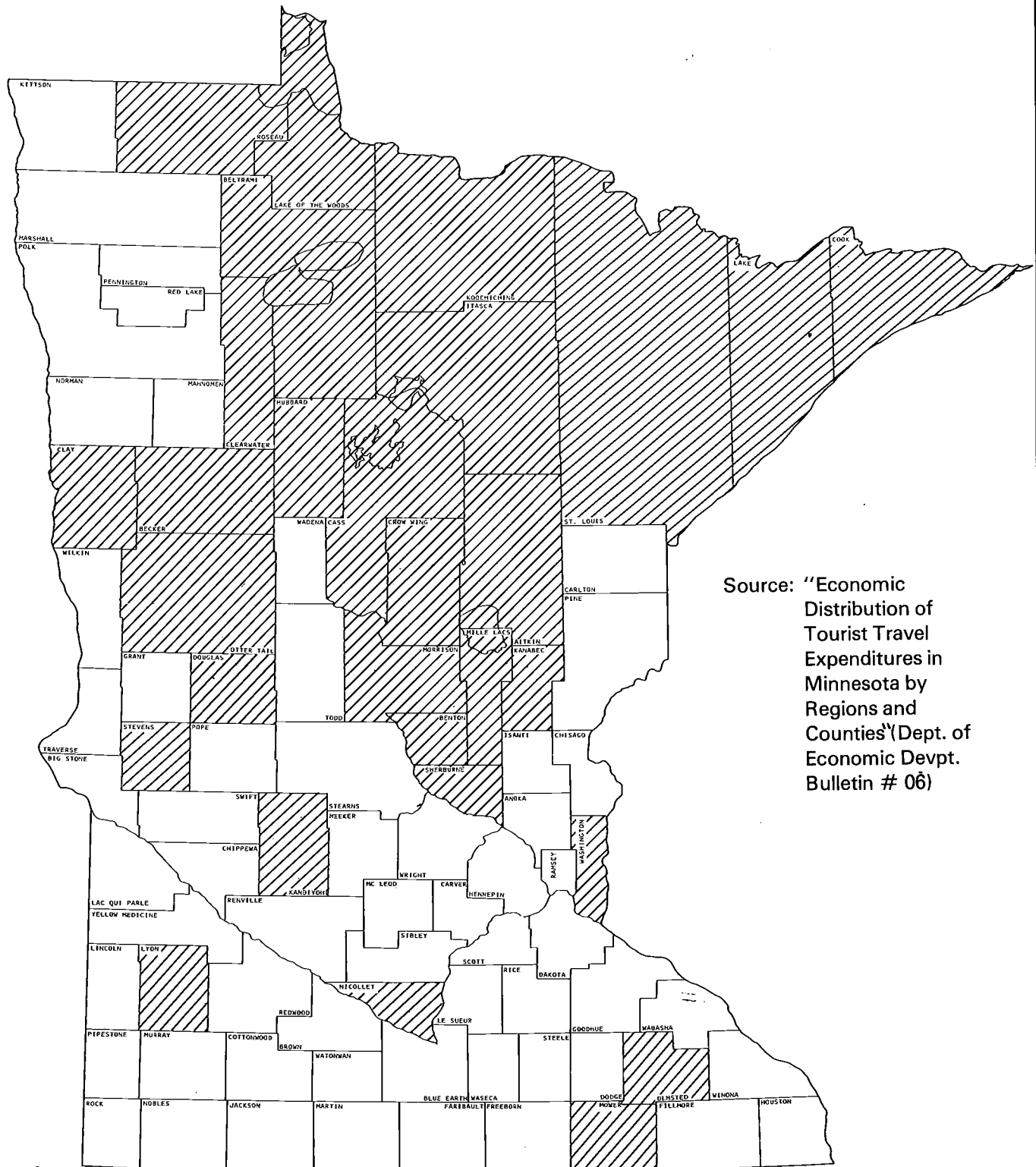
- Tourist-travel expenditures
- Governmental employment
- Park and recreation facilities
- Land management

Each of these potential impacts is discussed below.

Tourist-Travel Expenditures. Tourism was frequently identified by individuals surveyed as the most significant benefit of public natural resource lands in local communities. However, no specific data were available in the pilot areas regarding tourism. Therefore, statewide estimates provided by the Department of Economic Development were utilized. The DED research was based on several general assumptions as follows:

1. The U.S. Travel Service (Department of Commerce) definitions and basic assumptions were utilized.
2. Tourist-travel expenditures included all year-round pleasure, business and necessity travel by persons traveling over 100 miles from home.
3. Total expenditures were determined by expanding lodging receipts (hotels, motels and lodging places) using the U.S. Travel Service assumption that these expenditures account for 22 percent of total tourist-travel expenditures.
4. The remaining 78 percent of expenditures was broken down among the categories of food and beverage, transportation, entertainment, and retail purchases based on nationally established relationships.
5. Pass-through expenditures were not correctly allocated because the analysis was based on accommodations expenditures.

MINNESOTA COUNTIES WITH TOURIST-TRAVEL EXPENDITURES AS PERCENT OF COUNTY GROSS SALES ABOVE STATE AVERAGE



Source: "Economic Distribution of Tourist Travel Expenditures in Minnesota by Regions and Counties" (Dept. of Economic Devpt. Bulletin # 06)



FIGURE 11
Minnesota Public Lands Impact Study

Legislative Commission on Minnesota Resources
in cooperation with the
Tax Study Commission and Barton-Aschman Associates, Inc.

Scale 1:1,000,000

0 5 10 25 50 MILES
0 5 10 25 50 KILOMETERS

Because the assumptions used are so general, the DED recommends that "limited reliance should be placed on the specific dollar figures applied to a given county."⁽¹⁾

According to the DED estimates, tourism accounted for an estimated \$996 million (3.4 percent) of total transactions in Minnesota in 1974. Available data suggests that 18 of the 87 counties in Minnesota accounted for 80 percent of all tourist-travel expenditures in 1974. In terms of total dollars, the counties of Hennepin, Olmsted, Ramsey and St. Louis received well over half (57 percent) of 1974 tourist-travel expenditures.

Tourist-travel expenditures as a percent of county gross retail sales gives a better indication of each county's economic dependence on tourism (see Figure 11). Tourist-travel expenditures account for over 60 percent of gross sales in three counties (Cook, Lake of the Woods, Cass) and over 10 percent of gross sales in eight other counties (Koochiching, Aitkin, Olmsted, Crow Wing, Beltrami, Douglas and Mille Lacs). While an exact correlation cannot be drawn between the number of acres of public land and the level of tourist-travel expenditures, a general relationship appears to exist between tourist-travel expenditures and: (1) the location of recreation areas (especially water-oriented recreation and hunting), and (2) major commercial and population centers in the State (see Table 15).

There is some indication that tourist-travel expenditures may not be fully reflected in the local tax base although tourism businesses such as resorts may contribute significantly to local tax revenues. Whatever the exact balance between the costs and benefits of tourism, it is clear that public natural resource lands with recreational facilities attract tourists from significant distances and, therefore, aid in the development of tourist-oriented businesses in nearby communities.

Government Employment. There appears to be a direct correlation between the amount of public natural resource land and local reliance on government as a source of employment. All counties in Minnesota with over 10 percent public lands have an above average percentage of their labor force employed by the government (see Table 16). In addition, the existence of public natural resource lands may indirectly increase employment through an increase in tourist-oriented businesses in areas where they would not otherwise exist.

Park and Recreation Facilities. It is clear that the existence of State and federal natural resource lands provides recreational opportunities which might otherwise have to be provided by local communities. Since the direct cost of developing and operating these facilities is borne by the State and federal agencies, it may be argued that these communities benefit from significant cost savings in expenditures for local park and recreation facilities. County expenditures per capita do not appear

⁽¹⁾ Department of Economic Development Research Bulletin 06, "The Economic Distribution of Tourist-Travel Expenditures in Minnesota by Regions and Counties," 1976.

