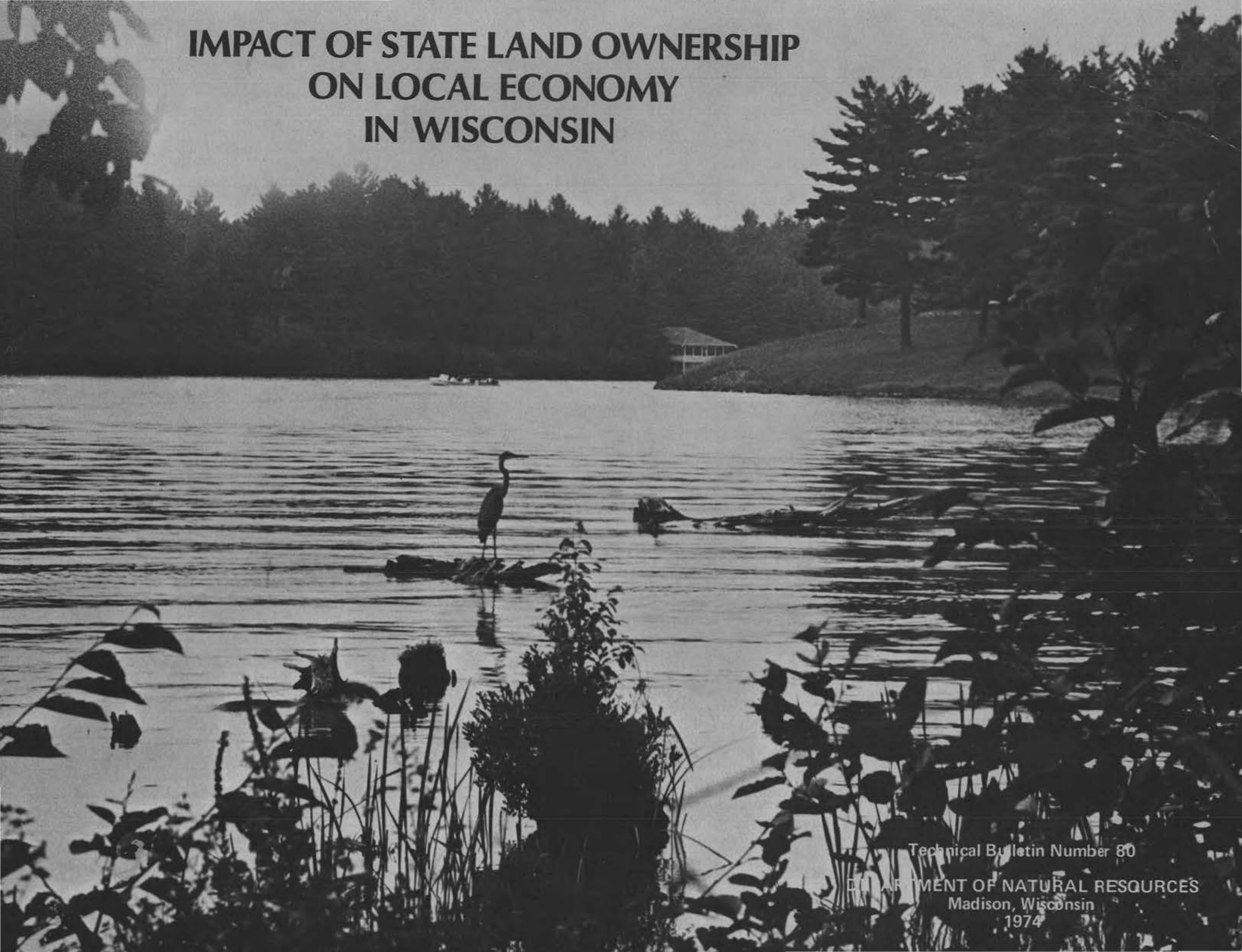
IMPACT OF STATE LAND OWNERSHIP ON LOCAL ECONOMY IN WISCONSIN



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ABSTRACT

With increasing allegations that state land ownership causes hardships to individuals and the local economy, the need for a comprehensive investigation of impacts from Wisconsin Department of Natural Resources (DNR) ownerships became essential. Detailed procedures were developed for evaluating impacts and they are explained in this report.

The report measures results of state ownership versus private operations through such impacts as: changes in assessed valuations on tax rolls of affected municipalities and for school districts and their related tax levies; DNR payments-in-lieu of taxes; loss of private land-use income; added trade and income to local businesses; changes in costs for local government facilities and services including schools, roads and law enforcement; labor employment opportunities lost and gained; and resource conservation of the watershed involved. Summary data relating to taxation matters are shown for all years since land was first acquired by the state for each of the 6 DNR ownerships studied including the percent of increased (or decreased) tax burden to properties on the tax rolls. Three sets of net balance sheets are presented for 1972 with credits and debits for monetarily evaluated items focused on: all areas concerned, the local area, and the local community. Conclusions are presented about causes for favorable and unfavorable net balance of impacts and possible alterations, as differences prevail between park and trail, wildlife management and fishery state ownerships. It is important to recognize that since this report concerns local impacts of state ownership, it does not deal with the broader values of these areas on the entire state.

The following statements reflect only a few of the summary highlights in the concluding section on Discussion and Conclusions. The major part of the total equivalent increased tax levies resulting from state land purchase and from local tax assessments are borne by those tax assessment districts (TAD's) in the school district involved (local area) that do not contain any part of the DNR ownership. DNR payments-in-lieu of taxes reduce the net increase of tax levies for the TAD(s) containing the DNR ownership (local community) but not for other parts of the school district. In some cases, payments-in-lieu of taxes and/or added property assessed valuations attributable to DNR ownership influences completely offset any increases in tax levies in the local community or even cause lower tax levies for a TAD in the community. However, irrespective of where the incidence of any added or decreased tax burden falls between tax assessment districts affected by the DNR ownership, this study shows that the net effects of tax impacts on properties continuing on the tax rolls are relatively small. •

With all considerations accounted for—especially tax assessed valuations for DNR properties removed from the tax rolls, amounts of payments-in-lieu of taxes paid by DNR, added assessed valuations of private business concerns attributable to DNR ownership influences—increased tax levies on local community taxable properties ranged from 0.029 percent to 2.143 percent among the 6 DNR ownership studied.

No cases could be found where assessed valuations had been increased for properties located adjacent to or near the DNR ownership if no changes in use or sales of such properties had been made since advent of the DNR project.

The gross trade of local business establishments from goods and services sold to recreationists using the DNR facilities was sizable in all 6 ownerships studied. It resulted in an increase in annual net income (for 1972) ranging from \$3,652 to \$54,104. Of the annual net income to local area businesses being generated by the DNR ownership, this amounted to 91 to 100 percent. The remainder resulted from trade relating to the initial development and annual maintenance and operation costs of DNR.

The above benefits from DNR-acquired lands were affected by the annual net farm income foregone on 5 of the ownerships studied, ranging from \$2,200 to \$11,700 for an ownership. The exception is the state trail ownership largely made up of an old railroad property. However, if the loss of farm income can be kept low, by minimizing purchase of farm-income-producing tracts, and the state-acquired lands generate sizable amounts of trade and income to local business establishments, there is a real chance for a favorable net balance in the economic impact of DNR ownership. Each of these items in the balance sheet can easily overshadow the net effects from increased tax levies caused by state acquisition of the ownership properties. This applies to the local area and especially to the local community.

Although there were pronounced changes in land use, there were generally no significant impacts on the natural environment.

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INTRODUCTION

Public criticism of agencies carrying out land acquistion continues to be great and is commonly centered on alleged hardships to both individuals and the local community brought about by added tax burdens and loss of opportunities for private enterprise. Agencies such as the Department of Natural Resources, however, are responsible for programs that require additional public land acquisition, as well as continued public ownership of lands now used for recreation. An outstanding example of this responsibility is the implementation of Wisconsin's Outdoor Recreation Plan which involves both local government as well as state land acquisition.

There is a definite lack of objective, factual information about the impacts of publicly owned lands on the local community and regional economies. Constructive evaluations are needed to inform the public and guide state agency managers and administrators on the needs for, and burdens and benefits of state land ownership.

A research study was set up in May, 1973 involving six Department of Natural Resources ownerships. Specific objectives were to make full appraisal of problems resulting from taking land off the tax roll, to identify and measure benefits accruing to communities in which public lands are located, and to develop guidelines which will help to bring about improved procedure in state land acquisition and better public understanding of public land ownership.

Literature was searched for accounts of previous methods used in determining the impacts on the local economy resulting from a DNR ownership. A methodology for a comprehensive evaluation is not available, and therefore a new approach had to be developed. The references reviewed are listed in the bibliography to provide a background for work that has been done in this field, especially on broad impacts regarding taxation matters. Since this study was not intended to evaluate the findings of other investigators, no literature citations are included in the body of this report.

In the following sections a detailed accounting of the procedures used to collect and analyze the data is presented to guide both the understanding of the results of the study and the use of the necessary tools by others wishing to undertake a serious evaluation. The results are presented in a series of analyses for each of the six DNR ownerships. These analyses are parallel and, as appropriate, set up in similar fashion for each ownership. General concepts are brought out in the discussion and the full picture brought together in the final section on net balance.

DEFINITIONS

PROJECT: The planned undertaking to affect the use of a particular area of land for a specific purpose; hence, the area of land itself. Its specific plan includes area location, acreage, boundary, name, purpose, design and general operations intended. Sometimes "project", "ownership", and "area" are used interchangeably since acreage included in the ownership usually increases periodically from initial acquisitions of land until total project area (or ownership) is comprised. (In DNR experiences it is an exceptional case where an entire project area is acquired during the first year of undertaking.)

DNR OWNERSHIP: That acreage of land included any one year in a named project area used in this study (e.g. Lake Wissota State Park).

SCHOOL DISTRICT: The school district is the territorial unit for school administration. School districts are classed as common school districts, union high school districts, city school districts and school systems organized pursuant to only cities of the 1st class (Milwaukee). A joint school district is a school district whose territory is not wholly in one municipality. Public schools are the elementary and high schools supported by public taxation. (Wis. Stat. 115.01)

Taxation matters in this report deal with joint school districts for public schools.

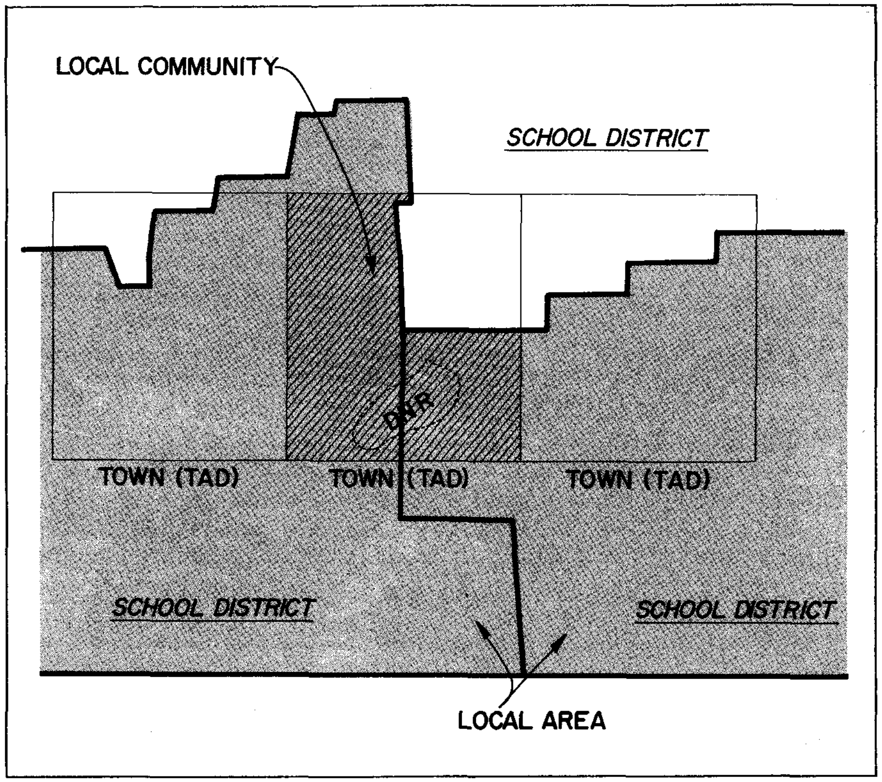

FIGURE 1. Schematic diagram showing interrelationship between terms used in text.

LOCAL AREA: The entire school district(s) that includes the DNR ownership.

LOCAL COMMUNITY: That part(s) of the Town(s) (municipality) within the school district(s) involved and embracing the DNR properties.

TAX ASSESSMENT DISTRICT (TAD): The Town, City or Village (municipality) that makes taxation assessments, tax levies and collections on real estate, taxable personal and other properties. (A schematic diagram showing the interrelationship between school district, local area, local community, and tax assessment district is presented in Figure 1.)

ECONOMIC IMPACT MATRIX: An order of elements or constituents, each occupying its proper place in the rectangular array; and, in this study, the rectangular array is composed of narrative elements depicting interrelationship of origin or development circumstances with causative and recipient interests.

ACQUISITION (OF LAND): The acquiring of properties by purchase, gift or otherwise wherein legal title is taken by the DNR (state) in fee simple. It does not include lands obtained by lease, easement or cooperative arrangements.

TAX ROLL: The annual recording instrument for all separate properties subject to general property taxation used by a municipality (town, city or village) as its official document for the purpose of levying and collecting taxes. It contains lists and descriptions of all parcels of real property in the territory of the municipality which are subject to tax and also those which are exempt from such tax. Reference to "assessment roll" for an assessment district is a synonymous expression for tax roll.

ASSESSED VALUATION: The amount of value for real estate and taxable personal and other properties entered into the municipal (e.g. Town, City, Village) government tax rolls for taxation purposes. Assessed valuations are determined by the municipal assessor's values (i.e. some percentage of full value).

Aggregate assessed valuation is the sum of assessed valuations for individual parcels of property (usually for the area of a municipal government). And, to distinguish assessor's values (assessed valuations) from full values used for equalization purposes between tax assessment districts, individual parcels' assessed valuations are often referred to as "aggregate" (meaning assessed).

Full assessed valuation is the value of property when assessed valuation has been converted to the level of full, market value established by the Wisconsin Department of Revenue. Full assessed valuations are determined for the state "equalization" of the assessed values among different municipalities so that the taxes imposed by jurisdictions—the state, county, school and vocational districts—which contain more than one municipality within their boundaries may be equitably apportioned among the municipalities. To distinguish assessed valuations ("aggregate") from full assessed valuations, the latter is often referred to as "equalized" (meaning full).

AFFECTED PERSONAL PROPERTIES: Refers to those taxable personal properties subject to tax levies of municipalities involved with the local area, which are either removed or added to the tax rolls by causes generating from the DNR ownership (in municipalities involved with the school district(s) having the DNR ownership within its boundaries).

TAX RATE: The rate which is necessary to raise sufficient money from the property tax to meet the levy. Usually it is the tax liability per $1,000 of value. It is determined by dividing the total tax levy by the value of all property against which the tax is being levied.

Mill rate is a common reference to a tax rate determined by dividing the total tax levy for a particular purpose (schools, town costs, etc.) by the assessed value of all property against which the tax is levied. A mill is 1/1000 of one U.S. dollar, consequently mill rate is commonly expressed in decimals.

DEVELOPMENT COST EXPENDITURES (project development costs): Those expenditures for materials, equipment, labor and services, expressed in dollar values, that are used for development of the project to meet its planned purpose. Costs for project lands are not included.

PAYMENTS-IN-LIEU OF TAXES: This refers to State aid to municipalities; aids in lieu of taxes. Payments-in-lieu of taxes are the amounts of aids paid annually by the DNR under provisions of various Wisconsin statutes as applicable for all DNR-owned lands or for named types of DNR ownerships (e.g. state-owned public hunting grounds or game refuges). Such payments are made to the municipal government (mostly a Town) within whose boundaries the DNR lands are located.

RECONSTRUCTED PRODUCTION (farm): The depicting of field crop and livestock enterprises on farm operating units, including annual acreages and yields of various crop fields and pasture lands and the kinds and numbers of livestock, in the prevailing production pattern of the immediate year or two before DNR acquired all or major parts of the land acreage involved.

LOCAL BUSINESS ESTABLISHMENTS: Refers to commercial outlets, located within the school district(s) including the DNR ownership, that sell goods and services. Examples for such businesses include grocery, clothing, drug, hardware and general merchandise stores, gasoline service stations, motels, restaurants, taverns and construction, plumbing, electrical, heating and other firms concerned with trade generated by the DNR ownership from its development and operations and from its recreational users.

WATERSHED: The area of all land and water within the confines of a drainage divide.

PARTICIPANT DAY: The occasion of one person taking part in a recreation activity for a day or part of a day.

ENTERPRISE: Refers to a unit of an establishment having sufficiently specific purpose and business characteristics in itself that a separate accounting for it is feasible within the whole firm; e.g. restaurant, fishing bait shop, boat rentals, liquor bar and cabin rentals, each constituting an enterprise within one ownership and over-all management; or, dairy cattle, hogs and field crops constituting 3 separate enterprises in a single farm operating unit.

NET INCOME FOREGONE: That net income to private entrepreneurs previously accruing from prevailing on-site production opportunities (e.g. farm lands) removed by advent of the DNR ownership.

DISPOSED ANIMALS (livestock): Those domestic animals (cattle, hogs, etc.) formerly on operating farm units but removed from the tax assessment district because those farms, either partly or entirely, were acquired for the DNR ownership.

METHODS AND MATERIALS

ECONOMIC IMPACT MATRIX

An economic matrix was prepared by kinds of impacts and interests involved. The matrix is in effect a guide regarding expected impacts from change of land ownership from private to state (DNR) expressed as benefits, liabilities and net balance for the monetary effects. For each kind of impact, considered governmental units and private interests are indicated in the matrix by those receiving and those contributing or inducing the impact.

In this matrix liabilities include such items as: loss of previous tax revenues on state-owned lands; increased local government finance costs (roads, school bussing, protective services and law enforcement, etc.); adverse economic influences on adjacent (to state ownership) communities, such as, decreased real estate tax assessments and lost employment; land damages and use, regarding both on-site (state ownership) and watershed resource losses and decreased land use returns (on state ownership) from production and rentals; and reduced taxable personal properties—assessed values and tax revenues.

The benefit items correspond directly to the liability items. For example, payments-in-lieu of taxes made by the state (DNR) for lands removed from the tax rolls is the corresponding item to that under liabilities for loss of previous tax revenues. And, the balance summary contains five items that net benefits and liabilities, namely: real estate tax assessment values; personal property assessment values; revenues from real estate taxes, personal property taxes, etc., land stabilization and use—on-site (state-owned lands) and watershed; and, employment.

SAMPLE SELECTION OF DNR OWNERSHIPS

The study is confined to DNR (state) ownership areas. Broadly speaking, most DNR areas come under such major purpose designations as: wildlife or fishery management area, park, trail and forest. The limited resource inputs available for this study necessitated omission of state forest areas, but the other four types were included. Consideration was given only to those projects for which real estate acquisitions were advanced or completed in keeping with the approved boundary plan for the area. Also, the area must have been under DNR ownership, development and operations for sufficient years that its intended purpose had materialized, although not necessarily to have had its full impacts from the standpoint of public use or general influence. Under these general guides over 200 projects appeared to be eligible: approximately 80 wildlife management areas, 100 fishery management areas, 30 state parks and 2 state (park) trails.

A socio-economic map was developed segregating the state into 11 regions. (Fig. 2). This generalized map reflected differences in physical factors, production, trade areas, population concentrations and related characteristics. The regional boundaries were superimposed on a map showing location of DNR land acquisition projects. This map assisted in selecting samples representing various socio-economic conditions throughout the state.

Multiple judgments were obtained separately from two or more technical staff members from each of the four speciality disciplines (wildlife, fishery, parks and trails) concerned with DNR ownership areas from which a sample was to be selected. Each staff member indicated (by first, second and third priority) representative projects in the 11 socio-economic regions. Synthesis of these selections resulted in 2 to 5 possible projects for most of the regions.

Time inputs and costs were estimated for 24 priority projects listed, covering such items as: period of years for property acquisitions; number of different years when acquisitions were made; numbers of counties, towns, school districts, separate parcel acquisitions with acreage of each, and separate purchase transactions; and total DNR ownership acres. Time for the study was estimated for field work and for in-office data processing, evaluation and report writing.

With all of these considerations plus availability of necessary study funds in mind, a committee of four persons appointed by the DNR Research Steering Committee selected 6 DNR (state) ownerships for this research study—2 state parks, 2 wildlife management areas, 1 fishery management area, and 1 state trail. These ownerships are: *Lake Kegonsa State Park,* in Dane County, located approximately 13 miles southeast of Madison and 4 miles north of Stoughton; *Lake Wissota State Park,* in Chippewa County, approximately 8 miles northeast of Chippewa Falls; *Albany Wildlife Management Area,* in Green County, approximately 12 miles northeast of Monroe; *Collins Wildlife Management Area,* in Manitowoc County, approximately 12 miles west of Manitowoc; *Plover River Fishery Management Area,* in Marathon County, approximately 10 miles south of Antigo; and *Elroy-Sparta State Trail,* in Monroe and Jackson Counties, covering approximately 30 miles between Elroy and Sparta. These ownerships are located in 5 (of the 11) socio-economic regions, namely in: No. 10, east central; No. 2, south central; No. 11, central; No. 4, lower west central; and No. 5, upper west central (Fig. 2).

DATA AND INFORMATION COLLECTIONS

Necessary working data and information used in this study essentially pertain to: DNR real estate acquisitions and their assessed valuations; taxable personal properties affected by DNR real estate acquisitions; tax assessment district (TAD) taxation data—school taxes and all others, total aggregate assessed valuations and related mill rates; farm land use and production before and after state acquisition; DNR project costs and benefits to business establishments (by location of the recipient); local government costs or benefits from advent and operation of the DNR ownership; benefits to local business establishments selling goods and services to users (recreationists) of the DNR ownership; and, effects of the DNR ownership area before and after DNR acquisition on the watershed in which it is located.

DNR Real Estate Property Acquisitions and Taxation Data

Records in the DNR were used to obtain the location, description, acreage and date of acquisition by DNR for each parcel in the project. Assessed valuation for each parcel, for the last year it was on the tax rolls, was obtained from the Real Estate Tax Roll for the Town, filed in the county treasurer's office(s). Such assessed valuations for parcels were accumulated for each succeeding year unless a general change in level of assessments for all similar properties was made by the Town Assessor. Information was obtained from the assessor for such changes, checked against tax roll

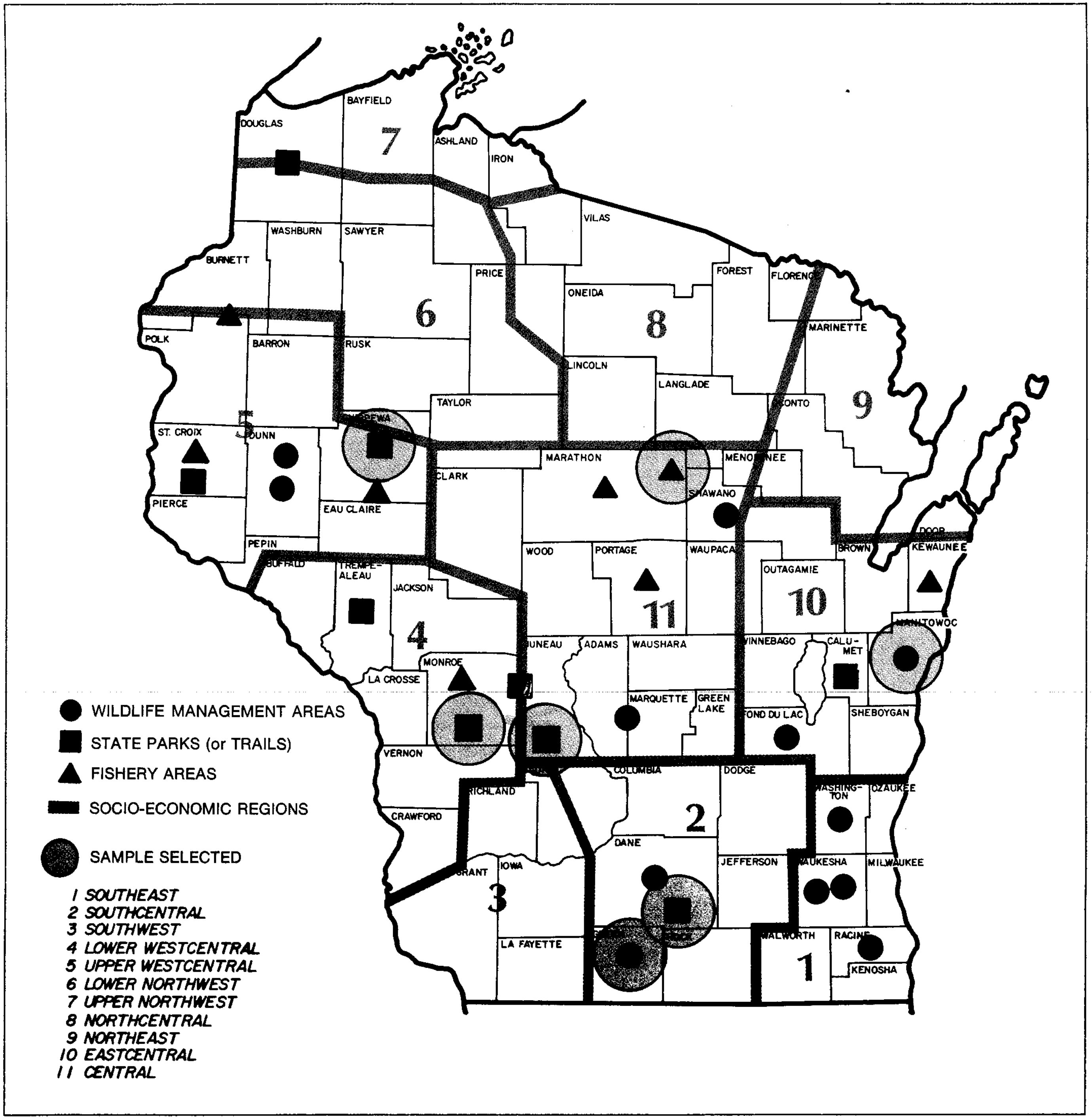

FIGURE 2. Socio-economic regions in Wisconsin.

changes for verification, and a percentage factor was developed and applied to accumulated assessed valuations for DNR properties previously removed from the tax rolls. Thus, an adjusted (current) equivalent assessment value for the DNR properties was obtained. Similarly, adjustments were made in those instances where the entire Town had a reappraisal of all taxable properties and changes in its assessed valuations.

Taxation Data for Properties Affected by DNR

The land in the DNR ownership and related real estate improvements and personal properties are not subject to taxation. However, certain personal properties are taxable, namely livestock formerly assessed for taxation purposes, on the real estate properties in farms acquired by DNR. Removal of such personal properties from the tax rolls, if it results from state acquisition of the real estate, is an effect of the DNR ownership on personal properties for taxation purposes.

Likewise, when trade from recreation users on the DNR ownership with local business establishments causes additions of assessed valuations on the tax rolls, this is an effect of the DNR area on properties for taxation purposes. This may come about in one or more of four principal ways: (1) by new real estate development for the business establishment; (2) additions to or improvements of real estate properties already on the tax rolls; (3) by added taxable personal property assessed valuations of the business establishments, and (4) from enhancement values reflected in larger assessed valuations of real estate properties near the DNR ownership. (It is also possible but not likely that the reverse or negative effects could take place.)

For farming purposes

Information was obtained from previous owners of DNR acquired real estate properties and/or from their neighbors and/or from DNR personnel regarding taxable personal properties disposed. This pertains entirely to those farm units sufficiently reduced in size by DNR real estate acquisitions that part or all of the numbers of livestock were sold.

Kind and grades of disposed animals were determined. Their assessed valuation was determined by (1) applying unit full values as recommended in the Annual Assessor's Conference Report (by the Supervisor of Assessments, Wisconsin Department of Taxation, Bureau of Property Taxation), and (2) reducing or adjusting these computed values to prevailing assessment levels of full value used for other properties assessed in the Town. This procedure in principle is what the assessor normally does in his assessment of livestock. Assessed valuations for personal properties (livestock) removed from the tax rolls was computed by this procedure for each year of the study starting with the first year disposed livestock was removed from the tax rolls.

For local area business establishments

Data were collected about changes in assessed valuations over the years of existence of the DNR ownership for each business establishment receiving trade from recreation users on the ownership. This information was variously obtained as available from the owner or operator of the business establishment, the municipality assessor and/or from taxation records. Usual procedure was to obtain dates from the business establishment owner as to when physical changes were made in his real estate and taxable personal properties and to follow through with taxation records to determine by years any amounts of change made in assessed valuations. The percent of total gross receipts (sales and services) of the business establishment accruing from trade of recreation users on the DNR ownership was used to compute the amout of increased assessed valuations affected by the DNR ownership. An example can illustrate the method used:

(1) The owner of a restaurant and bar indicated that his establishment was built two years after the state park was opened for public use.

(2) He built it on one acre of bare farm land.

(3) Analysis of the enterprises in his business showed that 15% of his gross trade was from recreation users on the state park.

(4) His taxable personal properties (stocks of liquors, food, equipment, etc.) remained about the same on May 1 of each year since opening the establishment.

(5) Check of tax records showed that the farm real estate before the change in land use had an assessed valuation (on the tax rolls) @ $400 but after the change it was @ $1,000, with the new improvements @ $15,000; thus, giving $15,600 increased total assessed valuations including (@15%) $2,340 of it as affected by the DNR ownership.

For enhanced values of properties near the DNR ownership

The proposition that values and assessed valuations of lands near a DNR ownership are greater than for lands in the same TAD but farther removed was fully explored. Assessed valuations for comparable lands both before and after advent of the DNR ownership were obtained from taxation records. Comparisons were made to determine any changes in amounts of such valuations that were justifiably traceable to effects from the DNR ownership. Information was obtained from assessors of Towns and Villages in which properties are located that could reasonably have their values affected by the advent and operation of the DNR ownership. Assessors' worksheets were also checked since provisions are included for recording the cause for any changes in assessed valuations of the same property from one year to the next year. Where changed land use was found (like from agricultural to residential) interviews were made with the new owner(s) to determine if location near the DNR ownership had an influence in selection of his site.

Tax Assessment District Taxation Data

Taxation data for each year of the study, from the first year DNR acquired real estate properties through year 1972, were obtained for each TAD in which DNR properties are located. Source of these data is the "Statement of Taxes and Indebtedness for the Town", filed in the respective county treasurer's office. Data collected and used were for: amount of school valuation in the Town, total amount of local school levy and school district state trust fund loans carried into the tax roll for collection, total amount of all other than school taxes levied (for county, town and state taxes), aggregate amount of tax roll and aggregate assessed valuation of all taxable property as contained in the tax roll. Mill rates as available in this source for various tax levy items were used; otherwise they were computed.

School district aggregate assessed valuation and equalization full value total amounts and by TAD's, parts or all, included in the district, were obtained for years 1961 through 1972 from the Wisconsin Department of Revenue (WDR), Bureau of Local Fiscal Information. Percent of school district full value assessed valuation for the TAD including the state ownership was also obtained from the WDR. Similar assessment amounts and percentages were computed by years for the school district and the TAD for circumstances as if the DNR ownership were nonexistent, and therefore not causing changes (removal or enhancement) of assessable properties in the tax rolls. This was done by including full value amounts of aggregate assessed valuations for real estate and taxable personal properties affected by the DNR ownership. Comparison was made for the two percent figures (with and without DNR ownership) for each year to obtain the change in school district tax revenue amounts allocable to the TAD that included the DNR ownership and to all other TAD's in the district, which net change is attributable to existence of the state area ownership.

For some projects studied the first DNR acquisitions were made before 1961. In all instances, the school district areas were greatly different in those earlier years prior to major consolidation of school districts throughout the state that took place mainly during 1961-63. Impacts on the economy of the local community by removal of taxable properties from the local tax rolls has direct relationship to the school district in which the DNR ownership is located. Since there is not even remote probability that the school district pattern of years before 1961 will recur, there appeared to be no worthwhile purpose for expending the sizable inputs necessary to collect and evaluate school district information for years earlier than 1961 in this study. Therefore, detailed treatise of taxation matters in this study only includes 12 years, i.e., 1961-1972.

Farm Land Use and Production

The DNR files were used to obtain appraisal data on the acreage, quality and broad land use at the time of negotiations for state acquisition of project lands. These records are kept separately by name of seller and include all parcels transferred. This was the first step for broadly determining acreages of land used for field crop, grazing and forest production and for other uses before DNR acquired the properties. Subsequently, more specific information was obtained as available in the local area of the project, from, for example, the previous farm owner or operator, his neighbors, soil conservation district technicians, county agricultural extension agents, records in the county agricultural stabilization and conservation service offices, DNR personnel, town assessors and other informed persons. Information was collected about type of soils; drainage hazards; crop rotations followed; field crop, grazing and forest land yields; production practices and costs; and kind and numbers of livestock on farms partly or entirely acquired by DNR. Also, areas of acquired idle and marsh lands were determined.

This information was focused specifically into the reconstruction of land use and production as generally prevailing for the immediate few years prior to acquisition of the land by the DNR. In fact, the information was sufficiently exacting to indicate the first season when farm production was stopped and when any disposal of livestock was made.

Also, disposal of livestock was traced to determine by kinds and numbers sold or otherwise removed from the TAD that includes the DNR ownership, and to determine those that were moved off the DNR ownership but remained in the TAD. For example: when DNR acquired a farm and livestock were sold by auction, it was considered that they were removed from the TAD—either directly or as on-farm replacements for other marketed animals; or, when DNR acquired only a part of a farm and total livestock numbers remained the same on that farming unit, it was considered that no livestock were removed from the TAD because of the land transaction(s). These kinds of data were necessary in reconstruction of the use and production picture before DNR acquisition and for property assessment valuation purposes as covered earlier.

For some DNR ownerships studied (wildlife management areas) some lands are continued in farm-type cropping production under cooperative sharecrop lease arrangements. Specific acreages, crops and yields were determined for these areas by their location regarding the reconstructed production for those same lands before DNR acquisition. Net changes in crop and grazing land production were determined for such areas as coming about in the two-year period surrounding date of DNR acquisition.

Information was obtained on the number and size of gardens discontinued because of DNR land acquisitions. Data for managed timber plantations were obtained including acreage, age of trees at time of DNR acquisition, expected growth rate and harvest years and amounts (dates and estimated amounts for thinnings, first harvests and mature harvest).

Gross production from farm field crops, grazing lands, timber plantations, gardens and the trapping of wild animals as it would have accrued to private enterprise was computed. Unit prices prevailing at the time reduced production began were applied to obtain dollar amounts of gross values. These gross value amounts by years were converted to an equivalent net income. Capital value annuity worth was determined for each first annual amount of net income incurred. The capital value annuity worth determinations cover that period of years including the first year of net income foregone through year 1972, and the total amount for all years is reduced to an average annual value. These computations give the value of reduced production to private enterprise affected by changed land ownership to DNR.

DNR Payments-in-lieu of Taxes

For DNR projects in this study, three different state law provisions applied when computing amounts of DNR payments to local governments in lieu of taxes for state-acquired real estate properties. Beginning in 1956 and continuing through 1963 payments were in lieu of school taxes on state-owned public hunting grounds or game reserves or refuges operated in connection therewith (under s. 70.113 Wis. Stats. 1955).[1] This payment in lieu of school taxes provision was repealed in 1963 and followed by laws of 1963 (s. 70.113 Wis. Stats. 1963) whereby \$.30 was paid on each acre of state forest lands and state public shooting, trapping or fishing grounds and reserves or refuges operated thereon.[2] This provision continued through the period of this study (through 1972) for all such state lands acquired before July 1, 1969. No payments-in-lieu of taxes were made for state lands used for state parks until provisions enacted in 1969.

The third state law provisions applicable for state lands included in this study became effective in 1970 tax computations (s. 70.113 Wis. Stats. 1969). Under this requirement payments-in-lieu of taxes are made according to a 10-year schedule. The payment is for all DNR lands acquired after July 1, 1969, and determined on the basis of May 1 local assessment following such acquisition multiplied by the county, local and school tax rate levied against all May 1 assessments for that year. The schedule, or "10-year formula" as frequently referenced, specifies 100 percent payment the first year with a decrease of 10 percent of the first year payment for each of the next nine years (this means that for the tenth year only an amount equaling 10 percent of the first year amount would be paid; and, for the eleventh year no payment would be made).[3]

In all state law provisions applicable for this study, the state lands must be acquired on or before May 1 for them to be considered as eligible for payment-in-lieu of taxes for that year. Also, in all provisions the payments-in-lieu of taxes are made to the Town (municipality) in which the acquired state land is located; there are no provisions for dividing such funds with any other unit of government or to the school district involved with the acquired lands.

The amounts of payments-in-lieu of taxes were computed for this study for each year that DNR was required by Wisconsin statutes to make such reimbursements. Accumulated acreages and assessed valuations as of May 2 for lands removed from the tax rolls because of state acquisition were used in these computations. For projects falling under the payment in lieu of school taxes statutory provision (for years 1956-1963), accumulated assessed valuations for each year were multiplied by those school tax parts of the total mill rate for the Town in which the lands are located. This was the only type of payment being made for the 1956-1963 period for any projects included in this study but it did not apply to the state park projects (since they were not included in the statutory provision of 1956 and 1963).

For projects falling under the payment per acre statutory provisions, accumulated acres for each year were multiplied by \$.30. This type of payment became effective for the 1964 tax year and continued through 1972 for all lands acquired on or before June 30, 1969.

For projects including lands acquired after June 30, 1969 the "10-year formula" type payment became operative. For the first tax year under this provision, 1970, assessed valuations of DNR acquired lands that were removed from the tax rolls before May 2, 1970 were multiplied by the gross mill rate for the Town (municipality) in which the properties are located. This gave the amount of taxes considered in this study under the "formula" provision for that year.[4] For tax year 1971 this process was repeated for additional lands acquired and removed from the tax rolls from May 2, 1970 through May 1, 1971. The answer was added with 90 percent of the amount paid for 1970 tax year to obtain the sum of payments-in-lieu of taxes made by DNR for 1971 in compliance with the "formula" statutory provision. The process was repeated for tax year 1972 and added with 80 percent of the 1970 payment and 90 percent of the separate (100%) amount computed for effective additional land removals for only 1971.

When two statutory provisions were applicable the same year for a project studied, the total payments-in-lieu of taxes made by DNR were obtained by adding amounts computed under each provision. This was necessary for three of the projects studied for the tax years 1970-73 because of lands acquired both before and after July 1, 1969 (one fishery and two wildlife management areas were involved). Lands acquired earlier continued at $.30 per acre after July 1, 1969, and additional lands acquired after June 30, 1969 had payments under the "formula" provision.

