

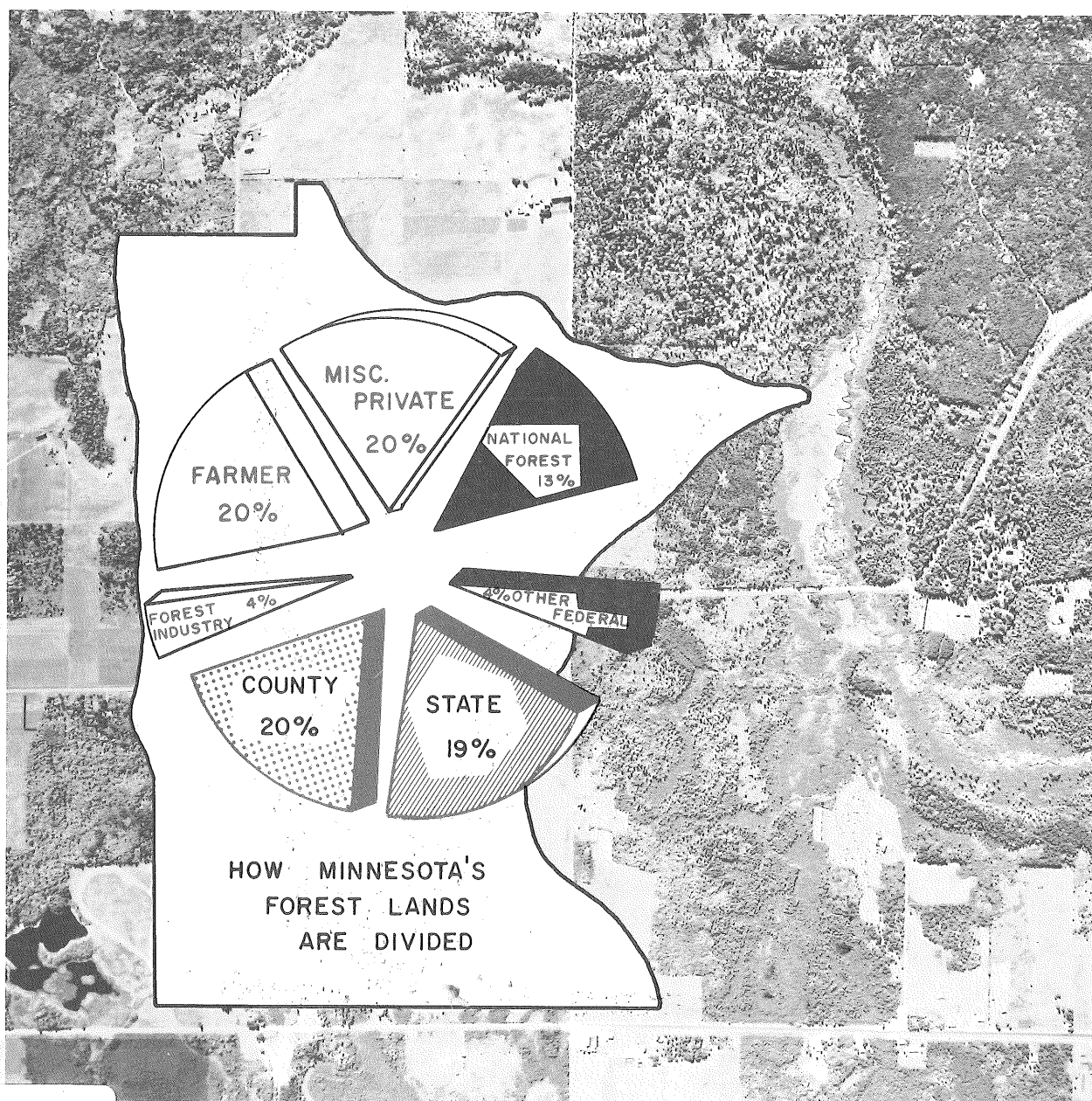


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USE CLASSIFICATION

NORTHERN MINNESOTA

PILOT STUDY PROGRESS REPORT



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LAND EXCHANGE STUDY SUPPLEMENT
 MINNESOTA DEPARTMENT OF CONSERVATION
 DIVISION OF LANDS AND FORESTRY
 JUNE - 1969
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LAND USE CLASSIFICATION IN NORTHERN MINNESOTA

Pilot Study Progress Report in Aitkin, Beltrami and Itasca Counties

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MINNESOTA DEPARTMENT OF CONSERVATION
DIVISION OF LANDS AND FORESTRY

June, 1969

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INTRODUCTION

Purpose of Report

The first major recommendation of the Land Exchange Study Report issued by the Department of Conservation in January, 1969 was:

"The Department of Conservation, jointly with the northern counties should, within the next couple of years, classify their lands broadly into two categories: (1) MANAGEMENT UNITS. State and tax-forfeited lands suitable for management as parks, game management units, multiple-use forests, or special-use tracts, (2) OTHER LANDS.

"They should proceed with the first group to prepare plans covering jurisdiction and management. They should classify the 'Other Lands' in detail to reach conclusions on property disposition; i.e., permanent or temporary retention, sale, or exchange."

In line with this recommendation, the Director of the Division of Lands and Forestry appointed Donald Carlson as Land Classification Supervisor and authorized him to arrange one or more pilot classification operations during the spring of 1969. This, he thought, would test the feasibility of the method, illustrate the problems to be encountered, and more or less set a pattern for other Department of Conservation and county personnel who will be engaged in the classification field work.

The word "classification" can be construed in many different ways. As used here, it signifies the sorting out of the public lands into major use categories; i.e., primarily useful for private residential, commercial, or industrial development; agricultural use; forestry, wildlife management, public recreational use. Some lands will be found to have no apparent immediate use and will be kept simply in custodial status. Classification of this kind must be based upon a blend of physical characteristics of the land, its location, and the existing economic environment.