TABLE 15
COMPARISON OF PUBLIC NATURAL RESOURCE LAND TO 1974 TOURIST-TRAVEL
EXPENDITURES¹

| County | Public Natural Resource Land | | Tourist-Travel Expenditures | | |
|-------------------|------------------------------|------|-----------------------------|--------------------------|-------------------------|
| | % | Rank | Rank in Total \$ | Rank in % of Gross Sales | Rank in \$ per Resident |
| Cook | 89% | 1 | 12 | 1 | 1 |
| Lake | 84 | 2 | 39 | 14 | 23 |
| Koochiching | 74 | 3 | 14 | 4 | 5 |
| Lake of the Woods | 72 | 4 | 22 | 2 | 2 |
| Beltrami | 69 | 5 | 17 | 9 | 12 |
| Cass | 59 | 6 | 5 | 3 | 3 |
| St. Louis | 56 | 7 | 4 | 20 | 21 |
| Aitkin | 54 | 8 | 24 | 6 | 8 |
| Itasca | 54 | 9 | 13 | 16 | 16 |
| Clearwater | 45 | 10 | 60 | 22 | 43 |
| Carlton | 40 | 11 | 46 | 59 | 51 |
| Hubbard | 38 | 12 | 21 | 5 | 6 |
| Roseau | 33 | 13 | 38 | 23 | 22 |
| Mahnomen | 30 | 14 | 66 | 49 | 32 |
| Crow Wing | 26 | 15 | 6 | 8 | 7 |
| Pine | 25 | 16 | 53 | 33 | 54 |
| Becker | 23 | 17 | 16 | 12 | 10 |
| Polk | 21 | 18 | 42 | 47 | 52 |
| Millie Lacs | 20 | 19 | 29 | 11 | 15 |
| Marshall | 16 | 20 | 85 | 84 | 86 |
| Wadena | 13 | 21 | 64 | 64 | 56 |
| Big Stone | 12 | 22 | 62 | 75 | 41 |
| Kanabec | 11 | 23 | 56 | 31 | 44 |
| Sherburne | 11 | 24 | 41 | 21 | 40 |
| Winona | 10 | 25 | 23 | 30 | 26 |

(1) Source: Minnesota Research Bulletin #06, "The Economic Distribution of Tourist-Travel Expenditures in Minnesota by Regions and Counties" (Department of Economic Development, 1976).

TABLE 16
COMPARISON OF GOVERNMENT EMPLOYMENT AND PERCENT OF PUBLIC LAND
BY COUNTY

| County | Percent of Public Land ⁽¹⁾ | Percent of 1970 Labor Force Employed by Government ⁽²⁾ |
|-------------------|---------------------------------------|---|
| Cook | 89% | 33.6% |
| Lake | 84 | 18.0 |
| Koochiching | 74 | 18.4 |
| Lake of the Woods | 72 | 25.5 |
| Beltrami | 69 | 37.2 |
| Cass | 59 | 25.9 |
| St. Louis | 56 | 17.8 |
| Aitkin | 54 | 19.5 |
| Itasca | 54 | 24.1 |
| Clearwater | 45 | 21.6 |
| Carlton | 40 | 17.8 |
| Hubbard | 38 | 24.4 |
| Roseau | 33 | 20.7 |
| Mahnomen | 30 | 19.7 |
| Crow Wing | 26 | 23.4 |
| Pine | 25 | 24.2 |
| Becker | 23 | 16.6 |
| Polk | 21 | 16.5 |
| Millie Lacs | 20 | 17.7 |
| Marshall | 16 | 15.2 |
| Wadena | 13 | 18.2 |
| Big Stone | 12 | 16.0 |
| Kanabec | 11 | 19.2 |
| Sherburne | 11 | 20.9 |
| Winona | 10 | 14.2 |
| Hennepin | 1% | 13.8% |
| TOTAL STATE | 25% | 15.1% |

(1) Source: See Table 1 in Chapter Two.

(2) Source: County and City Data Book, 1972.

to reflect this potential benefit. The average 1974 county expenditures per capita for parks and recreation was \$1.39. Aitkin County spent an above average \$1.80 per capita while Winona spent a below average \$0.93 per capita for parks and recreation in 1974.

It has been suggested in the past that public property has increased the value of adjoining properties at least in urban areas. In Minneapolis, the Elwell Law (MSA 430.02-.04) has been used to assess contiguous property owners for the cost of park improvements. While this report does not advocate special assessments for park development, the existence of the Elwell Law does lend support to the argument that local property owners accrue some benefits from these lands (at least those located in urban areas). On the other hand, these property owners might argue that they must deal with increased noise, loitering, vandalism, traffic and trespassing caused by the users of the park land.

While the value of amenity cannot be quantitatively measured, it is an important consideration from two perspectives. First, on a statewide basis, there is agreement that the State should preserve its natural beauty and its natural resources, through land ownership where necessary. Second, on a local basis there are many individuals who do not want the local natural environment to be altered or destroyed through development, population increases, or tourism. While the local benefits of natural resource lands were recognized, there was a feeling among those surveyed that these benefits are enjoyed by the entire State population not just local residents.

Land Management. This report has not attempted to evaluate or justify the validity of public land ownership. Further, no attempt has been made to determine which level of government or which agency within a particular governmental level should be responsible for management activities and decisions. Clearly, philosophical differences exist as to whether natural resource land management should be a local, county, state or federal responsibility. Current litigation over regulation of duck hunting in the Voyageurs National Park illustrates the dynamics of this issue.

Regardless of which governmental level or jurisdiction performs public land management activities, there is a definite need to develop a process which informs affected governmental jurisdictions as well as internal functional agencies within each governmental organization of decisions, policies and activities to assure compatibility and coordinated implementation of the intended public purpose.

The ownership of property brings with it the necessity for management. Currently, management activities are performed by the unit of government owning the property with the exception of tax-forfeited lands which, while state owned, are managed by the counties within the tight constraints described in Chapter Two.

Given that public natural resource land ownership will exist, management costs to local units of government will generally be reduced where these

activities are carried out by state or federal agencies. The State as a whole benefits from the coordinated implementation of statewide policies such as reforestation, sustained yield and multiple use development. Public ownership also aids the preservation of habitats, historical sites, and wilderness areas which could not be easily realized with private ownership. Finally, State or federal agencies may also be able to implement certain beneficial improvements such as erosion control which private land owners or local governments could not afford (this has been the case to some extent in Winona County).

Most counties with large acreages of tax-forfeited land have Land Commissioners who fulfill the land management function (see Chapter Two). The Aitkin County Land Commissioner manages over 223,000 acres of tax-forfeited land. Over half (116,000 acres) of this land has been dedicated to perpetual public use as County Memorial Forests. Another 11,000 acres are being developed as county parks. The DNR Land Classification System (see Chapter Four) has identified less than 10,000 acres of these lands as suitable for disposal or sale. In 1975, the Aitkin County Land Commissioner's operating costs were about \$52,000 or 23¢ per acre. These expenses are paid for by revenues from the land which come primarily from timber sales, land sales, and agricultural leases. Since land sales are the principal source of income and usually involve ten-year contracts, future revenues from tax-forfeited land may be significantly reduced unless there is an active program of land leases and timber sales or policies regarding land sales are changed. Without sale or lease revenues, land management activities will have to be reduced or other sources of revenue secured.

There are significant variations in staffing in relationship to land coverage by the Land Commissioner's office and the State Area Forester. On the average, each State forester in Aitkin County manages about 50,000 acres while each county forester manages about 100,000 acres. Management goals of sustained yield and multiple use are similar in both cases. Since Winona County has very little tax-forfeited land, the same problems of county land management do not exist. An attempt is made periodically to sell all tax-forfeited land parcels in Winona County at public auction.

The cost of county land management appears to be included in the budget category of general government (see Table 12). Aitkin County spent \$29.55 per capita for general government in 1974 and Winona County spent \$13.58 per capita. The statewide average cost for general county government was \$18.35.

Principal Observations and Conclusions

The service demands associated with public natural resource lands are largely the result of people-oriented activities, especially recreational activities. These demands are at least partially offset by direct and indirect revenues and services as shown in Table 17. Based upon the impacts analysis conducted in the pilot areas during Phase I of the Public Lands Impact Study, the following principal conclusions can be drawn with regard to the service demands of public natural resource lands in Minnesota.