Trade With Local Area Business Establishment From DNR Ownership

Local area business establishments receive trade of three principle types resulting from the DNR ownership: (1) that created when DNR paid for initial installations of works of improvement for the project (internal roads; toilet, workshop and other buildings; swimming beaches; water systems; etc.), (2) that created when DNR pays for maintenance and operation supplies and services for the ownership, and (3) that resulting from expenditures by recreationists using the facilities of the DNR ownership (campers, picnickers, swimmers, hikers, etc., including both overnight and day-only users, who would otherwise not normally trade in the local area of the DNR ownership). Data were collected and analyzed for all three types of trade by years when the purchases or business with local area firms took place.

Computed results are considered in terms of direct primary benefits to firms in the local area. No data were collected for specifically determining primary benefits accruing outside the local area or to estimate secondary benefits induced by or stemming from project developments and the maintenance and use of the state ownership.[5]

Trade created locally by DNR expenditures for development

Information was collected from informed DNR personnel and records for all cost expenditures made by DNR each year from inception through 1972 for all developments on the ownership. This includes developments installed through general contracts and those carried out directly by DNR. In all instances a breakdown was made for kinds of work, installations, materials, supplies and labor (skilled and unskilled) included in each important subpart of each major development. General contracts were separated by subcontracts. Resident location or headquarters of all firms receiving primary benefits was identified in order to determine if the trade accrued in the local area or in the local community or outside the local area. Such separations were made in tracing all inputs used, i.e., materials and supplies, both construction and installed equipment, and labor. Gross dollar values were either obtained from the records or, if necessary, estimated by applying prevailing unit prices for the year of installation to volume amounts of inputs. Net income to the firm or supplier was obtained by using an estimated percentage of gross value of the item of input locally obtained. Labor costs were excluded from computations for net income, but were converted into equivalent man-year amounts by location of residence for other purposes of this entire study.

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[1] This was not the first such provision in Wisconsin for payments-in-lieu of taxes. Starting in 1945, under Wisconsin Statutes of that year but effective July 1, 1944, Wisconsin made provision for payments-in-lieu of taxes on state-owned lands held for conservation purposes. This beginning dealt with paying annually to Dodge County one-fourth of the income received from sale of furs taken on state lands in Horicon marsh (under s. 29.571 (5) Wis. Stats. 1945). This provision was repealed by laws of 1963. Other similar purpose provisions under Wisconsin Statutes of 1947, 1949 and 1950 also dealt with sale of timber from state forests.

[2] Payments are for acres acquired by DNR including those not subject to taxation at the time of state acquisition; e.g., county-owned lands not being taxed.

[3] By Section 323. s. 70.113 of Wis. Statutes (1973) amendments were made whereby "For the 10th year and every year thereafter, 10% of the first year's payment" and "In no year shall the amount paid under the 10-year schedule fall below 50 cents per acre". Also, prevailing provisions of earlier statutes calling for payments of 30 cents per acre were amended to 50 cents per acre; and including acreages owned for state parks—under statute 27.01.

[4] Payments-in-lieu of taxes made by DNR to a Town(municipality) under the "10-year formula" statutory provisions do not include the local tax assessment for the state tax part of the tax levy. Since this is such a very small part of the tax assessment and a separation would be laborious and complex the effort did not appear to be warranted and was not made. Consequently payments computed under this provision in this study are a small fraction of a percent greater than actually made by DNR.

[5] The primary benefits accruing outside the local area from initial project developments for some of the DNR ownerships studied would exceed or equal those for the local area. Secondary benefits, including especially those induced by and some for those stemming from the project, could be estimated in an amount equal to at least 10 percent of the primary benefits.

Trade created locally by DNR expenditures for operation and maintenance (O&M)

Information was collected from DNR records and supervisory personnel for expenditures for operation and maintenance of the ownership. Only current year (1972) data were assembled and analyzed in detail; however, the previous year (1971) and the next future year plans (1973) were also checked in general to determine representativeness of costs for 1972. Minor adjustments were made in 1972 data as necessary (and, this proved to be for only a few items) to provide for a currently going annual amount of costs that reflect usual operations of the DNR ownership for its intended project purpose.

The same kind of separations and evaluations was made for trade generated from operation and maintenance expenditures with business concerns as covered above for development costs. For example, if payments for regularly cleaning toilet pits went to a firm outside the local area, such costs were not considered for local area benefits. But, payments to a trucker and gravel pit owner in the local community for materials and hauling them to the DNR ownership for use in road maintenance are costs considered for local area benefits. Likewise, repair parts for grass mowing equipment purchased from a firm a hundred miles from the ownership bears costs with benefits outside the local area while welding of the machinery done locally has service costs benefitting the local area.

Trade created with local business establishments by recreationists using facilities of the DNR ownership

Preliminary and general information was obtained from personnel managing the DNR ownership for name and location of business establishments in the local area patronized by recreationists using the ownership. This may be termed "project-oriented trade". Such establishments pertain to merchandizing groceries, gasoline and repair services to motorized vehicles, boat rentals and supplies, fishing tackle and bait, hunting equipment and supplies, bicycle rentals and repairs, sleeping accommodations, lunches and regular meals, night club entertainment, and others handled with recreational customers. Also the DNR personnel supplied the names and location of two or three individuals, usually merchants, who could help in establishing a preliminary purview of the trade pattern area for recreationists including the inner core and the approximate perimeters.

An informal directory was prepared and used as a preliminary guide for personal interview(s), by the research project personnel, with the owner or operator of each business establishment receiving trade from project-oriented recreationists. Those first interviewed were within the local area (school district(s)) in which the DNR ownership is located. The directory was revised as information received from interviewees indicated additional establishments that also received trade generated from users of the DNR ownership. Finally, after visiting concerns covered in the directory, owners of still other business establishments around the periphery were interviewed to verify limits of the trade area and to collect all possible data about trade generated from the recreationists.

The following information and data were collected and/or computed for each business establishment receiving trade from recreationists using the DNR ownership:

(1) Orienting information: type of concern and name; names of the owner and operator; address of concern; years concern established here; years under present manager (operator); and years under present owner; and, affirmative or negative confirmation about receiving trade from project-oriented customers.

(2) Percentage breakdown of total business (annual sales): (a) from annual (all-year) residents; (b) from temporary (semi) residents; (c) from project oriented transients; and (d) from other transients.

(3) Estimated beginning and ending dates and number of weeks therein, by 5 major periods of the year when trade from the project influences (increase) sales of the business establishment. The trade periods are covered within: spring, summer, fall, winter, and other period (weeks in between). All accounting sums to 52 weeks.

(4) Estimated current year gross sales for a typical week (or month) in each of the 5 major periods listed above and percentage of gross sales attributable to trade from project-oriented customers for each period.

(5) Total annual gross sales for the year (current year); and, either annual gross expenses or percent net income is of total sales; also, estimated net income percent of gross sales from project influence if such percentage differs from that regarding total gross sales of the business.

(6) Years that trade has been received from project-oriented customers with a breakdown by three periods of years for the relative amounts of trade expressed as a percent of the amount for the current year (1972): first year trade was received, years immediately preceding current year, and years between these two time periods.

(7) Number of years the business concern has been in present state (i.e. the physical building, site and basic internal spaces) since the first year of trade from project-oriented customers: (a) year and month when last major change was completed and the amount of cost; (b) years and respective months when any earlier changes were completed in the physical property and the respective amounts of cost (by year).

(8) Number of years immediately preceding current year (1972) that the business has carried approximately the same amount

of inventory of supplies and equipment (i.e. stock and other taxable properties) as in the current year; and, since the first year of trade from project-oriented customers: the years when any appreciable changes occurred and percentage increase or decrease compared to current year inventory. (May 1 of each year is the base for comparisons.)

For any significant changes in real estate and taxable personal properties for business establishments having two or more enterprises, if taking place during years when trade was received from project-oriented customers, it is necessary to know for which enterprise(s) the change was made. Allocation of increased tax assessment valuations creditable to influences from project-oriented trade is based on the percent of total gross sales (dollars) coming from such trade. Consequently, each enterprise must be considered much like a separate business firm in collecting data to provide bases for the assessment allocations. For example, the business establishment has 6 enterprises: a liquor bar, groceries, supper club dining room, boat rentals, bait shop, and cabin rentals. It has project-oriented trade for 5 of the enterprises (none for cabin rentals). Since the beginning of such trade a few years ago, the dining room (physical structure) and its supplementary equipment have been enlarged considerably, and the number of boats for rental has been doubled. Percent of total gross sales for the entire business made to project-oriented customers is noticeably different than those comparable percentages for each of the two enterprises that directly relate to the increased tax assessment valuations resulting from the property changes.

At the outset of collecting the orienting information (1), the multiple-enterprise nature of the business establishment becomes known to the interviewer. He proceeds in a preliminary manner to learn if any data will be forthcoming for parts of items (7) and (8) above; if so, he will obtain separate enterprise data throughout as well as totals for the entire business of the firm.

In collecting the information it is made clear that there is no intent to learn "what the operator earns or how much money the firm makes". Rather, the objective is to determine gross sales and net income to the business concern from trade of project-oriented customers. With proper orientation and rapport with the firm's operator the interviewer's biggest problem becomes one of avoiding unduly long sessions because the interviewee so freely offers use of his financial accounts or makes too extensive use of them in providing estimates of data needed for this study. With proper setting and working relations between interviewer and interviewee, use of financial records is made with efficiency.

After a few interviews are made the revised directory for the trade pattern area provides bases for determining how and where to select a sample of all business establishments for which interviews are made with the owner or operator. Most of the interviewees are asked for comparative data for nearby similar business concerns based on his (the interviewee's) source of customers and volume of trade. For example, a tavern operator with several years tenure at his establishment has reasonably good knowledge about comparative trade at a neighboring tavern.

Extent or number of all establishments to include in the sample for making full interviews and the number for collection of data by projections from those in the sample is not preconceived or statistically obtained. It is determined by apparent quality of information obtained from the interviewees. However, overall guiding rules used in this study were that if the number of qualifying establishments in the trade pattern area is less than 100, at least 50 percent of them would be included in the sample for full interviews. Furthermore, after obtaining certain information from an interviewee about a neighboring business establishment, often times a very short session with the second concern is made to quickly verify acceptability of the "projection" data. Even though this firm (where the quick verification was made) is included in the listing for number where data was obtained by projections, it is really somewhat in between those by full interview and those completely by projection or, i.e., by partial projection. In this study the partial projection approach was employed for several of those listed (in the tables) as by projection only.

Data collected by the interview evaluation approach were processed to obtain computed results for the following items regarding trade from project-oriented customers (expressed in dollars and percentage): gross sales by each of the applicable 5 periods of the year; total gross sales for the year; net income to the business establishment; percentage(s) that trade from project-oriented customers is of annual total gross sales of the business establishment, and likewise a percentage for net income. These data for business establishments included in the sample, and basically obtained by completing full interviews with their operators, were projected to other firms in the project-oriented trade pattern area to complete similar total gross sales and net income information. Business establishments with less than 25 dollars gross sales in any one year to project-oriented customers were omitted from the summary analyses. Separations of final results were made in keeping with locations of the business establishments to obtain summary information for amounts in the local area and within the local community.

Equivalent Labor Employment Opportunities Affected by DNR Ownership

Information and data were collected for examining labor employment opportunities affected by the DNR ownership. Part of the data used is from information directly providing number of employees and duration of their employment each year. Other data are from computing equivalent amounts of labor necessary to perform the work either displaced or created because of the DNR ownership. Man-years of labor is used as the total unit of measurement. All labor amounts were separated by residence location of the employees as to local area, local community, and outside of the local area.

Three categories of employment are considered: (1) farm labor displaced by DNR land acquisitions and changed land use (annual, previously recurring); (2) labor used annually by DNR in the operations and maintenance of the DNR ownership (presently recurring); and, (3) labor employed on the works of improvements for the initial developments on the DNR ownership (one-time, not recurring). A fourth category of labor that no doubt is affected in a small way by the DNR ownership pertains to increased use of labor by business establishments receiving trade from recreationists on the DNR ownership. This can create additional labor use opportunities either in the nature of more people employed or more use of present labor force that previously had normal capacities underused. Very general information indicated that few if any additional people were employed in the going business establishments; therefore, this category of employment opportunity was not pursued.

Farm labor

No attempt was made to trace the specific amounts of labor used in operating parts of farms, or in a few instances entire farms, before they were acquired by DNR. Care was taken to collect rather exacting information about enterprises (crop, livestock and woodland) on those farms affected by the DNR ownership. It was readily apparent that farm labor displacement would need to be computed from general application of labor requirements by units of farm enterprises since most of the affected farms contributed only relatively small acreages to the DNR ownership.

Information was collected about use of labor in farming technologies prevailing in the general area of the DNR project(s). No data were collected for any one-time or nonrecurring labor employment on farms as before DNR acquisition, such as for erecting or remodeling farm buildings or other permanent type on-farm developments.

Operations and maintenance labor on DNR ownership

Data were collected from DNR records and supervisory personnel for numbers of employees in 1972 on the DNR ownership. Full-time employees were each counted as one man-year of employment. For all others their months or hours of employment in 1972 were determined and converted into man-years. Representativeness of data for annual current use of labor on the ownership was obtained by comparing 1972 information with that for 1971 and that anticipated for 1973. Accordingly, any unusual amounts in 1972 were adjusted.

Labor employed in DNR project developments

Data were collected for labor employment in connection with all cost expenditures made each year through 1972 for all project developments on the DNR ownership. These data were obtained from DNR records and personnel associated with the developments. Labor costs were converted to months or hours of employment by using known or estimated prevailing unit rates per hour for the year of expenditure. These time amounts of employment were converted into equivalent man-years of labor.

Community Public Services Affected by the DNR Ownership

Information was collected from local DNR supervisory personnel and other informed individuals regarding any changes in amounts of public services via roads, protection and law enforcement and bussing of school children that could be attributed to the advent and operations of the DNR ownership.

For road services this included detailed actual or estimated data about miles of public roads closed, rerouted and/or newly installed by types of road bed and surface coverings. It also concerned related maintenance operations. Information was assembled about the location of residences on these public roads and the routing of school bussing vehicles, the needs for farm to market transportation and for recreation vehicles, plus many similar considerations about general traffic.

Information about protective services mainly concerned those from town and county officers, regarding: (a) circumstances in the area of the project before DNR ownership and any especially noticeable amounts of services required, and (b) circumstances on the DNR ownership and amounts of services supplied. Information collected for most areas of the DNR ownership(s) was of a general nature except where unusual circumstances occurred.

Information for school bussing considerations was collected in detail from DNR supervisory personnel and records, school and Town officials and other informed individuals. Local area maps were used to establish a diagram for the "before" and "after" DNR ownership situation(s) regarding: road patterns, location of residences with school children, and practicable school bus routes. Also information was noted regarding numbers of school children involved by general age groups, and especially by elementary and high school age groups. All information was screened to determine which parts were pertinent only to those circumstances identifiable with causal effects from the advent and operations of the DNR ownership.

Watershed Effects of DNR Ownership

Information was collected regarding resource conservation conditions on the ownership area both before and after DNR acquisition and operation of the lands. Primarily two major sources of information were used: (a) DNR supervisory personnel, previous owners or operators of the land or their neighbors, and soil conservation district technicians and their records; and, (b) results from on-site inspection of all parts of the DNR ownership by research personnel conducting this study. The information essentially pertains to land use and related water runoff and soil erosion on the ownership, vegetative protection of lands in the ownership, soil sediment pollutants and flood waters generating from the ownership into streams or lakes of the watershed, and net damages and benefits accruing to the ownership and to the watershed from changed land uses resulting from DNR operation of the acquired ownership.

The location and acres of different land uses (farm crops, grazing, forest and marsh type) before being acquired by DNR were ascertained for use in other parts of this study. For these watershed types of considerations it was a matter of gathering information about impacts of their use on resource protection or in creating damages to the watershed. For any specific areas on the ownership that gave rise to damages under previous owner operations, similar considerations were made for conditions under current DNR owner operations.

In addition, much general information was collected for use in making an overall summary of resulting conditions with the lands under DNR operations. This information pertains to the purpose and use for lands in the ownership and what changes in natural resource conservation took place after DNR acquired them.

USE OF DATA

Tax Changes From Effects of DNR Ownership Without Payments-In-Lieu of Taxes

Thirty steps were involved in determining the percent of increase in taxes to properties on the tax rolls caused by the DNR removal from the tax rolls of assessed valuations of real estate and affected personal property. This computed percentage is obtained without consideration of any aid payments-in-lieu of taxes or increased assessed valuations affected by the DNR ownership.

The sequential steps as carried out for each year of the study follow. The steps are outlined as if only one school district and one tax assessment district (TAD) are involved. However, the process is the same when data for more than one TAD and one or more school districts must be separately handled for many of the steps. The results supply data to show tax levy equivalent amounts affected by the DNR ownership regarding: school purposes for the entire school district involved plus breakdowns of the amounts for the TAD, local community and amounts for other parts of the school district; nonschool purposes for the entire TAD (Town) embracing the DNR ownership and for the local community; and, sum of amounts for school and nonschool purposes for the local community.

(1) Determine aggregate assessed valuation of properties removed from the TAD tax rolls for that sum of part of the TAD within the school district involved. (This is the sum of amounts for real estate and taxable personal properties.)

(2) Record full value factor for the TAD used for equalization purposes (among TAD's, e.g. in the school district involved).

(3) Determine full value of properties (from assessed valuations) removed from the TAD tax rolls. (Multiply results of step 1 by factor in step 2.)

(4) Record the school purpose tax levy of the TAD for the school district involved.

(5) Record the present percent of school district tax levy to be paid by the TAD involved in this procedure (TAD embracing the DNR ownership).

(6) Record total school district tax levy (i.e. total levy to be prorated among all TAD's involved with the school district). This can be obtained from dividing the known school district levy of the TAD (being studied in this process) by the percent of total school district levy allocated to the TAD, i.e. division of steps 4 and 5.

(7) Record the full value (equalization) assessed valuation of the school district.

(8) Determine the full value (equalization) assessed valuation of the school district as if the DNR-affected properties had not been removed from the tax rolls. (Add results of step 3 and step 7.)

(8-a) Determine a synthetic allocation percent of the school district tax levy to the TAD. (Add results of step 3 to present full value amount for the TAD involved and divide by the results of step 8.)

(9) Determine a synthetic tax rate based on results of step 8. (Result of step 6 divided by results of step 8).

(10) Determine school district synthetic levy on DNR-affected properties. (Multiply results of step 3 by results of step 9.)

(11) Determine school district synthetic levy on DNR-affected properties allocable to the TAD. (Multiply results of step 10 by results of step 8-a.)

(12) Determine allocable amount of school district synthetic levy on affected DNR properties to parts of the school district (other TAD's) outside of the TAD primarily involved in this process.

(13) Determine the TAD school district synthetic levy, i.e. as if

assessed valuations (full equalization values) for the DNR-affected properties had not been removed from the tax rolls. (Results of step 4 minus results of step 11.)

(14) Determine percent increase with assessed valuations of DNR-affected properties removed from the tax rolls. (Results of step 11 divided by results of step 13.)

(15) Record the increased tax levy for the TAD's part of the school district. (With only one TAD and one school district involved this amount is the same as obtained in step 11; however, with two or more TAD's involved the amount for this step is the sum of results obtained separately for each TAD in step 11.)

The above 15 steps conclude the basic determinations regarding school purpose taxes. The following nine steps deal with nonschool purpose taxation matters.

(16) Record the aggregate assessed valuation for the TAD. (This is for the entire TAD even though it may contain parts of more than one school district.)

(17) Determine the TAD mill rate excluding school purpose tax levies. (This is the TAD gross mill rate minus the school purpose mill rate—for the involved school district part of the TAD; it is sometimes necessary to obtain these rates from individual parcel tax billings or to compute them from entries in the Statement of Taxes and Indebtedness for the TAD.)

(18) Determine the TAD tax levy for all nonschool purposes. (Multiply results of step 16 by results of step 17.)

(19) Record the aggregate assessed valuation of DNR-affected properties removed from the tax rolls of the TAD. (With only one TAD and one school district involved this amount is the same as obtained in step 1; however, with two or more involved school districts in the same involved TAD the amount for this step is the sum of results obtained by school districts in step 1.)

(20) Determine the aggregate assessed valuation of the TAD as if the DNR-affected properties had not been removed from the tax rolls. (Sum results of step 16 plus results of step 19.)

(21) Determine a synthetic mill rate for the TAD nonschool tax levies as if DNR-affected properties were on the tax rolls. (Divide results of step 18 by results from step 20.)

(22) Determine the increase in the mill rate (synthetic) caused by removal of assessed valuation for DNR-affected properties from the TAD tax rolls. (Subtract results of step 21 from results of step 17.)

(23) Determine the percent change in the mill rate reflected by the increase found in step 22. (Results of step 22 divided by results of step 21.)

(24) Determine the added TAD tax levy for all nonschool purposes. (Results of step 16 multiplied by results of step 22.)

The above 9 steps (numbers 16 through 24) conclude the basic determinations regarding nonschool purpose taxes of the TAD.

The following 6 steps (numbers 25 through 30) deal with tax levies for the local community, i.e. the TAD's part of the school district.

(25) Record the aggregate assessed valuation for the TAD's (Town) part of the school district involved, i.e. the local community.

(26) Determine the percent of the TAD's aggregate assessed valuation in the local community. (Result of step 25 divided by result of step 16. If two or more local communities are involved (step 25) in the TAD, use their sum in this equation.)

(27) Determine the increased tax levy (nonschool and school purposes) for the local community. (Result of step 24 multiplied by result of step 26 and add answer with result of step 15.)

(28) Determine total tax levies for the local community. (Multiply results of step 25 by gross mill rate used in carrying out step 17.)

(29) Determine synthetic tax levies for the local community if DNR-affected properties were on the tax rolls. (Results of step 28 minus results of step 27.)

(30) Determine the percent increase in tax levies of the local community with DNR-affected properties removed from the tax rolls. (Results of step 27 divided by results of step 29.)

Tax Changes From Effects of DNR Ownership, With Payments-in-lieu of Taxes and Other Considerations

Any annual DNR payment-in-lieu of taxes regarding lands of the DNR ownership are made to the tax assessment district (TAD) having such lands within its boundaries. The payments-in-lieu of taxes are not subsequently allocated to other TAD's which are in part or entirely within the same school district as the TAD embracing the DNR ownership. Consequently these payments in effect relieve the tax levies for nonschool purposes required in the TAD having the DNR ownership. Therefore, the following nine sequential steps were carried out to determine net percent of tax increase (or decrease) caused by advent of the DNR ownership with payments-in-lieu of taxes considered.

(1) Record the added TAD tax levy for all nonschool purposes. (Results of step 24 in the previous section).

(2) Record the payments-in-lieu of taxes.

(3) Determine the net added tax levy for all nonschool purposes. (Subtract entry for step 2 from entry for step 1.)

(4) Record the aggregate assessed valuation for the TAD's (Town) part of the school district involved, i.e. the local community. (See step 25 in the previous section.)

(5) Record the percent for amount of aggregate assessed valuation for the school district part of the total TAD's aggregate assessed valuation. (Divide entry for step 4 by entry for step 16 in the previous section.)

(6) Determine the amount of additional tax levies to properties on the tax rolls in the school district part of the TAD. (Multiply results of step 3 by entry for step 5 and add the answer with results from step 15 in the previous section.)

(7) Record the amount of all tax levies in the school district part of the TAD, i.e. the local community. (Obtain from step 28 in the previous section.)

(8) Determine the amount of tax levy without changes caused from effects of the DNR ownership. (Subtract entry for step 7 from results for step 6.)

(9) Determine the percent increase (or decrease) in amount of tax levies for the local community caused by effects of the DNR ownership including offsets from payments-in-lieu of taxes. (Divide results of step 6 by results of step 8.)

There are two additional considerations besides payments-in-lieu of taxes which also have an effect of reducing increases in tax levies for the local community because of the DNR ownership.

First is an equivalent reduction of assessed valuations for properties acquired by DNR and removed from the tax rolls. This comes about when a use easement is granted by DNR to a former landowner who annually pays the property taxes throughout life of the easement as if he still had fee title possession. In effect such properties are still on the tax rolls. In fact, the assessed valuation for such properties is listed in the tax rolls for purposes of tax computations and tax collections even though it is included for entry in step 1 and the first section above and in step 4 in the second section above.[1] It becomes necessary, therefore, to make proper use of respective data for this easement matter and make a subtraction from total assessed valuations of properties acquired by DNR.

Second is the matter of additional assessed valuations entering the tax rolls which have a direct causal relationship to the DNR ownership from its development and use. These are the assessed valuations for new or expanded property developments of business establishments that receive trade originating from the DNR ownership (via its development, operation and recreational user expenditures).

For both considerations (easements and added taxable properties) the effects constitute a subtraction to amounts of assessed valuation initially removed from the tax rolls when the state (DNR) acquired the DNR ownership. Since the data for these two considerations are mostly determined (rather than actually existing in taxation records) they were not injected into the above step procedures (30 steps in the first section and 9 steps in the second section). The total amount of assessed valuations for these two considerations was determined for each year of the study by projects. A factor was computed to reflect the percent of initially reduced assessed valuations remaining after subtractions for the two considerations. This factor was applied to all appropriate items regarding effects of DNR project on tax levies to properties on the tax rolls when no offsets were involved, and the result gives net changed amounts of assessed valuations attributable to causes stemming from the DNR ownership.[2]

Use of data for these two consideration always affords some compensating offsets (reductions) in any increased taxes to the local community caused by removal of DNR properties from the tax rolls. For such offsets the principle is similar to that regarding DNR payments-in-lieu of taxes when the computations pertain specifically to effects on the local community.

Agricultural Pursuits

Private enterprise, in this instance from farming, no longer has production possibilities from previous farm lands and related properties that are acquired by DNR for its ownership.[3] For purposes of this study three principal impacts result to the local community. First is the disposed livestock that constituted taxable personal properties annually included in assessed valuations on the tax rolls. Second is the foregone employment opportunities for labor engaged in farming the lands acquired by DNR. Third is the overall foregone income to the farm entrepreneurs. Data collections regarding agricultural aspects were used as follows to focus the extent of these impacts.

Disposed farm livestock

Assessed valuation for disposed farm livestock was determined for the first taxation year when because of the DNR ownership they were no longer in the TAD for inclusion on the tax rolls. This was done for each affected farm. Where there were disposed livestock from more than one farm for the same taxation year their assessed

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[1] It is as though assessed valuations are added to the tax rolls for the years of the life of the easement after inclusion in the original subtraction when DNR acquired the properties.

[2] Like the results from tax changes without payments-in-lieu of taxes, this process of determining effects of offsets gives an amount of increased (or decreased) tax levy equivalent. Taking these into consideration, gives a net effect, i.e. increased tax levy equivalent after payments-in-lieu of taxes and/or enhanced assessed valuations have been included in the computations.

[3] There is the exception on certain wildlife management areas when some acres are farmed under sharecropping cooperative leasing arrangements.

valuations for the year of disposal were handled as a composite. For each succeeding year through 1972 assessed valuations were determined at the current level of assessed values for that year.

Results of these computed assessed valuations were included for each respective year with the accumulated assessed valuations for DNR real estate properties removed from tax assessment. These assessed valuations were used in section 1 above and otherwise where the amount of "aggregate assessed valuation of properties removed from the tax rolls" is called for in determining tax changes affected by the DNR ownership.

Foregone farm labor employment opportunities

Farm labor displacement was estimated from general application of labor requirements for field cropping operations and care of livestock (in man-years). Total net[1] acres of discontinued field crops and kinds and numbers of displaced livestock were used in this evaluation. The result obtained is an equivalent amount of farm labor displacement since it mainly accrues from dislocation on parts of several farms and only infrequently from an entire farm that makes up the DNR ownership. Current year farming technologies and use of labor in the general area of the DNR ownership were considered for unit labor requirements rather than those prevailing in earlier years when the labor was in fact displaced. This permits comparisons with additional labor employment at current levels on work generating from the DNR ownership.

Farm income foregone

Data from reconstructed land use patterns and yields for farming areas acquired by DNR were used in estimating previous gross income from discontinued production. Where some of the DNR-acquired lands (for example, in a wildlife management area) were continued in field crops, the amounts of production going to private enterprise were excluded in determining foregone gross and net income. This was handled by first computing total annual production under the reconstructed patterns and subtracting the production going to private enterprise from sharecropping arrangements.

Dollar evaluation of this production was treated at the primary level, i.e. as if marketed by cash sales. Thereby it was not necessary to evaluate feed supplies and balances with livestock on the farm or to consider additional income possible by marketing the feed through livestock consumption.[2] Net income was determined by applying an estimated factor for the percent of gross value of crops and pasture produced that remains after expenses are met.

The annual amount of net income was converted into capital value annuity worth starting with the amount incurred the first year farming was displaced by the DNR ownership and carried through year 1972. Total amounts of net income from all farms displaced the same year were handled separately for the corresponding number of years before 1973 (the study carries through year 1972). Compound factor(s) for the simple interest rate was used in keeping with that rate prevailing at time of the first year of net income foregone. (In all instances this was a rate of either 6 or 7%.) The capital value annuity worth amounts were summed for the project and an average annual annuity value of net income foregone was determined by amortizing such total value over the years of lost income. This number of years is determined by counting the first year when any net income was foregone and all succeeding years through 1972.

These calculations may be illustrated by reference to Lake Kegonsa State Park data (Table K-6). Starting after 1962 the initial annual gross value of field crops foregone is \$11,480. Converted to net income foregone (@ 35%) it amounts to \$4,018. Foregone pasture and garden production adds \$371 net income, giving a total of \$4,389 for first annual amount incurred. At 6 percent interest rate compounded annually over 10 years (1963 through 1972) this \$4,389 has a capital value annuity worth of \$57,850. Starting after 1966 another initial net income amount of \$46 was foregone from previous production of grazing lands. Over the six years through 1972 this \$46 has a capital value annuity worth of \$321. Thus the total capital value for net income foregone on this project amounts to \$58,171 (from, \$57,850 plus \$321). An equivalent average annual annuity value of net income foregone is determined by amortizing the \$58,171 over 10 years at 6 percent (i.e. multiply by factor of 0.13588 per one dollar) resulting in an amount of \$7,904. In other words, this amount of \$7,904 is the annual net income foregone from farming on this project and it is included in evaluations for net income from other sources covered in this study.

On one project private enterprise no longer had production possibilities from pine plantations when its lands were acquired by DNR. One plantation had been started in 1955 and income of the farmer was first foregone after 1967. Another plantation, started over a 2 or 3 year period, was on the average considered as starting in 1957, and income to private enterprise was first foregone after 1968. (Beginning year for income foregone stems from DNR purchase date.) Loss of income was estimated by the following method under assumption of reasonably good timber management practices. Simple interest rate of 6 percent compounded annually was used in computing the monetary analyses since that was the general prevailing rate at the time of land sales to DNR.

(1) Growth rate of trees, amounts of harvest cuttings and year for final (mature) harvest were determined by information for similar conditions in the area.

(2) The specific year for seven thinning cuts (harvest) and the

final harvest cut were estimated. Final harvest was estimated to be made about 80 or 85 years after the plantation(s) was started. Type and amount of products and gross sales (stumpage) values were determined for each harvest cutting. All harvest sales are net harvest values since unit prices were considered at rates where the buyer does the harvesting operations.

(3) Gross sales values for each of the 8 harvests were discounted from the future year of expected happening through the first year that income to private enterprise was foregone. The result obtained present worth as of the beginning year for foregone income. These separate gross sales values were summed to obtain total present worth of all harvests.

(4) The present worth of total gross sales values was amortized over the total years of foregone income (i.e. from year before first year of income foregone through the year of final harvest). The result is an average annual amount for gross sales values.

(5) An average annual charge for protection and management of the plantation was subtracted from the average annual gross sales values (present worth, step 4) to determine annual net income foregone. (This amount is included in evaluations for net income from other sources covered in this study.)

Income to Local Area Business Establishments

Data collected for trade generated by separate years from the DNR ownership to local area business establishments included amounts of gross sales together with either gross expenses or percent of gross income that is net income. Amounts of annual net income were computed for each establishment.

Business establishments were identified by three separate locations: in the local area, in the local community and outside of the local area. Data were maintained separately for these three areas. For each year of trade net incomes were summed for all business establishments.

Net income from operations and maintenance cost expenditures made by DNR on its ownership and net income to business establishments from expenditures of recreationists using the DNR ownership facilities were summarized and evaluated only for year 1972.

Net incomes from initial development cost expenditures made by DNR in the local area and in the local community were computed into equivalent average annual amounts whereby they could be included with net income from the other two sources of trade generated by the DNR ownership. This is done by amortizing the initial net income benefit over the life expectancy years for each works installed. The underlying principle is that: (1) only when the initial installation is replaced will there be repeated opportunity for net income accrual, therefore, (2) net income from the first cost expenditure(s) pertains to all years throughout the operating life of the initial installation, and, (3) the lump sum net income first accrued must be reduced to equivalent yearly amounts over those same years in order to compute an average annual net income. For example: three installation works of improvement had an initial gross cost of $3,791 with net income of $1,327 to the business firms. However, $569 of this net income accrues from costs for one installation with a life expectancy of only 25 years, thus the equivalent average annual net income is only $49 (i.e. from $569 amortized @7% interest rate over 25 years). The other $758 of net income accrues from costs of two installations with each having a life expectancy of 50 years, thus when amortized the equivalent average annual net income is only $55. Therefore, the total average annual net income for these three initial development cost expenditures is $104 ($49 plus $55).

Conversions of the initial amounts of net income into average annual net income were made at simple interest rate of either 6 or 7 percent compounded annually. Selection of the interest rate was made in keeping with those prevailing rates in the local area for the respective year(s) when initial income accrued.

Road, Protective Service and School Bussing Costs

For all public services evaluated, the "before" and "after" DNR ownership related circumstances are compared. In addition to use of data collected, some empirical analyses were made for evaluating the differences attributable to advent and operations of the DNR ownership. In all cases data and information collected are used in describing comparisons of circumstances without and with the DNR ownership.

Labor Employment Opportunities

Emphasis in the summary and evaluation for man-years of labor employment opportunities affected by the DNR ownership is placed

[1] In some projects part of the DNR-acquired cropland is continued in field crops for wildlife management purposes under cooperative arrangements with local farmer operators who receive a share of the crops produced.

[2] In actual circumstances the net income determined probably is less than experienced by the affected farmers. They did in fact market part or all of their crops through livestock on their farms. However, a large part of this additional income accrues from "marketing" their own labor, and, it can be contended that this opportunity could prevail at an off-farm location, i.e. profit from marketing feeds acquired at current market prices through livestock and by selling the livestock products.

on comparisons of annual recurring amounts of labor employed. Data collected and/or processed for total amounts of labor displaced and for employment opportunities created because of the DNR project are used to show the net gain or loss resulting from effects of the DNR ownership. This largely pertains to a loss of farm labor employment on farm lands acquired by DNR for its ownership, and to a gain of labor employment on the DNR ownership. Residence of the labor employed, both before and after advent of the DNR ownership, is used as the guide for separating affected employment opportunities in the local area and the local community and outside of the local area.

The one-time and nonrecurring amounts of labor employed on the DNR project developments are shown in the summary for each DNR ownership studied but they are not included in the net balances. Also, no offsetting possibilities were evaluated for any one-time and nonrecurring labor employment on farms prior to their acquisition by DNR, such as, for constructing or remodeling farm buildings or silos or other so-called permanent types of on-farm developments.

Resource Conservation Conditions

Information and data collected about land uses, water runoff and soil erosion on the DNR ownership area both before and after DNR acquisition were used in making on-site and watershed resource conservation evaluations. The evaluations are related to change from mostly private use purpose and management to public use and management. Generally the lands were previously used for agricultural purposes but under DNR ownership they are used for recreational purposes and, with some exceptions, are not cultivated or grazed.

Since purpose and use for lands in the ownership changed greatly after acquisition by DNR, comparative evaluations of on-site and watershed damages and benefits, even though basically measured the same way, must be described in markedly different terms. For example, an area grazed by livestock, under conditions existing before DNR ownership, subsequently becomes a picnic area on a state park. It is no longer a matter of overgrazing and erosion but how well soil-covering vegetation withstands heavy pedestrian traffic and prevents soil erosion. Or, a field with corn, oats and hay crops and relatively free of weeds is now on a wildlife management DNR ownership and is not cropped but has serious infestations of weeds. Thus it becomes a matter of evaluating added soil protection from good cover, with enhanced nesting and food for wildlife, while at the same time considering the damages from weed seeds scattered by spring flood waters over farm lands in downstream parts of the watershed.

Evaluations made for each DNR ownership studied are presented in descriptive terms supported by data collected about physical and biological conditions and changes in land uses and vegetative cover.

RESULTS

Major results from this research project are presented in the following parts, as applicable, for each of the six DNR ownerships studied. Analyses cover those years from the time when land acquisition began through 1972.

(1) State acquired real estate property and assessed valuations, by years and by towns involved (townships);

(2) Taxable personal properties affected, assessed valuations removed from the tax rolls, by years;

(2-A) [1]Additional general property assessed valuation, attributable to the DNR ownership influences (i.e. new assessed valuations generating from advent and use of the DNR ownership), by years and for real estate and taxable personal properties;

(3) Effects of DNR project on tax levies to properties on the tax rolls, without considering the DNR payments-in-lieu of taxes;

(4) Effects of DNR project on tax levies to properties on the tax rolls, with consideration of DNR payments-in-lieu of taxes;

(4-A) [1]Effects of DNR project on tax levies to properties on the tax rolls, with consideration for the net amounts of assessed valuations affected by the DNR ownership and for payments-in-lieu of taxes;

(5) Land use and reduced annual production caused by DNR ownership, by years and acres of DNR land use involved in previous farm production;

(6) Value of reduced annual production (to private enterprise) caused by ownership, by years and products and types of monetary values;

(7) Value of annual trade to local business establishments from nonlocal users of the DNR ownership, for 1972;

(8-a) Development cost expenditures on DNR ownership, and income to local business concerns from trade generated from such expenditures and from annual cost expenditures to operate and maintain the ownership;

(8-b) Equivalent labor employment opportunities affected by the DNR ownership;

(8-c) Road, protective service and school bussing costs affected by the DNR ownership;

(8-d) Land water conservation in the watershed (in which the DNR ownership is located);

(9) Some comparative summary items, including[2]: (1) Periodic progressions for accumulation of assessed valuations removed from the tax rolls; (2) Increased tax levies on tax assessment districts affected by DNR ownership, by end of 1972, with and without offsetting compensations attributable to DNR ownership influences; (3) Production factors and income changes regarding the DNR ownership area; (4) Changes in community public services and costs and watershed protection; and, (5) Net balances, debits and credits in monetary terms from advent and operations of the DNR ownership.