Cooperation Sought

Certain conclusions have been reached from preliminary trials of land classification:

1. There is need for considerable uniformity in premises, procedures, and forms used over the entire region to be covered. Since state land is scattered among the counties, the State should take a leading role in guiding the operation.

2. County officials in counties having sizable acreage of tax-forfeited land to manage appear to be willing to work with the State. They feel that classification will help them arrive at a sound policy of land disposal and land management.
3. The classification program will be most effective when citizens of the counties involved take part in the decisions on land use. Their participation creates a greater local understanding of the program, and the knowledge they possess of past and present use is important. Thus, technical advisory committees will be useful in most counties.
4. Cooperation should be sought with other public agencies, notably the U. S. Fish and Wildlife Service in Aitkin County; and the U. S. Forest Service in Beltrami, Itasca, and other counties where it has land. The Soil Conservation Service can be very helpful. These agencies can be represented on advisory committees and in many cases may want to participate in classification of intermingled lands.
5. The Division of Lands and Forestry will have operational charge of the work for the State. The viewpoint of other divisions of the Department of Conservation will be sought constantly through formal and informal conferences.
6. Classification is certain to encounter some sharp differences of opinion and interest. Many people have expressed a desire to transfer a great deal of public land to private ownership and advocate changes in state laws to liberalize sales. Other people have shown more concern for future needs of pure water, scenic landscapes, good hunting and fishing grounds, adequate timber supplies, sufficient recreational opportunities. It is to be hoped that, through full public discussion and with help of best available technical advice, these different views can be reconciled on the basis of the best long-run interests of the public.
7. Present classification is not to last for all time. Changes in economic conditions, completion of county zoning, etc., will doubtless justify thorough review at about ten-year intervals. However, to be effective, the classification should be maintained as a basis for policy during the interval and should not be frequently altered to meet local situations.

In other words, it is crucial that the state-county classification should be able to withstand the demands of outside interests to use land for purposes other than those for which it is considered properly suited.

Organization and Financing

The general direction of classification and most advisory services are expected to come from salaried personnel of the state, counties, and other public agencies, such as the Office of Iron Range Resources and Rehabilitation (I.R.R.R.), and will thus be contributed time. However, to be most

effective, the work requires full time services of a few land appraisers and some clerical and drafting help and minimal amounts for travel and expense. In the pilot operation, this was financed by some \$10,000 remaining in the Land Exchange Study appropriation. To keep the project on schedule during the next biennium will require approximately \$60,000 for contractual services (assuming I.R.R.R. contributions to counties continue), or about \$120,000 (if I.R.R.R. county help is discontinued). The source of these funds has not yet been assured.

The general plan of organization is shown in Fig. 1.

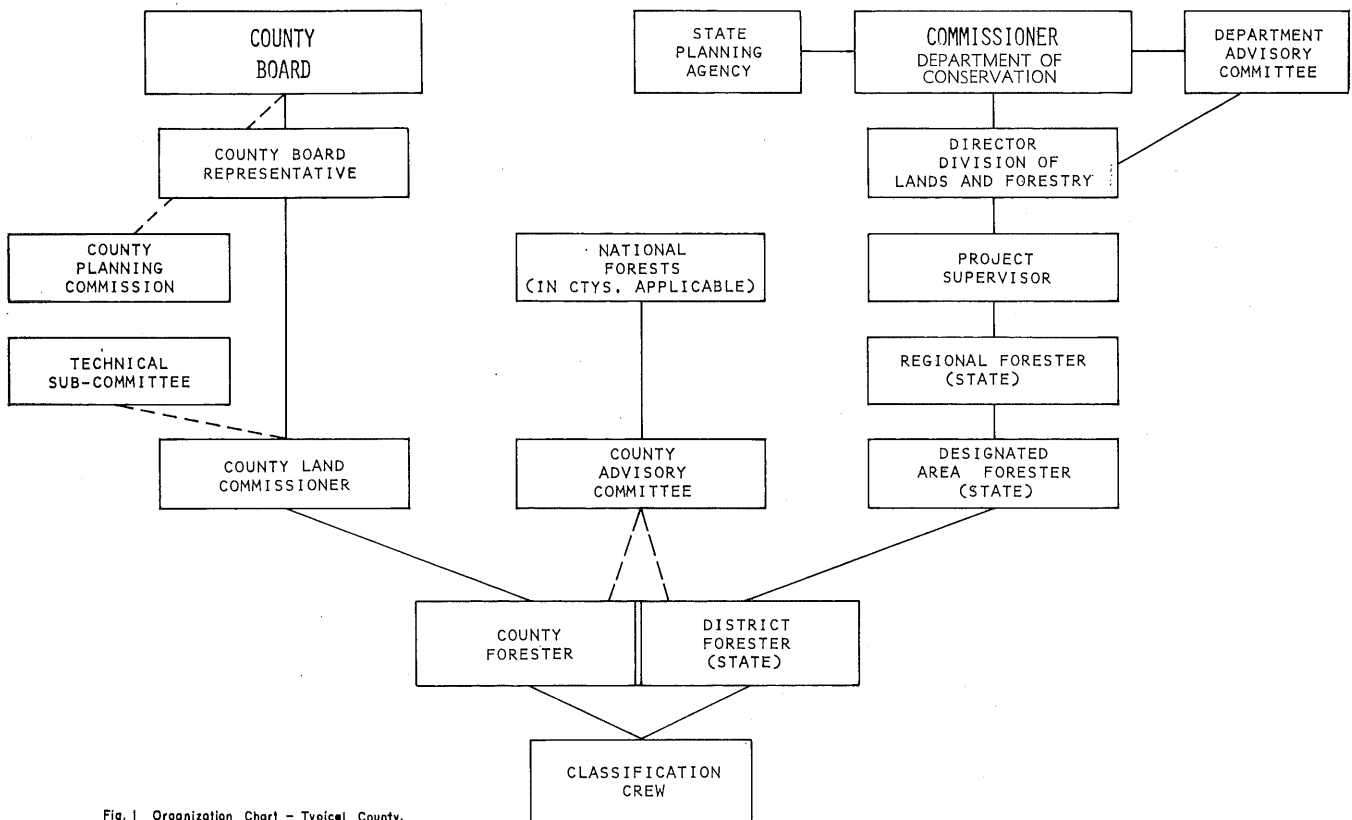


Fig. 1 Organization Chart - Typical County.