1. Natural resource lands which attract people bring with them increased governmental service demands. However, these increased activities also enhance the local economy (hence tax base) and tend to increase private property values.
2. The principal governmental services commonly provided to public natural resource land include road construction and maintenance, fire protection, and police protection. Other direct services may also be provided in some instances. The overall costs of local services may be indirectly affected by the extent of public land ownership. These service costs are at least partially compensated for through direct payments, direct services, service contracts, and indirect categorical State and federal aid.
3. Counties and townships sometimes provide road access to State and federal natural resource lands. While some special State and federal aid is available for construction, only CSAH aid is provided for road maintenance.
4. Local dependence on governmental employment as an economic base appears to be directly increased by the existence of State and federal natural resource lands. Those lands which are recreationally oriented also increase employment in the tourist industry.
5. While these impacts are not quantifiable, local communities benefit from State and federal natural resource lands through: (a) increased recreational opportunities, (b) public land management, and (c) preserved amenities.
6. The State and federal governments make a number of direct payments to local governments which directly compensate for the service demands and revenue impacts of natural resource lands. These include both direct payments in lieu of taxes and financial aid for specific projects related to natural resource lands.
7. A number of categorical federal and State funds and services, while not directly labeled as payments to local governments as a result of State land holdings, are increased as a result of State natural resource land holdings. These include:
 - State and federal road aid
 - Conservation officer services
 - Land management costs
 - State and federal school aid
 - Fire fighting cost reimbursement
 - Fire fighting equipment and training support
8. Existing records do not permit the separation of service demands and costs by natural resource and non-natural resource generated demands.

TABLE 17
SERVICE DEMANDS AND OFFSETTING REVENUES AND SERVICES RELATED TO
PUBLIC NATURAL RESOURCE LANDS

| Service Demand | Direct/Indirect Offsetting Revenues and Services |
|---|---|
| Road construction and maintenance | <ul style="list-style-type: none"> -Internal roads provided directly by State and federal agencies. -Limited special aid available for CSAH roads near State parks or federal lands. -Aid formulae based on both non-resident and resident traffic. |
| Law enforcement | <ul style="list-style-type: none"> -Some direct service contracts. -Conservation Officer and federal agency services reduce Sheriff's duties. |
| Fire protection | <ul style="list-style-type: none"> -Direct reimbursement through fire protection services and service contracts. |
| Solid waste disposal | <ul style="list-style-type: none"> -State and federal agencies provide own services or pay service charges. |
| Utilities | <ul style="list-style-type: none"> -Service charges and special assessments. -State and federal agencies sometimes provide own services. |
| Education | <ul style="list-style-type: none"> -More foundation state aid to areas with more public land or low land values. -Federal impact payment program. -Residences on State land subject to property tax. |
| Land management | <ul style="list-style-type: none"> -State and federal agencies provide own services. -Technical assistance provided to local governments and private landowners. -All land proceeds from tax-forfeited land go to local governments. |
| Secondary general services related to increased non-resident population | <ul style="list-style-type: none"> -Increased private property values as a result of tourist economy and preserved amenity. -Increased government employment opportunity. -Increased general employment opportunity. -Increased local revenues from tourism industry. -Increased recreational opportunities. |

9. Decisions to make payments to local governments as a result of public land holdings must be based on factors beyond the costs of governmental service demands.
10. Tourist-travel expenditures appear to be directly related to: (a) recreational facilities (especially water-oriented recreation and hunting), and (b) population and commercial centers (e.g., urbanized areas). While there is not an exact correlation between public natural resource land acreage and tourist-travel expenditures, there is evidence that local governments do benefit through increased tourist-travel expenditures as a result of public natural resource lands in proximity to their jurisdiction.

CHAPTER SEVEN

LOCAL TAX REVENUES AND NATURAL RESOURCE LANDS

There are many types of land, including natural resource lands, which are not subject to local property taxes and, therefore, may not generate tax revenues for local units of government even if services are provided to the property. This loss of revenue is one of the most prominent concerns expressed by local officials about tax-exempt lands, especially where large acreages or high land values are involved. One of the primary purposes of the first phase of the Public Lands Impact Study was to determine the impacts of State and federal natural resource lands upon local property tax revenues. The purpose of this chapter is to report the findings of this research.

Natural Resource Land Acreage Determination

Land Record Uniformity Conflicts. One of the major problems encountered in determining the impacts of public land ownership on local tax revenues was the lack of uniform land records and land valuations. In both pilot counties, records of public land ownership at the local level varied, sometimes significantly, from State records.

In Winona County, for example, the County Assessor's 1974 records show 30,056 acres of State and federal natural resource lands (defined in county records as forests, parks and wildlife areas). The composite land acreage estimate developed for the first phase of the Public Lands Impact Study (see Chapter Two) estimates State and federal natural resource lands in Winona County at 38,347 acres. The major portion of this difference appears to arise in differences in land classification in the records. Some natural resource land has apparently been included in a category called "Public Lands Used for Public Purpose" in the County Assessor's records. While this does not reduce the total amount of public land accounted for, it does reduce the amount of natural resource land which can be identified without reviewing parcel-by-parcel records. The composite State land acreage records are also more up to date than the 1974 County Assessor's records.

In Aitkin County, State and federal land ownership is extensive and includes a large amount of trust and tax-forfeited land, which is not included in county land records. As a result, there are also acreage discrepancies between Aitkin County aggregate records and centralized State land records.

Land Records Utilized. Since the DNR Land Ownership System is based upon administrative records (for example, sales and purchases), it appears to be the most current record of State natural resource land (see Chapter Three). In addition, these records are uniform for all counties. Therefore, data from the LOS were used for estimating land acreage, land value and the impact of State lands upon local tax revenues. The MLMIS land records were the only composite federal land records readily available (see Chapter Three) and, therefore, were used as the basis for estimating federal land acreage and land values. The Aitkin County Land Commissioner's records of tax-forfeited lands in that pilot county were utilized for estimates regarding tax-forfeited lands. Since Winona County had very little tax-forfeited land and acreage figures were not readily available, these lands were not included in the Winona County land value estimates. It should be noted that this compilation and computation is merely an estimate of land ownership and value in the respective pilot counties.

Significance of Acquired Land. Most current direct State and federal payments in lieu of taxes are for acquired lands only (see Chapters Two and Four). Any lands which were never in private ownership or were tax-forfeited are usually exempted from payment. The rationale for this exclusion is that these lands either: (1) have never been on the tax rolls, or (2) are not capable of producing tax revenue on the private market. There are differing opinions in this regard. In both Aitkin and Winona Counties, there is increasing pressure to acquire land for recreation, retirement or agriculture purposes. The current trend suggests that lands with previously low value, including lands forfeited during the 1930's, are now becoming marketable. The Aitkin County Assessor estimates that 90 percent of public land in Aitkin County could be sold on the private market. On the other hand, there were individuals surveyed in both counties who felt that most public lands would have very little market value on the private market. Estimates of the impacts upon tax revenues will be presented for acquired land alone, as well as for all types of State and federal natural resource lands. Acquired land in the pilot areas is estimated in Table 18.

Calculation of Potential Tax Revenues

Appraised Land Value. State law requires that all lands (except tax-forfeited land) be appraised once every six years (MSA 273.18). All lands, public or private, must be appraised at 100 percent of market value. In 1974, the Winona County Assessor appraised all individual parcels of public natural resource lands. The average value per acre of this appraisal (\$58) was multiplied by the estimated total acreage of public natural resource land to determine the total estimated appraised value of natural resource lands in Winona County. Based upon this estimating procedure, the total appraised value of natural resource lands in Winona County was estimated at \$2.2 million.

Due to the extensive acreage in Aitkin County, the County Assessor has not appraised individual parcels of public natural resource lands, as has been done in Winona County. Rather, standard values per acre are used for

TABLE 18
ESTIMATED ACQUIRED NATURAL RESOURCE LANDS IN PILOT COUNTIES

| Type of Land | Aitkin County | Winona County |
|--|--------------------|-------------------|
| <u>Federal Total</u> ⁽¹⁾ | <u>15,320</u> | <u>10,200</u> |
| - acquired | 14,880 | 10,200 |
| - non-acquired | 440 | -- |
| <u>State Forest Total</u> ⁽²⁾ | <u>255,608</u> | <u>6,024</u> |
| - acquired | 42 | 5,704 |
| - non-acquired | 255,566 | 320 |
| <u>Other State Natural Resource Total</u> ⁽²⁾ | <u>132,583</u> | <u>22,123</u> |
| - acquired | 11,794 | 22,121 |
| - non-acquired | 120,789 | 2 |
| <u>Tax-Forfeited Total</u> ⁽³⁾ | <u>223,329</u> | <u>--</u> |
| - forests | 116,000 | -- |
| - other | 107,329 | -- |
| TOTAL ACRES | <u>626,840</u> | <u>38,347</u> |
| - Federal | 15,320 | 10,200 |
| - State | 388,191 | 28,147 |
| - Tax-Forfeited | 223,329 | -- |
| <u>TOTAL ACQUIRED ACRES</u> | <u>26,716</u> | <u>38,025</u> |
| - Federal | 14,880 | 10,200 |
| - State | 11,836 | 27,825 |

(1) Actual acreage cannot be determined with available data; assumed all Indian and BLM land is trust land; assumed remaining lands are acquired (Source: MLMIS).