Complete results for all applicable 9 parts and subparts listed above are presented together in separate sections for each DNR ownership studied. The order of the following presentations by DNR project name is:

1. Lake Kegonsa State Park
2. Lake Wissota State Park
3. Albany Wildlife Management Area
4. Collins Wildlife Management Area
5. Plover River Fishery Management Area
6. Elroy-Sparta State Trail

[1] Increased assessed valuations traceable to influences generating from the DNR ownership had not come about by 1972 for most of the projects studied; therefore Table 2A (additional general property assessed valuation) was not necessary. Likewise, when 2-A is not involved, it is unnecessary to show Table 4-A (net amounts of assessed valuations affected by the DNR ownership).

2 These data and narrative summaries (under 9) are condensations from the above types of more detailed presentations in items (1) through (8); and subpart 5 focuses all major monetary evaluations into an annual net balance picture for 1972.

LAKE KEGONSA STATE PARK

This state park with 343 acres is located on the northeast shore of the 2,716-acre Lake Kegonsa. It is 3 miles from the first interchange on Interstate 90 south of Madison about 11 miles. The park's swimming beach and boat launch are on the lake while its campsites are in a heavily wooded tract of 70 acres lying about one-half mile away. Spacious picnic areas overlook the lake. It also has native marsh areas protected for nature study.

Most of the park land was acquired in 1962 and it was opened to the public in the late summer of 1966. At the start it had only 36 campsites but this number was increased to 66 in 1968.

Park visitations increased from less than 5,000 in 1966 and 1967 to about 6,500 in 1968, 85,000 in 1969, 97,000 in 1970, and around 125,000 to 130,000 in 1971 and 1972. In 1972, camper participant days accounted for about one-fifth of the total visitations.

Nonlocal park visitors made their needed purchases of supplies and services mostly from business establishments at the I-90 interchange, at Stoughton 4 miles south of the park and at a number of places nearer to the park.

Lake Kegonsa State Park lies entirely in the Town of Pleasant Springs (township), Dane County, and in the Stoughton school district.

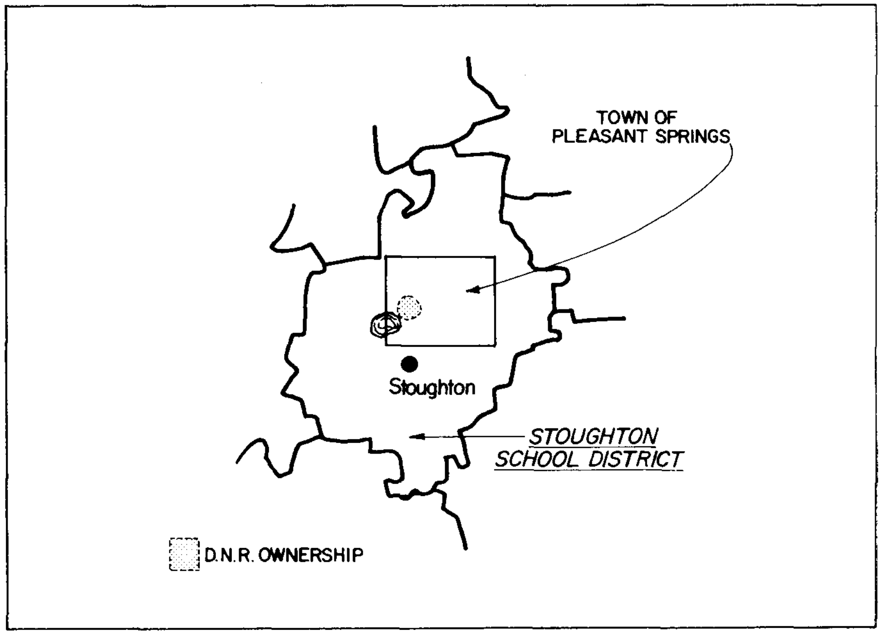


TABLE K–1. State Acquired Real Estate Property and Assessed Valuations
(All in One School District)

	State Ownership (acres)			
Year	Acquired	Owned	Off Tax Rolls April 30*	Aggregate Assessed Valuation Removed From the Tax Rolls[1]
1962	301.60	301.60	0	0
1963	0	301.60	301.60	$66,500
1964	0	301.60	301.60	66,500
1965	0	301.60	301.60	66,500
1966	41.21	342.81	313.30	68,180
1967	0	342.81	328.15	70,680
1968	0	342.81	328.15	70,680
1969	0	342.81	328.15	70,680
1970	0	342.81	328.15	70,680
1971	0	342.81	328.15	70,680
1972	0	342.81**	328.15**	70,680

*Indicates real estate property on the tax rolls that was removed with state ownership before the assessment date of May 1.

**Some properties (14.66 acres) acquired were already exempt from property taxation and were not on the tax rolls at time of state acquisition.

[1]By DNR easement to a previous owner the grantee paid taxes on assessed valuation of $7,300 for 1963 and each year through 1969. This assessment was in fact shown in the tax rolls; therefore, until 1970 the amounts shown as "removed from the tax rolls" should be considered in effect as smaller by $7,300. Section 70.11 Wis. Stats. (1967) provides that state-owned land is not exempt from taxation "while the grantor or others for his benefit are permitted to occupy the land or a part thereof in consideration for the conveyance".

TABLE K–2. Taxable Personal Property Affected by State Land Acquisitions

Year Off Tax Rolls	Personal Property Disposed: Number of Dairy Animals*	Aggregate Assessed Valuation Removed From the Tax Rolls**
1962	0	0
1963	26–6–8	$7,440
1964	26–6–8	7,440
1965	26–6–8	7,440
1966	26–6–8	7,860
1967	26–6–8	7,527
1968	26–6–8	6,993
1969	26–6–8	6,422
1970	26–6–8	5,854
1971	26–6–8	7,250
1972	26–6–8	7,291

*The three numbers, left to right, are for cows, heifers 1 to 2 years old and heifers 4 months to 1 year old.

**Three qualities of dairy cows (best, medium and poor) and two qualities of heifers (best and medium) are considered for the livestock disposed. Generally full value recommended unit prices increased for the quality of dairy animals involved, but not uniformly by years, from an average of $217 to $415 per cow, $177 to $276 per older heifer and $91 to $160 per younger heifer. Percent of full value used in assessments varied, but also not uniformly by years, from 100% for the first 3 years down to about 49% in 1970, 58% in 1971 and 53% in 1972. Combination of these two variables accounts for the noticeable differences in amount of aggregate assessed valuation by years.

TABLE K–2A. Additional General Property Assessed Valuation
(Attributable to State Ownership Influences*)

	Real Estate Assessed Valuation				Personal Property Assessed Valuation		
			Since Advent of State Park				
Year**	No. of Businesses	Total	Total	Allocated to Park Element	Total	Allocated to Park Element	No. of Businesses
1966	3	$ 80,400	$ 56,200	$ 1,569	$31,720	$ 802	3
1967	5	148,650	119,450	4,747	41,607	1,144	4[1]
1968	6	197,400	167,758	7,291	34,473	1,152	5[1]
1969	6	199,880	170,238	7,365	45,803	2,308	5[2]
1970	6	199,880	170,238	7,365	34,491	1,056	5[2]
1971	7	212,880	174,738	9,696	45,142	1,807	6[3]
1972	7	212,880	179,858	14,296	42,564	1,694	7

*Taxation assessed valuations for real estate and taxable personal properties of those business establishments having changes in such assessments because of influences stemming from the DNR ownership; they received trade from the DNR ownership users while adding taxable properties. Allocations to "park influences or element" are made in amount by percentage of total annual gross income (goods and services) accruing from sales to users of the DNR ownership.

**Years 1962-65 (of study) omitted since no significant "influences" came about during such period; state land developments were completed and trade enhancements to business establishments essentially started in 1966.

[1]One business had real estate and developments but no taxable personal property.

[2]One business previously operating was not open and had no taxable personal property.

[3]All 6 businesses previously having real estate assessed valuations also had personal property assessed valuations this year, but one new business had no personal property on May 1.

TABLE K–3. Effects of DNR Project on Tax Levies to Properties on Tax Rolls
(Without Consideration of DNR Payments-in-lieu of Taxes)

INCREASED TAX LEVY EQUIVALENT (TAX YEAR 1972)*

For school purposes	
On entire school district involved (Stoughton school district)	$2,709
On that part of school district in Town of Pleasant Springs	535
On parts of school district outside Town of Pleasant Springs	2,174
For nonschool purposes	
On entire Town of Pleasant Springs	846
On that part of the Town in Stoughton school district	794
Total on that part of the Town within the school district involved and embracing the DNR properties (part of the Town of Pleasant Springs; i. e. local community)	1,329
Percent of tax levy increase to properties on the tax rolls caused by effect of DNR project (tax year 1972)	2.6960%

Corresponding tax amount and percentage increase for past 10 years:**

	Without Easement Tax Levies		With Easement Tax Levies[1]	
Year	Tax Levy Amount	Percent	Tax Levy Amount	Percent
1972	$1,329	2.6960	$1,329	2.6960
1971	1,079	3.0503	1,079	3.0503
1970	848	2.8886	848	2.8886
1969[1]	877	3.1849	794	2.8834
1968	767	3.1895	695	2.8897
1967	752	3.5692	682	3.2360
1966	625	3.5591	568	3.2343
1965	594	3.5358	535	3.1867
1964	610	3.9370	550	3.5483
1963	587	4.0451	529	3.6457

*Based on equivalent assessed valuations for affected properties in 1972:

DNR real estate removed from the tax rolls	$70,680
Taxable personal properties disposed because of DNR effect	7,291
Total	$77,971

**First year of project effect was in 1963 although first parcel purchased was in November 1962.

[1]For 1963 through 1969 one part of DNR ownership was under easement to private party; and, it had assessed valuation of $7,300 carried on the tax rolls which was not exempt from payment of tax levies, paid by easement grantee. This $7,300 is not subtracted from the base assessed valuations used herein but is accounted for in Table K–4A.

TABLE K–4. Effects of DNR Project on Tax Levies to Properties on Tax Rolls

(With Consideration of DNR Payments-in-lieu of Taxes - Year 1963 Only)*

INCREASED NET TAX LEVY EQUIVALENT (TAX YEAR 1963)

	Without Easement[2]	With Easement[2]
Nonschool purposes	$ 625	$ 563
Payments-in-lieu of taxes by Conserv. Dept. (DNR) to Town of Pleasant Springs**	1,019	1,019
Nonschool purpose, entire Town of Pleasant Springs	(394)	(456)
On that part of Town of Pleasant Springs in Stoughton school district	(370)	(429)
School purposes, for that part of the Town of Pleasant Springs in the Stoughton school district	180	162
Total on that part of the Town within the school district involved and embracing the DNR properties (part of the Town of Pleasant Springs; i. e. the local community)	(190)	(267)
Percent of tax levy increase to properties on the tax rolls caused by effect of DNR project (tax year 1963)	(0.9631%)	(0.1296%)

Corresponding tax levy amount and percentage increase for past 10 years:[1]
(Same as in Table K–3 for years 1964-1972, and 1963 is shown above.)

*Only for the year 1963 were any payments-in-lieu of taxes made by DNR (then Conserv. Dept.) regarding this project. By Wis. Statutes, such payments were equivalent to tax levies for school purposes on acquired properties removed from the tax rolls. After 1963 and until application of Statutes effective 1 July 1969 no DNR payments-in-lieu of taxes were required for state ownership for park purposes. Acquisitions in this project causing new removal of assessed valuations from the tax rolls were only for the years 1963, 1966 and 1967; therefore, payments-in-lieu of taxes were made only for the year 1963.

**Based on equivalent assessed valuations for affected properties in 1963:

DNR (then Conserv. Dept.) real estate removed from tax rolls	$66,500[2]
Taxable personal properties disposed because of project effects	7,440
Total	$73,940[3]

Amounts in parentheses are decreases (or gains)

[1]First year of project effect was in 1963 although first parcel was purchased in November 1962.

[2]Considers entire assessed valuation of DNR ownership and affected personal properties "without" and "with" subtraction of easement granted properties having $7,300 assessed valuation; tax levies were paid by easement grantee.

[3]Includes $7,300 assessed valuation for some easement granted properties in the DNR ownership; the easement prevailed for years 1963 through 1969.

TABLE K–4A. Effects of DNR Project on Tax Levies to Properties on Tax Rolls

(With Consideration for Net Amount of Assessed Valuations Affected by DNR Ownership and Payments-in-lieu of Taxes)*

INCREASED NET TAX LEVY EQUIVALENT (TAX YEAR 1972)

For school purposes	
On entire school district involved (Stoughton school district)	$2,153
On that part of school district in Town of Pleasant Springs	425
On parts of school district outside Town of Pleasant Springs	1,728
For nonschool purposes	
On entire Town of Pleasant Springs	672
On that part of Town of Pleasant Springs in Stoughton school district	631
Total on that part of the Town within the school district involved and embracing the DNR properties (part of the Town of Pleasant Springs; i. e. the local community)	1,056
Percent of tax levy increase to properties on tax rolls caused by effect of DNR project (tax year 1972)	2.143%

Corresponding tax amount and percentage increase for past 10 years:[1]

Year	Tax Levy Amount	Percent
1972	$1,056	2.1430
1971	920	2.6000
1970	755	2.5708
1969	684	2.4838
1968	612	2.5430
1967	625	2.9672
1966	546	3.1064
1965	535	3.1867
1964	550	3.5483
1963	(267)	(0.1296)

*Based on net amounts of assessed valuations removed from and enhanced in the tax rolls because of the DNR ownership; see amounts in Tables K–1 plus K–2 minus amounts in Table K–2A. Examples: (1) for year 1972–base dollar amounts of equivalent assessed valuations: ([$70,680 entire DNR ownership plus $7,291 personal property affected by DNR ownership] minus [additional taxable properties attributable to state park influences: $14,296 real estate plus $1,694 personal property]) equals $61,981 net amount of general property assessed valuations affected by the DNR ownership and removed from the tax rolls; (2) for year 1967 – same items as above and in same sequence except for the second amount, i. e. a subtraction; ([$70,680 minus easement assessed valuation of $7,300**, plus $7,527] minus [$4,747 plus $1,144]) equals $65,016.

**See footnote 3 on Table K–4.

[1] Amounts in parentheses are decreases (or gains).

TABLE K–5. Land Use and Reduced Annual Production Caused by DNR Ownership

(DNR Land Involved was Previously Farmer Harvested)*

			Land Use**					Yield[1]				
Year	Total Acres	Cultivated Acres	Corn (acres)	Oats (acres)	Hay (acres)	Perm. Pasture (acres)	Gardens (no)	Corn (bu)	Oats (bu)	Hay (tons)	Perm. Pasture (AU)[2]	Gardens (dollars)
1962	–	–	–	–	–	–	–	–	–	–	–	–
1963	171	138	70	17	51	33	2	5,950	935	204	27.5	140
1964-66	–	–	–	–	–	–	–	–	–	–	–	–
1967	9	–	–	–	–	9	–	–	–	–	5.5	–
1968-72	–	–	–	–	–	–	–	–	–	–	–	–
Total	180	138	70	17	51	42	2	5,950	935	204	33	140

*These data are intended to provide the general picture; crop acres and use are averages by years and not exact to include variations that take place with usual farm operations. Grain and forage yields are estimated from information of the soil productivity index, records of production on similar land in the community and opinions of neighboring farm operators.

**Corn and hay yields are evaluated in terms of mature grain and harvested hay although usually some acreages are for corn silage and livestock grazing.

[1]Indicates the year when production was first foregone by former owners and operators.

[2]AU is one grazing animal unit equivalent to one mature cow.

TABLE K–6. Value of Reduced Annual Production Caused by DNR Ownership
(By Products and Types of Monetary Values)

Year	Initial Annual Gross Value of Reduced Production*: Field Crops	Pasture & Garden	Total	Net Income Foregone: First Annual Amount Incurred**	Capital Value Annuity Worth Through 1972[1]
1962	–	–	–	–	–
1963	$11,480	$371	$11,851	$4,389	$57,850
1964-66	–	–	–	–	–
1967	–	46	46	46	321
1968-72	–	–	–	–	–
Total	11,480	417	11,897	4,435	58,171
	Average annual annuity value of net income foregone (in 10 years)				$7,904[2]

*Unit prices are those prevailing in the area the year production was first foregone; going rental rates per unit of grazing were used.

**An estimated 35 percent factor was used to convert field crop gross value to net income; amounts for pasture and garden shown under gross income were used in full since they were computed at net income rental rates or values.

[1]At compound factor for 6 percent simple interest rate, which reflects average level prevailing interest rate for those years of reduced production.

[2]Computed from sum of capital values (i. e. from first annual amounts incurred respectively covering period from year of incidence through 1972) over 10-year total period of occurrence.

TABLE K–7. Value of Annual Trade From Nonlocal Users of DNR Ownership Area – 1972

NUMBER OF BUSINESS ESTABLISHMENTS HAVING TRADE FROM THE AREA 47*

1. Number of business accounts evaluated 35
2. Number of businesses appraised by projections from "1"** 12
3. Types of business establishments:

a. Gasoline station[1]	6	l. Country store; with antiques and bait sales	1
b. Tavern	6	m. 5¢ and 10¢ store	1
c. Grocery store	5	n. Sporting goods store	1
d. Hardware store (or similar)	5	o. Supper club & motel	1
e. Restaurant	4	p. Photo shop	1
f. Drug store	3	q. Laundromat	1
g. Gift shop	2	r. Liquor store	1
h. Men's clothing store	2	s. Drive-in: soft drinks and food	1
i. Ladies' apparel store	2	t. Commercial campground	1
j. General clothing store	1	u. Horesback riding stable	1
k. Restaurant & bar, boat rentals and bait sales	1	TOTAL	47[2]

INCOME EVALUATIONS FOR THE 47 BUSINESS ESTABLISHMENTS RECEIVING TRADE FROM THE DNR AREA USERS

1. Total Gross Sales	$9,049,247	(range/establishment: $2,000 – 2,500,000)
a. Avg./establishment	192,537	
b. To DNR-area users[3]	171,637	(range/establishment: 100 – 43,500)
(1) Avg./establishment	3,652	
2. Total Net Income	996,685	(range/establishment: 800 – 76,300)
a. Avg./establishment	21,206	
b. From DNR area users' trade[3,4]	24,019	(range/establishment: 20 – 4,372)
(1) Avg./establishment	511	

*Approximately 12 additional business establishments having very little or no DNR user trade were investigated in the procedure of determining the perimeter for nonlocal trade from users of the state ownership.

**Some operators were used as samples by location and visited to determine positiveness of their receiving trade from the DNR area users.

[1]Also, 7 additional stations in the trade area may have some sales to park users, especially to the day users.

[2]Ten business establishments in the Town of Pleasant Springs are within three miles of the state ownership area, and 37 in the city of Stoughton are about four and one-half miles from the area.

[3]In 1971 and in 1972 there were between 125,000 and 130,000 recreation visitor days use of the state ownership (L. Kegonsa St. Park) including between 19,000 and 20,000 family camper days. Trading expenditures from these DNR area users with the 47 business establishments are evaluated; it is primarily campers' trade which for this area (in Stoughton) includes much more than the usual gasoline, refreshments, groceries, etc. – some stores draw sizable trade from these nonlocal campers for durable goods.

[4]Ten business establishments in the area considered as the "local community" for this study (i. e. in those parts of the Town of Pleasant Springs included in the Stoughton school district) account for $9,713 net income from DNR area users' trade.

TABLE K-8A. Development Costs for DNR Ownership

Major development costs by DNR on this project are considered as starting in 1966 (some were initiated in late 1965). The greatest expenditures were made primarily through general contracting firms, which were located outside the local are encompassed by the school district (Stoughton) including the DNR ownership. However, in several instances these distant firms had subcontracts with business concerns in the general vicinity of the state park. Also, appreciable expenditures were made in the generally local area by DNR direct account for goods and services for use by its personnel engaged in development work on the DNR project. Separations were made by years for those expenditures accruing to business firms within the school district with further separation to firms in the local community (as defined for this research study).

Development costs are included for materials, supplies and equipment but labor costs are excluded in estimating net income directly accruing to local businesses. Indirect benefits are not included. Under these considerations for determining impacts on the local economy only parts of the total costs are evaluated. For example, only bed materials for road construction obtained locally came into account, since other segments of the installations were not handled through local processing or sales. The developments were for such works as public road and park roads, bridge and parking area construction, park sign, campground development materials, lodging rentals and food for laborers, building installations and operating equipment, construction materials and miscellaneous merchandise and services. For the seven years (1966-1972) of development the gross costs expended locally, exclusive of labor, amounted to $81,320. Annual recurring operation expenditures are estimated at $500 of trade with business establishments in the local area (i.e. within the school district).

Net incomes from each initial development expenditure for an installation are reduced to an equivalent average annual benefit evaluated over the respective years of life expectancy of use for the works installed. For example, road bed construction is evaluated into perpetuity while the park entrance sign is evaluated over 40 years, with other items having indeterminable but long life use expectancy evaluated over 50 years.

The following data indicate that the average net income benefits to business concerns within the school district containing the DNR project amount annually to an equivalent of $916, including $671 to concerns within the local community (i.e. Town of Pleasant Springs).

Income to Business Concerns in the School District

(From Trade Generated by DNR Project Development Expenditures and Operations)

	In Local Community		In Other Parts of School District		Total		Equivalent Average Annual Net Benefits**		
Year	Gross	Net	Gross	Net	Gross*	Net	In Local Community	In Other Parts of School Dist.	Total
FROM INITIAL DEVELOPMENT EXPENDITURES									
1966	$ 3,300	$ 495	$ –	$ –	$ 3,300	$ 495	$ 35	$ –	$ 35
1967	21,945	3,292	–	–	21,945	3,292	230	–	230
1968	7,984	1,198	–	–	7,984	1,198	84	–	84
1969	17,330	2,600	2,500	125	19,830	2,725	182	9	191
1970	8,575	1,286	–	–	8,575	1,286	90	–	90
1971	247	62	6,656	842	6,903	904	5	62	67
1972	4,300	645	8,483	1,018	12,783	1,663	45	74	119
Total	63,681	9,578	17,639	1,985	81,320	11,563	671	145	816
FROM ANNUAL RECURRING EXPENDITURES (MAINTENANCE & OPERATIONS)									
Annual	–	–	500	100	500	100	–	100	100
TOTAL AVERAGE ANNUAL NET INCOME (BENEFITS)									916

*All kinds of labor costs are excluded; basically inclusions cover materials, manufactured goods and supplies and equipment use.

**At prices paid in year of expenditure, and 7 percent simple interest rate compounded annually.

TABLE K-8B. Equivalent Labor Employment Opportunities Affected

There was a total of approximately 138 acres of cultivated farm crops and 42 acres of permanent pasture removed from production (Table 5). In addition the one complete farm unit acquired by DNR had about 80 acres of farm woodland from which much of the good merchantable timber had been harvested prior to the change in ownership. About one-half of the cropland acreage was used for corn each year with the other parts in hay and oats. The displaced dairy herd annually included around 26 cows and 14 head of dairy cattle heifers. With 1972 farming techniques it is estimated that accompanying farm labor requirements annually would amount to an equivalent of approximately 2 man-years.

This displacement of opportunity for farm labor use is offset by annual employment on the DNR ownership amounting to an equivalent of approximately 2.65 man-years of labor. This labor force is resident in the school district (Stoughton) considered in this study; in fact almost all of it (2.6 man-years) resides in the local community (Town of Pleasant Springs).

The conclusion is that net employment has been increased locally by approximately two-thirds of a man-year of labor which is practically all gain for the local community (only 0.05 man-year is from other parts of the school district).

TABLE K-8C. Road, Protective Service and School Bussing Costs Affected by DNR Ownership

Roads

No through-the-area public roads have been closed because of the DNR ownership. However, some road routing changes have been made around the southeast part of the ownership. Before advent of the DNR ownership Williams Road (north and south from Stoughton and paralleling the C.M.ST.P.&P. railroad tracks) crossed the tracks and turned west at what is now the southeast corner of the ownership. That road then generally paralleled the shoreline of Lake Kegonsa. This stretch of road was abandoned for a distance of approximately one mile. A replacement and "through" road of about 1 mile was built, but it does not lay by the lake shore. The new, hard surfaced road is a distinctly improved facility in comparison to the abandoned and somewhat worn road.

Originally developments for the DNR ownership did not include the "through" road and entrance to the ownership was designed for the north side. This would have caused road traffic stemming from Stoughton to go around the state land on the north and northwest by nearly 2 miles to reach residential properties near the southwest part of the DNR ownership. Systems of "turn around" school bussing routes would have been necessary with varying estimates of added mileage per day ranging from 6.4 miles to 19.6 miles. The new road and present traffic pattern, with entrance to the DNR ownership on the east side, eliminated any cause for such extra mileage.

The new road currently requires appreciably less maintenance costs than did the abandoned road, but exacting comparisons were not made in this study. Any impacts on economy of the local community could only be on the favorable side of debits and credits.

Protective Services

Use of the DNR ownership (all recreation) has involved no additional requirements for protective and law enforcement services from any nonstate officers. Also, previous uses of the lands (farming, idle, initial platting for subdivision residential and commercial developments, and some recreation) had no such requirements that were reduced because of the DNR ownership. Therefore, there are no changes in costs for protective services stemming from this DNR ownership that affect the local economy.

School Costs

No appreciable changes in mileage or difficulty or ease in bussing school children from the local community have come about because of the DNR ownership. School children are bussed from one state-owned residence on the DNR ownership but this same dwelling was the source of school pupils prior to state acquisition of the property. Also, there have been no appreciable changes in the number or age groups of school children caused by the change from private to DNR ownership. Therefore, there are no indications that the advent of the DNR ownership has affected these types of costs for the school system serving the local community embracing the ownership.

TABLE K-8D. Land and Water Conservation in the Watershed

Only 40 percent (138 acres) of the DNR ownership was farmed with field crops at the time of state acquisition. On the average only about one-fourth of the ownership was plowed each year but only one-fifth was used for clean tilled crops. Low lying marsh lands and permanent pasture land accounted about equally for 36 percent and woodland for another 23 percent of the ownership. In effect, therefore, only a small part of the entire ownership was not covered with close growing or permanent vegetation. Furthermore 88 percent of the DNR ownership was in one farm that was operated in keeping with a farm conservation plan, under cooperative agreement with the Dane County Soil and Water Conservation District. Consequently, only a minimal amount of damaging water runoff and soil sediment went into Lake Kegonsa from the DNR ownership lands before state acquisition. Most of these lands drain to the low lying adjacent marsh land areas. The marsh and their creek waterways directly outlet into Lake Kegonsa.

Developments on the DNR ownership have caused considerable deposits of sediment and soil materials into the marsh areas of the state property, and some moved on into the lake. First, there was serious soil erosion when the internal road system was built. Second, in conjunction with the boat launch facility approximately 7,500 cubic yards of fill is being made on adjacent marsh land. Much of this fill is coming from nearby areas by dredging and dragline operations. Perhaps there are some "trade-offs" between losses from filled marsh and benefits from improvement in the shoreline area used for boat launching plus possibly a small place for picnicking.

The areas of heaviest use by people on the DNR ownership in current years are the developed campground and the swimming beach (and nearby boat launch). Observations indicate no appreciable damages of the vegetated protective covers for these areas caused by recreationists. Therefore, only minimal water runoff and soil sediments could be attributed directly to the changed land use. Offsetting any such damage possibility is a little added soil protection from permanent vegetation presently covering the one-fifth to one-fourth of the ownership which was formerly in cultivation under a conservation farming plan.

Change in ownership to the state (DNR) has probably reduced any minimal pollutant damages from sedimentation that formerly occurred each year. However, in one or two recent years a sizable amount of marsh land (by the boat launch) has been filled and the wetland ecosystem characteristic of the former natural condition has been permanently damaged. Without some intensive evaluations the net balance effects cannot be expressed in concrete terms, but it would appear that there are some net losses in watershed protection from the change to DNR ownership.

TABLE K–9. Some Comparative Summary Items

1. Assessed Valuations of Taxable Properties Affected by DNR Ownership (by percent of total for time intervals over the first 11 years of the project, 1962-1972):

Years of Project	Percent of Total Acres	Real Estate	Personal Property	Total
Decreases in the Tax Rolls Attributable to DNR Real Estate Property Acquisitions and Related Taxable Personal Properties				
In first 2 years (1962-63)	91	$66,500*	$7,440	$73,940
In first 6 years (1962-67)	100	70,680**	7,860 (1966) 7,527 (1967)	78,540 (most)
In 11 years	100	70,680	Assessed valuations varied downward for 1968, 1969 and 1970, and raised for 1971 to 7,250 and for 1972 to 7,291	77,971 (1972)
Increases to the Tax Rolls Attributable to Influences of the DNR Ownership				
In first 4 years (1962-65)	none			
In first 6 years (1962-67)	37	$ 4,747	$1,144	$ 5,891
In first 8 years (1962-69)	60	7,365	2,308	9,673
In first 11 years (1962-72)	100	14,296	1,694	15,990

*Involves 301.6 acres of real estate property removed from the tax rolls.
**Involves 328.15 acres of real estate property removed from the tax rolls.

TABLE K-9 (Cont.)

2. **Increased Tax Levies on Tax Assessment Districts Affected by the DNR Ownership** (Taking into account taxable properties acquired by DNR and removed from assessment, and increases in assessed valuations attributable to influences of the DNR ownership; year 1972)*:

	Increased Tax Levies	
	With Only Assessed Valuation Removals	With Assessed Valuation Removals and Increases
Total amount (all tax assessment districts [TAD's])**	$3,555	$2,825
Amount for TAD containing DNR ownership[1]	1,381	1,097
Amount for other TAD's (re: school district involved)	2,174	1,728
Amount for local community containing DNR ownership[2]	1,329	1,056

*For years 1963-69 this type of consideration would also take into account the tax assessment for DNR-granted easement property (see footnote Table K–4A).

**Aggregate assessed valuation base for school district involved (Stoughton): total, $65,824,803 (at full equalization value, $121,387,300).

[1]TAD is tax assessment district, only Town of Pleasant Springs involved, having aggregate assessed valuation base totaling $12,101,557 (at full equalization value, $25,421,725).

[2]Local community – those parts of the school district which lie in the TAD containing the DNR ownership; aggregate assessed valuation base, $11,355,746 (at full equalization value, $23,855,000).

3. **Production factors and income changes regarding DNR ownership***

   a. Net reduction in farmer-harvested acreages: 138 acres cropland and 42 acres of permanent pasture, totaling 180 acres, plus 2 gardens (Table K–5).

   b. Net income loss of crops, pasture and gardens (Table K–6): Capital value determined as worth of a constant annuity amount starting in the year(s) of loss for crops, pasture and gardens: $58,171 or $7,904 average annual loss from inception through 1972 (10-year period).

   c. Reduction in livestock numbers (caused by DNR ownership): 26 dairy cows plus young stock: 6 dairy heifers 1 to 2 years old, and 8 dairy heifers 4 months to 1 year old.

   d. Annual increase in net income to business establishments benefitting from trade stemming from the DNR ownership: (1) to local retail business establishments serving nonlocal users of the DNR ownership (Table K–7), $24,019; (2) to local business concerns receiving trade via development and operation costs connected with DNR ownership, $916 (average annual equivalent, see Table K–8A); totaling $24,935.

   e. Net annual increase of local employment: from local area, 0.65 man-years labor (see Table K–8B), of which 0.6 man-years labor is from the local community.

*Coverage of the word "local" in this subsection embraces the Stoughton school district area involved in this study, whereas "local community" includes that part of the Town of Pleasant Springs embracing the DNR ownership and lying in the Stoughton school district.

4. **Changes in community public services and costs, and watershed protection:**

   a. Some possible net reduction in road maintenance costs from eliminating approximately one mile of old public road and installing an equal length of new road at a new location (but benefit-cost analyses were not made).

      There are no measurable changes for protective and school costs traceable to advent of the DNR ownership versus previous ownerships of the properties and their uses.

   b. Changes in use of DNR ownership area, before and after state acquisition, concerning protection of the watershed and Lake Kegonsa involved, probably resulted in some increased net damages to the natural resources. This stems mainly from damages caused by DNR intentionally filling in some marsh land to provide for access and parking at the boat launching area. However, detailed analyses were not made.

TABLE K-9 (Cont.)

5. Net Balances (Annual, 1972)

	Town of Pleasant Springs		Other	
	Local Community*	Other*	Assessment Districts**	Total
Increased taxes:[1]				
School purposes	$ 425	$ 0	$1,728	$ 2,153
Nonschool purposes	631	41	0	672
Subtotal	1,056	41	1,728[2]	2,825
Loss of land-use income	7,904	0	0	7,904
DEBITS	(–) 8,960	(–) 41	(–) 1,728	(–) 10,729
Net income to merchants:				
By annual trade from park users	9,713	0	14,306	24,019
By annual trade from park operations	0	0	100	100
Net income to business concerns:				
By trade from project development expenditures[3]	671	0	145	816
CREDITS	(+) 10,384	(+) 0	(+)14,551[4]	(+) 24,935
NET BALANCE (Annual, 1972)	(+) 1,424	(–) 41	(+)12,823	(+) 14,206

*"Local Community" is considered as those parts of the Town of Pleasant Springs within the Stoughton school district and embracing the DNR ownership;(93.837% of total assessed valuations in 1972 for Town of Pleasant Springs; the DNR ownership is entirely in this sector of the Town). "Other" accounts for the remainder of Town of Pleasant Springs.

**Includes parts or all of the following local tax assessment districts involved with the Stoughton school district; in Dane county, Towns of Albion, Christiana, Cottage Grove, Deerfield, Dunkirk, Dunn, Rutland and the City of Stoughton, and in Rock County Towns of Porter and Union (excludes Town of Pleasant Springs which also is mostly in this school district, as indicated by about 94 percent of its aggregate assessed valuation included in 1972).

[1]Based on equivalent assessed valuations for the DNR ownership and for affected personal properties removed from the tax rolls minus increased assessed valuations (for properties on the tax rolls) attributable to the DNR (state park) ownership influences (see Table K–2A). The increased assessed valuations come from new assessments of real estate and personal properties of business establishments serving the state ownership users and allocated to state park (DNR ownership) influences in proportion to the percentage of total sales of goods and services stemming from trade of nonlocal park users.

[2]For all local tax assessment districts involved in the Stoughton school district except the Town of Pleasant Springs.

[3]Based on all major development expenditures by DNR from 1966 through 1972 (Table K–8A) but only those parts are included here that accrued to business concerns located in the Stoughton school district, totaling $81,320 (or in the area of 25 percent of all major development expenditures).

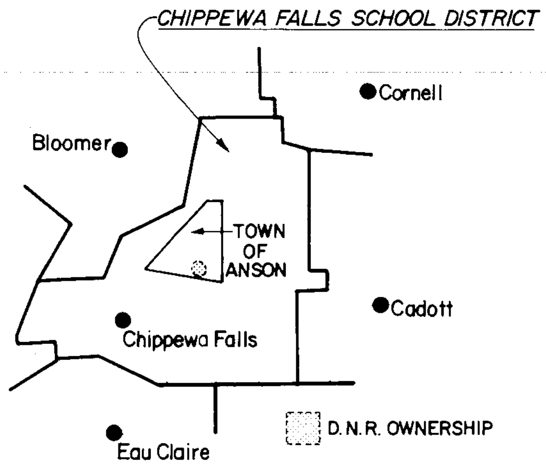
[4] Primarily to business establishments in the City of Stoughton.

LAKE WISSOTA STATE PARK

This state park area of 1,044 acres includes about 1.5 miles of the north shore of Lake Wissota (6,300 acres). Its swimming beach and boat launch are on inlets to the lake. The park has 4.3 miles of hiking trails along the lake and through natural forested areas and grown pine plantations. It has sizable picnic areas overlooking the lake and developed campgrounds in wooded areas accommodate 76 well-spaced campsites.

The park has had some use since acquisition started in 1962, for the nucleus of the property was an old American Legion park with limited camping, picnicking and boating facilities. The present beach was constructed in 1970 and use of the park increased. The network of park roads with parking lots and the present boat launch and campgrounds were completed in 1971 and accommodated 40,000 participant days of use. The first full season for use of all developed facilities was in 1972 and there were over 208,000 participants days use of the park. Of these totals camper participant days accounted for about 10 percent in 1971 and 18 percent in 1972. Nonlocal park visitors make their needed purchases of supplies and services mainly from business establishments in Chippewa Falls, about 7 miles southwest of the park, in Lake Wissota Village, 7 miles southeast, and at many places nearer to the park.

Lake Wissota State Park, lies entirely in the Town of Anson (township), Chippewa County, and in the Chippewa Falls school district.



K-1
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K-8C
K-8D
K-9

TABLE W–1. State Acquired Real Estate Property and Assessed Valuations
(All in One School District)

	State Ownership (acres)			
Year	Acquired	Owned	Off Tax Rolls April 30*	Aggregate Assessed Valuation Removed From the Tax Rolls
1962	60.00	60.00	0	$ 0
1963	174.00	234.00	65.00	11,100
1964	171.25	405.25	309.00	35,650
1965	149.98	555.23	475.87	70,290
1966	32.40	587.63	496.23	74,390
1967	239.98	827.61	505.73	81,090
1968	104.80	932.41	742.31	95,890
1969	31.64	964.05	847.75	105,750
1970	80.00	1,044.05	847.75	105,750
1971	0	1,044.05	927.75	111,350
1972	0	1,044.05**	927.75**	111,350

*Indicates real estate property on the tax rolls that was removed with state ownership before the assessment date of May 1.

**Some properties (116.3 acres) acquired were already exempt from property taxation and were not on the tax rolls at time of state acquisition.

TABLE W–2. Taxable Personal Property Affected by State Land Acquisitions

Year Off Tax Rolls	Personal Property Disposed Number of Cows	Aggregate Assessed Valuation Removed From the Tax Rolls*
1962	0	$ 0
1963	0	0
1964	10	1,946
1965	10	1,984
1966	10	2,370
1967	10	2,486
1968	10	2,291
1969	10	2,039
1970	10	2,325
1971	10	2,697
1972	10	2,274

*Generally full value recommended unit prices for the quality cows involved increased, but not uniformly by years, from $200 in 1964 to $409 in 1972. Percent of full value used in assessments varied, but also not uniformly by years, from 97.3% in 1964 and 99.2% in 1965 down to 55.6% in 1972. Combination of these two variables accounts for the noticeable differences in amounts of aggregate assessed valuations by years.