Sample Operations

Two pilot areas were selected:

1. Aitkin County where the County Board on January 14, 1969, had authorized and instructed the County Land Department to enter into land classification with the Department of Conservation, using the same

system in determining the best and highest use of the state and tax-forfeited lands.

2. Portions of Itasca and Beltrami counties within the Chippewa National Forest where intermingling with federal lands creates special problems.

This report then summarizes the results of these pilot operations up to June, 1969.

BASIC ASSUMPTIONS AND THEIR SIGNIFICANCE IN LAND CLASSIFICATION

Population

Minnesota's present population of 3 $\frac{3}{4}$ million is projected by Bureau of Census to about 5 million by 1985, 6 million or more by the year 2000. Shifts from rural to urban areas will continue but will be offset somewhat by spread outward from city cores to suburbs and along major travel routes. More people are certain to increase pressure on natural resources in Minnesota and will force some difficult decisions between competitive land uses.

Transportation

Improved highways, expanded air service, snowmobiles, power boats, auto-campers, increase mobility of people and open up wider areas for a variety of uses. They will have effects on agriculture, recreation, industry, and other items related to land classification.

Agriculture

The present general trend in the State and Nation is still toward more intensive use of better lands and retirement of poorer lands from crop use. This suggests the relatively small need for clearing new land for cultivation. However, several factors, including the urgent need of northern communities for additional tax-base, recent improvements in land clearing equipment, availability of some outside capital, some local successes in production of beef cattle and wild rice are stimulating a demand for forest land clearing and conversion of wet lands from conservation to agricultural use.

Land classifiers in these localities will need to place a great deal of dependence on local zoning plans and upon the advice of qualified local farm people. They will need to strike a balance between rigid adherence to the status quo and unsupported super optimism. When agreement cannot be reached locally, it may be advisable to employ disinterested farm management experts to make recommendations.

Recreation

A recent study by the Department's Bureau of Planning forecasts a substantial increase in camping, boating, fishing, canoeing, water skiing, and other water-based activities, as well as in snow skiing, wildlife observation, driving for pleasure, etc. This is related to growth in population, leisure time, income, and mobility.

Demand for public recreational facilities will take several forms which must be kept in mind by land classifiers:

1. Intensively developed areas for picnicking, camping, boating, swimming, etc., close to the Twin Cities, Duluth, Rochester, St. Cloud, Fargo-Moorhead, and other selected points.
2. Abundant open space for driving, hunting, fishing, hiking, canoeing, rustic camping, etc., on lands not exclusively devoted to recreation, notably on public forests and game management areas.
3. Some primitive or wilderness areas.
4. Special units including historical sites, natural areas, archeological relics.
5. Increased attention to aesthetics in all forms of land use—special timber cutting regulations along lakeshores, river banks and highways—backsetting of unsightly structures, pole lines, dumps, billboards—reforestation of barren lands.

Wildlife

Habitat conditions for game animals, birds and fish tends to deteriorate especially in southern and western Minnesota. Remedies must be sought on both private and public land. State and county efforts will include:

1. Maintaining certain sizable refuges or game management units with resident managers.
2. Maintaining and increasing a series of small independent units—pot holes, small game and bird refuges, etc., in farming areas. These are to be protected and managed under a regional or area-wide administrative organization.
3. Widespread game management program on public lands maintained primarily for other purposes, including state forests, county forests, national forests, etc. Activities should be integrated with those of the forestry agencies.

Forest Products

Nationally, the demand for lumber, pulpboard, paper, plywood, and many other forest products continues to expand at a rapid rate. Minnesota production has not kept pace with that of other

regions for reasons mainly associated with transportation and slow rate of timber growth.

As other regions reach or exceed their sustained yield capacity and stumpage rates rise, Minnesota industries, backed by accumulating wood surplus, may attain a more favorable competitive position. Existing industries can expand to use most of available surplus, but a few localities appear to need new enterprises.

Minnesota industries depend heavily on purchased wood, much of it from public lands. Several pulp and paper companies with large investment in plant and equipment like to own sufficient timber land to supply 15 to 25 per cent of their wood needs as insurance against shortage. Future expansion of plants doubtless will call for additional land ownership.

These considerations may have little direct bearing on field classification other than to encourage placing a large acreage of productive forest land under management. They may suggest sale of certain public lands to responsible private owners.

Mining

The outlook is for further decline of conventional iron mining, modest expansion of taconite, uncertain developments in copper-nickel.

Classification should reflect the current departmental policy which is to retain both surface and subsurface rights to state and county lands in zones of high mineral potential.

Surface rights may be sold or exchanged with mining companies where the lands are needed for industrial uses, such as water impoundments, settling ponds, etc. Leasing is preferred for mineral exploration and development.

Water

Minnesota, with 3.4 million acres in more than 15,000 lakes, plus dozens of sizable rivers and streams, would seem to have an abundance of water resources. However, good lake and river frontage is already under pressure and problems of pollution, over-crowding and unsightliness are causing increasing concern.

State law requires that the Department withhold from sale all lands on meandered lakes, rivers, and "other public waters." The intent of the law seems justified by the water situation, but there is some evidence that the wording is ambiguous and too inflexible. Land classifiers should make note of instances where relaxation of the rule would lead to better land use without loss to the State of valuable water resources.