(2) Source: County printouts from DNR Land Ownership System.

(3) Source: Aitkin County Land Commissioner.

estimating land values. The Aitkin County Assessor estimates that 40 to 50 percent of State and federal natural resource lands are forested upland (valued at \$80/acre) and 50 to 60 percent are marsh (valued at \$30/acre). To estimate appraised values for the purposes of the Public Lands Impact Study, a 50-50 split was assumed. Based upon this approximation of land values, the total appraised value of State and federal natural resource land in Aitkin County (including tax-forfeited lands) was determined to be approximately \$34.5 million (an average value of \$55 per acre).

The value of acquired land in the two pilot counties was assumed to have the same value per acre as non-acquired property. Based on this assumption, it can be estimated that the value of acquired land in Aitkin County is approximately \$1.5 million, and the value of acquired land in Winona County is approximately \$2.2 million.

Taxable Value. Taxable value is the land value used as the basis for calculating taxes. It is determined by applying a "ratio" to the appraised value of the land (appraised value is equal to the market value). State law provides for the use of several different ratios in determining the taxable value of land. That is, only a certain portion of the appraised (market) value is used as the base for calculation of taxes. The percentage varies with the type of land use, as outlined in MSA 273.13. Two ratios were used in the first phase of the Public Lands Impact Study to determine taxable value of public natural resource lands. The taxable value of State forests and county memorial forests was calculated by using the timber and homestead agricultural ratio of 20 percent of appraised value. The taxable value of all other natural resource land was calculated by using the seasonal recreational and non-homestead agricultural ratio of 33-1/3 percent. These ratios were multiplied times the estimated appraised value of the natural resource lands to determine their taxable value as follows:

$$\left(\begin{array}{l} \text{Appraised Value} \\ \text{of Forestry Lands} \end{array} \times \begin{array}{l} 20\% \text{ Taxable} \\ \text{Ratio} \end{array} \right) + \left(\begin{array}{l} \text{Appraised Value of} \\ \text{Other Natural} \\ \text{Resource Lands} \end{array} \times \begin{array}{l} 33-1/3\% \\ \text{Taxable} \\ \text{Ratio} \end{array} \right)$$

= Total Taxable
Value of Natural
Resource Lands

Based upon this calculation, it can be estimated that the taxable value of natural resource lands in Aitkin County is approximately \$8.8 million, and the taxable value of natural resource lands in Winona County is approximately \$0.7 million.

Mill Rates. To simplify the process of estimating total potential tax revenues from natural resource lands, average 1975 rural mill rates for the pilot counties were utilized, as calculated by the Department of Revenue. The average 1975 rural mill rate in Aitkin County was 98.36. The average 1975 rural mill rate in Winona County was 87.48. These mill

rates were used to estimate potential tax revenues from State and federal natural resource lands by multiplying the average rural mill rate times the taxable value of the land as follows:

$$\text{Taxable Value} \times \text{Mill Rate} = \text{Taxes}$$

Potential Impact on Local Property Tax Revenues

By using the land valuations, mill rates, and taxable value ratios described previously, the potential tax revenues from State and federal natural resource lands, if they were in private ownership, were estimated. Estimates were made for: (1) acquired natural resource lands (see Table 19), (2) State and tax-forfeited natural resource land (see Table 20), and (3) all federal, State and tax-forfeited natural resource lands (see Table 20).

Acquired Natural Resource Lands. Assuming property tax revenues were generated only by lands acquired for public natural resource purposes, Aitkin County would receive approximately \$48,000 and Winona County would receive approximately \$60,000 in real estate tax revenues (see Table 19). Acquired State natural resource lands would generate about \$21,000 in tax revenues in Aitkin County and approximately \$43,000 in Winona County. Acquired federal lands would generate approximately \$27,000 in Aitkin County and approximately \$17,000 in Winona County (see Table 19).

State and Tax-Forfeited Natural Resource Lands. Since the federal government has recently passed legislation authorizing extensive payments in lieu of taxes for federal lands, it appeared appropriate to calculate separately from federal lands the potential tax revenues related to State and tax-forfeited natural resource lands (see Table 20). Assuming both State and tax-forfeited lands generated tax revenues to the local units of government, Aitkin County would receive approximately \$835,000 in tax revenues and Winona County would receive approximately \$43,000 (see Table 20). As was noted in Chapter Two, tax-forfeited lands may be designated by the counties as county memorial forests dedicated to perpetual public use. Since this status may not be changed without State approval, estimates were made which discriminated between other tax-forfeited lands and those tax-forfeited lands dedicated as county memorial forests (see Table 20). Assuming tax revenues were generated only by State natural resource lands and county memorial forests, these lands would generate approximately \$641,000 in tax revenues in Aitkin County. In Winona County, \$43,000 of tax revenues would be generated (see Table 20).

All State, Federal and Tax-Forfeited Natural Resource Lands. Finally, the potential property taxes from all types of public natural resource lands in State and federal ownership were estimated (see Table 20). Assuming tax revenues were generated by all types of State, federal and tax-forfeited natural resource lands, Aitkin County would receive approximately \$862,000 in tax revenues, and Winona County would receive approximately \$61,000 in tax revenues from these lands (see Table 20).

TABLE 19
ESTIMATED POTENTIAL TAX REVENUES FROM ACQUIRED NATURAL RESOURCE
LANDS IN PILOT AREAS

| | Aitkin County | Winona County |
|---|----------------|------------------|
| A. <u>Estimated Acquired Acreage</u> ⁽¹⁾ | | |
| - Federal | 14,880 | 10,200 |
| - State Forests | 42 | 5,704 |
| - Other State | <u>11,794</u> | <u>22,121</u> |
| TOTAL ACQUIRED ACREAGE | 26,716 | 38,025 |
| B. <u>Average Value Per Acre</u> ⁽²⁾ | \$55 | \$58 |
| C. <u>Estimated Appraised Value</u> ⁽³⁾ | | |
| - Federal | \$ 818,400 | \$ 591,600 |
| - State Forests | 2,310 | 330,832 |
| - Other State | <u>648,670</u> | <u>1,283,018</u> |
| TOTAL APPRAISED VALUE | \$1,469,380 | \$2,205,450 |
| D. <u>Tax Ratios</u> ⁽⁴⁾ | | |
| - Federal | 33-1/3 | 33-1/3 |
| - State Forests | 20 | 20 |
| - Other State | 33-1/3 | 33-1/3 |
| E. <u>Estimated Taxable Value</u> ⁽⁵⁾ | | |
| - Federal | \$272,773 | \$197,180 |
| - State Forests | 462 | 66,166 |
| - Other State | <u>216,202</u> | <u>427,630</u> |
| TOTAL TAXABLE VALUE | \$489,437 | \$690,976 |
| F. <u>Average 1975 Rural Mill Rate</u> ⁽⁶⁾ | 98.36 | 87.48 |
| G. <u>Estimated Potential Taxes</u> ⁽⁷⁾ | | |
| - Federal | \$26,830 | \$17,249 |
| - State Forests | 45 | 5,788 |
| - Other State | <u>21,266</u> | <u>37,409</u> |
| TOTAL TAXES | \$48,141 | \$60,446 |

(1) See Table 18.

(2) Based upon information from County Assessors in pilot counties.

(3) Line A x Line B = Line C.

(4) Timber ratio used for forests; seasonal recreation and non-homestead agricultural ratio used for remainder.

(5) Line C x Line D = Line E.

(6) Source: Department of Revenue, Property Tax Bulletin No. 4.

(7) Line E x Line F = Line G.