TABLE W–3. Effects of DNR Project on Tax Levies to Properties on Tax Rolls
(Without Considering DNR Payments-in-lieu of Taxes)

INCREASED TAX LEVY EQUIVALENT (TAX YEAR 1972)*

For school purposes	
On entire school district involved (Chippewa Falls)	$2,838
On that part of school district in Town of Anson	181
On parts of school district outside Town of Anson	2,657
For nonschool purposes	
On entire Town of Anson	1,215
On that part of the Town in the Chippewa Falls school district	1,046
Total on that part of the Town within the school district involved and embracing the DNR properties (part of the Town of Anson; i.e. local community)	1,227
Percent of tax levy increase to properties on the tax rolls caused by effect of DNR project (tax year 1972)	0.5623%

Corresponding tax amount and percentage increase for past 10 years:**

Year	Tax Levy Amount	Percent
1972	$1,227	0.5623
1971	1,099	0.5643
1970	847	0.5195
1969	715	0.5316
1968	876	0.5812
1967	487	0.4233
1966	369	0.3896
1965	351	0.3806
1964	179	0.2227
1963	59	0.0705

*Based on equivalent assessed valuations for affected properties in 1972:

DNR real estate removed from the tax rolls	$111,350
Taxable personal properties disposed because of DNR effect	2,274
Total	$113,624

**First year of project effect was in 1963 although first parcel purchased was in 1962.

TABLE W–4. Effects of DNR Project on Tax Levies to Properties on Tax Rolls
(With Consideration of DNR Payments-in-lieu of Taxes)*

INCREASED NET TAX LEVY EQUIVALENT (TAX YEAR 1972)

Nonschool purposes	$1,215
Payments-in-lieu of taxes by DNR to Town of Anson**	151
Nonschool purpose, entire Town of Anson	1,064
On that part of Town of Anson in the Chippewa Falls school district	915
School purposes, that part of the Town of Anson in the Chippewa Falls school district	181
Total on that part of the Town within the school district involved and embracing the DNR properties (part of the Town of Anson; i.e. the local community)	1,097
Percent of tax levy increase to properties on the tax rolls caused by effect of DNR project (tax year 1972)	0.5021%

Corresponding tax amount and percentage increase for past 10 years:[1]

Year	Tax Levy Amount	Percent
1972	$1,097	0.5021
1971	955	0.4900
1970	847	0.5195
1969	715	0.5316
1968	876	0.5812
1967	487	0.4233
1966	370	0.3896
1965	351	0.3806
1964	179	0.2227
1963	(55)[2]	(0.0656)[2]

*After 1963 and until 1970 in this project (re: DNR lands acquired in 1969 subject to Wis. Statutes effective as of 1 July 1969) no DNR payments-in-lieu of taxes were required for state ownership for park purposes. Thus, only for years 1963, 1971 and 1972 do data herein differ from such where no consideration is given to payments-in-lieu of taxes.

**Based on equivalent assessed valuations for affected properties in 1972:

DNR real estate removed from tax rolls	$111,350
Taxable personal properties disposed because of DNR effects	2,274
Total	$113,624

[1]First year of project effect was in 1963 although first parcel was purchased in 1962.

[2]Payments-in-lieu of taxes to the Town of Anson was approximately $132 (re: school taxes equivalent only). For entire Town of Anson the increased nonschool purpose taxes amounted to $59, thus a gain of $73 to the entire Town. Of this $73 approximately $63 accrues to properties in the local community embracing the DNR ownership (i.e. the part of the Town in the Chippewa Falls school district having about 86% of all Town of Anson assessed valuations in 1963). However, increased tax levies for school purposes for this local community was $8, consequently its net gain was $55.

TABLE W–5. Land Use and Reduced Annual Production Caused by DNR Ownership
(DNR Land Involved was Previously Farmer Harvested)*

	Land Use								Yield**					
Year	Total Acres	Cultivated Acres	Corn (acres)	Oats (acres)	Hay (acres)	Perm. Pasture (acres)	Pine Trees (acres)	Gardens (no.)	Corn (bu)	Oats (bu)	Hay (tons)	Pasture (AU)[1]	Wood Products[2]	Garden (dollars)
1962	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1963	122	82	29	14	38	40	–	2	1,230	485	54.25	13.3	–	140
1964	154.5	154.5	49.5	40.5	64	–	–	1	1,840	1,635	96	–	–	70
1965	66.5	66.5	10	16	40	–	–	1	312	560	50	–	–	70
1966	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1967	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1968	149	109	27	27	55	–	40	–	1,080	945	82.5	–	47.6	–
1969	92	9	2.25	2.25	4.5	–	83	–	135	90	6.75	–	98.8	–
1970	74.5	66.5	20	10	36	8	–	1	800	300	54	1.1	–	70
1971	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1972	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	658.5	487.5	137.75	109.75	237.5	48	123	5	5,397	4,015	343.5	14.4	146.4	350

*These data are intended to provide the general picture; crop acres and use are averages by years and not exact to include variations that take place with usual farm operations. Grain and forage crop yields are based on estimates of farmers who have operated on the lands. Woodland yields are those that may be expected with average site conditions in the area and assuming adequate protection and reasonably good management for the plantation with timely interim cuttings (7) in an 80- to 90-year growth period to final harvest; it is estimated that the first 4 interim harvests would yield approximately 22 cords/acre total, the last 3 @ 30 cords/acre total, and the final harvest @ 48 cords/acre (24,000 MBF); the 83 acres of trees shown for 1969 represent the average composite for plantings made in the years 1951 and 1957-1960.

**Indicates the crop year when production was first foregone by former owners.

[1]AU is one grazing animal unit equivalent to one mature cow.

[2]Yield is shown in average annual equivalent cords of wood products–either cords or saw logs converted to cords; however, this is not current annual yield but determined over the future growth in one cycle to maturity harvest as covered in * above.

TABLE W–6. Value of Reduced Annual Production Caused by DNR Ownership
(By Products and Types of Monetary Values)

	Initial Annual Gross Value of Reduced Production*				Net Income Foregone	
Year	Field Crops	Pasture & Garden	Woodland	Total	First Annual Amount Incurred**	Capital Value Annuity Worth Through 1972[2]
1962	$ –	$–	$ –	$ –	$ –	$ –
1963	2,613	420	–	3,033	1,336	15,352
1964	4,895	70	–	4,965	1,783	17,647
1965	2,054	70	–	2,124	789	6,623
1966	–	–	–	–	–	–
1967	–	–	–	–	–	–
1968	4,403	–	$1,536	5,939	1,541[1]	7,413(+120[3])
1969	425	–	3,187	3,612	149[1]	474(+218[3])
1970	2,757	98	–	2,855	1,063	2,190
1971	–	–	–	–	–	–
1972	–	–	–	–	–	–
Total	16,850	658	4,723	22,528	6,631	49,699(+338[3])

Average annual annuity value of net income foregone:		
	in 10 years	$ 6,753[4] – –
	constant	– – – 338
	Total (for 1972)	$ 7,091

*Unit prices are those prevailing in the area the year production was first foregone; going rental rates per unit of grazing land were used; wood products amounts are present worth capital values for products "sold" (1968: $24,960 and 1969: $51,792) at future harvest years and discounted to the first year foregone by former owner(s) – stumpage cut unit prices were used alleviating need to subtract harvesting charges.

**An estimated 35 percent factor was used to convert field crop gross value to net income; amounts for pasture and garden shown under gross income were used in full since they were computed at net income rental rates or value.

[1]Income from wood products not included (see next right column).

[2]At compound factor for 6 percent simple interest rate,which reflects average level prevailing interest rate for those years of reduced production.

[3]Wood products average annual amounts; by result from amortization of present worth capital value over 72-year period from initial loss of production to private interests, to maturity of crop (evaluation period) minus 50¢ per acre annual maintenance cost.

[4]Computed from sum of capital values (i.e. from first annual amounts incurred respectively covering period from year of incidence through 1972) over 10-year total period of occurrence.

TABLE W–7. Value of Annual Trade from Nonlocal Users of DNR Ownership Area – 1972

NUMBER OF BUSINESS ESTABLISHMENTS HAVING TRADE FROM THE AREA 83*

1. Number of business accounts evaluated		43	
2. Number of businesses appraised by projections from "1"**		40	
3. Types of business establishments:			
a. Gasoline station[1]	15		
b. Restaurant, supper club, drive-in	15		
c. Tavern	13		
d. Grocery store	11		
e. Clothing, shoe, gen. merchandise	9		
f. Drug store	4		
g. Hardware store & similar type	4		
h. Motel	3		
i. Liquor store	3		
j. Fishing bait & sporting goods[1]	2		
k. Commercial campground	2		
l. Antique store	1		
m. Laundromat	1		
TOTAL	83[2]		

INCOME EVALUATIONS FOR THE 83 BUSINESS ESTABLISHMENTS RECEIVING TRADE FROM THE DNR AREA USERS[3]

1. Total Gross Sales	$16,072,440	(range/establishment: $6,000 – 2,500,000)
a. Avg./establishment	193,643	
b. To DNR area users	163,062	(range/establishment: 65 – 15,300)
(1) Avg./establishment	1,965	
2. Total Net Income	1,463,724	(range/establishment: 1,588 – 48,000)
a. Avg./establishment	17,635	
b. From DNR area users' trade[4]	22,737	(range/establishment: 10 – 3,480)
(1) Avg./establishment	274	

*Approximately ten additional business establishment operators having no DNR user trade were visited in the procedure of determining the perimeter for nonlocal trade from users of the state ownership.

**About 25 percent of the operators were used as samples by location and visited to determine positiveness of their receiving trade from the DNR area users.

[1]One gasoline station ("a") also sells fishing bait and tackle.

[2]Fifty-two are in the city of Chippewa Falls and about 6 to 8 miles from the users' sites in the DNR area.

[3]Primarily campers' trade with small amounts of day users' trade at some establishments.

[4]Ten business establishments in the area considered as the "local community" for this study (i.e. in those parts of the Chippewa Falls school district located in the Town of Anson) account for $2,978 net income from DNR area users' trade.

TABLE W-8A. Development Costs for DNR Ownership

Most of the development costs by DNR on this project were made in the last three years of this research study, i.e. in 1970, 1971 and 1972. Expenditures were made primarily through contracting firms, and some of them were located long distances from the local area of the park. In many instances these distant firms had subcontracts with business concerns in the general vicinity of the park. Also some expenditures were made locally by DNR direct account for goods and services required for its personnel engaged in development work. Separation was made by years for those expenditures accruing to business firms within the school district and the local community involved in this research study.

For the three years those cost expenditures considered had gross amounts totalling $61,536[1] which includes estimated amounts of $7,394 for labor costs and $2,845 for annual recurring operation expenditures. The developments were for such works as land clearing, road bed and parking area construction, beach and boat launch developments, building installations and operating equipment, construction materials, equipment and lodging rentals, food for laborers, fuel supplies and miscellaneous merchandise and services.

The initial capital costs by years are evaluated in terms of average annual net income over their respective years of life expectancy of use. For example, road bed construction is evaluated into perpetuity, other items with indeterminable but long life use expectancy are evaluated over 50 years, while the hot water heater for the concession enterprise is evaluated over no more than 25 years.

The following data indicate that the average net income benefits to business concerns within the school district containing the DNR project amount annually to an equivalent of $1,582 of which $401 is to concerns within the local community.

1 Initial development costs accruing to recipient business firms outside these specified (more local) locations accounted for nearly 9 times the amount allocatable for purposes of this evaluation. (Approximately $600,000 for all cost expenditures, including labor, was considered in making separations for data presented here.)

Income to Business Concerns in the School District
(From Trade Generated by DNR Project Development Expenditures and Operations)

	Income Gross*	Income Net	Equivalent Average Annual Net Benefit**
1. 1970			
In local community	$ 1,300	$ 1,170	$ 82
In other parts of school district	7,579	1,895	137
Subtotal	8,879	3,065	219
2. 1971			
In local community	13,000	4,550	319
In other parts of school district	25,627	5,125	371
Subtotal	38,627	9,675	690
3. 1972			
In local community	–	–	–
In other parts of school district	3,791	1,327	104
Initial development expenditures: Total	51,297	14,067	1,013
4. Recurring (Annual)			
In local community	–	–	–
In other parts of school district	2,845	569	569
5. Summary			
In local community			401
In other parts of school district			1,181
Total			1,582

*All kinds of labor costs are excluded (valued at approximately $7,394); no net income or "profit" is considered appropriate in this evaluation for labor costs; basically inclusions cover materials, manufactured goods and supplies, and equipment use.

**At generally prevailing price levels of 1970-72, and 7 percent simple interest rate compounded annually.

TABLE W-8B. Equivalent Labor Employment Opportunities Affected

There was a total of approximately 487 acres of cultivated farm crops and 48 acres of permanent pasture removed from production (Table W-5). Also, 123 acres of pine tree plantations were removed from private enterprise. About one-half of the cropland was annually tilled (corn and oats) and the other half (hay or rotation pasture) was tilled every two or three years. Ten dairy cows were displaced. With 1972 farming techniques it is estimated that accompanying farm labor requirements annually would amount to an equivalent of around 1.9 man-years.

This displacement of opportunity for farm labor use is offset by annual employment on the DNR ownership amounting to approximately 5.25 man-years. In addition, about 0.76 man-years of labor was used on a one-time basis (not recurring annually) in conjunction with the DNR developments on its ownership. For a large majority of these circumstances (farm labor and DNR direct or indirect employment) the labor force accounted for had residence in the school district considered in this research study. Only 0.75 man-years of DNR ownership employment is from outside the school district involved (Chippewa Falls). Labor coming from the local community (part of the school district) employed on the DNR ownership is more (2.25 man-years) than the 1.9 man-years of farm labor displaced by the change in land use and ownership (i.e. from farming to state owned park use).

The conclusion is that net employment has been increased by at least 3.35 man-years annually (176 percent increase) by the DNR ownership. Net increased employment for the local community labor force is 0.35 man-years. Net added annual employment from the school district involved, but exclusive of the local community part of it, is an equivalent of 2.25 man-years labor.

Following is a general balance sheet for this employment consideration.

Net Balance (Annual, 1972)

	Chippewa School District		
	Local Community	Other Parts of District	Total
Man-years labor employment			
Debit	(−)1.9	–	(−)1.9
Credit	(+) 2.25	(+)2.25	(+) 4.5*
Net	(+) 0.35	(+)2.25	(+) 2.6

*Also 0.75 additional in 2 school districts adjoining Chippewa Falls district, accounting for complete total of 5.25 man-years.

TABLE W-8C. Road, Protective Service and School Costs Affected by DNR Ownership

Roads

No through-the-area public roads have been closed or newly constructed because of the DNR ownership. Approximately one-half mile of regularly used, gravel surface Town road was eliminated. Another Town road-way of about six-tenths-mile length was also eliminated, but it was almost unused and not maintained. No estimates were made for the amount of reduced local government costs experienced with such road changes. However, since these roads were on nearly level terrain and no bridges or deep roadside drainage ditches were involved, the operating costs for the roads was very low. They were not used for school bussing purposes immediately prior to acquisition of the state ownership.

The network of hard-surfaced roads in the state ownership is maintained by DNR. This includes snow plowing done by the county, reimbursed by DNR, for approximately one mile of road presently used for school bussing purposes to the residence occupied by the state park superintendent.

Protective Services

Use of the DNR ownership has involved no unusual requirements for protective and law enforcement services for nonstate officers. However, the advent of the state ownership has reduced needs for such services since users in one small part of the state acquired lake shore properties previously caused repeated and serious local disturbances and consequent attention of local officers. No estimates were made for the savings in costs for nonstate protective services but they are believed to have some significance.

School Costs

One change in mileage for bussing school children from the local community has come about because of the DNR ownership. The school bus route is lengthened one mile to a residence on the state ownership making a total of 4 miles additional per school day for the two round trips. If such bussing is considered at 8 cents per mile the estimated additional school cost annually would amount to around $43.

Only one additional school pupil has resulted. There have been no other changes in the number or age groups of school children from residences in association with lands now in DNR ownership.

No other effects on school costs were determined. It seems reasonable to conclude, therefore, that the DNR ownership has had very little effect on the annual costs to the school district, which in 1972 operated with a total budget of over 3 million dollars, including the local Town's part of around $200,000.

TABLE W-8D. Land and Water Conservation in the Watershed

The DNR ownership has about 2 miles of Lake Wissota frontage and extends back from the lake only about 1½ miles at the widest parts. The land drains directly into the lake with very little of its runoff crossing another ownership before reaching the lake. Most of the land has very little slope, in fact, during seasons of heavy rainfall some of the land has such little drainage that it tends to stay wet for long periods. Only the wooded areas near the lake have sufficient undulation that soil erosion could be considered as a potential hazard. There is evidence that at one time, probably 40 years ago, one or two large gullies existed near the lake shore, each extending back through 10 to 15 acres.

It appears that even before state acquisition of this ownership area (1,044 acres) very little active soil erosion was prevalent. Any serious erodible areas were then and are now covered with grass, trees and brush. Before state acquisition the tillable farm land was cropped with rotations including hay and pasture for at least half of the years. Also, pine plantations had been established on sizable areas of field crop land before the DNR acquired its ownership.

There are no farming operations on the DNR ownership. Areas that were farmed with field crops and livestock grazing before DNR acquired them are now all covered with permanent vegetation of grass, shrubs and trees. Also, the extensive internal road system on the DNR ownership is well constructed with no unvegetated shoulders, steep grades or roadside ditches that can cause acceleration of water runoff or any noticeable soil erosion. Furthermore, those locations on the state park having the greatest concentrations of recreationists and heavy pedestrian traffic are well vegetated with dense grass sod. This ground cover, like near the swimming beach, at the picnicking areas and boat launch, shows no indication of failure to protect the soil from erosion. Also, other locations with heavy use, as at the developed campgrounds, have practically no slope and their low growing grasses and shrubs plus the fairly dense tree stands are providing ample protection for the soil with no indications of not withstanding the recreation traffic.

The conclusion is that the DNR ownership has not appreciably changed amounts of water runoff and sedimentation into Lake Wissota. There were no serious adverse effects from land uses before state acquisition and under good park management none have occurred since advent of the DNR ownership. There are a few "spots" along the lake shore where the high banks (20 to 30 feet high and nearly perpendicular) have some erosion; however, this is a continuing condition from before state acquisition without any indications of sizable change attributable to state ownership.

TABLE W–9. Some Comparative Summary Items

1. Assessed Valuations of Taxable Properties Affected by DNR Ownership (by percent of total for time intervals over the first 11 years of the project, 1962-1972):

Years of Project	Percent of Total Acres	Real Estate	Personal Property	Total
Decreases in the Tax Rolls Attributable to DNR Real Estate Property Acquisitions and Related Taxable Personal Properties				
In first 3 years (1962-64)	33	$ 35,650	$1,946	$ 37,596
In first 5 years (1962-66)	53	74,390	2,370	78,760
In first 9 years (1962-70)	91	105,750	2,325	108,075
In first 11 years (1962-72)	100	111,350*	2,274	113,624

*Involves 927.75 acres of real estate property removed from the tax rolls.

2. Increased Tax Levies on Tax Assessment Districts Affected by the DNR Ownership
(Taking into account taxable properties acquired by DNR and removed from assessment, and payments-in-lieu of taxes paid by DNR, year 1972)

	Increased Tax Levies			
	Without Payments-in-lieu of Taxes		With Payments-in-lieu of Taxes	
Total amount (all tax assessment districts [TAD's])*	$4,053	100%	$3,902	100%
Amount for TAD containing DNR ownership**	1,396	34	1,245	32
Amount for other TAD's (re: school district)	2,657	66	2,657	68
Amount for local community containing DNR ownership[1]	1,227	30	1,096	28

*Aggregate assessed valuation base for school district involved (Chippewa Falls): total, $133,060,000 (at full equalization value, $176,553,000).

**TAD is tax assessment district, only Town of Anson involved, having aggregate assessed valuation base totaling $7,111,711 (at full equalization value, $12,841,706).

[1]Local community–those parts of the school district which lie in the TAD containing the DNR ownership; aggregate assessed valuation base, $6,119,945 (at full equalization value, $11,050,900).

3. Production factors and income changes regarding DNR ownership*

a. Net reduction in farmer-harvested acreages: 485.0 acres cropland, 48.0 acres of permanent pasture, 123.0 acres of pine plantations, and 2.5 acres of gardens (Table W–5).

b. Net income loss of crops, pasture, gardens and woodland production (Table W–6): Capital value determined as worth of a constant annuity amount starting in the year(s) of loss for crops, pasture and gardens: $49,699 or $6,753 average annual loss from inception year through 1972 (10-year period); plus average annual loss for pine tree production over 72 years of full maturity period remaining after year of state acquisition, $338; totaling $7,091 average annual annuity value of net income foregone.

c. Reduction in livestock numbers (caused by DNR ownership): equivalent of 10 cows.

d. Annual increase in net income to business establishments benefiting from trade stemming from the DNR ownership: (1) to local retail business establishments serving nonlocal users of the DNR ownership (Table W–7), $22,737; (2) to local business concerns receiving trade via development and operation costs connected with DNR ownership, $1,582 (average annual equivalent); totaling $24,319.

e. Net annual increase of local employment: from local area, 2.6 man-years labor; total from all areas, 3.35 man-years labor

*Coverage of the word "local" in this subsection embraces the Chippewa Falls school district area involved in this study, and should not be confused with "local community" as used in other sections.

4. Changes in community public services and costs, and watershed protection:

a. Some reduction in road maintenance costs from eliminating approximately 1.16 miles of low use or unused town roads and in personal and property protective services (but benefit-cost analyses were not made).

b. There are some increased school bussing costs, estimated at about $43 annually.

5. Net Balances (Annual, 1972)

	Town of Anson		Other	
	Local Community*	Other*	Assessment Districts**	Total
Increased taxes:[1]				
School purposes	$ 181	$ –	$ 2,657	$ 2,838
Nonschool purposes	915	149	–	1,064
Subtotal	1,096	149	2,657	3,902
Loss of land-use income	7,091	–	–	7,091
DEBITS	(–) 8,187	(–) 149	(–) 2,657	(–) 10,993
Net income to merchants:				
By annual trade from park users	2,978	–	19,759	22,737
By annual trade from park operations	–	–	560	560
Net income to business concerns:				
By trade from project development expenditures[3]	401	–	1,181	1,582
CREDITS	(+) 3,379		(+) 21,500[4]	(+) 24,879
NET BALANCE (Annual, 1972)	(–) 4,808	(–) 149	(+) 18,843	(+) 13,886

*"Local Community" is considered as those parts of the Town of Anson within the Chippewa Falls school district and embracing the DNR ownership (86.0545% of total assessed valuations in 1972 for Town of Anson, the DNR ownership is entirely in this sector of the Town), and, "Other" is the remaining part of the Town of Anson.

**Includes parts or all of the following local assessment districts involved with the Chippewa Falls school district: in Chippewa County, Towns of Eagle Point, Hallie, Howard, Lafayette, Tilden, Wheaton, Woodmohr and the city of Chippewa Falls; and in Eau Claire County, Town of Seymour.

[1]Entirely from removal of assessed valuations of the state ownership and affected personal properties from the tax rolls. There is no evidence of any increase in assessed valuations of nearby properties on the tax rolls because of acquisitions made by the state or because of any potential future enhancements in sales price for such nonpublic properties located near this state park.

[2]For all local tax assessment districts involved with the Chippewa Falls school district except the Town of Anson.

[3]Development expenditures by DNR for 1970-72 are considered only for those parts where trade accrued to business concerns located in the local area (Chippewa Falls school district), totaling $57,675 (which is approximately 9 percent of the total DNR costs for all developments on the ownership).
Estimated net incomes were amortized over the expected life of the installation or for 50 years to obtain average annual amounts, except roadbed construction and materials were amortized into perpetuity; simple interest rate of 7 percent compounded annually was used.

[4]A large part is in the city of Chippewa Falls with substantial amounts in the Town of Lafayette.

ALBANY WILDLIFE MANAGEMENT AREA

This DNR ownership of 1,083 acres (in 1972) is along the Sugar River and Little Sugar River in Green County that borders on the Wisconsin-Illinois state line. In no instance are any of the lands of this wildlife management area farther from one of the streams than the distance across a quarter section of land. All but approximately 100 acres (92%) of the ownership is now covered with trees, brush and grass in contrast to only 60 percent having such cover when acquired by the DNR. Much of the area has low lying lands subject to flooding and poor drainage along with numerous springs and seeps. Predominantly these lands were the "back ends" of farms. Those fringe areas with slightly higher elevation were only intermittently cropped if at all. The grassed areas annually afforded very poor grazing except for those infrequent dry years when their grazing was an important supplement, although of low quality feed, to other farm pastures adversely affected by drought. However, some productive croplands were inseparable and were purchased in the transactions for entire tracts.

Recreationists using this area are primarily hunters and a comparatively few fishermen. Pheasants are the primary game harvested and during the open season for these birds literally hundreds of hunters use the area. Probably 75 to 80 percent of all hunting is for pheasants. Other hunting is for rabbits and squirrels and some for waterfowl and deer. This area is an attraction for hunters who not only use it but also go elsewhere in the local area for hunting on privately owned lands. The ownership also attracts many recreationists for bird watching, nature studying and general sightseeing.

Nonlocal visitors to this wildlife management area make their needed purchases of supplies and services from business establishments located predominantly in the village of Albany, immediately adjacent to the southeast part of the area, plus some in Monticello, about 4 miles west of the area. There are no rural establishments located nearby the area where recreationists might trade.

The major part of the Albany Wildlife Management Area lies in the Town of Albany and the smaller western part lies in the Town of Mt. Pleasant, both in Green County. The major part of the ownership is in the Albany school district and the west part is in the Monticello school district.

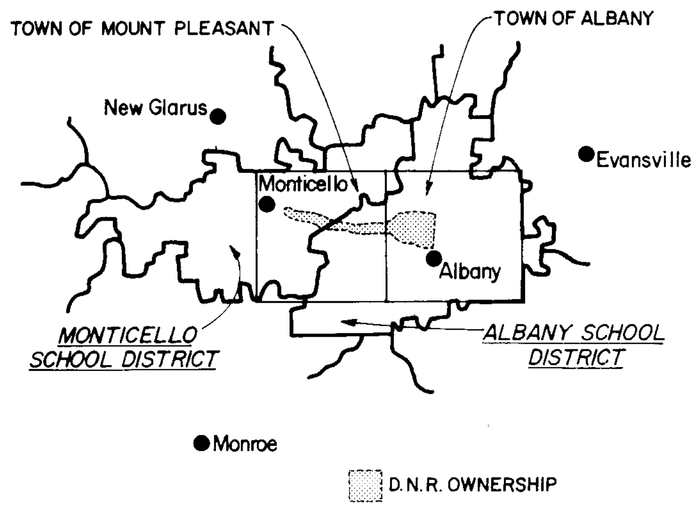

TABLE A–1. State Acquired Real Estate Property and Assessed Valuations*

	State Ownership (acres)					Aggregate Assessed Valuation Removed From the Tax Rolls		
			Off Tax Rolls–April 30					
Year	Acquired	Owned	Town of Albany	Town of Mt. Pleasant	Total	Town of Albany	Town of Mt. Pleasant	Total
1957	95.5	95.5	95.5	–	95.5	$ 710	$ –	$ 710
1958	176.0	271.5	251.5	–	251.5	2,630	–	2,630
1959	–	271.5	271.5	–	271.5	2,750	–	2,750
1960	–	271.5	271.5	–	271.5	2,750	–	2,750
1961	178.5	450.0	271.5	–	271.5	2,750	–	2,750
1962	78.0	528.0	450.0	–	450.0	4,440	–	4,440
1963	–	528.0	528.0	–	528.0	5,330	–	5,330
1964	–	528.0	528.0	–	528.0	5,330	–	5,330
1965	–	528.0	528.0	–	528.0	5,330	–	5,330
1966	–	528.0	528.0	–	528.0	5,330	–	5,330
1967	111.5	639.5	528.0	–	528.0	5,330	–	5,330
1968	–	639.5	639.5	–	639.5	7,270	–	7,270
1969	57.75	697.25	639.5	–	639.5	7,270	–	7,270
1970	207.0	904.25	790.25	20.0	810.25	9,205	335	9,540
1971	94.5	998.75	790.25	130.0	920.25	43,724**	3,225	46,949
1972	83.87	1,082.62	952.62	130.0	1,082.62	52,599	3,225	55,824

*All properties acquired up to 1970 are in the Town of Albany; originally these DNR lands were in two small school districts in the Town of Albany which in 1963 became a part of the Albany school district. In 1970 and 1971 acquisitions were made in the Town of Mt. Pleasant in the Monticello school district.

**Effective in 1971 the Town of Albany had a reappraisal of assessed valuations for all taxable real estate properties. By the proportionate change in assessed valuations for comparable classes of properties as those owned by DNR, assessed valuations for the state ownership were increased by 475% of the equivalent amounts already removed from the tax rolls.

TABLE A–2. Taxable Personal Property Affected by State Land Acquisitions*

	Personal Property Disposed		Aggregate Assessed Valuation Removed From the Tax Rolls**
	Number of Animals		
Year Off Tax Rolls	Cows (Dairy)	Hogs (Sows)	
1957	–	–	–
1958	16	7	$ 1,675
1959	16	7	1,760
1960	16	7	1,887
1961	16	7	1,618
1962	16	7	1,505
1963	16	7	1,775
1964	16	7	1,536
1965	16	7	1,702
1966	16	7	1,688
1967	16	7	1,744
1968	16	7	1,460
1969	16	7	1,588
1970	24	7	1,785
1971	24	7	1,782[1]
1972	24	7	11,615[1]

*All properties affected are in the Town of Albany (none in Town of Mt. Pleasant).

**Full value recommended unit prices for the quality of livestock involved varied from year to year as market prices annually change. Percent of full value used in assessments varied between years. Combination of these two variables accounts for noticeable differences in amounts of aggregate assessed valuations by years even when numbers of animals do not change.

[1]Level of assessed valuations from reappraisal of real estate properties in the Town of Albany, effective for 1971, did not cause such change in personal property assessed valuations until 1972. Equivalent amounts of adjustments accordingly made in assessed valuations for taxable personal properties in 1971 to the 1972 level, plus a sizable increase in market value of livestock that same year, necessarily caused the big change in 1972 amount.

TABLE A–3. Effects of DNR Project on Tax Levies to Properties on Tax Rolls
(Without Considering DNR Payments-in-lieu of Taxes)

INCREASED TAX LEVY EQUIVALENT (TAX YEAR 1972)*

	Town of Albany	Town of Mt. Pleasant	Total
For school purposes (Albany & Monticello school districts)			
On entire school district involved	$1,191	$94	$1,285
On that part of school district in the Town	491	31	522
On parts of school district outside the Town	700	63	763
For nonschool purposes			
On entire Town	726	50	776
On that part of the Town in the school district involved	726**	37	763
Total on that part of the Town within the school district involved and embracing the DNR properties (parts of Town of Albany and Town of Mt. Pleasant: i.e. local community)	1,217	68	1,285
Percent of tax levy increase to properties on the tax rolls caused by effect of DNR project (tax year 1972)	0.5316%	0.0373%	

Corresponding tax amount and percentage increase for past 12 years:[1]

Year	Tax Levy Amount: Town of Albany	Tax Levy Amount: Town of Mt. Pleasant	Percent: Town of Albany	Percent: Town of Mt. Pleasant
1972	$1,217	$68	0.5313	0.0373
1971	893	73	0.3452	0.0355
1970	1,000	7	0.4513	0.0041
1969	703	–	0.3610	–
1968	590	–	0.3268	–
1967	384	–	0.2619	–
1966	363	–	0.2959	–
1965	339	–	0.2891	–
1964	338	–	0.3098	–
1963	297	–	0.3310	–
1962	235	–	0.2468	–
1961	169	–	0.2067	–
1960-1957	–	–	–2–	–

*Based on equivalent assessed valuations for affected properties in 1972:
DNR real estate removed from the tax rolls: in Town of Albany, $52,599; in Town of Mt. Pleasant, $3,225.
Taxable personal properties disposed because of DNR effect: only in Town of Albany, $11,615.

**All of the Town of Albany except $5,500 assessed valuation (out of the Town total of $8,369,280) is subject to tax assessments for the Albany School District; therefore, the exact figure is $725.52 (before rounded to $726.00).

[1]DNR acquired properties in the Town of Mt. Pleasant, in the Monticello school district, starting in 1970.

[2]Not calculated in detail due to the absence of summary base data for distribution of school levies by assessment districts; however, by years increased equivalent taxes for all purposes are as follows– 1960. $194; 1959, $177; 1958, $166; and, 1957, $42. The percent of increase to properties on the tax rolls for these years is estimated to be generally about the same as for 1961 except for a much lower percent for 1957.

TABLE A–4. Effects of DNR Project on Tax Levies to Properties on Tax Rolls
(With Consideration of DNR Payments-in-lieu of Taxes)

INCREASED NET TAX LEVY EQUIVALENT (TAX YEAR 1972)*

	Town of Albany	Town of Mt. Pleasant	Total
Nonschool purposes	$726**	$ 50	$776
Payments-in-lieu of taxes by DNR to the Town	629**	129	758
Nonschool purpose, entire Town	97**	(79)[1]	18
On that part of the Town in the school district involved	97**	(59)[1]	38
School purposes (Albany and Monticello school districts) for that part of the Town in the school district involved	491	31	522
Total on that part of the Town within the school district involved and embracing the DNR properties (parts of Town of Albany and Town of Mt. Pleasant; i.e. local community)	588	(28)[1]	560
Percent of tax levy increase to properties on the tax rolls caused by effect of DNR project (tax year 1972)	0.2562%	(0.0153%)	–

Corresponding tax amount and percentage increase for past 12 years:[2]

Year	Tax Levy Amount: Town of Albany	Tax Levy Amount: Town of Mt. Pleasant	Percent: Town of Albany	Percent: Town of Mt. Pleasant
1972	$588	$(28)	0.2562	(0.0153)
1971	450	(33)	0.01737	(0.0160)
1970	529	(3)	0.2382	(0.0017)
1969	511	–	0.2622	–
1968	398	–	0.2202	–
1967	192	–	0.1308	–
1966	205	–	0.1667	–
1965	181	–	0.1542	–
1964	180	–	0.1647	–
1963	139	–	0.1546	–
1962	73	–	0.0765	–
1961	(17)	–	(0.0207)	–
1960-1957	–	–	–3–	–

*Based on equivalent assessed valuations for affected properties in 1972:
DNR real estate removed from tax rolls: in Town of Albany, $52,599; in Town of Mt. Pleasant, $3,225.
Taxable personal properties disposed because of DNR effect: only in Town of Albany, $11,615.

**All of the Town of Albany except $5,550 assessed valuation (out of the Town total of $8,369,280) is subject to tax assessments for the Albany School District; therefore, the exact figures before rounding would be, respectively: $725.52, $628.59, $96.93.

[1]Nonschool purpose taxes, Town of Mt. Pleasant, are $50 thus a gain of $79 of which $59 accrues to local community part or 74.4% of Town of Mt. Pleasant, but minus its $31 increased levies for school purposes leaves the net gain of $28. (Amounts in parentheses are decreases.)

[2]DNR acquired properties in the Town of Mt. Pleasant, in the Monticello school district, starting in 1970.

[3]See 2 Table 3; however, payments-in-lieu of taxes (school pruposes only) are as follows: 1957, $25; 1958, $118; 1959, $108; 1960, $105.

TABLE A–5. Land Use and Reduced Annual Production Caused by DNR Ownership*

(Farmer harvested, previous and current)

Year	DNR Land Acquired (acres) Crops	DNR Land Acquired (acres) Grazed	Land Use: Before DNR Owned Corn (acres)	Before DNR Owned Oats (acres)	Before DNR Owned Hay (acres)	After DNR Owned Corn (acres)	After DNR Owned Oats (acres)	After DNR Owned Hay (acres)	Net Yield Reduction** Corn (bu)	Net Yield Reduction** Oats (bu)	Net Yield Reduction** Hay (tons)	Net Yield Reduction** Grazing (acres)
1957	43	3.4	11	10	22	–	–	–	660	380	66	3.4
1958	58	14	22.4	11.7	23.9	–	–	–	1,344	445	61	14
1959-1960	–	–	–	–	–	–	–	–	–	–	–	–
1962	62	64.5	27	10	25	11	5	10	1,475	225	82	64.5
1963	–	10	–	–	–	–	–	–	–	–	–	–
1964-1967	–	–	–	–	–	–	–	–	–	–	–	–
1968	48.6	22.9	16	11	21.6	5	5	10	840	240	61	22.9
1969	–	–	–	–	–	–	–	–	–	–	–	–
1970	57.1	52.3	21	13	23.1	8	7	10	1,003	270	79	52.3
1971	17.2	35.3	10	3.6	3.6	–	–	–	850	180	14	35.3
1972	–	–	–	–	–	–	–	–	–	–	–	–
Total	285.9	202.4	107.4	59.3	119.2	24	17	30	6,172	1,740	363	202.4

*These data are intended to provide the general picture; crop acres and use are averages by years and not exact to include variations that take place with usual farm operations; there has been some crop substitution, like soybeans in recent years for some of the corn; yields are estimated on basis of information about the soils, drainage, flooding, etc. peculiar to each major tract.

**Under share-crop arrangements with DNR for this ownership area the farmer-operator gives one-third of the corn to DNR which may be left standing or some acres may be harvested, and the farmer keeps all of the oats but harvests no hay. Yield reductions cover these circumstances as well as for all crop and pasture acreages previously producing for farmer harvest that were not in farm production after DNR ownership.

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TABLE A–6. Value of Reduced Annual Production Caused by DNR Ownership

(By Products and Types of Monetary Values)

	Initial Annual Gross Value of Reduced Production*			Net Income Foregone	
Year	Field Crops	Pasture	Total	First Annual Amount Incurred**	Capital Value Annuity Worth Through 1972[1]
1957	$ 1,988	$ 14	$ 2,002	$ 710	$18,227
1958	2,520	47	2,567	929	21,623
1959-61	–	–	–	–	–
1962	3,199	286	3,485	1,406	21,050
1963	–	44	44	44	580
1964-67	–	–	–	–	–
1968	2,653	108	2,761	1,037	5,846
1969	–	–	–	–	–
1970	3,709	290	3,999	1,588	5,055
1971	1,696	231	1,927	825	1,700
1972	–	–	–	–	–
Total	15,765	1,020	16,785	–	74,081[2]
	Average annual annuity value of net income foregone (in 16 years)				7,330[3]

*Unit prices used for field crops are those prevailing in the area the year production was first reduced; likewise, going rental prices per acre or per head of grazing stock were used but computed as at net income level.

**An estimated 35 percent factor was used to convert field crop gross values to net income, with rental rates per unit of grazing land estimated at net income level.

[1]At compound factors for 6 percent simple interest rate level,which reflects prevailing average rates over the period of years of reduced production.

[2]Total annuity value for all first annual amounts of net income foregone, as respectively computed through remaining years of the 16-year evaluation period.

[3]Computed from sum of capital values (annuity worth) over 16-year total period of occurrence.