AITKIN COUNTY LAND USE CLASSIFICATION

Factors considered in selecting Aitkin for an initial trial of land classification were:

1. Desire of County Board to develop a sound long-range plan for their 250,000 acres of tax-forfeited land.
2. Presence of more than 100,000 acres of state land not specifically assigned to state forests, parks or game areas.
3. Conditions fairly representative of northern counties as regards intermingling of county and state lands.
4. Fairly typical overlapping of jurisdictions of Department of Conservation divisions—Lands and Forestry, Game and Fish, Parks and Recreation, Enforcement and Field Service, and typical opportunities for multiple use.
5. Absence of the complicating factor of national forest overlaps.
6. Existence of the County Planning Commission and some preliminary drafts of county zoning ordinances.
7. Availability of competent technical personnel in the state and county services.

Preparations

As a first step, the State Classification Supervisor consulted representatives of the State Planning Agency and several divisions of the Department of Conservation (notably Bureau of Planning, Division of Game and Fish, Land Management Section of Lands and Forestry). From these discussions and a knowledge of practical field limitations he developed a simple system of mapping and coding compatible with the present computer system and a common state-wide identification of land parcels. The code sheet (L&F-214) and the code definitions were field tested by Lands and Forestry area men. On February 19, 1969, the code sheet and work sheet were submitted to the various divisions of the Department; also to staff and regions of Lands and Forestry; and to county administrators. Some constructive suggestions were received leading to minor revisions.

The Supervisor then approached the Aitkin County Auditor, the Land Commissioner, and the Iron Range Rehabilitation forester who agreed that a joint classification would be desirable.

The Supervisor then appeared before the County Planning Commission, with a professional land use planner hired by Aitkin County in attendance. He discussed the classification proposal

in detail and showed that the classification scheme would make use of and would dovetail with the county zoning plans. Very soon thereafter, the Planning Commission presented a resolution to the County Board favoring the joint classification of state and county lands.

The Aitkin County Board, on January 14, 1969, authorized and instructed the County Land Department to enter into land classification with the Department of Conservation.

In early April, the classification job was placed under the direction of Lawrence Gubbe, the State Area Forester at Hill City and Louis Olts, the County Land Commissioner at Aitkin. To assist them on difficult land use decisions, they appointed an advisory committee consisting of local representatives from:

County Board and County Officials
County Planning Commission
County Agent
Soil Conservation Service
Rice Lake National Refuge
Timber Industry
Sportsman Federations
Division of Waters, Soils and Minerals
Division of Parks and Recreation
Division of Game and Fish

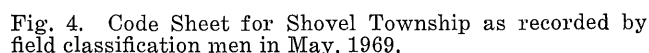
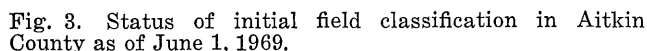
The committee met for the first time April 28, and agreed upon rules of procedure. It was suggested that the County Board should appoint the Committee as an official committee of the county and allow per diem and expenses to members not employed by government agencies. Fig. 2 shows members in attendance at meeting called to review field work on June 13.



Fig. 2. Members of Aitkin County Advisory Committee and classification field men at June 13 meeting. From left to right: Elmer Anderson, Lands and Forestry, Brainerd;

On April 14, the Division of Lands and Forestry employed Mr. William E. Schmechel, a retired state forester with 22 years residency in Aitkin County as consultant. He has given 10 weeks full time to the field classification under the direction of the Area Forester and County Land Commissioner. The Division also secured the services of a competent office girl for like period, to relieve the field man of routine and mechanical detail.

Fig. 3 shows the status of initial field classification as of June 1, 1969. By July 1, it is ex-



To illustrate the kinds of problems and questions that arise in classifying land for use, the actual classification sheets (before review) are shown below for four townships:

In each 40-acre tract or lot, three code symbols appear. The lower figure (letter) indicates ownership, in these cases S for State, C for County. The upper left number designates the primary use for which the land is suited; 2 = agricultural, 4 = mining, 5 = recreational, 6 = multiple-use forestry, including watershed protection, 7 = game or fish management, 9 = access to lake or to other public land. The upper right letter signifies the

recommended disposition; R = retain permanently, P = retain provisionally (in custodial status for the immediate future), D = available for sale, X = suitable for exchange. Additional details on ownership, possible secondary uses, accessibility, zoning status and other features are recorded on Form L&F-214 but are not presented here.

Shovel Lake Township (52N-27W)

This partial township occupies the northwest corner of the county. It contains a considerable acreage of agricultural land but the northern half is almost all public forest land and land south of Shovel Lake Village, along Willow River is also largely wooded. (See Fig. 4.)

Almost all the public land here is classified (6) chiefly valuable for multiple conservation purposes (timber, game and recreation). A few forties are designated (9) needed for access to Cranberry Lake.

The bulk of the public land is recommended for (R) retention for state or county management. Certain forties in Sections 22, 23, 27, and 35 are marked (P) retain provisionally which signifies temporary retention in custodial status pending later developments. Several state parcels in Sections 2, 3, 4, 9, and 12 are marked (X) suitable for exchange. The implication here is that the north two tiers of sections form a natural county management unit and that the state land should be exchanged for county land elsewhere such as in Section 21. Lacking authorization for such exchanges at least for the present, the situation suggests negotiation for exchange of services (protection, trail maintenance, cutting supervision) between the two agencies.

The state lands in the S½ SW¼, Section 36, front on the Willow River and by law must be withheld from sale. If this had been agricultural land not really needed for conservation purposes it would nevertheless have to be classified for retention. The rating in that case would logically be (P) retain provisionally.

White Elk Township (50N-27W)

This township consists almost entirely of woodland and swamp. It is within the boundaries of the Hill River State Forest. The western part is County Memorial Forest (See Fig. 5).