TABLE 20
ESTIMATED POTENTIAL TAX REVENUES FROM ALL STATE AND FEDERAL NATURAL
RESOURCE LANDS IN PILOT AREAS

| | Aitkin County | Winona County |
|---|------------------|---------------|
| A. <u>Estimated Land Acreage</u> ⁽¹⁾ | | |
| - Federal | 15,320 | 10,200 |
| - State Forests | 255,608 | 6,024 |
| - Other State | 132,583 | 22,123 |
| - Memorial Forests | 116,000 | -- |
| - Other Tax-Forfeited | <u>107,329</u> | <u>--</u> |
| TOTAL NATURAL RESOURCE LANDS | 626,840 | 38,347 |
| B. <u>Average Value Per Acre</u> ⁽²⁾ | \$55 | \$58 |
| C. <u>Estimated Appraised Value</u> ⁽³⁾ | | |
| - Federal | \$ 842,600 | \$ 591,600 |
| - State Forests | 14,058,440 | 349,392 |
| - Other State | 7,292,065 | 1,283,134 |
| - Memorial Forests | 6,380,000 | -- |
| - Other Tax-Forfeited | <u>5,903,095</u> | <u>--</u> |
| TOTAL APPRAISED VALUE | \$34,476,200 | \$2,224,126 |
| D. <u>Tax Ratios</u> ⁽⁴⁾ | | |
| - Federal | 33-1/3 | 33-1/3 |
| - State Forests | 20 | 20 |
| - Other State | 33-1/3 | 33-1/3 |
| - Memorial Forests | 20 | 20 |
| - Other Tax-Forfeited | 33-1/3 | 33-1/3 |
| E. <u>Estimated Taxable Value</u> ⁽⁵⁾ | | |
| - Federal | \$ 280,838 | \$197,180 |
| - State Forests | 2,811,688 | 69,878 |
| - Other State | 2,430,445 | 427,668 |
| - Memorial Forests | 1,276,000 | -- |
| - Other Tax-Forfeited | <u>1,967,502</u> | <u>--</u> |
| TOTAL TAXABLE VALUE | \$8,766,473 | \$694,726 |
| F. <u>Average 1975 Rural Mill Rate</u> ⁽⁶⁾ | 98.36 | 87.48 |
| G. <u>Estimated Potential Taxes</u> ⁽⁷⁾ | | |
| - Federal | \$ 27,623 | \$17,249 |
| - State Forests | 276,558 | 6,113 |
| - Other State | 239,059 | 37,412 |
| - Memorial Forests | 125,507 | -- |
| - Other Tax-Forfeited | <u>193,523</u> | <u>--</u> |
| TOTAL TAXES | \$862,270 | \$60,774 |

(1) See Table 18.

(2) Based on information from County Assessors in pilot counties.

(3) Line A x Line B = Line C.

(4) Timber ratio used for forests; seasonal recreation and non-homestead agriculture ratio used for remainder.

(5) Line C x Line D = Line E.

(6) Source: Department of Revenue Property Tax Bulletin No. 4.

(7) Line E x Line F = Line G.

Impact on Average Rural Mill Rates

Taxation of public natural resource lands could reduce local mill rates rather than, or in addition to, raising local revenues. The degree to which mill rates could be reduced is dependent upon several factors, including the extent of land included in the tax base, any increases in expenditures for local services, and any decrease in other State and federal aid. In reality, it is anticipated that expenditures for services might be somewhat increased and general State and federal aid might be slightly reduced. It should also be noted that payments in lieu of taxes might not have the same effect on aid formulae as an increase in ad valorem taxes unless the laws affecting the formulae were also changed.

Calculation of Mill Rate. The changes in mill rate were calculated on the basis of 1975 average rural mill rates and rural taxes levied in the pilot counties. It was also assumed that 30 mills of the average mill rates would not be affected due to State laws affecting school mills for operating expenses and transportation (see Chapter Four). Using these assumptions, the new mill rate was calculated as follows.

$$\frac{\text{Total 1975 Rural Taxes Levied} - \text{Taxes for 30 Mills}}{\text{Estimated Taxable Value of Natural Resource Lands} + \text{1975 Rural Taxable Value}} + 30 \text{ Mills} \\ = \text{Estimated Rural Mill Rate}$$

This calculation was completed for: (1) State and federal acquired lands alone, (2) all State and federal natural resource lands, and (3) State natural resource and tax-forfeited lands alone.

Acquired Land. Assuming taxes were paid only on acquired State and federal natural resource lands, local expenditures remained constant, and federal and State aid remained constant, the average rural mill rate in Aitkin County might be reduced from 98.36 to 85.89. The average rural mill rate in Winona County might be reduced from 97.48 to 85.79 (see Table 21).

All State, Federal and Tax-Forfeited Lands. Assuming that tax revenues were generated by all State, federal and tax-forfeited natural resource lands, local expenditures remained constant, and federal and State aid remained constant, the average rural mill rate in Aitkin County could be reduced from 98.36 to 73.19, and the Winona County average rural mill rate could be reduced from 87.48 to 84.88 (see Table 21).

State and Tax-Forfeited Land. Assuming that tax revenues were generated only by State and tax-forfeited natural resource land, the average rural mill rate in Aitkin County could be reduced from 98.36 to 73.52, and the

TABLE 21
ESTIMATED POTENTIAL IMPACT ON RURAL MILL RATES IN PILOT AREAS

| | Aitkin County | Winona County |
|---|---------------|---------------|
| <u>Average Rural Mill Rate</u> <u>in 1975⁽¹⁾</u> | <u>98.36</u> | <u>87.48</u> |
| <u>Estimated Change in Rural</u> <u>Mill Rates⁽²⁾</u> | | |
| - State and Federal Acquired Land Alone ⁽³⁾ | 85.89 | 85.79 |
| - All State and Federal Land ⁽⁴⁾ | 73.19 | 84.88 |
| - State and Tax-Forfeited Land Alone ⁽⁴⁾ | 73.52 | 86.52 |

(1) Source: Department of Revenue Property Tax Bulletin No. 4.

(2) Assumes no change in 30 school mills.

(3) See Tables 18 and 19.

(4) See Tables 18 and 20.

average rural mill rate in Winona County could be reduced from 87.48 to 86.52 (see Table 21).

Relationship Between Current Direct Payments and Potential Property Tax Revenues

Existing direct and indirect payments in lieu of taxes for natural resource lands were described in detail in Chapter Four. Direct payments in lieu of taxes received by the two pilot counties in Fiscal 1975 are summarized in Table 22. Aitkin County received total direct payments of \$38,441, and Winona County received \$12,743. Aitkin County also received revenues of approximately \$89,000 in Fiscal 1975 from tax-forfeited lands under county management. Approximately 58 percent (\$52,000) of these tax-forfeited land revenues was used for the operating costs of the County Land Commissioner's office. As indicated in Chapter Four, local governments may also receive indirect aid related to public lands through categorical grants including school aid, aid for road construction, and revenue sharing. In addition, some services are provided to local areas which partially compensate for lost revenues. Examples are DNR fire protection services, and the contributions of the Conservation Officer to local law enforcement.

Acquired Land. Current direct federal and State payments in lieu of taxes in Aitkin County equal about 80 percent of the potential tax revenues on acquired State and federal natural resource lands. Current in lieu payments in Winona County equal approximately 21 percent of the potential tax revenues generated by acquired natural resource lands currently in State or federal ownership.

State and Tax-Forfeited Land. Current direct State payments in lieu of taxes for natural resource lands and direct revenues generated by tax-forfeited lands in Aitkin County equal approximately 15 percent of the potential tax revenues which might be generated by State and tax-forfeited natural resource lands, if these lands were in private ownership. The current State payments in lieu of taxes in Winona County are equivalent to approximately 21 percent of the potential tax revenues which might be generated if State-owned land in that county were in private ownership.

All State, Federal and Tax-Forfeited Lands. Revenues from tax-forfeited lands and current State and federal payments in lieu of taxes for natural resource lands in Aitkin County equal about 15 percent of the potential tax revenues from these lands if they were in private ownership. Current State and federal payments in lieu of taxes in Winona County equal about 27 percent of the potential tax revenues which might be generated by all State and federal natural resource lands if these lands were in private ownership.