TABLE A–7. Value of Annual Trade From Nonlocal Users of DNR Ownership Area–1972

NUMBER OF BUSINESS ESTABLISHMENTS HAVING TRADE FROM THE AREA 15*

1. Number of business accounts evaluated		9
2. Number of businesses appraised by projection from "1"		6**
3. Types of business establishments:		
a. Tavern (6 serving light foods)	7	
b. Gasoline station (one also sells gun shells)	4	
c. Restaurant	2	
d. Grocery store	2	
TOTAL	15[1]	

INCOME EVALUATIONS FOR THE 15 BUSINESS ESTABLISHMENTS RECEIVING TRADE FROM THE DNR AREA USERS[2]

1. Total Gross Sales	$1,202,000	(range/establishment:$30,000 – 325,000)
a. Avg./establishment	80,133	
b. To DNR area users	15,305	(range/establishment: 25 – 4,165)
(1) Avg./establishment	1,020	
2. Total Net Income	201,200	(range/establishment: 6,900 – 32,000)
a. Avg./establishment	13,413	
b. From DNR area users' trade[3]	3,652	(range/establishment: 3 – 1,041)
(1) Avg./establishment	243	

*More than 10 additional business establishment operators having no DNR area user trade were visited in the procedure of determining the perimeter for nonlocal trade stemming from the state ownership. These included: 2 hardware stores, 2 drug stores, 4 grocery stores and 2 taverns.

**Most of the projections were made with assistance from operators of similar businesses by direct comparison to accounts evaluated.

[1]Location of businesses are: 6 in the village of Albany and 9 in the village of Monticello.

[2]Primarily hunters' (mostly for birds, some for deer) trade and small amounts of fishermen's trade at a few establishments.

[3]None of the business establishments are in the area considered as the "local community" for this study (i.e. in those parts of the Towns of Albany and Mt. Pleasant included in the Albany and Monticello school districts and embracing the DNR properties). Six of the business establishments are in the village of Albany located less than 1 mile southeast of the state ownership and 9 are in the village of Monticello located about 4 miles west of the main body of the state ownership area, $3,361 accrues to 6 business establishments in the Albany school district, and $291 accrues to 9 businesses in the Monticello school district.

TABLE A-8A. Development Costs for DNR Ownership

Development costs by DNR on this project were mostly for tree planting. Neither planting stock nor major labor supplies were obtained locally, consequently such operations did not materially affect the local economy. However, occasionally in the early years of this project some local purchases of small items and some day-labor were obtained from local sources. These amounts were relatively so small that no detailed accounting of them was made in this study.

Annual maintenance and operations of the area do not involve any local labor or purchase of goods and services of sufficient amounts to warrant a detailed accounting.

TABLE A-8B. Equivalent Labor Employment Opportunities Affected

There were approximately 286 acres of cultivated farm crops and 202 acres of permanent pasture acquired in the DNR ownership. This includes 71 acres of cropland operated on sharecrop arrangements under DNR agreements with local farmers. Thus, only 215 acres of former cropland was not farmed in 1972. In only one instance, for an equivalent of 116 acres from a former single farm unit (of 143 acres), did the DNR acquisitions cause an operating farm to cease. In earlier years this farm had around 85 acres of crops and 25 acres of permanent pasture including wooded areas grazed, and the state acquisitions removed approximately 75 of these acres from farming use.

Much of the 215 acres of cropland is near the Sugar River and it is subject to overflow or poor drainage conditions almost every year. This is also true for much of the formerly grazed lands. These lands are from the "back" of farms, so-to-speak, that still continue without any appreciable adversities from removal of such lands from their operations. In fact, in some cases the farmers believed they had an advantage in no longer trying to crop such land or to keep them fenced for grazing.

Under these conditions it is difficult to estimate the displacement of opportunity for labor use as affected by the DNR ownership. In addition to the removal of land from farming there were 24 dairy cows and 7 brood sows disposed. With 1972 farming techniques it may be that accompanying farm labor requirements annually would amount to an equivalent of no more than 1.7 man-years of labor. Since there are no offsetting local area additions in labor use from the DNR ownership, the conclusion is that employment has had an annual net decrease of 1.7 man-years of labor.

TABLE A-8C. Road, Protective Service and School Costs Affected by DNR Ownership

Roads

No through-the-area or other public roads have been closed because of the DNR ownership. So far as it could be determined the few roads and small mileage of changes in the road system near the DNR ownership had nothing to do with the advent or presence of the DNR ownership. Therefore, no increases or decreases in initial road costs or in operation and maintenance resulted because of the DNR ownership.

Protective Services

Use of the DNR ownership (all recreation) has involved no additional requirements for protective and law enforcement services from any nonstate officers. Also, previous uses of these lands (farming and idle land) had no requirements that were reduced because of DNR ownership. Therefore, there are no changes in costs for protective services stemming from this DNR ownership.

School Costs

No changes in the mileage, or difficulty or ease in bussing school children from the local community have come about because of the DNR ownership. Also no changes have resulted in the number or age group of school children from residences in association with lands now in the DNR ownership. The only residence abandoned had been occupied for many years by a bachelor. Therefore, there are no indications that the advent of this DNR ownership has either increased or decreased these types of school costs for schools serving the local community that embraces the state ownership.

TABLE A-8D. Land and Water Conservation in the Watershed

All of the lands in this DNR ownership are in the immediate drainage pattern of the Sugar River or the Little Sugar River. Most of the lands are low lying areas directly along or nearby these two streams. This circumstance was intentional since these were the properties planned for acquisitions in this wildlife management area. In only a few instances were small acreages of high lands acquired that have appreciable undulating and steeper slopes. These sloping lands were of necessity acquired as part of a unit of private ownership including areas of lower lands needed for project purposes.

Approximately 60 percent of the DNR ownership was covered with trees, brush or grass when acquired by the state. The other 40 percent (Table A-5) was in farm crop or grazing areas. Examination of the ownership reveals no serious soil erosion conditions at the time of state acquisition. On one of the higher elevation tracts there are indications of serious sheet erosion and gullies that probably prevailed 30 to 40 years ago. However, these adverse conditions had been nullified by conservation practices several years before the properties were acquired by DNR. And, parts of these same tracts were sharecropped after being included in the DNR ownership, but the farm operations were carried out with strip-cropping and grassed waterway conservation practices. Other lands, farmed before and after state acquisition, only have drainage impediments but no discernible soil erosion conditions. However, serious infestations of generally uncontrolled weeds have developed on many of the previously cropped and grazed fields of the DNR ownership. These weeds have favorable values for wildlife cover and food but pose watershed problems. Much of the growth is weeds that are classified as noxious (thistles and others) and distribution of their seeds by flood waters causes damaging effects to farm lands in downstream parts of the watershed.

There are no indications of damages to the vegetation or the soils from use of the ownership by recreationists. There are the usual paths along some reaches of the streams made by bank fishermen, but dense vegetative growth along these paths provides ample protection against erosion. The only other concentrations of user traffic are at the parking areas, but there is no evidence of any appreciable resource damages.

There appears to be no basis for believing that the DNR ownership has appreciably affected other parts of the watershed or the stream beds and waters, measurable as cost or benefits from the standpoint of sedimentation (from soil erosion) and flooding. Any minimal watershed damages resulting from operations of the DNR lands prior to state acquisition could only be reduced because of appreciably more acreage having permanent vegetative cover and essentially no damages caused by current land use by recreationists or sharecropping farm operations. An exception must be taken to this statement of conclusion so long as the present weed growth is uncontrolled. However, effective weed control measures could be applied by DNR to eliminate these damages.

TABLE A–9. Some Comparative Items

1. **Assessed Valuations of Properties Affected by DNR Ownership (by percent of total for time intervals over the first 16 years of the project, 1957-1972):**

Decreases in the Tax Rolls Attributable to DNR Real Estate Property Acquisitions and Related Taxable Personal Properties

Years of Project	Percent of Total Acres	Real Estate	Personal Property	Total
In first 6 years (1957-1962)	42	$ 4,440	$ 1,505	$ 5,945
In first 12 years (1957-1968)	59	7,270	1,460	8,730
In first 14 years (1957-1970)	75	11,325	1,785	11,325
In first 15 years (1957-1971)	85	46,949	1,782	48,731*
In first 16 years (1957-1972)	100	55,824**	11,615	67,439*

*See Tables A–1 and A–2 for changes in level of assessed valuations for real estate caused by reappraisal of entire Town of Albany in 1971; and, for changes in full value and assessed valuation of livestock in 1972.

**Involves 1,082.62 acres in DNR ownership of which 952.62 acres were removed from the tax rolls by DNR ownership.

2. **Increased Tax Levies on Tax Assessment Districts Affected by the DNR Ownership Causing Taxable Properties to be Removed from the Tax Rolls (Year 1972):**

	Increased Tax Levies			
	Without Payments-in-lieu of Taxes		With Payments-in-lieu of Taxes	
Total amount (all tax assessment districts [TAD's])*	$2,061	100%	$1,303	100%
Amount for TAD's containing DNR ownership**	1,298	63	540[2]	41
Amount for other TAD's (re: school district involved)	763	37	763	59
Amount for local community containing DNR ownership[1]	1,285	62	560[2]	43

*Aggregate assessed valuation base of school districts involved: Albany, $14,636,795; Monticello, $14,388,720; at full equalization value: Albany, $22,238,000; and Monticello; $22,555,400. (Totals: aggregate, $29,025,515; full value, $44,793,400).

**TAD is assessment district; two towns are involved with base assessed valuations, Albany: aggregate, $8,369,280 (full equalization value, $9,136,310) including parts with DNR ownership in Albany school district having $8,363,780 (full equalization value, $9,130,300); Mt. Pleasant: aggregate, $5,884,298 (full equalization value, $10,083,847) including parts with DNR ownership in Monticello school district having $4,376,665 (full equalization value, $7,500,200).

[1]Local community – those parts of the involved school districts in the TAD's containing the DNR ownership; total aggregate assessed valuation base (see** above), $12,740,445 and at full equalization value, $16,630,536.

[2]Last figure larger than second by $20 because the "local community" part of the TAD (Town of Mt. Pleasant) bears all of the increased school tax levy, while sharing payment-in-lieu of taxes with other (approximately 25%) parts of the TAD through nonschool purpose net decrease in tax levies (see Table A–4.).

3. **Production factors and income changes regarding DNR ownership**

   a. Net reduction in farmer-harvested acreages: 215 acres cropland and 202 acres of permanent pastures (but much of these areas are subject to drainage and flooding hazards and were low yielding), totaling 417 acres (Table A–5).*

   b. Net income loss of crops and pasture (no gardens disposed, Table A–6); capital value determined as worth of a constant annuity amount starting in the year(s) of loss, $74,081 or $7,330 average annual loss from inception through year 1972 (16-year period).

   c. Reduction in livestock numbers (caused by effect of DNR ownership): 24 dairy cows and 7 brood sows.

   d. Annual increase in net income to business establishments benefiting from trade to nonlocal users stemming from the DNR ownership: $3,652 total or $243 average per establishment; 6 business establishments within the Albany school district accounted for $3,361 and 9 outside the district accounted for $291. None of the business establishments are in the area considered as the "local community" (i.e. in those parts of the Towns of Albany and Mt. Pleasant within the Albany school district and embracing the DNR ownership).

   e. Net annual loss of employment: 1.7 man-years labor.

4. **Changes in community public services and costs and watershed protection:**

   a. No increases or decreases in construction, operation and maintenance road costs resulted because of the DNR ownership. There are no changes in costs to nonstate officers for protective or law enforcement services because of the DNR ownership. Also, there are no indications that advent of this DNR ownership has affected school operation costs for the school district serving the local community embracing the DNR ownership.

   b. There is no apparent basis for believing that the DNR ownership has caused any appreciable changes in the watershed from sedimentation and flooding. Contributing sources of damages from the ownership area were minimal prior to state acquisition. There is no evidence that current recreational users of the ownership area are damaging natural resources. It is concluded, therefore, that any previous minimal watershed damages must be reduced since a considerably larger acreage of the DNR ownership has permanent vegetative cover under DNR management.

*Additional areas with interspersion of grass, sedge and willows and generally wet because of poorly drained soils were also acquired. Although listed as low-grade grassland by the purchasing appraisers, the farmers interviewed in this study indicated that these lands were either not grazed or that carrying capacity was so low as to be of no significance. Therefore, acreages of such lands are not accounted for here in showing reduction of farmer-harvested acres or for evaluating monetary values for net income loss.

5. **Net Balances (Annual, 1972)**

	Town of Albany*	Town of Mt. Pleasant*		Other	
	Local Community	Local Community	Other	Assessment Districts**	Total
Increased taxes:[1]					
School purposes	$ 491	$ 31	$–	$ 763	$ 1,285
Nonschool purposes	97	(59)	(20)	–	18
Subtotal	588	(28)	(20)	763[2]	1,303
Loss of land-use income	7,162	168	–	–	7,330
DEBITS	(–) 7,750	(–) 140	(+) (20)	(–) 763	(–)8,633
Net income to merchants[3]	–	–	–	3,652	3,652
CREDITS	–	–	–	(+) 3,652	(+) 3,652
NET BALANCE (Annual,1972)	(–)7,750	(–) 140	(+) 20	(+) 2,889	(–)4,981

*"Local community" is considered as those parts of the Towns of Albany and Mt. Pleasant within the Albany and Monticello school districts and embracing the DNR ownership; this includes all of the Town of Albany and approximately 74.4 percent of the Town of Mt. Pleasant assessed valuations for taxable properties in 1972. (Therefore, Town of Albany has no listing here for "other".)[4]

**Includes parts or all of the following local tax assessment districts involved with the Albany school district: in Green County, Village of Albany and Towns of Brooklyn, Decatur, Mt. Pleasant and Sylvester, plus Magnolia in Rock county; and with the Monticello school district: in Green county, Village of Monticello and Towns of Adams, Albany, Brooklyn, Exeter, Monroe, New Glarus and Washington. (Respectively for these two school districts, the Towns of Albany and Mt. Pleasant are also in the districts, but are excluded in these data).

[1]Entirely from assessed valuations of the state ownership real estate and affected personal properties removed from the tax rolls. There is no evidence of any increases in assessed valuations for properties located nearby the DNR ownership that might possibly result in light of prices paid for state properties acquired or because of any favorable effects from the state ownership to values of such properties on the tax rolls.

[2]This amount is for all local tax assessment districts listed in ** above except the Towns of Albany and Mt. Pleasant.

[3]$3,361 accrues to 6 business establishments in the village of Albany and $291 to 9 business establishments in the village of Monticello (each village is a TAD within the school districts involved in this study).

[4]This represents the working premise used in this study, but technically in 1972 there was $5,500 (amounting to 0.0657, i.e. 6+/100 of 1%) of the Town of Albany's total of $8,369,280 aggregate assessed valuation in the Monticello school district.

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COLLINS WILDLIFE MANAGEMENT AREA

This DNR ownership of 3,823 acres (in 1972), with Mud Creek flowing through its entire length, is in Manitowoc County about 12 miles west of Manitowoc. It is approximately 3.5 miles long and 2.25 miles wide at the widest point. A dam and dike across Mud Creek at the lower (south) end of the ownership, built in 1965, shallow-floods approximately 1,600 acres which formerly was largely marsh lands. Prior to acquisition by DNR, starting in 1959, the Wisconsin Conservation Department (now DNR) had leased the marsh and surrounding uplands as a public hunting grounds for 13 years.

This ownership is developed primarily for waterfowl, especially for reproduction, rest during migration, harvest, and protection, but it also has secondary functions for deer, ruffed grouse, pheasant, woodcock and rabbit hunting, marsh ecology and waterfowl study, and aesthetic enjoyment. It has a heron rookery. A large west central part of the ownership serves as a refuge and is closed to waterfowl hunting. However, ample area is open during the hunting season and provides for excellent hunter harvest. Corn, grain and hay cropping is carried out on about 350 acres of the ownership to provide food principally for waterfowl, pheasants and rabbits as a part of the management program. These crop areas are from the more than 900 crop areas in farms before DNR acquisition.

Thousands of hunter participant days are spenton this ownership each year. It is said that on opening day of the waterfowl season there is "hardly standing room". This ownership is also an attraction for hunters, who by membership in a private association use surrounding areas for part of their hunting. It is also an attractive area for pheasant hunting. And, although only a fraction of the number of hunters, there is an appreciable number of fishermen using waters on the ownership. This ownership attracts many recreationists interested in bird watching, nature studying, and general sightseeing. An indoor study hall and guide are provided for prearranged group meetings of visitors, and an observation tower permits aerial view of the area.

Nonlocal visitors to this wildlife management area make their needed purchases of supplies and services from business establishments located mostly in the villages of Collins, at the southwest corner of the ownership, Valders, 2 miles southeast, and Reedsville, 2 miles north of the project. Some trade from recreationists using the ownership is in the unincorporated village of Cato and in the city of Brillion, 2 miles east and 5 miles west of Reedsville, respectively. Many establishments in rural locations between these urban centers and the project receive trade from recreationists visiting the ownership. However, the DNR expenditures for project developments were made with business concerns outside of the local area; therefore, no benefits accrued to firms in the local community.

Collins Wildlife Management Area lies entirely in the Town of Rockland in Manitowoc County. The north two-thirds of the ownership is in the Reedsville school district and the south one-third is in the Valders school district.

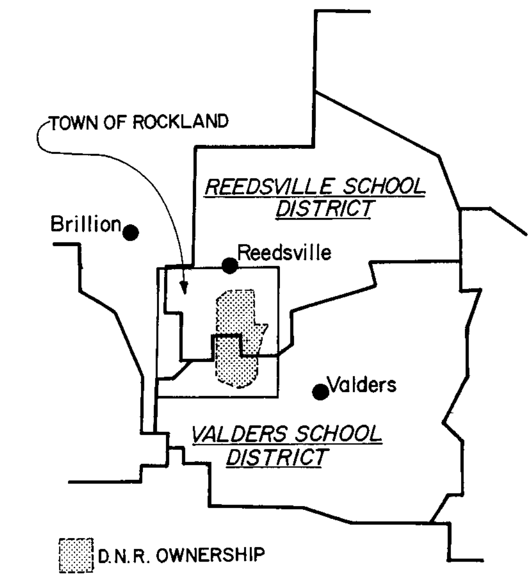

TABLE C–1. State Acquired Real Estate Property and Assessed Valuations

	State Ownership (acres)*					Aggregate Assessed Valuation Removed from the Tax Rolls		
			Off Tax Rolls–April 30					
Year	Acquired	Owned	Reedsville School District	Valders School District	Total	Reedsville School District	Valders School District	Total
1959	16.00	16.00	16.00	–	16.00	$ 250	$ 0	$ 250
1960	354.00	370.00	64.00	50.00	114.00	750	200	950
1961	579.89	949.89	320.00	194.66	514.66	10,600	5,660	16,260
1962	984.93	1,934.82	710.00	545.03	1,256.03	16,625	16,810	33,435
1963	577.26	2,512.08	1,343.57	847.53	2,190.10	49,175	28,735	77,910
1964	383.75	2,895.83	1,413.57	975.53	2,389.10	75,301	58,702	134,003
1965	223.00	3,118.83	1,840.17	998.28	2,838.45	88,271	59,002	147,273
1966	319.41	3,388.24**	2,139.58	998.28	3,137.86	101,621	59,002	160,623
1967	221.80	3,610.04	2,381.38	948.28**	3,329.66**	121,421	46,402**	167,823**
1968	233.90	3,843.94	2,421.38	948.28	3,369.66	178,151	67,747	245,898
1969	–	3,843.94	2,421.38	1,142.18	3,563.56	178,151	92,747	270,898
1970	–	3,843.94	2,421.38	1,142.18	3,563.56	178,151	92,747	270,898
1971	–	3,843.94	2,421.38	1,142.18	3,563.56	178,151	92,747	270,898
1972	13.33	3,823.37*,[1]	2,421.38	1,108.28[2]	3,529.66[1]	178,151	81,247*	259,398*,[3]

*"Owned" acres are all in Town of Rockland; excludes 50 acres of former tax exempt land acquired in Town of Eaton. Project total is 3,873.37 acres.

**Nets out land exchange, 50 acres returned to private ownership, with assessed valuation, $12,900.

[1]Several state acquisitions were public owned lands already not subject to taxation; therefore, state ownership acres and acres taken off the tax rolls via state ownership are not the same amounts. By end of 1972 this difference is 280.4 acres (1972 acquisition was after May 1).

[2]Nets out land exchange, 33.9 acres returned to private ownership, with assessed valuation: $11,500.

[3]Assessed valuations for properties for the year removed from the tax rolls are adjusted in subsequent years in keeping with changes in assessment levels for valuations for similar properties on the tax rolls; therefore, the accumulated totals by years reflect assessed valuations as if properties were still on the tax rolls.

TABLE C–2. Taxable Personal Property Affected by State Land Acquisitions

	Personal Property Disposed Cattle Numbers*			Aggregate Assessed Valuation Removed from the Tax Rolls		
Year Off Tax Rolls	Reedsville School Dist.	Valders School Dist.	Total	Reedsville School Dist.	Valders School Dist.	Total
1959	–	–	–	–	–	–
1960	–	–	–	–	–	–
1961		(20-5-5)				
	–	20-5-5	20-5-5	–	$ 5,150	$ 5,150
1962		(14-4-4)				
	–	34-9-9	34-9-9	–	8,658	8,658
1963	(65-17-18)					
	65-17-18	34-9-9	99-26-27	$17,821	9,304	27,125
1964	65-17-18	34-9-9	99-26-27	17,821	9,304	27,125
1965	65-17-18	34-9-9	99-26-27	17,821	9,304	27,125
1966	65-17-18	34-9-9	99-26-27	22,719	11,862	34,581
1967	65-17-18	34-9-9	99-26-27	24,649	12,870	37,519
1968	65-17-18	34-9-9	99-26-27	24,824	12,960	37,784
1969	65-17-18	34-9-9	99-26-27	25,819	13,481	39,300
1970	65-17-18	34-9-9	99-26-27	29,875	15,593	45,468
1971	65-17-18	34-9-9	99-26-27	31,825	16,613	48,438
1972	65-17-18	34-9-9	99-26-27	33,910	17,699	51,609

*Numbers in each set of three represent left to right: cows, heifers 1 yr. & over, and heifers 4 mos. to 1 yr. Parenthesized numbers are for cattle initially disposed; all other numbers are for accumulated disposals. All personal property disposed was in the Town of Rockland.

TABLE C–3. Effects of DNR Project on Tax Levies to Properties on Tax Roll

(Without Considering DNR Payments-in-lieu of Taxes)

INCREASED TAX LEVY EQUIVALENT (TAX YEAR 1972)*	Reedsville School Dist.	Valders School Dist.	Total
For school purposes (Reedsville and Valders school districts)			
On entire school district involved	$3,694	$1,741	$5,435
On that part of school districts in the Town of Rockland	575	98	673
On parts of school districts outside the Town of Rockland	3,119	1,643	4,762
For nonschool purposes			
On entire Town of Rockland			4,502
On that part of the Town of Rockland in the Reedsville and Valders school districts			3,730
Total on that part of the Town of Rockland within the Reedsville and Valders school districts and embracing the DNR properties (i.e. local community)			4,403
Percent of tax levy increase to properties on tax rolls caused by effects of DNR project (tax year 1972)			2.151%

Corresponding tax amount and percentage increase for past 12 years:

Year	Tax Levy Amount	Percent
1972	$4,403	2.151
1971	4,288	2.269
1970	4,017	2.303
1969	3,743	2.330
1968	3,362	2.146
1967	3,634	2.473
1966	2,613	2.231
1965	2,345	2.022
1964	2,027	1.917
1963	1,797	1.837
1962	732	0.776
1961	348	0.407

*Based on equivalent assessed valuations for affected properties in 1972:

DNR real estate removed from tax rolls	$259,398
Taxable personal properties disposed because of DNR effect	42,835
Total	$312,233

TABLE C–4. Effects of DNR Project on Tax Levies to Properties on Tax Rolls

(With Consideration of DNR Payments-in-lieu of Taxes)

INCREASED NET TAX LEVY EQUIVALENT (TAX YEAR 1972)*	
Nonschool purpose	$4,502
Payments-in-lieu of taxes by DNR to the Town of Rockland	1,143
Nonschool purpose, entire Town of Rockland	3,359
On that part of the Town of Rockland in the Reedsville and Valders school districts	2,783
School purpose (Reedsville and Valders school districts) for that part of the Town of Rockland in the school districts involved	673
Total on that part of the Town of Rockland within the Reedsville and Valders school districts and embracing the DNR properties (i.e. local community)	3,456
Percent of tax levy increase to properties on the tax rolls caused by effect of DNR project (tax year 1972)	1.681%

Corresponding tax amount and percentage increase for past 12 years:

Year	Tax Levy Amount	Percent
1972	$3,456	1.681
1971	3,331	1.756
1970	3,060	1.744
1969	2,782	1.721
1968	2,455	1.558
1967	2,705	1.829
1966	1,730	1.398
1965	1,562	1.338
1964	1,381	1.298
1963	374	0.377
1962	180	0.190
1961	94	0.109

*Based on equivalent assessed valuations for affected properties in 1972:

DNR real estate removed from tax rolls	$259,398
Taxable personal properties disposed because of DNR effects	42,835
Total	$312,233

C-1
C-2
C-3
C-4
C-5
C-6
C-7
C-8A
C-8B
C-8C
C-8D
C-9

TABLE C–5. Land Use and Reduced Annual Production Caused by DNR Ownership*

(Farmer harvested, previous and current)

Year	DNR Land Acquired (acres) Crops	DNR Land Acquired (acres) Grazed**	Land Use: Before DNR Owned Corn (acres)	Oats (acres)	Hay (acres)	Garden & Furs (no.)	Land Use: After DNR Owned** Corn (acres)	Oats (acres)	Hay (acres)	Net Yield Reduction Corn (bu)	Oats (bu)	Hay (tons)	Grazed Land (acres)[1]
1961	175	105	43	48	84	–	12	18	29	1,457	1,350	133	65
1962	197	60	35	35	127	–	16.6	25	50	733	400	80	60
1963	280	81	62.5	59.5	148	2	40.5	46.25	77.5	870	513	115	81
1964	10	10	2.5	2.5	5	1 trapper	–	–	–	87	87	6	10
1965	87	15	6	21	60	–	.6	1	2	160	400	64	15
1966	–	40	–	–	–	–	–	–	–	–	–	–	40
1967	99	50	25	25	49	–	6	8	10	1,110	725	78	50
1968	–	–	–	–	–	–	–	–	–	–	–	–	–
1969	73	–	5	32	36	–	–	–	–	525	2,080	135	–
1970-1972	none acquired												
Total	911	361	179	223	509	3	75.7	98.25	168.5	4,942	5,555	611	321

*These data are intended to provide the general picture; crop acres and use are averages by years and not exact to include variations that take place with usual farm operations; yields are based on estimates of farmers in the area who have operated on the lands.

**Under share-crop arrangements with DNR the farmer-operator leaves part of the corn crop in the field for bird and game feed; also, his crops and cropping pattern is stipulated by DNR; a total of 114.25 acres is corn whereas only 75.7 acres are farmer-harvested and only for grain.

[1] All grazed before DNR acquisition; only 40 acres continued for grazing with DNR ownership.

TABLE C–6. Value of Reduced Annual Production Caused by DNR Ownership
(By Products and Types of Monetary Values)

Year	Initial Annual Gross Value of Reduced Production*			Net Income Foregone	
	Field Crops	Pasture, Garden and Furs	Total	First Annual Amount Incurred**	Capital Value Annuity Worth Through 1972[1]
1961	$ 4,636	$ 389	$ 5,025	$2,012	$33,942
1962	2,325	–	2,325	814	12,187
1963	3,426	393	3,819	1,592	20,984
1964	223	390	613	468	5,378
1965	1,392	21	1,413	508	5,028
1966	–	120	120	120	1,007
1967	3,122	270	3,392	1,363	9,507
1968	–	–	–	–	–
1969	6,438	–	6,438	2,253	9,856
1970-72	–	–	–	–	–
Total	21,562	1,583	23,145		97,889[2]
	Average annual annuity value of net income foregone (in 12 years)				11,676[3]

*Unit prices are those prevailing in the area the year production was first reduced; an estimated 35 percent factor was used to convert field crop gross values to net income with going rental rates per unit of grazing land estimated at net income level, and with garden and fur values considered as at net income amounts.

**Production accounted for stopped at end of preceding year to that indicated respectively here with amount shown.

[1]At compound factors for 6 percent simple interest rate level which reflects prevailing average rates for those years of reduced production.

[2]Total annuity value for all first annual amounts of net income foregone, as respectively computed through remaining years of the 12-year evaluation period.

[3]Computed from sum of capital values (annuity worth) over 12-year total period of occurrence.

TABLE C–7. Value of Annual Trade From Nonlocal Users of DNR Ownership Area – 1972

NUMBER OF BUSINESS ESTABLISHMENTS HAVING TRADE FROM THE AREA 36*

1. Number of business accounts evaluated		31
2. Number of businesses appraised by projection from "1"		5
3. Types of business establishments		
a. Tavern or bar	17	
b. Gasoline station	8	
c. Restaurant	5	
d. Grocery store	3	
e. Hardware store	2	
f. Drug store	1	
TOTAL	36	

INCOME EVALUATIONS FOR THE 36 BUSINESS ESTABLISHMENTS RECEIVING TRADE FROM THE DNR AREA USERS**

1. Total Gross Sales	$1,864,215	(range/establishment:$4,000 -- 250,000)
a. Avg./establishment	51,783	
b. To DNR area users	48,801	(range/establishment 25 – 5,983)
(1) Avg./establishment	1,356	
2. Total Net Income	321,875	(range/establishment 480 – 22,500)
a. Avg./establishment	8,938	
b. From DNR area users' trade[1]	12,974	(range/establishment 3 – 1,703)
(1) Avg./establishment	360	

*Approximately 12 additional business establishment operators having no trade from DNR area users were visited in the procedure of determining the perimeter for nonlocal trade stemming from the state ownership.

**Primarily hunters' trade at all business establishments, and small amounts of fisherman trade at a few establishments.

[1]$4,762 are for 8 business establishments in the area considered as the "local community" for this study (i.e. located in those parts of the Town of Rockland within the Reedsville and Valders school districts and embracing the DNR properties).

TABLE C-8A. Development Costs for DNR Ownership

Except for one bulldozer and one operator used for a short time in one small subpart, all other equipment, materials and labor used for this development work were brought in from outside both the local community and the two school districts involved with the DNR ownership. Therefore, no evaluations are made for employment (labor) and net income benefits accruing to the local community because of DNR development expenditures on its ownership.

		Approximate Cost
1. Dam:	initial construction (1965)	$29,000
	dam raised and repaired (1970)	10,000
2. Parking areas (5)		10,000

TABLE C-8B. Equivalent Labor EmploymentOpportunities Affected

The 99 dairy cows plus young stock disposed (Table C-2) could be considered by 1972 farming techniques as comparable to 2.5 herds. Likewise the net displacement of 568 acres of cropland(Table C-5 acreages: 911-(75.7 + 98.25 + 168.5) and 321 acres of medium-low carrying capacity grazing land may be considered as adequate complement for the 2.5 herds. With such basic propositions the major production per farm would be from the equivalent of 52 animal units of dairy cattle, 231 acres of cropland and 128 acres of permanent pasture.

It may be estimated that such a farming operation would require an equivalent of 1.4 man-years of labor from the operator and off-farm labor plus the equal of another 0.4 man-years of family labor, or a total of approximately 1.8 man-years of labor. For 2.5 farms a total of 4.5 man-years of labor would be required. The DNR ownership, therefore, has annually displaced an equivalent of 4.5 man-years of employment.

DNR operations of this ownership require a relatively small amount of labor. Furthermore, the technical labor force of DNR that has responsibilities for management of this property does not reside in the local community. Therefore, practically the entire equivalent displacement of employment because of the DNR ownership is a net loss to the local community.

TABLE C-8C. Road, Protective Service and School Costs Affected by DNR Ownership

Roads

No through-the-area roads have been closed or newly constructed because of the DNR ownership and its establishment in a "block" pattern. No inner-core residences were eliminated by acquisition of the DNR ownership. A short stretch of road relocation was made on the south end of the ownership, but all indications are that this was done as a matter of usual road improvements, rather than caused by the DNR ownership. Therefore, no increases in initial road costs or in operation and maintenance resulted because of the DNR ownership.

Protective Services

Use of the DNR ownership (all recreation) has involved no additional requirements for protective and law enforcement services from any nonstate officers. Also, previous use of these lands (farming and idle land) had no such requirements that were reduced because of DNR ownership. Therefore, there are no changes in local costs for protective services stemming from this DNR ownership.

School Costs

No changes in the mileage, or difficulty or ease in bussing school children from the local community have come about because of the DNR ownership. Also no changes have resulted in the number or age groups of school children from residences in association with lands now in the DNR ownership. Therefore, there are no indications that the advent of this DNR ownership has either increased or decreased these types of costs for schools serving the local community that embraces the ownership.

TABLE C-8D. Land and Water Conservation in the Watershed

The lands in the inner-core of this DNR ownership are generally level marshland with interspersed grass and tree cover. Years ago as much as 250 acres in some drier years were harvested for marsh-grass hay. An appreciable acreage of the outer perimeter areas of the ownership was cropped or grazed before DNR acquisition and approximately one-third of it is currently sharecropped for farming and wildlife management purposes. Soil erosion was generally undetectable in this area; a few acres of crop land that did have slight erosion are now in permanent vegetative cover. The high hazard flooding and wetland crop and grazing lands for former agricultural uses are now removed from such uses and have permanent vegetative cover.

The inner-core of this DNR ownership has always served as a storage reservoir for the watershed in periods of excessive rainfall and snowmelt. Installation of the dam and flowage reservoir by DNR has not appreciably changed the influence of this project area on any flooding conditions downstream. It has, of course, completely "flooded" a sizable segment of the ownership. Some local residents speculate that this permanently flooded area causes a higher water table on parts of two farms downstream from the DNR ownership and below the dam and (new) road located above these farms. Technical study of this situation has not been made (as of July 1973) to either support or disprove this contention; however, there appears to be reasonable support of a counter belief by some people that the changed road location and construction now causes the water table rise (if, in fact, it is a new circumstance) on the two parcels of farm land. Nevertheless, the Town assessor has lowered the assessed valuation of these two parcels by $200 each, even though he takes no technical position on the specific cause of the lower valuation claimed by the owners and allowed by him.

There is no conclusive evidence that the DNR ownership has appreciably affected other parts of the watershed, measurable as costs or benefits for protection and use, from the standpoint of sedimentation (from soil erosion) and flooding.

TABLE C–9. Some Comparative Summary Items

1. Assessed Valuations of Taxable Properties Affected by DNR Ownership Causing Their Removal from the Tax Rolls, (by percent of total for time intervals over first 14 years of the project, 1959-1972):

Decreases in the Tax Rolls Attributable to DNR Real Estate Property Acquisitions and Related Taxable Properties

Years of Project	Percent of Total Acres	Real Estate	Personal Property	Total
In first 6 years	68	$134,003	$27,125	$161,128
In first 9 years	94	167,823	37,519	205,342
In first 10 years	95	245,898	37,784	283,682
In 14 years	100	259,398*	51,609	311,007

*Involves 3,530 acres of real estate property removed from the tax rolls.

2. Increased Tax Levies on Tax Assessment Districts Affected by the DNR Ownership Causing Taxable Properties to be Removed from the Tax Rolls (Year 1972):

	Increased Tax Levies: Without Payments-in-lieu of Taxes		Increased Tax Levies: With Payments-in-lieu of Taxes	
Total amount (all tax assessment districts [TAD's])*	$9,937		$8,794	
Amount for TAD containing DNR ownership**	5,175	52%[2]	4,032	46%[3]
Amount for other TAD's (re: school districts involved)	4,762	48	4,762	54
Amount for local community containing DNR ownership[1]	4,403	44	3,456	39

*Aggregate assessed valuation base for two school districts involved (Reedsville and Valders): $55,614,267 (at full equalization value, $84,068,900).

**TAD is tax assessment district–all Town of Rockland; aggregate assessed valuation base, $7,223,710 (at full equalization value, $9,420,310).

[1]Local community–that part of the Town of Rockland within the two school districts (Reedsville and Valders) involved and embracing the DNR properties; aggregate assessed valuation base, $5,985,130 (at full equalization value, $7,815,100).

[2]Giving 2.151 percent tax levy increase to properties on tax rolls.

[3]Giving 1.681 percent tax levy increase to properties on tax rolls. (Accounts for payments-in-lieu of taxes @30¢ per acre, but if this rate were @50¢ per acre the percent increase would be reduced to 1.321.)

TABLE C-9 (Cont.)

3. Production factors and income changes regarding the DNR ownership:

a. Net reduction in farmer-harvested acreages: 578 acres cropland; 321 acres pasture (Table C–5).

b. Net income loss of crops, pasture, garden and fur trapping production (Table C–6): capital value determined as worth of a constant annuity amount starting in the year(s) of loss: $97,889 total; or $11,676 average annual loss from inception year through 1972.

c. Reduction in cattle numbers: 99 dairy cows plus young stock; equivalent of 129 mature animal units.

d. Annual increase in net income to retail business establishments serving nonlocal users of the DNR ownership (Table C–7): $12,974 total, or $360 average per establishment; *37% of this total ($4,762) is to 8 establishments in the local community.*

e. Net annual loss of local employment: 4.5 man-years labor.

4. Changes in community public services and costs, and watershed protection:

a. No measurable changes for road, protective and school costs traceable to advent of the DNR ownership compared to previous ownerships of the properties and their uses.

b. Changes in use of DNR ownership area before and after state acquisition, concerning protection of entire watershed involved, have no appreciable consequences.

5. Net Balances (Annual, 1972)

	Town of Rockland*		Other	
	Local Community	Other	Assessment Districts**	Total
Increased taxes:				
School purposes	$ 673	$ –	$4,762	$ 5,435
Nonschool purposes	2,783	576	–	3,359
Subtotal	3,456	576	4,762[1]	8,794
Loss of land use income	11,676	–	–	11,676
DEBITS	(–)15,132	(–)576	(–)4,762	(–)20,470
Net income to merchants:	4,762		8,212	12,974
CREDITS	(+) 4,762	–	(+) 8,212	(+) 12,974
NET BALANCE	(–)10,370	(–)576	(+) 3,450	(–) 7,496

*"Local community" is considered as that part of the Town of Rockland within the school districts (Reedsville and Valders) involved and embracing the DNR properties (82.854% of total assessed valuations in 1972 for Town of Rockland; the DNR ownership is entirely in this sector of the Town).

The "Other" part of this Town includes those properties **not** in the Reedsville or the Valders school districts (17.146% of total assessed valuations in 1972 for Town of Rockland).

**Include parts or all of the following assessment districts involved with the Reedsville and the Valders school districts: in Manitowoc county, Towns of Cato, Eaton, Cooperstown, Franklin, Kosuth, Liberty, Manitowoc Rapids, Maple Grove, Newton, Saint Nazianz, Whitelaw, and the Villages of Kellnersville, Reedsville and Valders; and in Brown county, Town of Morrison. (The major part of the Town of Rockland is also in these two school districts is excluded in these data.)