The use classification is mostly (6) multiple-use conservation, with a few tracts marked (9) for lake access.

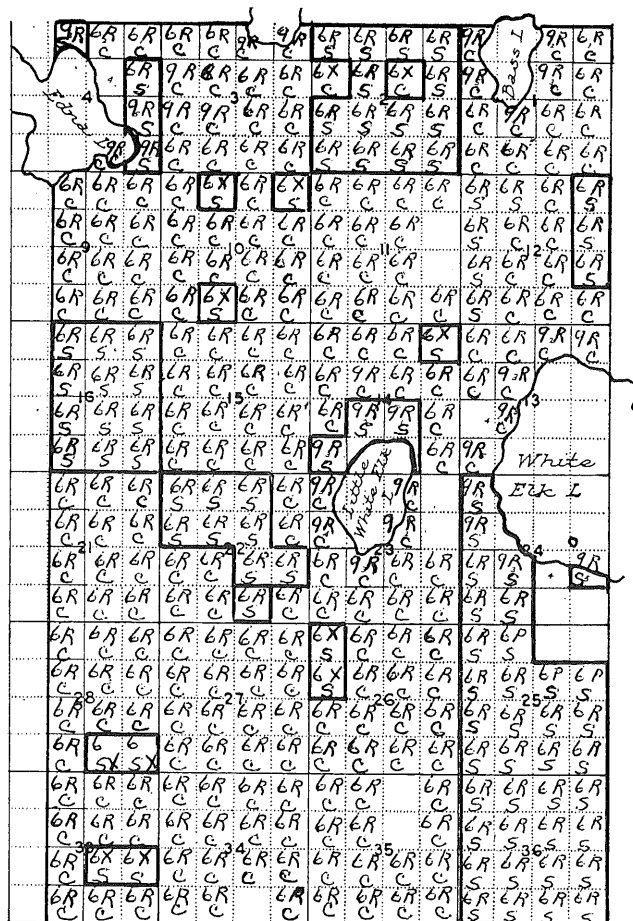


Fig. 5. Code sheet for White Elk Township as recorded in May, 1969.

The recommended action is mainly (R) retention for public purposes. A few scattered state forties in Sections 10, 14, 28, 26 and 33 are marked (X) exchange suggesting that they could be best handled by the County which controls the surrounding land.

Wagner Township (43N-22W)

This is primarily an agricultural township but contains some fairly good forest land in the northern tier of sections and in the southwest corner. (See Fig. 6).

The classification of this township indicates that, since there is very little state land, it would be advantageous to dispose of all of it except on Pine Lake, where a small tract should be retained for public access. As for tax-forfeited lands, the classification indicates that all the scattered tracts should be disposed of by sale (D) or held provisionally (P) until requested for farm or multiple-use unit expansions. Since the Solana State Forest borders this township on the north, the classify-