Principal Observations and Conclusions

The principal observations and conclusions which have been drawn from the research related to property tax revenues and public natural resource lands may be summarized as follows:

1. Local tax revenues are clearly affected by the existence of public natural resource lands within the pilot counties. The extent to which the existence of these lands reduces the need for services, if owned privately, and the extent to which they create increased value for private property cannot be calculated.
2. The respective pilot counties appear to be less dependent upon local property taxes than the average county in Minnesota. Property taxes accounted for 29 percent of the county revenues in Winona County and 23 percent of county revenues in Aitkin County. Local property taxes account for 36 percent of 1974 county revenues in the average Minnesota county. The trend in Minnesota is a dramatic reduction in local government reliance upon property taxes to support governmental expenditures.
3. When all types of State, federal and tax-forfeited natural resource lands are considered, current direct federal and State payments in lieu of taxes (including direct revenues from tax-forfeited lands) account for less than one-fifth of the potential tax revenues which might be generated from these lands, if the lands were all in private ownership. If only acquired lands are considered, direct State and federal payments account for 21 percent of potential tax revenues in Winona County and 80 percent of potential tax revenues in Aitkin County.
4. It is recommended that both acquired and non-acquired lands, including tax-forfeited lands dedicated and managed for a public purpose, be included in any payments systems. Evidence suggests that there

TABLE 22
TYPES OF STATE AND FEDERAL NATURAL RESOURCE LANDS AND RELATED PAYMENTS¹

| Type of Land | Type of Payment | Amount of Payment in Fiscal 1975 | | |
|--|--|--|------------------|------------------|
| | | Total State | Aitkin County | Winona County |
| <u>STATE</u> | | | | |
| State Forests | 50% of gross revenues from acquired or tax-forfeited land. | \$99,794 | \$9 | \$1,496 |
| State Parks | None. | -- | -- | -- |
| Wildlife Management Areas | 35% of gross revenues or 50¢/acre, whichever is greater; from acquired land used for public hunting grounds or game refuges. | \$138,643 | \$996 | \$10,149 |
| Consolidated Conservation Areas | 50% of gross revenues, plus up to \$1,000/year for administration. | \$218,664 | \$33,582 | No eligible land |
| Trust Fund Lands | Payment per student distributed equally throughout the State as part of categorical aid for schools. | Not directly related to the location of public lands | | |
| Tax-Forfeited Lands | 80% of gross mineral royalties and receipts; counties may also keep all revenues from sales, leases, timber, etc., which are a result of county management of the lands. | \$794,519 | \$0 | \$0 |
| Law Enforcement, Public Access, DNR Administration | None. | -- | -- | -- |
| <u>FEDERAL</u> | | | | |
| National Forests ⁽²⁾ | 3/4 of 1% appraised value of acquired wilderness lands (BWCA), plus 25% of net revenues. | \$453,814 | No eligible land | No eligible land |
| National Parks ⁽²⁾ | None. | -- | -- | -- |
| Wildlife Management Areas | 3/4 of 1% appraised value of acquired lands or 25% of net revenues, whichever is greater, plus 25% of net revenues from public domain lands. | \$169,974 | \$3,854 | \$790 |
| Corps Lands ⁽²⁾ | 75% of revenues from fee title lands. | \$8,952 | \$0 | \$308 |
| BLM Lands ⁽²⁾ | 25% of net revenues from acquired lands. | \$0 | \$0 | \$0 |
| Indian Lands | None. | -- | -- | -- |
| TOTAL DIRECT PAYMENTS | | \$1,884,360 | \$38,441 | \$12,743 |
| State | | \$1,251,620 | \$34,587 | \$11,645 |
| Federal | | \$632,740 | \$3,854 | \$1,098 |
| (Tax-Forfeited County Revenues) | | | (\$89,000) | (--) |
| PERCENT OF POTENTIAL TAX REVENUE ⁽³⁾ | | | | |
| State and Federal Acquired Land Alone | | -- | 80% | 21% |
| All State and Federal Natural Resource Land ⁽⁴⁾ | | -- | 15% | 21% |
| State and Tax-Forfeited Land Alone ⁽⁴⁾ | | -- | 15% | 27% |

1) Sources: Individual agencies (see Chapter Four).

2) New federal legislation provides for payments of 75¢/acre minus existing payments for certain federal lands.

3) See Tables 19 and 20.

4) County revenues from tax-forfeited land included in calculations.

is very little difference between the two types of land with respect to service demands or potential marketability. The distinction does not reflect current conditions, but rather historical patterns.

5. Current direct State and federal payments to the two counties represent 9 percent of 1974 county revenues in Aitkin County, and 2 percent of 1974 county revenues in Winona County.
6. Consideration of probable loss of property taxes, as a result of natural resource land holdings alone, does not consider the public purposes being served, direct and indirect payments, and the services being provided as a result of these holdings.

CHAPTER EIGHT

ALTERNATIVE APPROACHES TO PAYMENTS IN LIEU OF TAXES FOR TAX-EXEMPT LANDS

The purpose of this chapter is to describe alternative compensation approaches which might be used as a basis for making payments in lieu of taxes for tax-exempt lands including public natural resource lands. It is not a recommendation for payments in lieu of taxes; rather, its purpose is to set forth alternatives for consideration in evaluating the need for payments in lieu of taxes and selecting the appropriate method by which such payments might be made. It is the goal of the Public Lands Impact Study to evaluate the impacts of all types of tax-exempt lands on local units of government. The first phase of the study has involved an evaluation of only State and federal natural resource lands. There are a number of factors supporting the desirability of a single payment system covering all tax-exempt lands if payments are to be made. Consequently, the remaining classifications of tax-exempt property should be examined before developing definitive legislative programs.

Alternative Compensation Approaches

Available literature coupled with the pilot area evaluations and other research activities undertaken as part of the first phase of the Public Lands Impact Study have led to the identification of several alternative approaches to payments in lieu of taxes. The alternatives which will be described in this chapter include the following:

1. No payments
2. Payments based on shared revenues
3. Payments based on property taxes generated prior to acquisition
4. Payments based on current appraised value
5. Payments based on a flat rate per acre
6. Graduated scale of payments taking into consideration land characteristics such as acreage, use of facilities, land use classification, location of land, land value, etc.
7. Service charges, exchanged services, or payments based on estimated service demands

8. Payments based on a cost-benefit ratio or formula.
9. Payments based on square footage and acreage (revenue capacity) formula

Each of these alternative approaches to payments in lieu of taxes is described below.

No Payments. While no payments should be considered as an alternative, the research undertaken in Phase I of the Public Lands Impact Study sustains a case for direct assistance for natural resource lands. This is supported by the statewide purpose served by public natural resource lands, the desirability of preserving those lands, their uneven distribution, the requirements for locally supplied services, and the reduction of taxable lands. Furthermore, the existence of current direct and indirect payments sets a strong precedent for such payments to local units of government.

Shared Revenues. At the present time most payments related to natural resource lands in Minnesota are based on the concept of shared revenues. That is, a certain portion of revenues directly generated by the private use of various land holdings is returned to the county, and redistributed by the counties to townships and school districts as if the monies were taxes collected for the land. The concept of shared revenues has been the primary basis for payments in many other states as well as by the federal government. The major disadvantages of this payments system are: (1) it is very difficult and very costly to administer, (2) local communities cannot predict the level of payment from one year to the next, and (3) it may cause pressure to use the land to generate revenues rather than for a more appropriate public use.

Payments Based on Prior Property Taxes. The precedent for this type of payment in Minnesota is provided by legislation covering new acquisitions for Voyageurs National Park and Wild River State Park. In each case, payments during the first year are equivalent to a specified portion of the taxes levied on the property in the year prior to acquisition. Subsequent payments are made on a declining basis over a designated number of years. The concept of declining short-term payments for new acquisitions is typically based on the argument that the impact of removing the land from the tax rolls is most keenly felt at the time of acquisition. As the land is developed, the local government begins to accrue benefits that offset the original tax reduction. It would be difficult to use previously assessed taxes as a basis for long-range payments since many public lands have never been on the tax rolls or were acquired many years ago.

Payments Based on Current Appraised Value. Under this system, payments would be determined in the same manner as private property taxes are calculated. Tax-exempt lands would be periodically appraised by either a State/federal agency or county assessors. Theoretically, this payments

system would reflect both land value and service demands. Its principal disadvantages are the cost of appraisals and the difficulty in maintaining statewide uniformity in appraisals. Significant amounts of public natural resource lands have never been appraised. If this system were initiated, care would have to be taken to assure that exempt lands were not appraised at values above or below adjacent properties. Improper appraisals could create a need to reappraise private taxable properties.

Payments Based on a Flat Rate Per Acre. The most popular approach to in lieu payments for public natural resource lands at the present time is a flat rate payment per acre of land. The federal legislation recently passed by the U.S. Congress authorizes a payment of 75¢ per acre minus any existing payments. (The total payment per county is also limited by a population index.) One of the major advantages of a flat rate per acre payment is its ease of administration -- minimum data are required to calculate the payment due. This potential benefit is lost if current payments are continued using existing formulae. The major disadvantage of this system is that it does not relate directly to the service demands of the land, and it is not very adaptable to future changes in conditions or impacts. A flat rate per acre payment also does not reflect variations in land value among different parts of the State or among different land uses.