[1]For all local tax assessment districts involved with the Reedsville and the Valders school districts except the Town of Rockland.

PLOVER RIVER FISHERY MANAGEMENT AREA

This DNR ownership of 950 acres (in 1972) along the upper 8 miles of the Plover River, including the headwater reaches, is in the northeast part of Marathon County, about 10 miles southwest of Antigo. The purpose of the project is to provide a means of promoting efficient management of fish and wildlife resources.

This is one of the best trout streams in Marathon and surrounding counties. Abundant ground water supply occurring in the form of spring ponds and issuing as springs along much of the project area, assures conditions for natural brook and brown trout reproduction. The lowland area adjacent to the stream, up to one-fourth mile wide in many places, consists of coniferous bog—a natural sponge which maintains excellent ground water supply. The protection of this coniferous cover, a main objective for the project, is vital to maintaining the Plover River as prime trout water.

Hundreds of fishermen participant days are spent on this ownership each year. It is slightly overcrowded with fishermen on opening day of the trout season and some of the days immediately following, and on any good fishing day there are numerous fishermen on this ownership. Also, many waterfowl broods are produced annually along the river course, there are excellent hunting opportunities for ruffed grouse, and the area is used as a winter deer yard. In total, this ownership is heavily used by recreationists participating in several outdoor activities. Although the project was primarily established as a fishery area, its multiple use management program encompasses resource protection and use for various wildlife species.

Nonlocal visitors to this fishery management area make their needed purchases of supplies and services from business establishments located mostly in the villages of Aniwa, near the east boundary of the northeast part of the area, Birnamwood, 5 miles east from the southern part, and Hatley, 4 miles south of the area. Also, a number of rural business establishments located nearby receive trade from recreationists using this DNR area.

The Plover River Fishery Management Area lies mostly in the Town of Plover and some in the Town of Harrison, Marathon County. The northern part is in the Antigo and the southern part in the Wittenberg school districts.

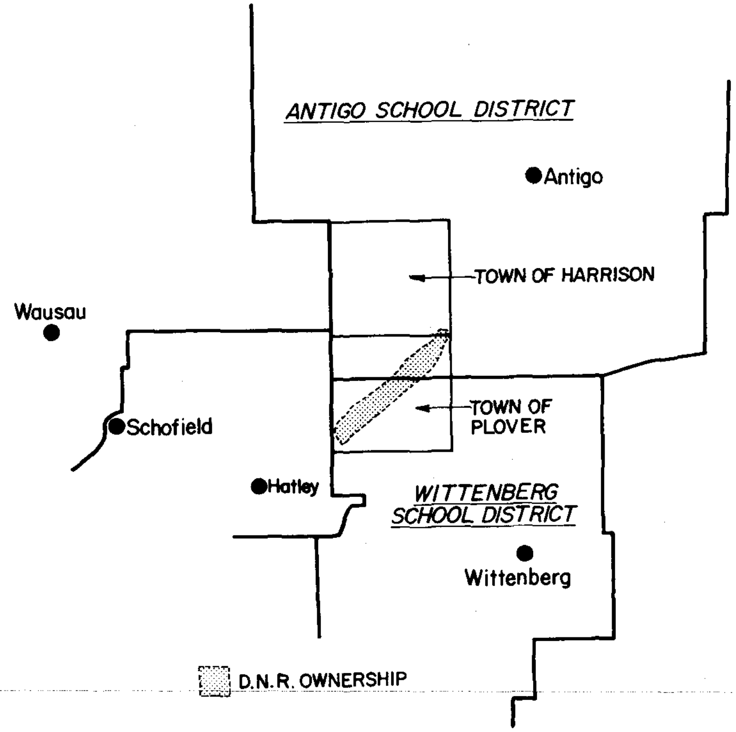

TABLE P–1. State Acquired Real Estate Property and Assessed Valuations

	State Ownership (acres)			Off Tax Rolls–April 30**			Aggregate Assessed Valuations Removed from the Tax Rolls		
Year	Acquired*	Disposed Of	Owned	Town of Plover	Town of Harrison	Total	Town of Plover	Town of Harrison	Total
1951	120	–	120	–	–	–	$ –	$ –	$ –
1952	–	–	120	–	120	120	–	1,100	1,100
1953	19.88	–	139.88	19.88	120	139.88	420	1,100	1,520
1954	–	–	139.88	19.88	120	139.88	420	1,100	1,520
1955	–	–	139.88	19.88	120	139.88	420	1,100	1,520
1956	–	–	139.88	19.88	120	139.88	420	1,100	1,520
1957	–	–	139.88	19.88	120	139.88	420	1,100	1,520
1958	–	–	139.88	19.88	120	139.88	420	1,100	1,520
1959	–	–	139.88	19.88	120	139.88	420	1,100	1,520
1960	266.3	–	386.30	166.18	120	286.30	1,690	1,100	2,790
1961	278.0	–	684.18	286.18	120	406.18	2,440	1,100	3,540
1962	51.5	57	678.68	565.68	120	685.68[1]	8,980	1,100	10,080
1963	120.0	3	795.68	595.68	120	715.68	5,910	1,100	7,010
1964	210.0	–	1,005.68	675.68	120	795.68	6,475	1,100	7,575
1965	96.5	–	1,005.68	835.68	170	1,005.68	11,245	1,350	12,595
1966	–	80	1,022.18	755.68	170	925.68	10,205	1,350	11,555
1967	–	–	1,022.18	832.18	170	1,002.18	11,360	1,350	12,710
1968	–	–	1,022.18	832.18	170	1,002.18	11,360	1,350	12,710
1969	–	–	1,022.18	832.18	170	1,002.18	13,632[2]	1,350	14,982
1970	7.5	80	949.68	759.68	170	929.69	11,110[2]	1,350	12,460
1971	–	–	949.68	759.68	170	929.68	13,332[2]	1,350	14,682
1972	–	–	949.68[3]	759.68	170	929.68[3]	14,665[2]	1,350	16,015

*All properties acquired and disposed of are in the Town of Plover except for the acquisitions made for 2 years in the Town of Harrison for 120 acres (1951) and 50 acres (1964).

**Indicates real estate property on the tax rolls that was removed with state ownership before the assessment date of May 1.

[1]Larger acreage than owned results from a circumstance of purchase and disposal dates as for parcels in state ownership on assessment date of May 1 versus the calendar year totals.

[2]Change in level of assessed valuations of all real estate properties in the Town of Plover was made by the assessor by a flat percentage increase; this same percent increase adjustment was applied to previous year accumulated valuations for state ownership properties.

[3]Some properties (20 acres) acquired were already exempt from property taxation and not on the tax rolls at time of state acquisition.

TABLE P-2. Taxable Personal Property Affected By State Land Acquisitions

No taxable personal property disposals were made because of DNR land acquisitions; thus no aggregate assesse valuations for taxable personal properties were removed from the tax rolls.

TABLE P–3. Effects of DNR Project on Tax Levies to Properties on Tax Rolls
(Without Considering DNR Payments-in-lieu of Taxes)

INCREASED TAX LEVY EQUIVALENT (TAX YEAR 1972)*

	Antigo School Dist.	Wittenberg School Dist.	Total
For school purposes (Antigo and Wittenberg school districts)**			
On entire school district involved	$514	$163	$677
Inside Town of Harrison	1		1
Outside Town of Harrison	67	–	67
Inside Town of Plover	6	8	14
Outside Town of Plover	440	155	595

	Town of Harrison	Town of Plover	Total
For nonschool purposes			
On entire Town	$28	$245	$273
On that part of the Town in Antigo school district	28	–	28
On that part of the Town in Antigo and Wittenberg school districts	–	245	245
Total on that part of the Town within the school district(s) involved and embracing the DNR properties (parts of Town of Harrison and Town of Plover; i.e. local community)	29	259	288
Percent of tax levy increase to properties on the tax rolls caused by effects of DNR project (tax year 1972)	0.0652%	0.3292%	–

Corresponding tax amount and percentage increase for past 12 years:

	Tax Levy Amount		Percent	
Year	Town of Harrison	Town of Plover	Town of Harrison	Town of Plover
1972	$29	$259	0.0652	0.3292
1971	36	314	0.0850	0.4186
1970	33	239	0.0811	0.3628
1969	39	304	0.1062	0.5044
1968	33	289	0.0956	0.5766
1967	22	263	0.0768	0.6223
1966	24	212	0.1008	0.5903
1965	19	100	0.0828	0.4623
1964	14	100	0.0650	0.3267
1963	16	94	0.0789	0.2805
1962	15	129	0.0551	0.4158
1961	50[1]	46	0.2722[1]	0.1933
1960-51	–	–	– 2 –	– 2 –

*Based on equivalent assessed valuations for affected properties in 1972:
DNR real estate removed from tax rolls: in Town of Harrison, $1,350; in Town of Plover, $14,665; no taxable personal properties affected.

Aggregate assessed valuation of taxable properties on the tax rolls:
Town of Harrison, total and all in Antigo school district, $617,385.
Town of Plover: total, $1,234,740; in Antigo school district, $533,245 and in Wittenberg school district, $701,495.

**For this DNR ownership those lands located in the Town of Plover are in two school districts, namely, the Antigo school district and the Wittenberg school district; and, DNR lands located in the Town of Harrison are entirely in the Antigo school district. (Before 1968 that part of the Town of Plover now in the Wittenberg school district was in the Birnamwood school district which merged with Wittenberg.)

[1]Town of Harrison had its own school district but transferred high school pupils to another district; in 1962 the Harrison school district merged with the Antigo (Jt. 1) school district.

[2]Not calculated in detail due to the absence of summary base data for distribution of school levies by assessment districts; however, by years increased equivalent taxes for all purposes can be considered as follows: Town of Harrison, quite similar to such for year 1961; Town of Plover, very small from 1953 until 1960 when assessed valuations removed from tax rolls increased from $420 to $1,690; also, for 1957-1960 school taxes accounted for from 63 percent to around 73 percent or more of all tax levies and the state made payments-in-lieu of taxes for school purposes in those years.

TABLE P–4. Effects of DNR Project on Tax Levies to Properties on Tax Rolls

(With Consideration of DNR Payments-in-lieu of Taxes)

INCREASED NET TAX LEVY EQUIVALENT (TAX YEAR 1972)*

	Town of Harrison	Town of Plover	Total
Nonschool purposes	$ 28	$245	$273
Payments-in-lieu of taxes*	51	236	287
Nonschool purpose, entire Town	(23)**	9	(14)
On that part of the Town in the school district(s) involved	(23)**	9	(14)
School purposes (Antigo and Wittenberg school districts) for that part of the Town in the school district(s) involved[1]	1	14	15
Total on that part of the Town within the school district(s) involved and embracing the DNR properties (parts of Town of Harrison and Town of Plover; i.e. local community)	(22)**	23	1
Percent of tax levy increase (or decrease) to properties on the tax rolls caused by effects of DNR project (tax year 1972)	(0.0494%)	0.0291%	–

Corresponding tax amount and percentage increase for past 12 years:

	Tax Levy Amount		Percent	
Year	Town of Harrison	Town of Plover	Town of Harrison	Town of Plover
1972	$(12)	$ 23	(0.0494)	0.0291
1971	(15)	77	(0.0354)	0.1023
1970	(18)	2	(0.0442)	0.0030
1969	(12)	49	(0.0326)	0.0809
1968	(17)	34	(0.0477)	0.0675
1967	(29)	8	(0.1010)	0.0188
1966	(27)	(14)	(0.1132)	(0.0387)
1965	(32)	(105)	(0.1392)	(0.3321)
1964	(22)	(100)	(0.1019)	(0.3182)
1963	(20)	(109)	(0.0984)	(0.3234)
1962	(42)	(119)	(0.1541)	(0.3805)
1961	14	(20)	0.0759	(0.0838)
1960-51			– 2 –	– 2 –

*Based on equivalent assessed valuations for affected properties in 1972:
DNR real estate removed from tax rolls: in Town of Harrison, $1,350; in Town of Plover, $14,665; no taxable personal properties affected.
Aggregate assessed valuations of taxable properties on the tax rolls:
Town of Harrison, total and all in Antigo school district, $617,385.
Town of Plover: total, $1,234,740; in Antigo school district, $533,245 and in Wittenberg school district, $701,495.
But, payments-in-lieu of taxes are based on acres owned by DNR.

**Payments-in-lieu of taxes go to the Town that contains the state ownership for which they are made—no allocation is made to other assessment districts throughout the school district also including the state properties. Thus such in-lieu of taxes amounts are considered in view of the Town levies for nonschool purposes ($28) in the current year of levy and receipt of DNR payments-in-lieu of taxes ($51). Consequently, the Town gained ($23) except that its share of the entire school district's increased taxes ($68, Table P–3) to properties on the tax rolls (because of state properties removed from the tax rolls in the Town of Harrison) was $1.00; therefore, the "net added tax levy" to the Town was actually a decrease of $22. All amounts in parentheses shown throughout here are decreases or gains.

[1]For this DNR ownership those lands located in the Town of Plover are in two school districts, namely, the Antigo school district and the Wittenberg school district; and, those lands located in the Town of Harrison are entirely in the Antigo school district. (Before 1968 that part of the Town of Plover now in the Wittenberg school district was in the Birnamwood school district which merged with Wittenberg district. Before 1962 the Town of Harrison had its own school district but transferred high school pupils to another district; in 1962 the Harrison school district merged with the Antigo (Jt. 1) school district.)

[2]See footnote 2 of Table P–3.

TABLE P–5. Land Use and Reduced Annual Production Caused by DNR Ownership

(DNR Land Involved was Previously Farmer Harvested)*

	Land Use				Yield**		
Year	Total Acres	Oats (acres)	Hay (acres)	Perm. Pasture (acres)	Oats (bu)	Hay (tons)	Pasture (AU)[1]
1951-61	none	–	–	–	–	–	–
1962	6	1	5	–	65	10	–
1963	17.7	1	4	12.7	65	8	5
1964	–	–	–	–	–	–	–
1965	50.4	10	37.6	2.8	590	72	1
	76.7	11	43.7	22	660	87.4	10
1966-72[2]	none	–	–	–	–	–	–
Total	150.8	23	90.3	37.5	1,380	177.4	16
1972	74.1	12	46.6	15.5	720	90.0	6

*These data are intended to provide the general picture; crop acres and use are averages by years and not exact to include variations that take place with usual farm operations. Crops grown and yields are based on statements and estimates of farmers who have operated the lands.

**Indicated by year(s) when production was first foregone by former owners.

[1]AU is one grazing animal unit equivalent to one mature cow.

[2]Out of farm production (in DNR ownership) for 5 years only, 1965-69.

TABLE P–6. Value of Reduced Annual Production Caused by DNR Ownership

(By Products and Types of Monetary Values)

	Initial Annual Gross Value of Reduced Production*			Net Income Foregone	
Year	Field Crops	Pasture	Total	First Annual Amount Incurred**	Capital Value Annuity Worth Through 1972[1]
1951-61	$ –	$ –	$ –	$ –	$ –
1962	249	–	249	87	1,303
1963	209	50	259	123	1,621
1964	–	–	–	–	–
1965	2,302	10	2,312	816	8,073
	(2,910)	(100)	(3,010)	1,119	6,308[3]
1966-72[2]	–	–	–	–	–
Total	2,760	60	2,820	1,026	17,308
	(5,670)[4]	(160)[4]	(5,830)[4]	(2,145)[4]	
Average annual annity value of net income foregone (in 11 years)					2,194[5]

*Unit prices are those prevailing in the area the year production was first foregone; going rental rates per unit of grazing were used.

**An estimated 35 percent factor was used to convert field crop gross value to net income; amounts for pasture shown under gross income were used in full since they were computed at net income rental rates or value.

[1]At compound factor for 6 percent simple interest rate which reflects average level prevailing interest rate for those years of reduced production; computed for first year incurred through 1972.

[2]Amounts in parentheses are for production foregone starting in 1965 and continuin through 1969; the land was in state ownership and off the tax rolls for those 5 years, but again in private ownership starting in 1970.

[3]Computed only for 5 years, rather than from year first incurred through 1972 (see 2 above).

[4]Also includes amounts for 5 years (1965-69) (see 2 above).

[5]Computed from sum of capital values (i.e. from first annual amounts incurred respectively covering period from year of incidence through 1972) over 11-year total period of occurrence.

TABLE P–7. Value of Annual Trade From Nonlocal Users of DNR Ownership Area – 1972

NUMBER OF BUSINESS ESTABLISHMENTS HAVING TRADE FROM THE AREA			**30***
1. Number of business accounts evaluated		25	
2. Number of businesses appraised by projections from "1"**		5	
3. Types of business establishments:			
a. Tavern	8		
b. Gasoline station	7		
c. Tavern plus light foods	5		
d. Hardware or similar type store	3[1]		
e. Grocery store plus dry goods	2		
f. Grocery store	1		
g. Restaurant	1		
h. Restaurant and tavern	1		
i. Tavern and hotel	1		
j. Tavern and gasoline station	1		
TOTAL	30[2]		

INCOME EVALUATIONS FOR THE 30 BUSINESS ESTABLISHMENTS RECEIVING TRADE FROM THE DNR AREA USERS

1. Total Gross Sales	$2,433,260[2]	(range/establishment: $16,400 – 369,000)
a. Avg./establishment	81,108	
b. To DNR area users	26,765	(range/establishment: 50 – 2,400)
(1) Avg./establishment	892	
2. Total Net Income	321,001	(range/establishment: 1,800 – 25,200)
a. Avg./establishment	10,700	
b. From DNR area users' trade[2,3]	5,373	(range/establishment: 5 – 940)
(1) Avg./establishment	179	

*Approximately seven additional business establishment operators having no DNR user trade were visited in the procedure of determining the perimeter for nonlocal trade from users of the state ownership.

**Information from operators of businesses evaluated provided bases for location and types of concerns used in the projections.

[1]Two hardware stores had extensive supplies of fishing tackle and equipment.

[2]Twenty-two of the business establishments are in the villages of Aniwa and Birnamwood and seven are along primary access roads to the ownership; all these 29 are in the school districts involved with the DNR ownership but another is outside; none of the establishments are in the area considered as the "local community" for this study.

[3]Includes one establishment outside the assessment districts included in the school districts involved with this DNR ownership (it has $35,000 annual total gross sales from all sources, and $684 net income from trade of DNR area users).

TABLE P-8A. Development Costs for DNR Ownership

No detailed analysis is included, as development cost expenditures have had very little impact on local economies. Appreciable real estate acquisition started in 1960 (Table P-1). Before that (1951-59) most of the project area along the Plover River was in a land-lease fishery program with DNR, which included fencing to exclude livestock, stream crossings, channel protection, and improvements to enhance fish habitat. Some of this work, along with maintenance of earlier works, has continued over the years along with spring-pond dredging in limited areas and improvements done with DNR-owned and operated equipment. The earlier work (1951-59) was carried out mainly with NYC project labor and some locally purchased supplies, but at that time the lands were not in DNR ownership. Also, in 1965 a sizable DNR crew of laborers continued such works and substantially repaired previous installations, but no appreciable purchases of locally obtained supplies were made to enhance trade in the area. For the last several years DNR maintenance crews have headquartered outside this area and when called upon for maintenance work in the Plover River Fishery Management Area no appreciable trade has resulted in the local area.

Net monetary benefits accruing to the local community because of DNR expenditures for development of its ownership are insignificant for inclusion in the evaluations for this project.

TABLE P-8B. Equivalent Labor Employment Opportunities Affected

There were approximately 113 acres of cultivated farm crops and 38 acres of permanent pasture removed from production (Table P-5). However, of this total there were 54.7 acres of cropland and 22 acres of pasture returned to farm production in 1970 following 5 years in DNR ownership. Thus, only 58.6 acres of cropland and 15.5 acres of pasture were removed from continuous farm production. With 1972 farming techniques it can be estimated that accompanying annual farm labor requirements displaced by the DNR ownership would be an equivalent of around 0.2 man-years employment.

Under DNR ownership, operations require a relatively small amount of labor each year. Also, the technical force of DNR that has responsibility for management of this property does not reside in the local community. And, only for one year was there any appreciable use of labor from the local community. Therefore, the 0.2 man-years of farm labor displacement is offset a little but not appreciably by local labor employment on the DNR ownership and should be considered as the maximum net loss to the local community.

Added employment because of DNR expenditures for development of its ownership took place for only one year (1965). Although coming from local area sources this is considered an insignificant amount of employment over the total years of this project (1951-1972) and without much impact on the local community.

TABLE P-8C. Road, Protective Service and School Costs Affected by DNR Ownership

Roads

No through-the-area roads have been closed or newly constructed, nor were any inner-core year-around residences eliminated by acquisition of the DNR ownership. Therefore, no increases or decreases in initial road costs or in operation and maintenance resulted because of the DNR ownership. There were no determinable changes in the local road pattern and operations of this area caused by the DNR ownership.

Protective Services

Use of the DNR ownership (all recreation) has involved no additional requirements for protective and law enforcement services from any nonstate officers. Also, previous uses of these lands (farming, idle land and some recreation) had no requirements that were reduced because of the DNR ownership. Therefore, there are no changes in costs for protective services stemming from this DNR ownership that affect the local economy.

School Costs

No changes in the mileage, or difficulty or ease in bussing school children from the local community have come about because of the DNR ownership. Also no changes have resulted in the number or age groups of school children from residences in association with lands now in DNR ownership. Therefore, there are no indications that the advent of this DNR ownership has affected these types of costs for schools serving the local community embracing the ownership.

TABLE P-8D. Land and Water Conservation in the Watershed

Much of the land along the major stream and its tributaries in the DNR ownership is well covered with trees, brush and close-growing vegetation. These conditions prevailed immediately before acquisition by DNR. However, there were several reaches along the stream that were subject to livestock grazing prior to the DNR land-lease and protection program that preceded transfer of ownership through land acquisition by DNR. The present project and ownership, therefore, assures perennial protection, but did not directly bring it about.

The cropland and pasture lands removed from private ownership and production of farm field crops and pasturing were not subject to serious erosion formerly. What erosion did occur has been reduced to practically nothing by permanent vegetative cover under DNR ownership. The type of farming that prevailed in the area with a field cropping pattern of mainly hay and small grains and very little clean tilled crops did not accelerate water runoff and sediment depositions into the streams of the watershed. Serious floods stemming from causes traceable in any extent to nonprotective land uses for the area in the DNR ownership were practically nonexistent in this watershed.

There is no real basis for believing that the DNR ownership has appreciably affected other parts of the watershed, measurable as costs or benefits for protection and use from the standpoint of sedimentation (from soil erosion) and flooding. Undoubtedly there are small favorable benefits from this project to protection of the entire watershed in which the DNR ownership is located, but they are not sufficiently sizable to warrant detailed analyses and monetary evaluations.

TABLE P–9. Some Comparative Summary Items

1. Assessed Valuations of Properties Affected by DNR Ownership (by percent of total for time intervals over the first 22 years of the project, 1951-1972):

Decreases in the Tax Rolls Attributable to DNR Real Estate Property Acquisitions (no taxable personal properties were affected; amounts of equivalent assessed valuations removed from the tax rolls shown in Table 1)

Years of Project	Percent of Total Acres	Real Estate
In first 9 years (1951-59)	15.0	$ 1,520
In first 10 years (1951-60)	30.8	2,790
In first 15 years (1951-65)	98.0	12,595
In first 20 years (1951-70) (Small acreage acquired in the 20th year, but sizable acreage disposed in the 16th and 20th years)	100.0	12,460
In 22 years (1951-72) (No acreage acquired in the 21st and 22nd years but Town assessed valuation levels increased)	100.0	16,015*

*Involves 929.68 acres of real estate properties removed from the tax rolls.

2. Increased Tax Levies (Table 3) on Tax Assessment Districts Affected by the DNR Ownership Causing Taxable Properties to be Removed from the Tax Rolls (Year 1972):

	Increased Tax Levies			
	Without Payments-in-lieu of Taxes		With Payments-in-lieu of Taxes	
Total amount (all tax assessment districts [TAD's] involved)*	$950	100%	$663	100.00%
Amount for TAD's containing DNR ownership**	288	30	1	0.15
Amount for other TAD's (re: school districts involved)	662	70	662	99.85
Amount for local community containing DNR ownership[1]	288	30	1	0.15

*Aggregate assessed valuation base for two school districts involved: total, $83,886,894 (Antigo district, $60,397,588; Wittenberg district, $23,489,306). At full equalization value: $139,887,800 (Antigo, $103,748,500; Wittenberg, $36,139,000).

**TAD is tax assessment district; two Towns involved have aggregate assessed valuation base totaling, $1,852,125 (Town of Harrison, $617,385; Town of Plover, $1,234,740; respectively having full value: $1,996,400 and $2,965,400).

[1]Local community—that part of the Towns of Harrison and Plover within the two school districts (Antigo and Wittenberg) and embracing the DNR properties; aggregate assessed valuation base, $1,852,125 (same as above since all of the two Towns involved are within the two school districts involved—Harrison entirely in Antigo school district and parts of Plover are in Antigo school district and parts are in Wittenberg school district accounting for the entire Town), with full equalization value of $4,961,800.

3. **Production factors and income changes regarding the DNR ownership area:**

   a. Net reduction in farmer-harvested acreages: 113.3 acres cropland and 37.5 acres of pasture, totaling 150.8 acres (Table 5). However, 54.7 acres cropland and 22 acres pasture, totaling 76.7 acres returned to farm production after the 5 year period 1965-69. Continuing reductions as of 1972 were: 58.6 acres cropland and 15.5 acres of pasture.

   b. Net income loss of crops and pasture production: Capital value determined as worth of a constant annuity amount starting in the year(s) of loss: $17,308 total; or $2,194 average annual loss from inception year through 1972.

   c. No reduction in livestock numbers.

   d. Annual increase in net income to retail business establishments serving nonlocal users of DNR ownership: $5,373 total, or $179 average per establishment; none of the establishments are in the area considered as the "local community" for this study.

   e. Net annual loss of local employment: no more than 0.2 man-years labor.

4. **Changes in community public services and costs, and watershed protection:**

   a. No measurable changes for road, protective and school costs traceable to advent of the DNR ownership compared to previous ownerships of the properties and their uses.

   b. Changes in use of DNR ownership area before and after state acquisition, concerning protection of the entire watershed involved have no appreciable consequences.

5. **Net Balances (Annual, 1972)**

	Local Community*		Other	
	Town of Harrison	Town of Plover	Assessment Districts**	Total
Increased taxes:				
School purposes	$ 1	$ 14	$ 662	$ 677
Nonschool purposes	(23)	9	–	(14)
Subtotal	(22)	23	662[1]	663
Loss of land use income	–	2,194		2,194
DEBITS	+ 22	(–)2,217	(–) 662	(–)2,857
Net income to merchants	–	–	5,373[2]	5,373
CREDITS	–	–	(+) 5,373	(+) 5,373
NET BALANCE	(+) 22	(–)2,217	(+) 4,711	(+) 2,516[2]

* "Local community is considered as those parts of the Towns of Harrison and Plover within the Antigo and Wittenberg school districts and embracing the DNR ownership; (this includes all of the Town of Harrison—in Antigo school district, and all of the Town of Plover as distributed between the Antigo and the Wittenberg school districts).

Includes parts or all of the following local assessment districts involved with two school districts: (a) **Antigo school district: in Langlade county, Towns of Ackley, Antigo, Langlade, Neva, Norwood, Peck, Polar, Price, Rolling, Summit, Upham, Vilas and the city of Antigo; in Shawano county, Towns of Aniwa, Hutchins and the villages of Aniwa and Mattoon (Town of Harrison and part of Town of Plover in Marathon county are also in this school district); (b) **Wittenberg (-Birnamwood) school district:** in Marathon county, Towns of Bevent, Elderon, Franzen, Norrie, Reid and village of Elderon; in Shawano county, Towns of Almon, Aniwa, Birnamwood, Germonia, Hutchins, Morris, Wittenberg and the villages of Birnamwood, Eland and Wittenberg (part of Town of Plover in Marathon county is also in this school district).

[1]For all local tax assessment districts involved with the Antigo and the Wittenberg school districts except the Town of Harrison and the Town of Plover (amounts for these exceptions are shown under "local community").

[2]Includes $684 increased annual net income to a business establishment located in another school district (i.e. not in Antigo or Wittenberg school districts).

ELROY-SPARTA STATE TRAIL

This DNR ownership of 576 acres (in 1972) is over 30 miles long extending from Elroy, in Juneau County, northwesterly to Sparta, in Monroe County. Its purpose is for an exclusive biking and hiking trail, with snowmobiling permitted in wintertime. Overnight camping facilities are provided for only bikers and hikers in a wooded area along the northern entrance to the trail, 2 miles south of Sparta. The ownership is mostly lands acquired from the Chicago and Northwestern Railroad Company known as the railroad line from Elroy to Sparta, and the trail carries the name Elroy-Sparta.

Intervening stations and stops were at Kendall, Wilton and Norwalk, and correspondingly these three small villages have become pleasurable stopping places for trail users. The trail has three cavernous tunnels under the high ridges along its course with one near each of these three villages. The longest tunnel, about three-fourths of a mile in length, is near Norwalk. Although in rugged terrain the tunnels permit a maximum grade of only 3 percent. It is remarkable that this initial and difficult construction took place in 1873.

This trail is in coulee country in the unglaciated region of western and southwest Wisconsin exemplifying the natural beauty of the state. Picturesque trail views are continuous along the pathway including some 33 planked bridges supported by precipitous trestles. The trailside flora is abundant and has been mostly undisturbed for many years. The trail is covered with limestone screening and provides a smooth riding surface.

Nonlocal visitors to this trail area make their needed purchases of supplies and services from business establishments located mostly in the cities of Sparta and Elroy and in the Villages of Kendall, Wilton and Norwalk along the trail, in the village of Union Center, 4 miles south of Elroy, and in several stores in rural locations also near the trail.

The Elroy-Sparta State Trail lies in 7 Towns (townships) and 1 village in Monroe County and in 1 Town in Juneau County, and it is in 3 school districts.

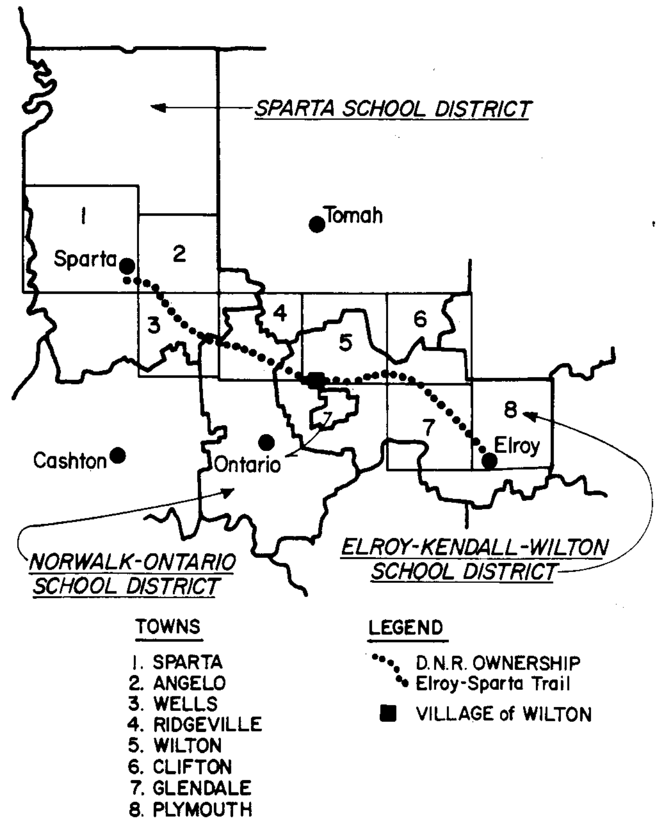

TABLE ES–1. State Acquired Real Estate Property Assessed Valuations

	State Ownership (acres)					Aggregate Assessed Valuation Removed from the Tax Rolls		
			Off Tax Rolls–April 30*					
Year	Acquired	Owned	Town of Angelo	Town of Sparta	Total	Town of Angelo	Town of Sparta	Total
1966	492.76	492.76**	0	0	0	$ 0	$0	$ 0
1967	17.30	510.06	0	0	0	0	0	0
1968	0	510.06	17.3	0	17.3	340.00	0	340.00
1969	0	510.06	17.3	0	17.3	340.00	0	340.00
1970	0	510.06	17.3	0	17.3	340.00	0	340.00
1971	0	510.06	17.3	0	17.3	340.00	0	340.00
1972	66.2[1]	576.26	17.3	0	17.3	374.00[2]	0	374.00

*Indicates real estate property on the tax rolls that was removed with state ownership before the assessment date of May 1. Only two Towns in Monroe county had real estate properties acquired by DNR and removed from the tax rolls (Towns of Angelo and Sparta).

**The 492.76 acres were in the abandoned railroad bed area of the Chicago and Northwestern Railroad Company and this real estate property was not taxed as a part of Town assessed valuations and tax levies. (They were a part of the valuation and taxes levied on Wisconsin properties of railroads and telegraph companies handled through state taxations.) These 492.76 acres are the sum of parcel acreages in the following Towns: Monroe county: Angelo (33.39), Clifton (1.23), Glendale (104.49), Ridgeville (135.91), Sparta (3.61), Wells (86.76), Wilton (90.88); Village of Wilton (7.52); and Juneau county: Town of Plymouth (28.97).

[1]Purchased by DNR as of 10 July 1972 (20 acres in Town of Angelo, assessed valuation of $600 and 46.2 acres in Town of Sparta, assessed valuation of $800); thus it will be removed from the tax rolls in 1973 but becomes subject to payments-in-lieu of taxes.

[2]Change in level of valuations of all real estate properties in the Town of Angelo was made by a flat percentage (10%) increase over 1971 assessed valuations.

TABLE ES-2. Taxable Personal Property Affected By State Land Acquisitions

No taxable personal property disposals were made because of DNR land acquisitions; thus no aggregate assessed valuations for taxable personal properties were removed from the tax rolls.

TABLE ES–2A. Additional General Property Assessed Valuation
(Attributable to State Ownership Influences*)

Tax Assessment District and Year**	Real Estate Assessed Valuation: No. of Businesses	Real Estate Assessed Valuation: Total	Since Advent of State Trail: Total	Since Advent of State Trail: Allocated to Trail Element	Personal Property Assessed Valuation[1]: No. of Businesses	Personal Property Assessed Valuation[1]: Total	Increase: Total	Increase: Allocated to Trail Element
Town of Angelo								
1972	–	$ –	$ –	$ –	1	$ 4,000	$ 3,300	$ 967
Town of Wells								
1972	–	–	–	–	1	560	560	560
Village of Kendall								
1971	–	–	–	–	1	10,889	3,315	43
1972	1	6,125	500	13	1	600	50	1
Village of Norwalk								
1971	2	16,600	11,250	1,227	1	6,570	4,870	365
1972	1	10,300	1,000	79	1	5,000	(–1,570)	(– 124)
Village of Union Center								
1972	2	13,200	6,500	1,300	1	5,400	1,000	55
City of Sparta								
1971	2	159,100	36,900	4,423	2	6,100	1,000[2]	2[2]
1972	2	190,000	30,800	3,066	1	3,600	1,500	210
TOTAL								
1971	4	175,700	48,150	5,650	4	23,559	9,185	410
1972	6	219,625	38,800	4,458	6	15,160	4,840	1,660

*Taxation assessed valuations for real estate and taxable personal properties of those business establishments having changes in such assessments because of influences stemming from the DNR ownership; they received trade from the DNR ownership users while adding taxable properties. Allocations to "trail influences or element" are made in amount by percentage of annual gross income (goods and services) accruing from sales to users of the DNR ownership.

**Years 1966 through 1970 (of study) omitted since no appreciable influences came about during this period; there was some trade from trail users but its impact on business establishments related to general property improvements essentially started in 1970 subject to assessed valuation changes in tax year 1971.

[1]Personal property assessed valuations essentially reflect values for annual inventories as of May 1 for supplies of goods and equipment used in the business and subject to taxation. Business establishments included are only those for which the operator indicated that some significant changes had taken place in the personal property listing for assessment.

[2]One business had an increase of $1,500 with $20 allocable to trade from the state trail while the other business had a decrease by $500 and $18 respectively.

TABLE ES—3. Effects of DNR Project on Tax Levies to Properties on Tax Rolls

(Without Considering DNR Payments-in-lieu of Taxes)

INCREASED TAX LEVY EQUIVALENT (TAX YEAR 1972)*	
For school purposes**	
On entire school district involved (Sparta school district)	$10.16
On that part of school district in Town of Angelo[1]	0.55
On parts of school district outside Town of Angelo	9.61
For nonschool puposes	
On entire Town of Angelo	3.15
On that part of the Town in Sparta school district	3.15
Total on that part of the Town within the school district involved and embracing the DNR properties (part of the Town of Angelo; i.e. local community)	3.70
Percent of tax levy increase to properties on the tax rolls caused by effect of DNR project (tax year 1972)	0.0045%
Corresponding tax amount and percentage increase for past 5 years: For years 1971 to first year of incidence, 1968, the tax levy amounts and percentages are smaller than for 1972 as shown above. Computations of exact but insignificant amounts are not considered necessary for inclusion here.	

*Based on equivalent assessed valuations for affected properties in 1972: DNR real estate removed from the tax rolls: in Town of Angelo, $374; no taxable personal properties affected.

Aggregate assessed valuation of taxable properties on the tax rolls in 1972: Town of Angelo, $3,154,995 (at full equalization value, $3,890,100); Sparta school district, $55,917,756 (at full equalization value, $71,016,100).

**For this DNR ownership the real estate properties are in 3 school districts, namely, Elroy-Kendall-Wilton, Norwalk-Ontario, and Sparta. However, all DNR acquired lands removed from the tax rolls are located in the Sparta school district in the Towns of Angelo and Sparta, and through 1972 only those lands in the Town of Angelo (acquired from others than the railroad company) are involved.

[1]The entire Town of Angelo is in the Sparta school district.

TABLE ES-4. Effects of DNR Project on Tax Levies to Properties on Tax Rolls (With Consideration of DNR Payments-in-lieu of Taxes)

Increase Town Tax Levy Equivalent (Tax year 1972): Neither of the three different state statute provisions concerning DNR payments to local governments in lieu of taxes for state acquired real estate properties can be applied for this ownership for the years covered by this research project. Since this state trail comes under classification of a state park, the earlier statutes of 1956 and 1963 for such aid payments do not apply. The statutes covering DNR project lands acquired after June 30, 1969 do apply, but the real estate properties acquired for this project in July, 1972 come into such consideration for tax year 1973 and this research study only carries through year 1972. Consequently, there are no DNR payments-in-lieu of taxes involved. The preceding table for effects of DNR project on tax levies to properties on the tax rolls without consideration of DNR payments-in-lieu of taxes needs no modifications similar to those constructed for other ownerships used in this research study.