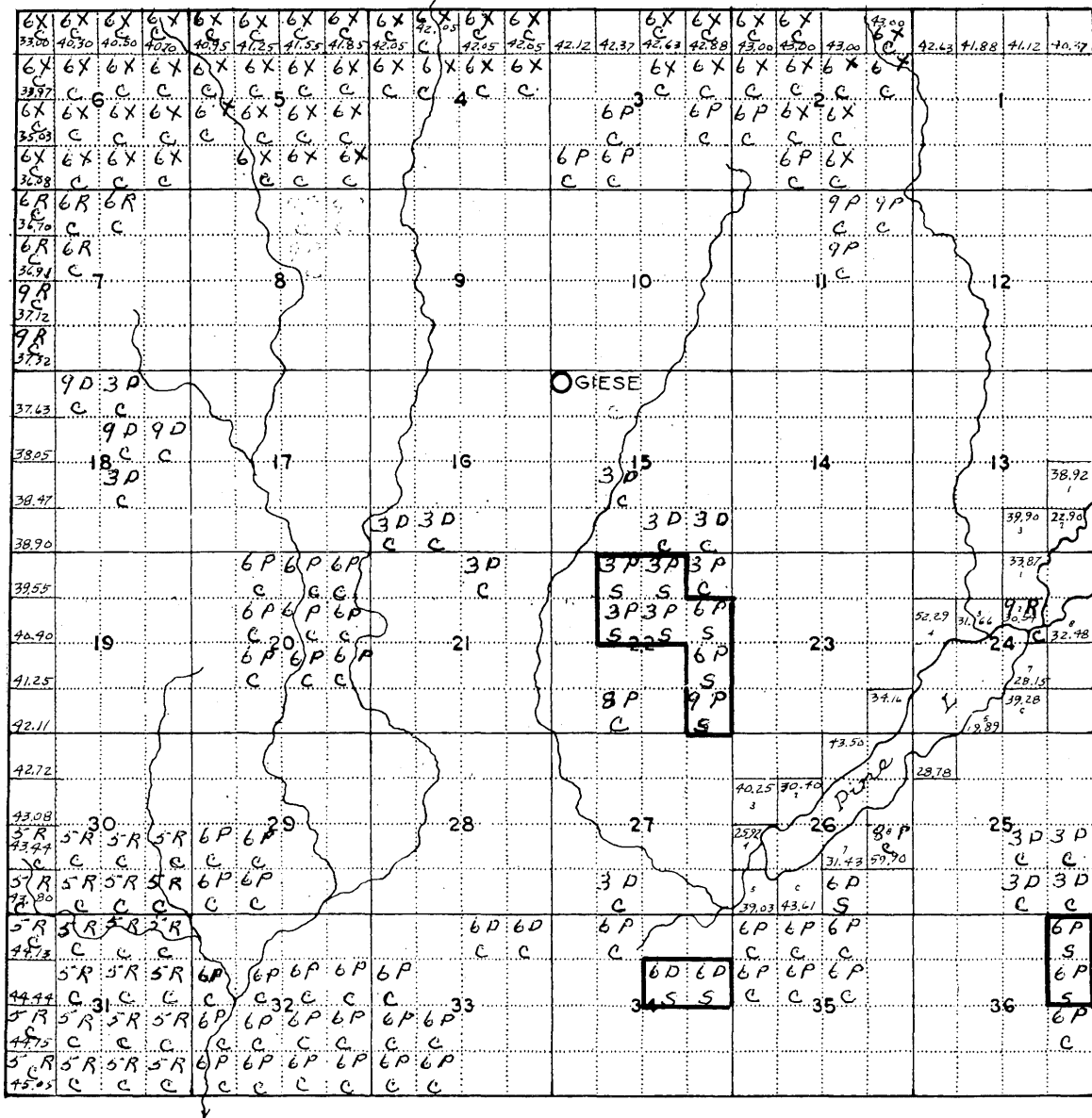


Fig. 6. Code Sheet for Wagner Township Prior to Review by Advisory Committee.

ing consultant felt that most all the county land in the north tier of sections should be assigned to the State for management purposes. Thus, he marked them (X) for exchange.

The southwest portion of the township is extensively tax-forfeited with some recreational possibilities, but, on the whole, adapted to multiple use. This area could be incorporated into a management unit with the township to the west. Public access to Pine Lake in Section 24 will remain under the jurisdiction of the Conservation

Department's Division of Enforcement and Field Service.

Since present laws do not authorize exchanges between State and County, it would be advantageous for management administrators to work out a cooperative agreement for Wagner Township. Perhaps the State should manage county land in the north tier of sections, while the County would help in protecting and managing some scattered state lands intermingled with tax-forfeited lands in Idur and Williams Townships (43N-23W and 24W). (See Fig. 6a).

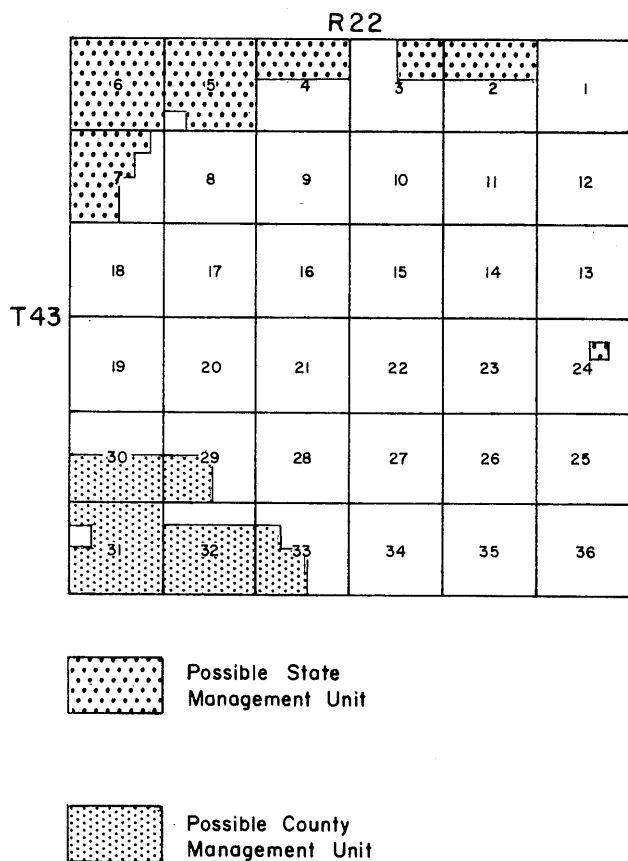


Fig. 6a. Map indicating approximately how state and county management units would shape up after a planned disposal program and a cooperative agreement would be put into effect.

Kimberly Township (47N-25W)

The initial field classification is shown in Fig. 7, P. 10. Other than a few scattered pieces in the southwest corner, it indicates practically no public land suitable for immediate disposal. Some new tracts north and east of Kimberly and near Camp Lake might be suitable for private use but are listed as having potential mineral value and are thus withheld from sale. Some other marginal lands more or less isolated from the main blocks of public land are not convenient for state or county management. However, they are classified for provisional retention until a real need for them develops.

The land classified for retention as multiple-use woodland and marsh block up into reasonably compact management units. (See Fig. 8). There still remain, however, some problems of dividing responsibility for administration between county, state and federal government, and also questions concerning coordination of game management, forestry and recreation.

The southeastern block of intermingled state and county lands adjoins the Rice Lake National Wildlife Refuge. The northeast block is close to the Kimberly State Wildlife Management Area. The whole township will be very accessible to state and county foresters and state game managers stationed at Aitkin, as well as to the State Park and Recreation Supervisor at McGregor.

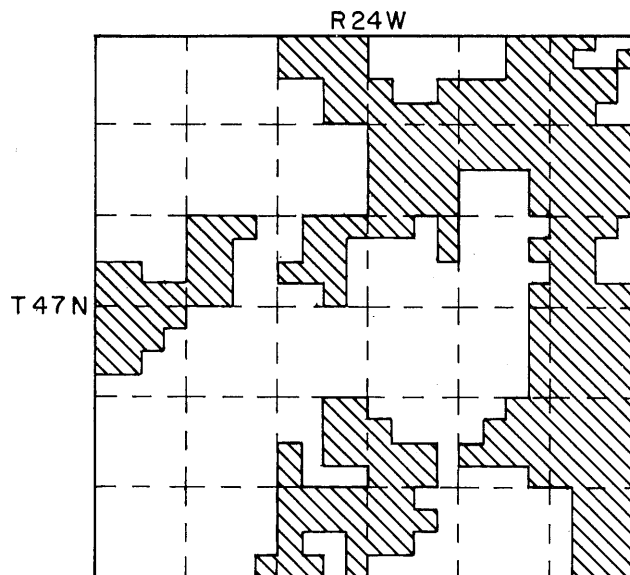


Fig. 8. Potential conservation management units in Kimberly Township. Best assignment of responsibility for management is yet to be worked out.