Graduated Scale of Payments Per Acre Based on Assumed or Calculated Value. A graduated scale of payments per acre based on assumed land values might more truly reflect the varying degree of impact in local communities. This type of system could take into consideration any number of factors influencing land value. Examples of factors which might be considered include acreage, location (urban or rural), structure value, population, land use, etc. Model or pilot areas might be selected representing a cross-section of factors and community types by which to compute assumed values based on changing conditions. One of the principal advantages of this system is its potential ability to include all types of tax-exempt lands within a relatively simple administrative system which would reflect variations throughout the State.

Service Charges. One of the primary impacts of tax-exempt land upon local governments is the cost of providing local services without adequate compensation through local tax revenues. These costs might be reimbursed through direct service charges or payments in lieu of taxes based on estimated service requirements. As an alternative, State and federal agencies might provide other services in exchange for the needed local activities. Some service charges are currently paid in Minnesota for selected services to public natural resource lands.

Cost-Benefit Ratio or Formula. In theory, the best and most equitable system of payments in lieu of taxes would be based on a detailed cost-benefit ratio or formula which directly related the actual cost of tax-exempt lands to the actual benefits accrued by the local unit of govern-

ment. In reality, however, the data required to develop a rigorous cost-benefit "balance sheet" is clearly not available at the present time. Some impacts, particularly those which are indirect, are not quantifiable; and the system would be difficult and costly to develop and maintain.

Revenue Capacity Factor Formula. In a Virginia study of property taxes, the suggested payments formula was based on acreage and square footage in relationship to the total revenue generated by local taxation. The average revenue per acre of land and per square foot of improvement was determined by dividing total taxes by total taxable acres and square feet of improvements, respectively. This "revenue capacity factor" could then be applied to tax-exempt properties to determine payments. In Virginia, this formula was further refined by relating total service costs to total tax revenues. A coefficient was then applied to the potential tax bill of the tax-exempt property to determine the amount of payment. The major advantage of this system is its ability to reflect local differences in local land values, service levels and tax rates. The major disadvantages are that some data, especially that related to improvements, are not readily available at the present time; and the formula may not be readily understood by individual taxpayers.

Principles to Consider in Evaluating Alternative Approaches

There are a number of issues which should be considered as the alternative approaches to in lieu payments described above are evaluated for their potential use in Minnesota. Each of the alternative approaches and the major evaluation criteria listed below are interrelated in Table 23. Some of the most important questions related to principles of compensation include the following:

Visibility to Taxpayers. Any in lieu of tax payments should be clearly tied to tax-exempt lands. One of the major problems related to existing payments for public natural resource land in Minnesota is that local officials and individual taxpayers are unaware of many direct and indirect payments which are related to natural resource lands in their communities.

Relationship to Local Needs. Payments should be related to the fiscal needs of local units of government. Local fiscal needs are related to local tax revenues available in the community and the expenditures for services being provided by the local unit of government.

Relationship to Service Demands. Payments should be related to the service demands created by tax-exempt lands. Payments formulae ideally should take into consideration both the direct services being provided to the tax-exempt land and the indirect service demands created by the land holding (for example, increased law enforcement problems outside the land holding).

Ease of Administration. While a complex system of payments could increase the precision of determining the amount of payment, such systems could conceivably cost more to administer than the amount of the payments distributed. Other administrative questions should also be considered. How easy will the payment formula be to administer? What level of government should be responsible for determining the payments? How should the payment be initiated?

Availability of Data. The general data requirements for the alternative approaches described above are identified in Table 24. Clearly, the more data required, the more difficult the payment system will be to administer and the more costly it will be to collect data and maintain system accuracy. A multiplicity of factors may also lead to increased challenges as to fairness of the payment amount.

Degree of Equity. It has been suggested that the benefits of State and federal natural resource lands are distributed throughout the entire State while the costs of servicing these lands is borne primarily by individuals living in the locality. Any State payments above the revenues generated by the land would require financing through some form of taxation, probably from the general fund through the State income tax. While it may be argued that any shift away from property taxation to progressive income taxation makes the system more equitable on an individual basis, it could result in disproportionate taxation of individuals in areas with little public land.

Adaptability to Changing Conditions. Payments ideally should have the ability to adapt to changing conditions and to respond to the particular impacts of new acquisitions. As the impacts of the tax-exempt land change and as inflation and developmental patterns change the value of land, it would be desirable to have a payment formula which would be sensitive to these changes. It has been suggested that new public acquisitions place additional stress on the local community because the lands are removed abruptly from the local tax base. Short-term payments made on a declining basis may be an appropriate consideration in any payments in lieu of taxes formula.

Predictability of Payments to Local Governments. Payments should be predictable so that local units of government may anticipate or project future revenues.

Costs. The cost of the payments system is also an important consideration. The administrative complexity of this system clearly will have an impact on the cost of the payment system. Excessive administrative costs at either the State or the local level could completely offset the ability of the payment to respond to the service demands and tax revenue impacts of tax-exempt lands.

TABLE 23
MATRIX OF EVALUATION CRITERIA AND ALTERNATIVE APPROACHES TO PAYMENTS IN LIEU OF TAX FOR TAX-EXEMPT LANDS

| Alternative Approaches | Visibility to Taxpayers | Relationship to Local Needs | Relationship to Service Demands | Redistribution Impact or Degree of Equity | Ease of Administration |
|--|-------------------------|--|---|---|---|
| 1. No Payments | None | None | None | Remains same | No administration |
| 2. Shared Revenues | Slight to none | Indirect; may have no relationship to need | Indirect; may have no relationship to service demands | Natural resource lands which don't generate revenue would have higher negative impact. | Requires very detailed recordkeeping; many different laws and formulae are in effect. |
| 3. Previously Levied Taxes | Highly Visible | Direct relationship to impacts on tax base | Indirect relationship to service demands | Areas with higher tax rates would receive highest payments; areas with little natural resource lands might have increased taxes. | Extremely difficult for old acquisitions; relatively simple for new acquisitions. No taxes ever levied on some lands. |
| 4. Appraised Value | Highly Visible | Direct relationship to impacts on tax base | Indirect relationship to services provided by local government | Areas with higher land values and level of service would receive highest payments. Areas with little natural resource lands might have increased taxes. | Periodic land appraisal would be required by State or local govt. Uniformity of appraisal might be difficult. |
| 5. Flat Rate Per Acre | Highly Visible | Indirect relationship | Indirect relationship | Areas with most acreage would receive highest payments regardless of services or impacts. Areas with little natural resource lands might have increased taxes. | Very easy to administer. |
| 6. Graduated Scale Per Acre Based on Assumed Value | Highly Visible | Direct relationship to impacts on tax base | Could be fairly direct relationship if problems considered in assumed value | Would be very equitable system if consider population, acreage, land use, land values, etc. Areas with little natural resource lands might still have higher taxes. | Somewhat difficult to administer since considerable data required. |
| 7. Service Charges | Slight to None | Indirect relationship | Very direct relationship to problems | Would provide payment for local services without affecting taxes in other areas. Some inequity related to impacts on tax base would continue. | Relatively easy to administer. Uniformity of service charges might be problem. |
| 8. Cost-Benefit | Moderately Visible | Very direct relationship | Very direct relationship | In theory very equitable. Areas with little natural resource land might have higher taxes. | Very difficult to administer. |
| 9. Square Footage Formula | Highly Visible | Direct relationship | Indirect relationship | In theory very equitable. | New data required to establish; but relatively simple to administer. |