TABLE ES–4A. Effects of DNR Project on Tax Levies to Properties on Tax Rolls

(With Considerations for Net Amounts of Assessed Valuations Affected by DNR Ownership)*

INCREASED (OR DECREASED) NET TAX LEVY EQUIVALENT (TAX YEAR 1972)	
For school purposes**	
On entire school district involved (Sparta school district)	($16.22)
On that part of school district in Town of Angelo	(0.89)
On parts of school district outside Town of Angelo	(15.33)
For nonschool purposes**	
On entire Town of Angelo	(6.31)
On that part of Town of Angelo in Sparta school district	(6.31)
Total on that part of the Town within the school district involved and embracing the DNR properties (part of the Town of Angelo)	(7.20)
Percent of tax levy decrease to other properties on tax rolls caused by effect of DNR project (tax year 1972)	(0.0088%)
Corresponding tax amount and percentage increase for past years: (See Table E–3; there would have been insignificant small increases since the Town of Angelo enhancements in assessed valuations came only in 1972 and removals started in 1968. Other TAD's without removals but having enhancements would have had decreases, see Table E–2A.)	

*Based on net amounts of assessed valuations removed from and enhanced in the tax rolls because of DNR ownership (see amounts in Table ES–1 minus amounts in Table ES–2A for Town of Angelo). For 1972, base dollar amounts of equivalent assessed valuations: $374, entire DNR ownership (no disposed personal property assessed valuations to add) minus $967 from enhancement of taxable properties attributable to state trail influences, equals net gain (+) of $593 for general property assessed valuations added to the tax rolls. Since additions ($967) exceed removals ($374) the $593 **must be evaluated** in the taxation data for the school district and tax assessment district directly involved **on a basis of what levies would have been without the $593 inclusion.** (Base data used in this analysis included the $967 and excluded the $374 amounts of assessed valuations.) This is a synthetic evaluation since property owners of the $967 assessed valuation did in fact pay the tax levies; this exercise simply evaluates what additional amounts other property owners would have had to pay if the DNR influences had not existed to cause enhancement values ($967) and the assessment removals ($374).

No DNR payments-in-lieu of taxes were made through 1972 and do not come into this evaluation.

**Primary emphasis of this evaluation centers on the Town of Angelo since it alone of all tax assessment districts involved with this state trail area had taxable properties removed from the tax rolls (through 1972) and also had increases in tax-assessment valuations generated by the DNR ownership.

Parentheses on numerical figures indicate an evaluated decrease in amounts of tax levies.

TABLE ES-5. Land Use and Reduced Annual Production Caused by DNR Ownership

(and)

TABLE ES-6. Value of Reduced Annual Production Caused by DNR Ownership

Only 83.5 acres of acquired lands for this DNR ownership were from farm units, including only 17.3 acres involved in analyses of this research study. These 17.3 acres were on the fringe of the farm adjoining crop fields and were inaccessible for livestock grazing. Its sandy soils afforded only unproductive low vegetative cover plus scrub jack pine trees. It was not a producing area in the farm business. And, the other 66.2 acres (of the 83.5) acquired by DNR in July, 1972, although producing in a farm business, come into consideration for year 1973 (the year following coverage of this research study). All other lands in the DNR ownership, 492.7 acres, were from the abandoned railroad bed and were not in productive use for some years before being acquired by DNR.

Therefore, there is no need or opportunity to evaluate the land use, production and value of reduced production to private enterprise as affected by change in ownership for this DNR trail development project.

TABLE ES–7. Value of Annual Trade From Nonlocal Users of DNR Ownership Area – 1972

NUMBER OF BUSINESS ESTABLISHMENTS HAVING TRADE FROM THE AREA			72*
1. Number of business accounts evaluated		42	
2. Number of businesses appraised by projections from "1"**		30	
3. Types of business establishments:			
a. Gasoline station	20		
b. Tavern & light foods	9		
c. Tavern & restaurant	3		
d. Tavern	8		
e. Restaurant	6		
f. Restaurant & bar	5		
g. Grocery store	5		
h. Motel	5		
i. Motel & restaurant	1		
j. Motel & restaurant & bar	1		
k. Hotel	1		
l. Drive-in – food & soft drinks	3		
m. Hardware store or similar type store	2		
n. Bike rentals (large number & substation outlets) & pet shop	1		
o. Bike rentals (small number, no substations) & soft drinks	1		
p. Drug store	1		
TOTAL	72[1]		

INCOME EVALUATIONS FOR THE 72 BUSINESS ESTABLISHMENTS RECEIVING TRADE FROM THE DNR AREA USERS

1. Total Gross Sales	$5,377,275[1]	(range/establishment:$600 – 236,000)
a. Avg./establishment	74,684	
b. To DNR area users	295,129[1]	(range/establishment: 200 – 19,000)
(1) Avg./establishment	4,099	
2. Total Net Income	840,172	(range/establishment: 200 – 36,000)
a. Avg./establishment	11,669	
b. From DNR area users' trade	54,104	(range/establishment: 30 – 6,900)
(1) Avg./establishment	751	

*Approximately 16 additional business establishment operators with no DNR trade, or such small amounts that inclusion was not warranted, were visited in the procedure of determining the perimeter for nonlocal trade from users of the state ownership.

**Information from operators of businesses evaluated provided bases for the location and types of concerns used in the projections; also brief checking was done with the operators of some of these establishments.

[1]General location of the business establishments: Villages–Kendall, 11; Wilton, 10; Norwalk, 9; Union Center, 1; Cities–Sparta, 21; Elroy, 12; and five Towns, 8. The state ownership and the business establishments studied are within three school districts: Sparta, Norwalk-Ontario, and Elroy-Kendall-Wilton.

TABLE ES-8A. Development Costs for DNR Ownership

Major development costs by DNR through 1972 have been for trail surfacing, trail bridge improvements, restoration of the old railroad depot at Kendall, and camping area facilities. Work started in 1967 and these five cost items totaled approximately $75,000.[1]

The majority of these DNR initial development costs were for materials purchased outside the local area and for labor. For this study labor costs are excluded in estimating net income benefits to local business firms from trade generated from DNR project developments. Consequently, only approximately 46 percent of all DNR expenditures were for materials and related services supplied by business concerns in the local area. None of the firms were in the local community as defined in this study.[2] The annual recurring expenditures for maintenance and operations of the trail also benefit local area business concerns that supply goods and services.

Conclusions from the following data indicate that average annual net income (benefits) to business concerns in the local area amount to an equivalent of $908.

[1]This amount is approximately 80 percent of total expenditures through 1972-73 fiscal year. Other important developments include: area planning and landscaping, trail signing, and repairs to trail tunnel doors.

[2] Local area includes entire school districts (3 involved with trail land locations) that include the DNR ownership. Local community is that part of the town(s) within the school district(s) involved and embracing the DNR properties. Ironically, the business firms involved here are near the state trail but none of the land acquired by DNR came from the same municipalities in which these firms are located.

TABLE ES-8A (Cont.)
Income to Business Concerns in the Local Area
(From Trade Generated by DNR Project Development Expenditures and Operations)

Year	Gross*	Net	Equivalent Average Annual Net Benefits**
FROM INITIAL DEVELOPMENT EXPENDITURES			
1967	$10,960	$2,740	$271
1968	6,249	1,562	155
1969	12,280	3,070	317
1970	1,600	240	17
1971	1,637	246	18
1972	1,903	451	10
Total	34,629	8,309	788
FROM ANNUAL RECURRING EXPENDITURES (MAINTENANCE AND OPERATIONS)			
Annual	600	120	120
TOTAL AVERAGE ANNUAL NET INCOME (BENEFITS)			908

*All kinds of labor costs are excluded; basically inclusions cover materials, manufactured goods and supplies, and equipment use.

**At prices paid in year of expenditure, and 7 percent simple interest rate compounded annually. Trail surfacing expenditures are computed at 75 percent into perpetuity and 25 percent for an estimated maximum life expectancy of 7 years; all other materials have an estimated life expectancy of 50 years. Net incomes from cost expenditures are amortized over the life expectancy period of years for the materials and structures involved.

TABLE ES-8B. Equivalent Labor Employment Opportunities Affected

Through 1972 no lands acquired for the DNR ownership were removed from agricultural production. The 17.3 acres of farm land acquired in 1967 were not a producing area in the farm business. The other 66.2 acres acquired in July 1972 was a producing area in the farm business yet that year, which is the last year covered by this research study. Therefore, in this study no displacement of farm labor opportunities was caused by the DNR ownership.

Under DNR operations this state trail annually requires a relatively small amount of labor. A DNR maintenance crew of 4 to 5 men service the trail plus other DNR ownerships. An estimated 0.25 man-years of employment is accounted for on the trail ownership. However, the maintenance crew is headquartered some distance away and the local area employment situation is not affected.

Local area employment sources were used on many of the development works (campground, erecting signs, depot restoration, bridge improvements and fencing). These development works were carried out from 1967 through 1972 during which time an equivalent of approximately 7 man-years of labor was used. The DNR superintendent of the trail resides in the local area and about 0.25 man-years of his time is for the trail area.

In summary, labor employment opportunities have been increased by this ownership; however, on a recurring annual basis the effect on the local area labor supply is small.[1]

[1] Added labor needs are anticipated in connection with major repairs to the tunnel entrances and doors. This will probably be done in 1974-75 fiscal year at a cost of approximately $140,000, much of which will be for labor expenditures. However, this will be one-time labor input and not annually recurring.

TABLE ES-8C. Road, Protective Service and School Costs Affected by DNR Ownership

Roads

No public roads have been closed or newly constructed because of the DNR ownership. Therefore, no increases or decreases in initial road costs or in operation and maintenance result because of the DNR ownership.

Protective Services

Use of the DNR ownership (all recreation) has involved no appreciable added requirements for protective and law enforcement services from any nonstate officers. Also, previous uses of lands (abandoned and idle railroad properties) had no such requirements that were reduced because of DNR ownership.

The county sheriff's department and village peace officers are called when injuries happen to trail users or occasionally when local residents become suspicious or observe wrongdoings on the trail. However, these services from local units of government are infrequent and occur no more than 4 to 6 times in a year. The "wrongdoings" are usually caused by people who live in the local area rather than by nonlocal trail users. Therefore, the services of officers may be considered only as incidental to the trail.

School Costs

No changes in the mileage, or difficulty or ease in bussing school children from the local community(s) have come about because of the DNR ownership. Also, no changes have resulted in the number or age group of children from residences in association with lands now in the DNR ownership. In fact, only one residence, now vacant, is directly involved with the land acquisition for the ownership, and no children of school age resided there. Therefore, advent of this DNR trail ownership has neither decreased nor increased these types of costs for schools serving the local communities that embrace the ownership.

TABLE ES-8D. Land and Water Conservation in the Watershed

This DNR ownership is in the upper drainage areas for three rivers. The western part drains to the LaCrosse River, the middle parts to the Kickapoo River and the eastern part to the Baraboo River. Since there are valleys with steep slopes to the ridge tops, any construction of major roadways invariably leaves cuts in the landscape that are difficult to stabilize against erosion. Drainage ditches along the roadways have reaches that almost annually fill with silt and sediment beyond their capacities and other reaches that continuously afford stabilization problems. The Elroy-Sparta trail area is no exception. The same places along the trail bed that were troublesome for 75 to 100 years for the railroad maintenance crews are still problems. It is not uncommon for parts or all of entire steep slopes to slide onto the trail, undoubtedly caused by the freezing and thawing process plus untimely heavy loads of surface water and infiltration. Lesser amounts of eroding materials cause plugging of drainage ditches on the up-side of the trail and waters flooding across the trail cause eroding of trail banks on the lower side. Again, this is not a new circumstance and it has repeatedly happened over past years.

Although difficult to prove conclusively, it appears that more protection and less erosion prevails now than was true before DNR acquisition of the trail area. There is more volunteer vegetative growth immediately adjacent to the trail itself than was the case when the railroad was in operation and such vegetative growth was purposely suppressed. This vegetation reduces the extensiveness of the soil washouts even though it reduces the effectiveness of some reaches of the roadbed drainage ditches.

It appears that this DNR ownership is not contributing to more watershed hazards and damages than before its acquisition. If there is some difference in the "after" as compared to the "before" DNR ownership conditions, it is on the side of reduced contributions of flood waters and eroded soil materials to watershed problems. There is no evidence that foot traffic and wheel traffic from the trail users have in any appreciable respect caused increased soil erosion that would add to on-site or watershed problems.

ES-1
ES-2
ES-2A
ES-3
ES-4
ES-4A
ES-5
ES-6
ES-7
ES-8A
ES-8B
ES-8C
ES-8D
ES-9

TABLE ES–9. Some Comparative Summary Items

1. Assessed Valuations of Taxable Properties Affected by DNR Ownership (by percent of total for time intervals over the first 7 years of the project, 1966-1972):

Years of Project	Percent of Total Acres	Real Estate	Personal Property	Total
Decreases in the Tax Rolls Attributable to DNR Real Estate Property Acquisitions and Related Taxable Personal Properties				
In first 2 years (1966-67)	100	$ 374*	$ –	$ 374
In 7 years**	100	374	–	374
Increases to the Tax Rolls Attributable to Influences of the DNR Ownership				
In first 5 years (1966-70)	None	–	–	–
In first 6 years (1966-71)	51	5,650	410	6,060
In first 7 years (1966-72)	100	10,108	1,669	11,777

*Involves 17.3 acres of real estate property removed from the tax rolls.

**In the 7th year (1972), 66.2 acres of real estate properties were acquired with assessed valuation of $1,400 to be removed from the tax rolls in 1973.

2. Increased Tax Levies on Tax Assessment Districts Affected by the DNR Ownership

(Taking into account taxable properties acquired by DNR and removed from assessment, and increases in assessed valuations attributable to influences of the DNR ownership, year 1972)*

	Increased Tax Levies: With Only Assessed Valuation Removals	Increased Tax Levies: With Assessed Valuation Removals and Increases
Total amount (all tax assessment districts)*	$13.31	($22.53)
Amount for TAD containing DNR ownership**	3.70	(7.20)
Amount for other TAD's (re: school district involved)	9.61	(15.33)
Amount for local community containing DNR ownership[1]	3.70	(7.20)

*This analysis provides synthetic data reflecting what the tax levies amount to for the additional (net) assessed valuations on the tax rolls caused from the influence of DNR ownership. The amount(s) is a gain to the TAD and all tax payers in it, except those property owners who in fact paid more taxes because of their enhanced assessment valuations.

This gain ($22.53) comes from evaluating taxation data for one school district (Sparta) and one TAD therein (Town of Angelo, Monroe county) where tax assessment removal from the tax rolls was $374 and trail (trade) influences accounted for $957 enhanced tax assessed valuations to the tax rolls–a net gain of $593 in tax assessed valuations. The entire picture was not evaluated, but data in Table 2A will support an estimate for total gains of more than 18 times the amount shown here. (Total added property assessed valuation by 1972 was $11,777 and less the $967 used here is $10,820 or roughly 18 times larger than the $593 amount.) Parentheses on numerial figures indicate an evaluated decrease in amounts of tax levies.

Aggregate assessed valuation base for school district involved (Sparta): $55,917,756 (at full equalization value: $71,016,000).

**Only one tax assessment district (TAD), Town of Angelo is involved with DNR acquired properties removed from the tax rolls and also having assessed valuations enhanced on other properties as generated by the DNR ownership.

[1]Local community–those parts of the school district which lie in the TAD containing the DNR ownership, in this instance it is all of the Town of Angelo since it is entirely in the Sparta school district; aggregate assessed valuation base: $3,154,995 (at full equalization value: $3,890,100).

3. **Production factors and income changes regarding DNR ownership**

   a. No reductions in farmer-harvested acreages or livestock through 1972.

   b. Net annual increase of local employment: in local area source, 0.25 man-years, but none in local community.

4. **Changes in community public services and costs, and watershed protection:**

   a. No reductions or increases in road maintenance costs, and only a very slight increase in protective and law enforcement services and costs. No changes in school bussing and costs because of the DNR ownership.

   b. None or only slight favorable changes in conservation of natural resources and protection of the watershed. Trail maintenance has prevented deterioration of protective vegetation and structural measures which tend to retard soil erosion and damaging flood waters.

5. **Net Balances (Annual, 1972)***

	Local Area**		
	Local Community[1]	Other[2]	Total
Increased taxes:[3]			
School purposes	\$(0.89)	\$(15.33)	\$(16.22)
Nonschool purposes	(6.31)	0	(6.31)
Subtotal	(7.20)	(15.33)	(22.53)[3]
Loss of land-use income	0	0	0
DEBITS	(+) 7.20	(+) 15.33	(+) 22.53
Net income to merchants:			
By annual trade from trail users	11,939	42,165	54,104
By annual trade from trail operations	–	120	120
Net income to business concerns:			
By trade from project development expenditures	–	788	788
CREDITS	(+)11,939	(+)43,073	(+)55,012
NET BALANCE (Annual, 1972)	(+)11,946	(+)43,088	(+)55,034

*Necessarily separations of data are made by parts of the "local area" in keeping with the definition for "local community" used in this research study and explained in the following footnotes. However, the state trail actually extends from the edge of the city of Elroy northwesterly to the edge of the city of Sparta and goes through three villages, namely, Kendall, Wilton and Norwalk. In usual considerations all "credits" data pertain to the local communities of business establishments near the trail and receiving trade generated from this DNR ownership.

**By definition used in this study "local area" encompasses the entire school district(s) that includes the DNR ownership. Three large school districts are involved, namely, Elroy-Kendall-Wilton, Norwalk-Ontario, and Sparta. These three school districts include tax assessment districts (towns, villages and cities) in 3 counties, namely, Juneau, Monroe and Vernon, but the DNR trail ownership lies only in some of their TAD's in Juneau and Monroe counties. Since these school districts encompass so much area beyond the boundaries of the DNR ownership almost all economic considerations in this study relating to the trail area (especially trade generated by the DNR ownership to business establishments) fall within the "local area" and tabular space to show data for "other assessment districts" is not necessary.

[1]By definition used in this study "local community" is that part of the Town(s) within the school district(s) involved and embracing the DNR properties. Location of the DNR ownership is determined by TAD's in which lands were acquired, therefore, the local community is limited to the following TAD's in Monroe county: Towns of Angelo, Clifton, Glendale, Ridgeville, Sparta, Wells, and Wilton, and the Village of Wilton; and in Juneau county: Town of Plymouth.

[2]Includes other TAD's located within the local area explained under 1 above.

[3]Parentheses on numerical figures indicate an evaluated decrease in amounts of tax levies (see Table ES–4A) and the amounts are equivalent taxes that would have been levied against other properties on the tax rolls if DNR ownership influences had not existed to cause net gains in assessment valuations on the tax rolls. Thus, they become negative debits (i.e. like credits). The subtotal amount (\$22.53) would probably amount to over \$400 if all enhanced assessment valuations shown in Table ES–2A were evaluated as was done for the Town of Angelo, in the Sparta school district. Since such larger amount is still relatively small compared to credits shown herein, computations of the detailed evaluations for all enhanced assessements were considered unwarranted.

DISCUSSION AND CONCLUSIONS

Contents of this section are presented in somewhat the same order by topics as followed in the "results" section. Three summary tables are presented for ready reference.

TAX CHANGES AFFECTED BY DNR OWNERSHIP

Removal of assessed valuations from a municipality's tax rolls for taxable properties affected by DNR ownership can cause added tax burdens to other property owners. However, the extent of increased tax burdens and their incidence in respect to tax assessment districts (TAD's) involved with properties acquired by DNR depend on several considerations. Three major considerations are brought out in this research study: (1) the payments-in-lieu of taxes made by DNR to the taxing municipality (Town) in which the DNR ownership is located, (2) the school district and the local community (i.e. the part of the Town and school district) in which the DNR ownership is located, (3) the enhanced assessed valuations, of properties on the tax rolls, generated by advent and operations of the DNR ownership.

It is clearly evident that under present statutes payments-in-lieu of taxes by DNR cannot alleviate added tax burdens throughout the school district. Even if such annual payments were made in full for all loss of assessed valuations from the tax rolls, only the tax assessment district (TAD) containing the DNR ownership could be fully compensated since no allocations of such aids are made to other TAD's in the school district. Furthermore, another circumstance favors the TAD containing the DNR ownership in that reduction of assessed valuations for only that TAD and not for others in the school district reduces the allocated share of the total school district levy to that one TAD. In 1972, for the 6 DNR ownerships studied, those TAD's of the school district which did not contain any part of the DNR ownership assumed from one-third to three-fourths of the total equivalent increased tax levies caused by removal of the DNR ownership from the local tax assessments. This was the case without compensations by any payments-in-lieu of taxes by DNR or by other compensations from enhancement of assessed valuation on the tax rolls coming about because of the DNR ownership.

When these two compensations were included not only was there a benefit from reduction in the net increase of tax levies, but the TAD containing the DNR ownership usually absorbed most of it, especially if the benefit stemmed primarily from payments-in-lieu of taxes. For example, the data herein show that without consideration of any compensations the Albany Wildlife Management area had $2,061 of equivalent increased tax levies and 37 percent ($763) of it was absorbed by other TAD's not containing any of the DNR ownership. When compensations were included the equivalent increased tax levies were reduced to $1,303 but the other TAD's absorbed 59 percent (still $763) of this total amount (Table D-C1).

In some cases, the compensations completely offset any increases in tax levies in the local community or even reduce the tax levies from what they would have been without the DNR ownership, while the other TAD's almost entirely absorb the equivalent net increase in tax levies. For example, in the case of the Plover River Fishery area in 1972 without any compensations considered the increase in equivalent tax levies was $950 and 70 percent of this amount fell to other TAD's, but with compensations the equivalent levy amount was reduced to $663 with over 99 percent of it being absorbed by the other TAD's. In this case the DNR ownership was in two TAD's and for one of them properties continuing on the tax rolls had an increase in their tax levies of only 0.0291 percent while in the other TAD tax levies had a small equivalent reduction of 0.0494 percent.

Irrespective of where the incidence of any added or decreased tax burden falls between tax assessment districts affected by the DNR ownership, this study shows that the net effects of tax impacts on properties continuing on the tax rolls is relatively small. This is understandable because the amount of assessed valuations for taxable real estate and personal properties affected by the DNR ownership and removed from tax assessment is, for all 6 ownerships studied, no more than one-half of one percent of the total assessed valuation for the school district in which the ownership is located. And, school purpose tax levies constitute from 54 to 75 percent of total tax levies on real estate and personal properties for the TAD's where these ownerships are located (Table D-C1).

Furthermore, in no case does the amount of assessed valuations removed from tax assessment account for more than around 5 percent of the total assessed valuations for the local community in which the DNR ownership is located—in fact, in 4 of the 6 ownership cases it was less than 1 percent (Table D-C1). And, nonschool purpose tax levies constitute from 25 to 46 percent (the counterpart with school purpose levies) of the tax levies. These large base aggregate assessed valuations permit relatively small subtractions without an appreciable increase in tax burden on the remaining major part of the whole. In addition, the compensations stemming from the DNR ownership, by payments-in-lieu of taxes by DNR and/or enhanced assessed valuations on the tax rolls, usually have their greatest beneficial effects in reducing tax levy burdens at the local community level.[1]

Methodology was developed in this study for realistically expressing tax levy impacts resulting from changes of amounts of assessed valuations in tax assessment and school districts affected by a DNR ownership. This involves determining a percentage from a comparison of the tax levies with and without inclusion of the amount(s) of assessed valuation for those properties removed from and those properties enhanced in the tax rolls, and with and without offsets in needed tax levy amounts from payments-in-lieu of taxes made by DNR. In effect, therefore, the result from application of the percentage figure to an annual amount of tax levy (current for 1972) gives the part caused by effects from the DNR ownership. For example, if a gross tax bill is $1,000 and this type of percentage figure is 0.5021 it can be computed that $5.02 of these taxes are because of effects of the DNR ownership.

This percentage varies between local communities that contain the DNR ownerships (Table D-C1). It also varies by years for any one local community. These variations exist both with and without inclusion of offsetting compensations that reduce the size of the percentage figure (i.e. inclusion of payments-in-lieu of taxes and enhanced assessed valuations of properties on the tax rolls affected by the DNR ownership).

For 1972 tax year the percent tax increase, considering all compensations, is greater for the local community containing Lake Kegonsa State Park than for any other DNR ownership area studied. It is 2.143 percent. Without compensations included it amounted to 2.696 percent. There were no offsetting compensations by payments-in-lieu of taxes for this ownership after 1963. The next largest tax increase is in the local community containing the Collins Wildlife Management Area with 1.681 percent when offsetting compensations are included (payments-in-lieu of taxes) and 2.151 percent without the compensations.

At the other extreme is the Elroy-Sparta State Trail ownership where the local community has a decrease in tax levies of 0.0088 percent when offsetting compensations are included and only an increase of 0.0045 percent without the offsets. However, this DNR ownership is hardly comparable with the others studied since so small an amount of assessed valuation was removed from the tax rolls and there were sizable amounts of enhanced assessed valuations affected for added tax assessments (even though there were no payments-in-lieu of taxes).

However, among the other three ownerships studied, the main local community (in Town of Plover) containing the Plover River Fishery Area has a low percentage increase in taxes as affected by the ownership of only 0.029 percent with offsetting compensations included and 0.3292 percent without the offsets (i.e. payments-in-lieu of taxes).

For the main local community (Town of Albany) regarding the Albany Wildlife Management Area, this percentage increase in taxes is 0.256 percent with offsetting inclusions and 0.5313 without offsets. Similarly for Lake Wissota State Park area these respective tax increases are 0.502 percent and 0.5623 percent.

Some data in Table D-C1 result from computations developed in an attempt to explain a causal pattern for the percent of tax increase (or decrease) to the local community embracing the DNR ownership. Is the tax increase greater as net amounts of assessed valuations removed from the tax rolls are a larger part of the total assessed valuation (full value equalization) of the school district and of the TAD(s) directly involved with the DNR ownership? Does it have a meaningful relationship with any applicable offsetting compensations and any other influencing aspects of the taxation complex? For example, the Lake Kegonsa State Park local community, among the 6 ownerships studied, had the largest percentage of increased taxes as affected by the DNR ownership, but it ranks only third among the 6 ownerships for percent of local community assessed valuations removed from the tax rolls and second for percent of the amount of total school district assessed valuation accounted for by the local community. In these same respects the Collins Wildlife Management Area local community, with the second largest percent of increased taxes, ranks first or third for the other factors covered above for the Lake Kegonsa ownership. Furthermore, for three of the other four ownership areas studied most of the percentage amounts for these four considerations are smaller than for the Lake Kegonsa and Collins ownership areas. One major exception regards the Albany Wildlife Management Area where percent of the total school district assessed valuation accounted for by the local community is the largest among all six areas, however, this is offset somewhat by the larger percent of the school districts assessed valuation removed from the tax rolls. Also, there are exceptions for the Lake Wissota State Park area.

The conclusion from this information is that, although the relationship is explainable as to factors causing high or low increases in tax levies of the local community as affected by the DNR

[1]In most instances the local community in which the DNR ownership is located accounts for a large part or all of the TAD directly involved. Thus, the local community is a major recipient of compensations from DNR payments-in-lieu of taxes made to the TAD (Town). The exception is where only a small part of any enhanced assessed valuations benefits the local community because the business establishments from which they stem are located elsewhere in the local area.

TABLE D-C1. Selected Summary Data from the Study (1972)

	State Park		Wildlife Management Area		Fishery Area	State Trail
	Lake Kegonsa	Lake Wissota	Albany	Collins	Plover R.	Elroy-Sparta
First year of land acquisition	1962	1962	1957	1959	1951	1966
Acres in project—1972	342.81	1,044.05	1,082.62	3,823.37	949.68	576.26
Acres removed from tax rolls	328.15	927.75	952.62	3,629.66	929.68	17.3
Assessed valuation removed from tax rolls	$ 77,971	$ 113,624	$ 67,439	$ 311,007	$ 16,015	$ 374
Real estate	70,680	111,350	55,824	259,398	16,015	374
Personal properties	7,291	2,274	11,615	51,609	0	0
Assessed valuation generated for tax rolls	15,990	0	0	0	0	967
Real estate	14,296	0	0	0	0	967
Personal properties	1,694	0	0	0	0	0
Net Assessed valuation removed from tax rolls	61,981	113,624	67,439 64,214*	311,007	16,015 14,665**	(593)
Percent of total for local community	0.54 %	1.85 %	0.53 % 0.768*	5.2 %	0.086 % 1.188**	+0.36%
Percent of total for school district	0.0941	0.085	0.23 0.439*	0.56	0.018 0.017**	+0.02
(at equalization value)	0.1073	0.1162	0.2021	0.4824	0.0307	—
Increased tax levies						— 1 —
Total without compensations	3,555	4,053	2,061	9,937	950	13
With payments-in-lieu of taxes	— 5 —	3,902	1,303	8,794	663	— 5 —
With all compensations	2,825	3,902	1,303	8,794	663	(23)
For TAD's including ownership	1,097	1,245	540	4,036	1	(7)
For local community	1,056	1,096	560	3,456	1	(7)
For other TAD's involved	1,728	2,657	763	4,762	662	(15)
Percent of total increase	61%	68%	59%	54%	99%	65%
Loss of land-use income	7,904	7,091	7,330	11,676	2,194	0
Annual net income generated by DNR area to local businesses	24,935	24,319	3,652	12,974	5,373	55,012
Within TAD's including ownership	10,384	3,379	0	4,762	0	11,939
To local community	10,384	3,379	0	4,762	0	11,939
Within other TAD's involved	14,551	20,940	3,652	8,212	5,373	43,073

TABLE D-C1. (Cont.)

	State Park		Wildlife Management Area		Fishery Area	State Trail
	Lake Kegonsa	Lake Wissota	Albany	Collins	Plover R.	Elroy-Sparta
Net Balance (Credit (–) Debits):						
For TAD's including ownership	(+) 1,383	(–) 4,957	(–)7,870	(–)10,946	(–)2,195	(+)11,946
To local community	(+) 1,424	(–) 4,808	(–)7,890	(–)10,370	(–)2,195	(+)11,946
For other TAD's involved	(+)12,823	(+) 18,843	(+) 2,889	(+) 3,450	(+) 4,711	(+)43,088
Total Net Balance	(+)14,206	(+) 13,886	(–)4,981	(–) 7,496	(+) 2,516	(+)55,034
Aggregate assessed valuation on tax rolls						
Total for school districts involved	65,824,803	133,060,000	29,025,515	55,614,267	83,886,894	55,917,756
TAD's including ownership	12,101,557	7,111,711	14,253,578	7,223,710	1,852,125	3,154,995
Local communities involved	11,355,746	6,119,945	12,740,445	5,985,130	1,852,125	3,154,995
Percent of school district(s)	17.3%	4.6%	43.9% 57.4	9.8%	2.2 % 1.47	5.6%
(Percent on equalization value basis)	20	6	37	9	4	5.5
Percent aggregate assessed valuation of full value	47.603%	55.380%	74.512%[2&4]	76.682%	37.328%[3&4]	81.1031%
Payments-in-lieu of taxes	0	151	758	1,143	287	0
Percent increase in taxes for local community:[1]	Re: 1 TAD	Re: 1 TAD	Re: 2 TAD	Re: 1 TAD	Re: 2 TAD	Re: 1 TAD
Without payments-in-lieu of taxes	2.696%	0.5623%	0.5313 0.0373	2.151	0.0652 0.3292	0.0045
With payments-in-lieu of taxes	2.696	0.5021	0.2562 0.0153	1.681	(0.0494) 0.0291	0.0045
Plus other compensations	2.143	0.5021	0.2562 (0.0153)	1.681	(0.0494) 0.0291	(0.0088)
If at 50¢/acre (now 30¢ in 1972)	– 5 –	– 5 –	0.2000 (0.0153)	1.321	(0.126) (0.169)	– 5 –
Percent school taxes of total taxes (Re: local community)	75.5	69.7	58.6*	54.0	70.0**[4]	70.5

*Town of Albany, Green County

**Town of Plover, Marathon County

[1]Parenthesis indicates a gain rather than a loss

[2]Involves 2 Towns; one at 91.604 and one at 58.353

[3]Involves 2 Towns; one at 41.638 and one at 30.925

[4]Weighted average

[5]Not applicable since no land acquisitions came under statutory provisions for payments-in-lieu of taxes on a per acre basis.

ownership, a pattern could not be formulated to follow in helping to approximate the amount of percentage increase. In short, it appears that each affected local community has its own taxation complex insofar as changes caused by the DNR ownership are concerned. While the type and direction of effects can be predicted, the amounts of tax impact cannot be approximated without computations such as those carried out in this study.

DNR OWNERSHIP INFLUENCES ON TAXES FOR SURROUNDING PROPERTIES

Diligent search was made in regard to all 6 projects studied to determine any effects of the DNR ownership on assessed valuations of real estate properties in the local community. The positive indirect effects have been covered in statements above about increased valuations for business establishments receiving trade from the DNR ownership. No cases could be found where assessed valuations had been increased for properties located adjacent to or near the DNR ownership if no changes in use or sales of such properties had been made since advent of the DNR project. Assessments (through 1972) have not been increased because of the DNR ownership. Information gained from work sheets, finalized records and verbal statements of Town assessors verified the accuracy of this finding of no enhancement in assessed valuations.

However, there is an understandable misconception by some people that the DNR ownership has intrinsically caused increased assessed valuations of nearby properties. And, there have been many opportunities for incorrectly correlating the advent or enlargement of a DNR ownership(s) and noticeable increases in assessed valuations throughout the local communities. But for the most part there is no relationship between these two circumstances. In the past decade for most of the TAD's including the local communities studied, assessors have made one or more (some as many as 4) increases in assessed valuations by applying uniform percentage amounts to the current values or in some cases by reappraisal of all real estate and improvements throughout the entire tax assessment district. But, this is normal in the taxation process whereby added tax revenues are needed and result from a function of tax rate levies applied on assessed valuations and when the level of aggregate assessed valuations in relation to full valuation for equalizing purposes between TAD's has become an important consideration in connection with various tax allocation and state aide programs. Furthermore, real estate property values have increased greatly throughout the state in the last decade irrespective of state-owned land, and this has accounted for some of the misconceptions regarding impacts of a DNR ownership.

Two circumstances stand out among a large number accumulated in gathering information for the conclusion that DNR ownerships have not intrinsically caused increased assessed valuations of nearby properties. These circumstances make it understandable that enhancement of valuations because of property location near a DNR ownership can easily be misconceived when facts are not researched. In both instances new, small residential developments directly overlook a DNR ownership and are practically adjacent to the project boundaries. Many thousand dollars of assessed valuations have been added to the tax rolls because the land use changed from agricultural (crop and woodland use) to residential and improvements (the houses) were developed. From interviews with 75 percent of all owner-residents in these developments it was learned that not one of them was attracted to the development because of the nearby DNR ownership. No mention was made of the DNR area by real estate brokers dealing with these owners either before or at the time of sale and purchase. Furthermore, in one of the developments only one resident-owner knew that the DNR ownership was there. And, in the other development, all residents knew about the DNR ownership but it had beenof no influence on their selection of a locationto live. Also, some of these owners believed the dead trees and often-times stagnant waters (on the nearby impoundment reservoir part of this DNR wildlife management area) were a definite liability to their residential properties. Furthermore, adjacent farm lands could provide equally good sites for residential developments, but the assessed valuations for these agricultural lands have not been increased except as valuations have been raised throughout the entire tax assessment district. Both of these developments were started within the last six years and no other similar type developments or separate residences could be found that even gave visual promise of having some influence from a nearby DNR ownership.

FARM LAND USE AND PRODUCTION AFFECTED BY DNR PROJECT

In 5 of the 6 ownerships studied farm lands were removed from agricultural production following DNR acquisition. Through 1972 the Elroy-Sparta Trail ownership was the exception, but it too will cause reduced farm production starting in 1973.

There is no general rule as to how much farm land, agricultural production and annual net farm income are foregone by advent of a DNR ownership. Amounts for these considerations depend on the type of land acquired by DNR, its former use and production qualities. It is entirely coincidence, for example, that the average annual net income foregone is relatively the same (over \$7,000 and under \$8,000) for the Lake Kegonsa and Lake Wissota State Park areas and the Albany Wildlife Management Area (Table D-C1). The acreages of field crops and grazing lands removed from production varied greatly between these 3 ownerships as did the cropping patterns, unit levels of production and various years when foregone production initially occurred. Furthermore, in two DNR ownerships some of the acquired farm lands have been continued in farming use but on an arrangement whereby part of the crops are left for wildlife food.

Two conclusions are evident. First, in all 6 DNR projects farm lands were acquired and in most of them the annual net farm income foregone is significant, ranging from around $2,200 to $11,700 for 5 of the 6 DNR ownerships studied. Second, avoidance of acquiring appreciable acreages of high producing agricultural lands can reduce annual net income foregone by private entrepreneurs.

Frequently there are alternative parcels of land that may be acquired in fulfilling the purpose of a DNR project. Acquisition of higher producing agricultural land increases the annual net income to be foregone by private entrepreneurs. Therefore, which parcels are acquired and permanently retained in the DNR ownership becomes an important influence in the economic impacts of the project. Very often to obtain desired lower class agricultural lands the DNR has had to acquire entire parcels including higher class, unneeded crop lands. Sometimes, however, the DNR can trade or sell back to private owners those better agricultural lands not needed to meet the project purpose.

There is also an indirect influence on the local area from the permanent reduction in farm lands acquired by DNR. When a sizable part of a farm unit is acquired, that farm cannot support its present numbers of livestock (cattle, hogs, etc.). These unsupported livestock are disposed, and usually it means that when marketed they are removed from the local community. Since these livestock are taxable personal properties their disposal from the local community causes a reduction in assessed valuations on the tax rolls. This happened in 4 of 6 DNR projects studied. (Plover River Fishery Management Area and Elroy-Sparta State Trail ownerships were the exception, but in 1973 the latter area will also have livestock disposal.) In 1972 such assessed valuations ranged from around $2,000 to $51,000, and the largest amounted to 20 percent as much as the real estate assessed valuations for DNR properties removed from the tax rolls (Table D-C1). When there are reasonable alternatives for selection of agricultural lands to be acquired by DNR it is possible to reduce this adverse impact on the local community.

INCOME TO BUSINESS CONCERNS IN THE LOCAL AREA

Three major types of trade are generated from the DNR ownership with business establishments in the local area: (1) cost expenditures by DNR for initial developments on the ownership, (2) cost expenditures by DNR annually for operation and maintenance of the ownership, and (3) expenditures by recreationists using facilities on the DNR ownership. Only the trade from these three sources with business establishments located in the local area or the local community within it was accounted for in determining income benefits caused by the DNR ownership.