Next Steps in Aitkin County

The remaining job in Aitkin County can be considered in two parts—completion of classification and putting the results to use.

Completion and Review of Classification

All of the township maps summarizing the field men's recommended classification are being duplicated and made available to the advisory committee members. Copies of individual code sheets (L&F-214) giving greater detail will be supplied on request.

Depending upon the reaction of the advisory committee, further field checks will be arranged and efforts made to reconcile differences of opinion.

One complete set of township maps and classification forms, together with committee comments and recommendations, will be submitted to the Commissioner of Conservation, and one set to the Aitkin County Board.

This will complete the field operation, but it is expected that the advisory committee will continue interest in seeing the work put to use.

found primarily suited to conservation purposes. Most of the lands are being classified for multiple use, which means that certain portions are well suited to recreational use, others to wildlife management, still others to timber production, but that these areas are too intertwined or in some cases too scattered to permit efficient one-use management. How shall they be delineated and how managed? One solution is to blanket them into the state forest system and provide for coordinated management by the several Department of Conservation divisions concerned with the different activities. These matters, of course, will have to be worked out by the Commissioner when he has all of the facts before him.

Aitkin County has approximately 100,000 acres in memorial forests and 140,000 acres of woodland, brush and marsh outside of memorial for-

ests. Much of the outside land will be classified for multiple-use conservation uses. The County Board will need to decide what areas to add to its memorial forests, parks, recreation areas, game areas, etc., which areas to retain in present custodial status, and which areas to dispose of in one way or another.

Fig. 9 shows in a general way which of the public lands fall into natural management units.

3. Evaluating Field Organization. The present distribution of state personnel concerned with large scale land management is shown in Fig. 10.

Prospective new responsibilities can be absorbed without radical readjustment of the state field stations. However, if the county is to be the unit of management, some redrawing of district lines will be required.

Assuming all multiple-use state lands to be blanketed in the state forest system, a well-staffed area headquarters will be essential (eventually at Aitkin). Two Division of Lands and Forestry staff assistants will be needed to share responsibilities for fire protection, road and building operations, state timber land management, cooperation with private timber land owners, etc. Contributed planning and supervisory services from Game and Fish Division men will insure adequate attention to the wildlife possibilities of the nearly 400,000 acres of state land in the county. Similar contributed services of Park and Recreation Division men will insure proper attention to the recreational potential.

4. Making Plans for Management. The type of organization suggested above will facilitate effective multiple-use planning on state properties. In addition to this, however, there is going to be a need for means of financing the day-to-day activities in fields other than timber management. Such things as construction and maintenance of rustic camps and other recreational facilities on state and county lands (other than parks), maintenance of dams, game habitat development, roadside beautification, are not adequately provided for in forestry budgets and probably will require special financing.

As stated in the January, 1969, Land Exchange Study Report, the State recognizes a strong interest in having counties do a good job of forest management and will help in any way possible. The consultations growing out of classification projects undoubtedly will suggest a number of practicable forms of aid.

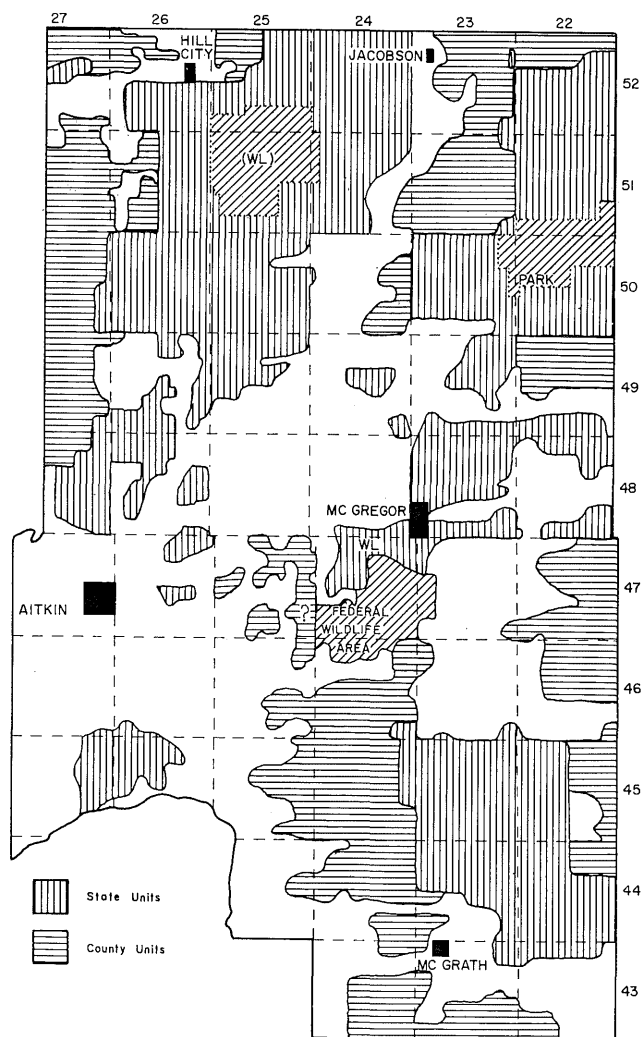
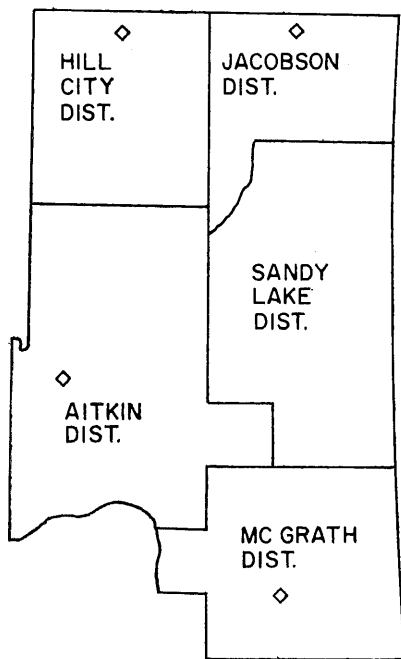
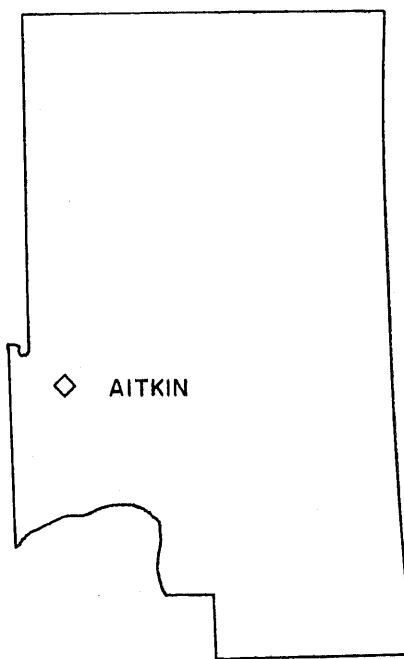