TABLE 23
(Continued)

| Availability of Data | Adaptability to Changing Conditions | Predictability of Payments to Local Governments | Costs to State (Availability of Resources) | Comments |
|--|--|---|---|---|
| No data required | None | None | None | -- |
| Data presently collected | Revenue may change without regard to impacts; legislation required to change formula. | Will vary from year to year (sometimes extremely). | All costs paid for by revenues from land; administrative costs somewhat high. | Currently in effect to some extent in Minnesota. Management policies which produce revenue may not always be desirable. Local governments cannot project future revenue. |
| Only available for recent acquisitions; no central source of data. | Extremely poor adaptability unless sliding scale for payments introduced. | Would be reduced in relation to land value through time. Amount of payment predictable. | Could be very high unless maximum payment set; would decrease in relation to land value through time. | Probable best used to counteract special impacts of new land acquisition. |
| New land appraisals would be required, no central source. | Very adaptable if lands reappraised periodically. | Payment would increase with land value and inflation; amount of payment relatively predictable. | Could be very high unless maximum payment set; would increase in relation to value and inflation; cost of appraisal very high. | Could be applied to all types of tax-exempt lands if structures included. Administration costs may be high. Value may not reflect public expenditures required by the property. |
| Data presently available in central source. | Not very adaptable unless sliding scale for payments introduced. | Predictable amount of payment; would be reduced in relation to land value through time. | Depends on per acre payment, would decrease in relation to value through time; maximum payment might be needed to avoid windfall. | Would not be suitable for other than natural resource lands (i.e., low acreage but high value lands and structures). Current proposals in legislature; federal precedent. |
| Most data currently available from central source but periodic updating would be required. | Not very adaptable unless assumed values reviewed periodically; could be very adaptable. | Predictable amount of payment | Could be high unless maximum payments set. Administrative costs might be somewhat high. | Reflects both local need and services provided without cost of actual appraisals. Could exempt certain lands with proper formula. |
| Minimum data required; local government would bill for services rendered. | Very adaptable to increase or decrease in services. | Not predictable; only reimbursement for services rendered. | Relatively low. Probably less than average revenues from land. | Currently in effect to some extent in Minnesota. |
| Adequate data is not available and would be very difficult to obtain. | Very adaptable | Not predictable payment, but theoretically adequate compensation. | Could be very high unless maximum payment set. Extremely high administrative costs. | Not a feasible alternative. |
| Data on acreage currently available; data on structures may not be available. | Very adaptable | Predictable payment; direct relationship to tax loss. | Could be high unless formula limited payments. | Could maintain local autonomy and reflect local differences if administered locally. Formula may be difficult for individual taxpayers to understand readily. |

TABLE 24
MATRIX OF DATA NEEDS FOR ALTERNATIVE APPROACHES TO PAYMENTS IN LIEU OF TAX FOR TAX-EXEMPT LANDS¹

| Data | No Payments | Shared Revenues | Previously Levied Taxes | Appraised Value | Flat Rate Per Acre | Graduated Scale Per Acre Based on Gross Estimated of Value | Service Charges | Cost-Benefit Ratio | Square Footage Formula |
|--------------------------------------|-------------|-----------------|-------------------------|-----------------|--------------------|--|-----------------|--------------------|------------------------|
| Location | - | X | X | X | X | X | X | X | X |
| Acreage | - | X | X | X | X | X | X | X | X |
| Owner | - | X | X | X | X | X | X | X | X |
| Previous Owner | - | - | X | - | - | - | - | - | - |
| Funding Authorization | - | X | - | - | - | - | - | - | - |
| Appraised Value | - | - | - | X | - | - | - | X | - |
| Previous Appraised Value | - | - | X | - | - | - | - | - | - |
| Land Use(s) | - | - | - | X | - | X | - | X | - |
| Facilities & Structures | - | - | - | X | - | X | - | X | X |
| Revenues from Land | - | X | - | - | - | - | - | X | - |
| Current Mill Rates | - | - | - | X | - | - | - | X | - |
| Services Provided | - | - | - | - | - | - | X | X | - |
| Benefits of Land | - | - | - | - | - | - | - | X | - |
| Current local taxes and expenditures | - | - | - | - | - | - | - | X | X |

(1) X means data required (may or may not be currently available).

Principal Observations and Conclusions

As indicated at the beginning of this chapter, it is not the intent of this report to recommend a payments in lieu of taxes system at this time. This summary report documents the research which has been undertaken as part of Phase I of the Public Lands Impact Study focusing on natural resource lands. Conclusions regarding payments in lieu of taxes for public natural resource lands which may be drawn from this first phase of research may be summarized as follows:

1. A case can be substantiated for direct assistance to impacted local governments on some uniform, easy to administer basis. This is supported by the statewide purpose served by public natural resource lands, the desirability of preserving those lands, their uneven distribution, the requirements for locally supplied services, and the reduction of taxable properties.
2. There are a number of factors supporting the desirability of establishing a single payment system covering all tax-exempt lands if payments are to be made. Consequently, it appears desirable to examine the remaining classifications of tax-exempt property before developing definitive legislative programs.
3. Any payments system selected ideally should be: (a) visibly tied to tax-exempt land ownership, (b) relatively simple to administer, (c) require a minimum of data, (d) related to local fiscal needs, (e) related to the service demands created by the land, (f) adaptable to changing conditions, (g) as equitable as possible, (h) predictable to local governments, (i) a reasonable cost, and (j) responsive to new acquisitions.

4. All types of State owned natural resource lands (acquired, trust, and tax-forfeited) should be included in the payments system. The State should not make payments for federal natural resource lands since the federal government is already making direct and indirect payments related to these lands.
5. Any payments system should support public land acquisition, disposal and management policies.
6. It is the explicit policy of the State to return all tax-forfeited lands not required for public purpose to private ownership. The payments system should reinforce this policy by:
 - a. Making payments for those tax-forfeited properties dedicated to perpetual public purpose or use.
 - b. Making payments for the tax-forfeited properties which the counties are making a bona-fide attempt to sell but which have not yet been privately purchased.
 - c. Requiring substantial additional payments from state agencies which are restricting the sale of tax-forfeited properties (particularly in designated management areas) but are not actively pursuing acquisition.
7. A hold harmless consideration should be included initially in any payments formula. This should be tied to the total payments received in some base year, not the continuation of existing payments. To continue existing payments in addition to a new formula would increase both administrative costs and the current misunderstandings related to State payments in lieu of taxes.

PRINCIPAL AGENCIES CONTACTED

Federal Agencies

Bills Status Office
Bureau of Indian Affairs
 Realty Division, Bemidji
 Realty Division, Minneapolis
Bureau of Land Management
Colorado Senator Gary Hart (sponsor of P.L. 94-565)
Corps of Engineers
 Real Estate Division
Housing and Urban Development
 Property Disposition Division
Rice Lake National Wildlife Refuge
U.S. Fish and Wildlife Agency
U.S. Forest Service
 Chippewa National Forest
 Superior National Forest
Upper Mississippi National Wildlife and Fish Refuge
Voyageurs National Park

State Agencies

Department of Administration
 Intergovernmental Information Services Advisory Council
 Real Estate Management Division
Auditor (State Auditor)
 County Audit Division
 Municipal Reporting Unit
Department of Economic Development
 Tourism Division
Department of Education
 Research, State Aids and Statistics
Department of Finance
 Land Documents
 Statewide Accounting
Historical Society (Minnesota Historical Society)
 Field Services, Historic Sites and Archaeology Division
Iron Range Resources and Rehabilitation
Legislature
 Senate Natural Resources and Agriculture Committee
 Senate Council Division
 Office of Senate Research

Metropolitan Council
Minnesota Land Management Information System
Department of Natural Resources
Administration Assistant Commissioner
Administrative Services
Field Services Section
Fiscal Section
Resources 2000
Environmental Planning and Protection Bureau
Land Use Planning
Enforcement Division
Information Officer
Conservation Officer in Winona County
Fish and Wildlife Division
Wildlife Section
Wildlife Manager, Winona Area
Forestry Division
Fire Protection Unit
Forest Management Section
Forest Resources and Products Section
Hill City Area Forester
Lewistown Area Forester
Land Bureau
Records Section
Sales and Lease Section
Parks and Recreation Division
Central Office
Savanna Portage State Park
Whitewater State Park
Mineral Division
Mineral Lease Administration
Water Division
Department of Revenue
State Board of Assessors
Tax Research Division
State Planning Agency
Environmental Planning
Local and Urban Affairs
Department of Transportation
Office of Right-of-Way
State Aid
Treasurer's Office

County Agencies

Aitkin County
County Assessor
County Auditor
County Engineer
Land Commissioner

Registrar of Deeds
Sheriff
Treasurer
Zoning Administrator

Hennepin County
County Assessor
Hennepin County Park Reserve District

Wabasha County
County Assessor
County Auditor
Registrar of Deeds

Winona County
County Assessor
County Auditor
County Engineer
Planning Director
Recorder
Sheriff
Treasurer
Elba Township Chairman
Whitewater Township Chairman

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