Three of the ownerships (Kegonsa, Wissota and Elroy-Sparta) had cost expenditures for initial developments and for operations and maintenance that generated trade with business establishments in the local area. These cost expenditures on the other three ownerships (Albany, Collins and Plover) were not large and generated trade was with business establishments outside of the local area. However, these two types of trade contributed only a small part of the total net income resulting from the DNR ownerships.

Gross trade with local business establishments for goods and services to recreationists using the DNR facilities was sizable in all 6 ownerships. Annual net income for 1972 ranged from $3,652 for all businesses serving the Albany Wildlife Management Area to $54,104 for those in the Elroy-Sparta State Trail local area (Table D-C1). Business establishments in the local areas of the two state parks (Kegonsa and Wissota) had about the same net income from trade of recreationists, $24,019 to $22,737 respectively even though it was spread over nearly twice as many businesses (87) for Wissota than for Kegonsa (47). Plover River Fishery Management Area created trade from its users that provided $5,373 of net income annually to 30 business establishments. The Collins Wildlife Management Area accounted for a total of $12,974 net income to slightly more (36) businesses.

The amount of gross dollars of trade resulting from recreationists on the DNR ownership varies greatly between different establishments. However, as an average for each of the businesses involved the smallest amount was $179 in the Plover River area and it was over $240 for all other areas, reaching $511 for the Kegonsa State Park local area and $751 for the Elroy-Sparta State Trail Area. In total, an accounting was made for 283 business establishments for all 6 DNR ownership areas studied. Collectively their annual gross business from all sources of trade was $33,998,437 with $720,699 of it (2.2%) generated from nonlocal recreationists using the 6 DNR ownership areas. For some business establishments such trade constitutes 20 to 40 percent or more of their entire gross receipts while for others it is only a relatively small amount. In no instance, however, did an owner or operator of a business indicate anything but a favorable attitude toward trade received from the recreationists.

Net income on an average annual basis for trade stemming from the recreationists on the DNR ownerships by far overshadowed the income from cost expenditures for developments and operations of the DNR ownerships. These smaller income amounts were about 2 to 6 percent as much as from trade of the recreationists.

The local community (i.e. that part of the TAD in the school district involved and embracing the DNR properties) does not necessarily benefit (indirectly) from the trade generated from the DNR ownership to local area business establishments. In some cases increased assessed valuations of taxable properties of such businesses have resulted because of the DNR ownership. However, in two of the DNR ownership areas studied none of the benefitting business establishments were in the local community even though they were in the local area (meaning, in other TAD's of the school district(s) involved). This matter becomes important when the entire economic impact, plusses and minuses, from the DNR ownership is evaluated in terms of the local area and the local community. The same is true for location of benefitting trade stemming from improvement and operation expenditures by DNR on the ownerships (Table D-C1).

It is understandable that no pattern of relationship exists between trade received by business establishments and the TAD's directly and indirectly involved with the DNR ownership. No directing of trade knowingly takes place. These economic aspects have not been considered in any preplanning for location of the DNR ownership. However, results of this study do indicate that if alternative opportunities for placement of a DNR project are possible, these types of economic considerations could be taken into account and location of the ownership could materially assist in directing benefits to the same localities that indirectly bear some losses.

INITIAL DEVELOPMENT AND OPERATION COSTS FOR DNR OWNERSHIP

Although initial development costs for some of the DNR ownerships studied, especially in the two state parks, amounted to a few hundred thousand dollars, economic benefits stemming directly from these expenditures to the local area are relatively small. This occurs because contracts for only parts of the installations and needed materials and equipment come from the local area. The same is true for annual operations and maintenance of the ownership in that considerable parts of the needed equipment and supplies are obtained through statewide contracts and do not come through local area business concerns. Furthermore, when initial profits of the firms receiving business from development expenditures are converted into annual terms, the average annual net income is relatively small in comparison to the large gross cost.

Three of the 6 ownerships studied (Kegonsa, Wissota and Elroy-Sparta) had initial development costs that benefitted the local area economy. Exclusive of labor costs, the gross business to firms in the local areas amounted to $63,681 for the Lake Kegonsa State Park which on the basis of average annual net income was $816. Similarly for Lake Wissota State Park, $51,297 of gross costs had average annual net income benefits to local area firms of $1,013, and for Elroy-Sparta Trail these amounts were $34,629 and $788, respectively.

The total gross cost expenditures by DNR have no relationship to how much the economy of a local area is benefitted. For example, the total expenditures for Lake Wissota State Park initial developments were around $600,000 while for the Elroy-Sparta Trail they were approximately $94,000—greater than a 6 to 1 ratio by comparison. But, average annual net income to the local area business firms was less than one-third larger for the Lake Wissota circumstance. Basic data for this example also reveal that there is no relationship between the total expenditures made for initial developments and the amounts that will go to local area business firms—for Lake Wissota it is less than 9 percent and for Elroy-Sparta it is approximately 37 percent. In the Collins Wildlife Management local area practically none of the initial development expenditures, although relatively small (about $49,000), went to local business firms and consequently caused no benefits to the local area economy.

Operations and maintenance expenditures made annually with local area business firms are either small or for some of the ownerships too insignificant to be evaluated in this study. For three of the 6 ownerships (Albany, Collins and Plover) the amounts were insignificant. For the other three ownerships (Kegonsa, Wissota and Elroy-Sparta) two were in the range of $500 to $600 and the other was only $2,845. These expenditures add from $100 to $569 of annual net income benefit for the business establishments receiving the DNR trade.

Adding the average annual net incomes of local area business concerns from trade because of initial development costs and operation costs for the DNR ownership gives only a total of from approximately $900 to $1,600 for any one of the projects studied, and for 3 projects no added net income was gained in the local area. The conclusion is inescapable that these aspects of DNR ownership impacts on the local area economy are relatively small in comparison to many other considerations covered in this study.

ROAD, PROTECTIVE SERVICE AND SCHOOL BUSSING COSTS AFFECTED BY DNR OWNERSHIPS

Only 2 of the 6 projects studied had any changes in public road patterns caused by the DNR ownership. These changes were not extensive and involved abandonment of approximately 1 mile of road and installation of a replacement nearby in the Lake Kegonsa State Park Area. The new mileage is a through-the-area public road as was the one it replaced.

The other change was in the Lake Wissota State Park where approximately six-tenths mile of little used public road was closed and another one-half mile of public road was replaced by park roads.

In neither case are they through-the-area roads. These two stretches of public roads were originally built to serve farm sites but one farmstead had been abandoned before the land was acquired by DNR.

Public road maintenance costs resulting because of the DNR ownerships for 4 projects have not changed because of the DNR ownerships. Such cost changes are small for the 2 projects having some road alterations, and are on the side of less expenditures by local road crews. Consequently this aspect of public costs, affecting impacts on the local community or area economy, was considered as insignificant.

Needed law enforcement and protective services from local government officers have not increased or decreased in any measurable degree with advent of the DNR ownerships. In one project a local nuisance-creating site was eliminated by transfer of properties to the DNR, but only a little extra time from county officers had been given to this area anyway. In no instance did any general information obtained by personnel making this study lead to specifics warranting detailed time and cost analysis. Therefore, this aspect of public cost services was of no consequence.

In only one of the 6 projects were any changes made in school bussing routes as a result of the DNR ownership. The one change comes about by an added stop for a school pupil at a residence which before the DNR ownership had no children. This necessitated approximately 4 miles extra travel each school day with estimated annual cost of less than fifty dollars. Overall for the 6 DNR ownerships this aspect of public costs, affecting impacts on the local community or area economy, was considered as insignificant. Also, no evidence could be found to indicate that any one of the 6 projects had caused any changes in the number or age groups of school children from residences in association with lands now in DNR ownership. Therefore, the school aspect of public cost services was also not significant.

In conclusion, results from this study of the above three types of public costs indicate little or no effects from any of the 6 projects studied. However, closing of through-the-area (DNR ownership) public roads without replacement travel routes, acquiring and abandoning houses with a good number of school age residents, or having DNR ownership users who require attention from local law officers could either add to or reduce local governmental costs. There are reasons to believe the 6 projects studied are a fair sample of many more DNR ownerships and that these types of public-costs are not generally affected, but there well may be exceptions to this general conclusion.

EQUIVALENT LABOR EMPLOYMENT OPPORTUNITIES AFFECTED

Displacement of opportunity for labor employment has not been large in any of the local areas involved. This is loss of labor that was engaged in farming land acquired by DNR and did not exceed an equivalent of over 2 man-years on any of the ownerships except in the Collins project which displaced 4.5 man-years. For Elroy-Sparta ownership no loss of labor was caused. Table D-C2 presents a summary of these losses by DNR ownerships.

TABLE D-C2. Equivalent Employment Affected

	State Park		Wildlife Management Area		Fishery Area	State Trail
Equivalent Labor	Lake Kegonsa	Lake Wissota	Albany	Collins	Plover River	Elroy-Sparta
			Man-years			
New Employment	2 2/3	4.5	0	0	0.2	0.25
Lost Employment	2	1.9	1.7	4.5	0.2	0
NET BALANCE (Annual)	(+) 2/3	(+)2.6	(–)1.7	(–)4.5	0	(+)0.25

Annual employment from local area sources on 4 of the DNR ownerships either equals or exceeds the amounts of displaced employment. The two wildlife management ownerships (Albany and Collins) do not employ from local area sources but labor needs are so small that the losses caused by the DNR ownership would not be offset. On some of the ownerships new employment is also provided annually for employees not residing in the local area (school district(s) involved) and this labor is not included in the above summary data.

The conclusion is apparent that on DNR projects having park-type uses, labor employment opportunities lost with change from private to public ownership are offset or increased. However, on projects having wildlife and fishery management purposes labor employment opportunities are not increased and losses may not be offset. Although not converted into monetary terms in this study, these labor employment losses or gains caused by the DNR ownership no doubt do have some impacts on the local community or area economy.

LAND AND WATER CONSERVATION IN THE WATERSHED

There is no serious soil erosion taking place on any of the 6 DNR ownerships studied. All of the ownerships except the Elroy-Sparta trail have some lands which formerly were cultivated or grazed in farming operations. However, these lands are either without appreciable undulation or were operated under conservation farm programs so that soil erosion was only slight or not occurring at all before DNR acquired them. Although most of these open area lands are now covered with permanent vegetation this added protection to the soils cannot be credited too much for prevention of soil erosion since no serious problems preceded this changed land use. This circumstance also applies for prevention of flood waters and damages to the watersheds in which the DNR ownerships are located.

Three of the DNR ownerships (Albany, Collins and Plover River) have important areas of wetlands and marshes. Some of these areas were formerly grazed at times by farm livestock. Now these low lands are permanently protected which is a definite credit for the change in ownership. However, in another ownership (Lake Kegonsa) some marsh land has been intentionally filled with spoil from nearby dredging operations while other marsh lands on this same ownership are permanently protected. There are no offsetting land protection benefits for eliminating a marsh area even though the purported justification may be for adding facilities at the edge of the filled marsh for lake-based recreational activities. In another project (Albany) serious weed infestations have come on lands that were formerly grazed or cropped. These weeds have favorable values for wildlife cover and food. However, these infested areas normally flood in the spring and the weed seeds are distributed into agricultural lands in downstream parts of the watershed.

Complete inspection of all 6 DNR ownerships revealed that no appreciable damages to the soil-covering vegetation have resulted from recreationists' use of the properties. There are no indications that this will change in the next few years.

The conclusion is that in net effect, despite the isolated instances of damages, watershed conditions changed very little as a result of DNR ownership. The known changes from the standpoint of sedimentation (from soil erosion) and flooding are too small to warrant a detailed evaluation in terms of costs and benefits. There is not now, and was not before DNR ownership, any serious pollution of the lakes or streams from water runoff from the DNR lands.

NET BALANCE

A net balance is included under results for each DNR ownership studied, and each major aspect is covered above under discussion and conclusions. However, those net balance briefs cover credits and debits throughout the entire tax assessment districts involved with the DNR ownership, either from location of the DNR properties in the TAD or because of the school district embracing the ownership. In the overall purview of the main credits and debits in impacts from an ownership presented here, the coverage is limited just to the local area and to the local community. The purpose of this is to finalize broad conclusions and to facilitate comprehension of the results from this study with focus on local impacts from DNR ownership.

For the ownerships studied 3 items on the credit side and 2 items on the debit side can cover the major entries on a balance sheet for the 6 DNR ownerships studied. Additional considerations were taken into account but added costs or benefits generated by a DNR ownership were found to be of no consequence or so small that detailed cost evaluations were not warranted.

LOCAL AREA

The local area, as defined at the beginning of this report, is the entire school district(s) that includes the DNR ownership. Usually the DNR properties are embraced by only one or two tax assessment districts of the several in a school district(s) involved with the DNR ownership. A school district very often involves TAD's which are not entirely included, and frequently a DNR ownership is in one part of a TAD embraced by a different school district than the other part of that same TAD. Thus, there is a difference between net balance of impacts in this section from those in the results sections of this report.

On the credit (plus) side there is one item that appears in the balance sheets for all 6 projects studied, namely, increased net income to merchants by annual trade from nonlocal recreationists using the DNR ownership (Table D-C3). This credit accounts for all or most (91-100%) of the annual net income to local businesses generated by the DNR ownerships. The remainder comes from trade by DNR expenditures for initial developments and operations on the ownerships. Another item on the credit side is payments-in-lieu of taxes. For two of the 6 DNR ownerships (Kegonsa and Elroy-Sparta) there were none of these aids for 1972. For the other 4 ownerships these aids in 1972 constituted from 0.5 percent (Wissota) to 17 percent (Albany) of the total credits. The third item has an entry for only 2 (Kegonsa and Elroy-Sparta) of the 6 ownerships and accounts for reduction in taxes to local taxpayers because of new assessed valuations on the tax rolls stemming from influences of the DNR ownership. This entry is only significant for the Lake Kegonsa State Park area and accounts for about 3 percent of total credits.

A fourth item, not shown in the table, is added employment for local area sources generated by the DNR ownership. In two ownerships (Albany and Collins) no local area labor is affected, and

TABLE D-C3. Balance Sheet for Economic Impacts on the Local Area Caused by DNR Ownership

	State Park		Wildlife Management Area		Fishery Area	State Trail
	Lake Kegonsa	Lake Wissota	Albany	Collins	Plover River	Elroy-Sparta
CREDITS (Plus)						
Annual net income generated by DNR ownership to local businesses	$24,935	$24,879	$3,652	$12,974	$4,689	$55,012
By trade from DNR ownership users	24,019	22,737	3,652	12,974	4,689	54,104
By trade from initial developments and operations	916	2,142	0	0	0	908
Decreased tax levy equivalent due to enhanced valuations to business properties	730	0	0	0	0	35
Payments-in-lieu of taxes	0	131	725	947	287	0
Total	25,665	25,010	4,377	13,921	4,976	55,047
DEBITS (Minus)						
Increased tax levy equivalent	3,503	3,884	2,048	9,165	950	13
Percent of total	31%	35%	22%	44%	30%	100%
Loss of land-use income	7,904	7,091	7,330	11,676	2,194	0
Percent of total	69%	65%	78%	56%	70%	
Total	11,459	11,144	9,378	20,841	3,144	13
NET BALANCE (Annual, 1972)	(+)$14,258	(+)$14,035	(–)$5,001	(–)$ 6,920	(+)$1,832	(+)$55,034

in each of two others (Plover and Elroy-Sparta), only about one-fourth of a man-year of labor is added. However, for two other ownerships (Kegonsa and Wissota) respectively 2 2/3 and 4 1/2 man-years of labor employment are added.

On the debit (minus) side of the balance sheet one item appears for all 6 projects studied, namely, the total increase in tax levy without compensations. A second and the larger debit entry, however, is the loss of land-use income. This item accounts for from 56 percent (Collins) to 78 percent (Albany) of the total debits, except that for one ownership (Elroy-Sparta) the item is not applicable for 1972. Labor loss is applicable to all ownerships except Elroy-Sparta State Trail. This lost employment comes about because of farm lands acquired by DNR and amounts to from 1.7 man-years (Albany) to 4.5 man-years (Collins).

Net balance for each ownership, without monetary inclusions for labor employment credits or debits, indicates that four ownerships (Kegonsa, Wissota, Plover and Elroy-Sparta) have a favorable net effect and two ownerships (Albany and Collins) have unfavorable influences on the economy of the local area. Review of these data brings up several questions: Why do some ownerships have favorable net effects and why do some have unfavorable? What items could significantly change the net balance if they had a smaller or larger magnitude? Are there any practicable opportunities for such changes that might bring more favorable impacts? Brief discussion of information about the ownerships can provide possible answers to these questions.

It is readily obvious as to why the net balance is so favorable for the Elroy-Sparta State Trail ownership: first, a large amount of annual net income was generated by this DNR ownership to local businesses; second, the decreased tax levy equivalent, stemming from influences of the project, amounted to more than the increased tax levy equivalent caused by DNR acquisition; and third, there were no farm lands lost from production, and consequently no loss of land-use income.

By sharp contrast the Collins Wildlife Management Area has an unfavorable net balance. The loss of land-use income ($11,676) almost equals the added net income to local businesses ($12,974), and increased tax levies ($9,165) caused by removal of assessed valuations stemming from DNR land acquisition exceed payments-in-lieu of taxes ($947) by nearly tenfold. Even if these aid payments were doubled, the net balance would fall far short of being favorable. It is not likely that volume of trade from the DNR ownership users can be increased significantly thereby providing for more net income to local area businesses and offset the debits.

The answers for the Collins ownership appear to lie in the consideration of project composition, namely, that the DNR acquisition of sizable acreages of productive farm lands has caused such large losses of assessed valuations and land-use income that they cannot be overcome by offsetting favorable developments (credits) under present conditions for such an ownership. However, if practicable, there are two changes that could be made to reduce the unfavorable net balance for this ownership: namely, return some of the productive farm lands to private enterprise, and, greatly increase the payments-in-lieu of taxes but do so with appropriate allocations throughout the local area (i.e. not just to the TAD embracing the DNR properties). The return of some farm lands to private ownership would have a double effect on the debits by restoring assessed valuations on the tax rolls, thereby reducing the equivalent loss of tax revenues, and at the same time by reducing the loss of land-use income. Also these are the kinds of considerations that can be taken into account in future land acquisition programs for similar DNR projects to assist in preventing unfavorable net balances.

The Albany Wildlife Management Area has an unfavorable annual net balance. With this ownership the loss of land-use income ($7,330) is twice the amount of annual net income ($3,652) generated by the area to local businesses. The increased tax levy equivalent ($2,048) is three times larger than the payments-in-lieu of taxes ($758). Although a much smaller DNR ownership than the Collins area, the same points can be made here regarding the unfavorable net balance and changes that might be effective in reducing the negative balance. However, DNR ownership in the Albany project is still being enlarged. The negative net balance could become larger if care is not taken in the selection of properties for acquisition.

The Plover River Fishery Management Area offers an example of favorable impact on the local area with annual credits ($4,976) in the balance summary sheet exceeding debits ($3,144) by approximately 50 percent. This DNR ownership has about the same acreage (929) for which assessed valuations were removed from the tax rolls as does the Albany area (952); however, the amount of valuations removed because of DNR land acquisitions is only about 24 percent as large for the Plover area (Table D-C1). Relatively much less high-producing farm lands were acquired in the Plover area, and loss of land-use income is only $2,194 on an annual equivalent basis, whereas it is $7,330 for the Albany area. Furthermore, this smaller debit is offset by added annual net income to local businesses that is more than twice the amount of land-use income ($5,373). Payments-in-lieu of taxes are small since earlier statutes at $.30 per acre prevailed whereas some of the Albany ownership comes under the new statutes of 1969 with the "formula" provisions. Nevertheless, these aid payments are in about the same ratio of 1 to 3 in comparison to increased tax levy equivalent caused by removal of assessed valuations from the tax rolls for DNR acquired and affected properties. This discussion and comparison of the two DNR ownerships points to the conclusion that the Plover ownership avoids large debits through loss of land-use income and increased tax levy equivalents, and gains through the sizable amount of annual net income generated by this DNR area to local businesses. With fishery management as its primary project purpose, the land acquisition program as much as possible intentionally avoided acquiring lands removed from the Plover River channel area. The result has had a favorable impact on the local area economy.

The two state park ownerships (Lake Kegonsa and Lake Wissota) have almost parallel debits and credits in their balance sheets for economic impacts on the local area caused by the DNR ownership. Credits exceed debits by about a 2 to 1 ratio. In both projects the acquisition program was for a "block" of tracts extending inland from lake water frontage needed for the ownership. Therefore, there was little or no opportunity to avoid purchase of productive agricultural lands. Much more agricultural land was acquired for the Lake Wissota ownership than for Lake Kegonsa but the productivity levels were noticeably different resulting in a similar annual loss of land-use income. Although some payments-in-lieu of taxes were made for the Lake Wissota project this ownership caused no enhancement in assessed valuation of business establishments receiving trade from the park users as was the case for the Lake Kegonsa ownership.

The favorable impacts on local area economy resulted for Lake Kegonsa and Lake Wissota because of the fact that increased income generated by the ownerships more than offset debits from lost income opportunities and increased tax levies. There are primarily two opportunities for changes in the net balance: first, these ownerships can absorb more recreationists and still larger annual net incomes are possible to business establishments serving these ownership users, and second, if larger payments-in-lieu of taxes are made this too will increase the favorable net balance.

It should be pointed out, as is noticeable by reference to Table D-C3, that the total debits must be offset by total credits to avoid an unfavorable net balance. The two state park ownerships, next to the Elroy-Sparta trail ownership, are outstanding in this regard. The two wildlife management areas simply do not generate enough credits, including tax aid compensations, to offset the relatively large debits created. Impacts on the local area economy result accordingly irrespective of any justifications or the source of funds underlying establishment of the DNR ownership. The need for the projects and responsibility for offsetting potential burdens on local economies may be noticeably different between ownerships but there is no indication that any such differences have been reflected in the debits and credits of the balance sheets for the 6 DNR ownerships studied.

LOCAL COMMUNITY

The local community, as defined at the beginning of this report, is a smaller unit within the local area. The local community is that part of the tax assessment district (TAD) included in the school district involved and embracing the DNR properties. When the DNR properties occur in two TAD's the local community accordingly includes parts of both TAD's.

The separation of these two areas, local area and local community, is important to the conclusions of this study since removal from the tax rolls of assessed valuations for the DNR properties affects taxation results for the school district differently than for the TAD embracing the DNR ownership. Such removals, for example, do not affect tax levies for nonschool purposes in the TAD's outside those embracing the DNR properties. Also when the school district does not include the entire tax assessment district embracing the DNR properties, effects of tax assessed valuation removals or enhancements on the local community tax levies for school purposes are different than for the other part(s) of the TAD. Furthermore, payments-in-lieu of taxes received only by the TAD(s) embracing the DNR properties may be prorated for this study to the local community part of the TAD, but such aids cannot be shared by other outside TAD's. As a consequence of these and other considerations, it is to be expected that impacts from the DNR ownership on the local community may be different than those on the local area.

On the credit (plus) side in the balance sheets for local community there is no single item appearing for all 6 DNR projects studied (Table D-C4). The largest amount for any item is for annual net income generated by trade from DNR ownership received by business establishments. This took place with business establishments located within the local community for 4 of the 6 DNR ownerships and was mostly from trade by recreationists using the ownership. For the Albany and Plover River projects all except one of the business establishments receiving trade generated because of the DNR ownership were in the local area but outside of the local community. More of the total trade generated by a DNR ownership was in the local community of the Lake Kegonsa State Park than for any of the others studied.

The other credits for the local community were relatively small. The local community for the Collins ownership had the largest amount ($947) of payments-in-lieu of taxes. Business establishments in local communities of only two DNR ownerships had enhanced assessed valuations resulting because of the DNR ownership, and the decreased tax levy equivalent amounts were small—$273 for Lake Kegonsa and $11 for Elroy-Sparta local communities.

On the debits (minus) side in the balance sheets for local community, the largest amount is attributable to the loss of land-use income (Table D-C4). Accountability for this debit has to be in the local community because that is where the DNR ownership is located. Whenever DNR acquired lands that formerly were used for agricultural purposes the loss of annual income from those farm lands first affects the local community economy. It can also affect the local area but the full amount must be a debit for the local community. (The same amounts for this item appear in both Tables D-C3 and Table D-C4.)

The other important debit is increased tax levy equivalent caused by the DNR ownership. It is a significant item for 5 of the 6 DNR ownerships studied. It is insignificant for the Elroy-Sparta local community since DNR land acquisitions were primarily for the abandoned railroad property which was not on municipality tax assessment rolls and the small acreage of farm lands acquired (through 1972) had very low value. The opposite is true for the Collins ownership where a large acreage of land was acquired and an appreciable part of it was relatively valuable for farming. Consequently assessed valuations removed from the tax rolls affecting the local community caused a significant ($4,403) amount of increased tax levy equivalent. This is 48 percent of the total increased tax levy equivalent to the local area. And, the Albany local community absorbed the largest proportion ($1,285 of $2,048, or 63%).

Net balance from the credits and debits is favorable for the local community of only 2 of the 6 DNR ownerships studied, namely, Elroy-Sparta and Lake Kegonsa (Table D-C4).

The local community for each of the two wildlife management areas (Collins and Albany) have the largest unfavorable net balance (respectively, (-)$10,370 and (-)$7,890). In both, the unfavorable net balance for the local community was much larger than that for the respective local area. The reason is that they bear the debit for the loss of land-use income without having any (Albany) or even a major part (Collins) of the annual net income to local businesses occurring in the local community. Also, these two local communities happen to carry a larger proportion of the total increased tax equivalent for the local area than does any local community for each of the other 4 ownerships.

There is no built-in carry over from the net balance for the local

TABLE D-C4. Balance Sheet for Economic Impacts on the Local Community Caused by DNR Ownership

	State Park		Wildlife Management Area		Fishery Area	State Trail
	Lake Kegonsa	Lake Wissota	Albany	Collins	Plover River	Elroy-Sparta
CREDITS (Plus)						
Annual net income generated by DNR ownership to local businesses	$10,384	$ 3,379	$ 0	$ 4,762	$ 0	$11,939
By trade from DNR ownership users	9,713	2,978	0	4,762	0	0
By trade from initial developments and operations	671	401	0	0	0	0
Decreased tax levy equivalent due to enhanced valuations to business properties	273	0	0	0	0	11
Payments-in-lieu of taxes (prorata part)	0	131	725	947	287	0
Total	10,657	3,510	725	5,709	287	11,950
DEBITS (Minus)						
Increased tax levy equivalent	1,329	1,227	1,285	4,403	288	4
Percent of total	14%	15%	15%	27%	12%	100%
Loss of land-use income	7,904	7,091	7,330	11,676	2,194	0
Percent of total	86%	85%	85%	73%	88%	
Total	9,233	8,318	8,615	16,070	2,482	4
NET BALANCE (Annual, 1972)	(+)$ 1,424	(–)$ 4,808	(–)$7,890	(–)$10,370	(–)$2,195	(+)$11,946
PERCENT INCREASE IN TAXES	2.143%	0.5021%	0.2562%* (0.0153%)**	1.681%	(0.0494%)[1] 0.0291%[2]	(0.0088%)

*Local community in Town of Albany, Green County.
**Local community in Town of Mt. Pleasant, Green County (parenthesis indicates a decrease).
[1]Local community in Town of Harrison, Marathon County (parenthesis indicates a decrease).
[2]Local community in Town of Plover, Marathon County.

area into the local community. For example, both the Plover River and the Lake Wissota local areas had a favorable net balance (Table D-C3). However, the respective local community had an unfavorable net balance. In each of these two local communities none (Plover River) or only a small part (Lake Wissota) of the business establishments receiving trade generated by the DNR ownership were in the local community. Consequently, credits for annual net income were inadequate in helping offset the debits from loss of land-use income and increased tax levy equivalent for the local community, whereas this type of credit was the determining factor in the favorable net balance for the local area.

The above discussion on the net balance for the local community answers the same question raised regarding the local area, namely, why a favorable or unfavorable balance. As to what changes could bring about a favorable net balance for the local community, answers can be supplied in part as was done for the local area. Loss of land-use income should be kept to a minimum by carefully avoiding, as alternative opportunities may provide, the purchase of lands having high agricultural or other production qualities--especially if possibilities are limited for offsetting credits to materialize in the local community. More properties than are really necessary to meet the project purpose should not be brought into DNR ownership. The proposition of "expediency" in having large acreages in a state ownership, if any "surplus" area has only a marginal benefit to the project purpose, can be costly in terms of adverse impacts (debits) on the local community economy. Also, to meet some project purposes it might be possible to satisfactorily develop permanent arrangements whereby the land does not pass into state ownership with tax assessments removed from the tax rolls, and annual farm income is not entirely lost but only partially reduced. This, too, would help keep debits at a lower level in the net balance for impacts on the local community economy. In addition, increase in payments-in-lieu of taxes could have a small influence for a more favorable net balance. However, this credit item is relatively small in the totals for a local community even if continuous 100 percent annual payments were made. This item of taxes may assume undue importance in the minds of some, but this can happen only if considerations for loss of land-use income and income for business establishments receiving trade generated by the DNR ownership are minimized in the whole picture of impacts on the local economy.

It is also clear that any operations of a state ownership which reduce the opportunities for local business establishments to profit from trade generated by the ownership will reduce the favorable impacts on the local community. This is especially true for the local communities that have only a relatively few business establishments serving trade generated by the DNR ownership but, together with others in the local area, are adquate to meet the needs of recreationists using the ownership. And, an unfavorable net balance may be further accentuated if any inadvertent actions impede business establishments from expanding and adding assessed valuations to the tax rolls.

The concluding evaluation on the impacts of DNR ownership on local community economy is centered on the net balance of credits and debits and the increase (or decrease) in tax levies for properties having assessed valuation on the tax rolls. The size of the net balance for economic impacts on the local community does not help in determining the percent increase in taxes. Summary amounts for these two considerations follow for easy reference for comparisons between the 6 DNR ownerships studied.

Circumstances for the Elroy-Sparta project are so different from those for the other 5 ownerships that it should not figure into comparisons here. The local community for the Lake Kegonsa State Park has a favorable net balance for impacts from the DNR ownership but it also has the largest percent increase in taxes. However, for the Plover River Fishery Area there is practically no percent increase in taxes (in fact, in one Town there was a decrease) but the net balance for impacts on the economy of the local community is unfavorable (-$2,195). For the local communities of the other 3 DNR ownerships (Lake Wissota, Albany and Collins) it is also obvious that the ratio between amount of unfavorable net balance, for monetarily evaluated credit and debit impacts and percent increase in taxes shows no relationship. Although the amount of increased tax levy equivalent is one of the debit items affecting the net balance, removal of this item from the debits only alters the amount of net balance and not the lack of relationship between the two summary factors. This is not surprising since the amount of increased tax levy equivalent in the balance sheet is greatly overshadowed by the amount for loss of land-use income. Furthermore, there is no relationship between the credit amount for annual income generated by DNR ownership and the amount of land-use income lost.

The incidence of burden or benefit from impacts of DNR

Local Community	State Park		Wildlife Management Area		Fishery Area	State Trail
	Lake Kegonsa	Lake Wissota	Albany	Collins	Plover River	Elroy-Sparta
NET BALANCE (Annual, 1972)	(+)$ 1,424	(–)$ 4,808	(–)$7,890	(–)$10,370	(–)$2,195	(+)$11,946
PERCENT INCREASE IN TAXES	2.143%	0.5021%	0.2562%* (0.0153%)**	1.681%	(0.0494%)[1] 0.0291%[2]	(0.0088%)

*Local community in Town of Albany, Green County.
**Local community in Town of Mt. Pleasant, Green County (parenthesis indicates a decrease).
[1]Local community in Town of Harrison, Marathon County (parenthesis indicates a decrease).
[2]Local community in Town of Plover, Marathon County.

ownership in the local community is important in regard to attitudes about the exchange of properties from private to public ownership. For example, even though the local community for Lake Kegonsa State Park has a favorable balance from overall economic impacts, the fact remains that tax bills for 1972 tax year for properties on the tax rolls contain an amount equal to 2.143 percent of the total that comes about because the park properties are state owned. It is primarily the business establishments that receive the benefits, but their enhanced assessed valuations are not yet sufficient by a wide margin to offset lost assessed valuations for the park properties.

It is unlikely that the tax payer in the Lake Kegonsa area will be consoled by the fact that the major part of the total equivalent increased tax levy is borne by the local area, or by the favorable net balance for the local community or for the local area. On the other hand, will the taxpayer in the local community for the Plover River Fishery Area understand or believe that his tax bill is only very slightly affected or is decreased because of DNR ownership? And will he be concerned that the net balance of economic impacts is unfavorable for the local community but is favorable for the local area? These questions point up the need for evaluations like those in this report to clarify understandings about the local impacts from DNR ownership.

While this study is obviously limited to local impacts and relationships, it is important not to lose sight of the main responsibility of a state agency, namely to carry out programs which benefit the entire state. These include the preservation of important native plants, animals and other natural features that in many cases have not as yet had a dollar valueplaced on them. Commitment to this responsibility, which results in statewide benefits, may have direct adverse local impact as was shown in these studies. On the other hand, actions which directly benefit the state should have indirect benefits to a local economy.

In focussing attention on the local impacts resulting from state ownership, this report not only can help administrators and planners of programs involving public owned lands, but it can also help taxpayers in general to appreciate the merits of questionable statements oftentimes based on only well-meaning opinions of fragments of information incorrectly depicting the complete circumstances.

APPENDIX

Economic Impact Matrix

An economic impact matrix was prepared during the project proposal stages for this study. It served as a general guide during the study as to major considerations for data collection and evaluation.

Some items in the matrix were not pursued and included in the body of the report. For example, size of gross product (leading to secondary benefits evaluation) and amounts of sales and income taxes were not pursued since they primarily concern nonlocal impacts. (In the matrix these are in items A & B-3-d-2&3 and C-3-c.) Also, early in the study it was determined, in consultation with Wisconsin Department of Revenue personnel, that the DNR ownerships separately would have no significant effect on school aids received from the state. Likewise, state tax refunds were inappreciably affected. Consequently, items A & B-6 and C-3-e were not pursued further.

Land-use returns both before and after DNR ownership were obtained. Since the DNR returns go into a state fund and do not remain for use on the respective ownership, they were not included in the body of this report. However, continued farm production on some DNR ownership lands is netted out of comparisons for former results. (In the matrix these are items A & B-4-b and C-4-c.)

Economic Impact Matrix for State Owned Land: By Kinds of Impacts and Interest Involved

	Governmental Units and Others										
	Receiving (X)					Contributing (C) or Inducing (I)					
Kinds of Impacts	Locl.	Co.	St.	Fed.	Priv.	Locl.	Co.	St.	Fed.	Priv.	Cen. Conditions
A. BENEFITS											
1. Payments-in-lieu of Taxes											
a) For 10 yrs. after ownership, starting since 7-1-69; amt. by formula–full first yr. & equal decrease to 10% for tenth yr.; all lands	X							C			
b) Perpetual, annually at 30¢ per acre; for ownerships before 6-30-69 (except lands for parks)	X							C			
2. Reduced Local Finance Costs											
a) Roads–operation and maintenance	X	X						I			I
b) School bussing	X										I
c) Law enforcement	X	X						I			I
d) Other											
3. Favorable Economic Influence Results on Adjacent Local Communities											
a) Added real estate tax assessment value, from:											
1) New home sites and buildings					X					C	I
2) New and expanded business establishments					X					C	I
3) Full-value (land and other assessed property) appraisal enhancements (by potential rather than present use)					X						I
b) Increased (normal process) real estate tax recpts.	X	X	X							C	
c) Added employment					X			C			I
d) Added income											
1) From new specific businesses and enterprises					X						I
2) From larger general gross product					X						I
3) Taxes (also include sales taxes)			X	X						C	
4. Land Protection and Use											
a) Resource loss prevention											
1) On-site (state owned land)			X					CI	C		
2) Watershed (that includes state owned land)	X	X	X	X	X	CI	CI	CI	CI	CI	
b) Increased land use returns (on state land)											
1) Re: land production			X					C			
2) User fees; and, concessions			X							C	
5. Increased Personal Property											
a) Assessed values					X					C	I
b) Tax revenues	X	X	X							C	I
6. Increased State Assistance											
a) State tax refund	X	X						C			I
b) School aides	X							C			I

Kinds of Impacts	Governmental Units and Others										
	Receiving (X)					Contributing (C) or Inducing (I)					
	Locl.	Co.	St.	Fed.	Priv.	Locl.	Co.	St.	Fed.	Priv.	Cen. Conditions
B. LIABILITIES											
1. Loss of Previous Tax Revenues on State Owned Lands	X	X	X					I		C	
2. Increased Local Finance Costs											
a) On accessory roads and bridges–construction and/or operations and maintenance	X	X						I			I
b) Community law enforcement	X	X						I			I
c) Other											
3. Adverse Economic Influence on Adjacent Local Communities											
a) Decreased real estate tax assessment values from:											
1) Existing home sites and buildings					X			I		C	
2) Existing business establishments					X			I		C	
3) Reductions in (land and other property) appraisals (depreciated present or potential use)					X			I		C	
b) Decreased (normal processed) real estate tax revenues	X	X	X							C	
c) Lost employment					X			I		C	I
d) Decreased income											
1) From specific business(s) losses					X					C	I
2) From smaller general gross product					X					C	I
3) Taxes			X	X						C	I
4. Land Damages and Use											
a) Resource losses											
1) On-site (state owned land)			X					CI			
2) Watershed (that includes state owned land)	X	X	X	X	X	CI	CI	CI	CI	CI	
b) Decreased land use returns (on state land)											
1) Re: land production		X			X			I		C	
2) Rentals		X			X			I		C	
5. Reduced Personal Property											
a) Assessed values					X					C	I
b) Tax revenues	X	X	X							C	I
6. Reduced State Assistance											
a) State tax refund	X	X						C			I
b) School aides	X							C			I

Kinds of Impacts	Governmental Units and Others										
	Receiving (X)					Contributing (C) or Inducing (I)					
	Locl.	Co.	St.	Fed.	Priv.	Locl.	Co.	St.	Fed.	Priv.	Cen. Conditions
C. BALANCE SUMMARY (Plus or Minus; Net)											
1. Real Estate Tax Assessment Values					X					C	I
2. Personal Property Assessment Values					X					C	I
3. Revenues From:											
a) Real estate taxes	X	X	X							C	I
b) Personal property taxes	X	X	X							C	I
c) Income taxes (also include sales taxes)			X	X						C	I
d) Payments-in-lieu of taxes	X	X						C			I
e) State assistance (tax refund & school aides)	X	X						C			I
4. Land Stablization and Use											
a) On-site (state owned land)			X					CI			
b) Watershed (that includes state owned land)	X	X	X	X	X	CI	CI	CI	CI	CI	
c) Returns (on state land)			X				I	CI		C	
5. Employment					X			CI		C	I

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