Fig. 9. Approximate location of state and county lands classified for retention for conservation purposes. Boundaries are subject to revision after all classifications have been reviewed and approved.



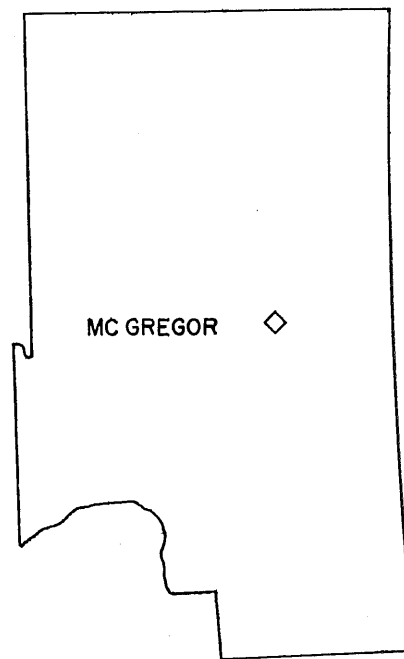
LANDS & FORESTRY

(REGIONAL HEADQUARTERS
BRAINERD)



GAME SECTION

(REGIONAL HEADQUARTERS
BRAINERD)



PARKS & RECREATION

(REGIONAL HEADQUARTERS
MC GREGOR)

Fig. 10. Present field organization of three land managing divisions of the Department of Conservation.

BELTRAMI AND ITASCA COUNTY SAMPLES

No complete classification of these counties was undertaken. The pilot study here was confined to three areas within or adjoining the Chippewa National Forest. It was designed to explore some of the problems peculiar to classifying state land within the national forests.

The only preparation for the study was some informal discussion with the United States Forest Supervisor and his assistants and with the state area and district foresters concerned. The field work was done by Mr. Paul StAmant, consultant for the Department of Conservation.

General Situation

As pointed out in the January, 1969, Land Exchange Study Report, the State owns some 272,760 acres of land within the Chippewa National Forest; counties control an additional 91,580 acres. Tentative plans have been made to exclude 48,700 acres of state land by means of land exchanges; also, to consolidate interior blocks by the same means. However, land exchanges are slow and over large areas are held up by questions of mineral value. Thus, there is need for interim arrangements on land management. These arrangements become more and more urgent as land management is intensified to meet increasing public needs.

The principal elements of management related to the state lands in the Chippewa National Forest are these:

1. Fire Protection. A cooperative agreement between the Department of Conservation and the United States Forest Service provides for exchange of services, each party to protect certain areas of the other. The Chippewa National Forest Supervisor reports that cooperative relations with local state men is excellent. However, he points out that at present the National Forest protects approximately 250,000 acres of state land at no cost to the State, while the state organization protects less than 6,000 acres of national forest land. In addition, the National Forest protects approximately 380,000 acres of private and tax-forfeited land.
2. Recreation. The state and county lands in the Chippewa National Forest include frontage on many lakes large and small. They adjoin a number of good canoe routes and many miles of scenic highway. They include natural compsites and numerous hunt-

ing and fishing areas. They include portions of snowmobile trails, riding and hiking routes, a few historic sites. It is important that state, county, and federal men correlate plans for developing these resources.

3. Wildlife Management. The Department of Conservation has primary responsibility for hunting and fishing throughout the forest. Moreover, it has special interest in improving the game and fish environment on state-owned and tax-forfeited land. State holdings include a great deal of wet land important in propagation of waterfowl. Again, state and federal developments need to be closely correlated.
4. Timber Sales. Generally, state men make timber appraisals, sell timber, mark cutting boundaries, scale products, etc., on state lands wherever located within the National Forest. County managers handle sales on tax-forfeited land. Because many tracts are considerable distance from state and/or county headquarters and surrounded by federal land independently managed, the sales are not always as efficient as they might be. Possibilities of joint planning and merchandising need to be explored as a benefit to operators, as well as land managers.
5. Land Disposal Policy. Generally, the federal government has a "no disposal" policy in regard to sale of land for agriculture or private recreation purposes, the State is inclined to be conservative, while the counties are more liberal. It would seem desirable that the three agencies should find a satisfactory middle ground. This should be possible through the process of land classification and land exchange. Unquestionably, an area as large as the Chippewa National Forest, and one already including a large acreage of private land, will include some public lands suitable for private development. On the other hand, it would serve no good purpose to indiscriminately relinquish large blocks of public land for speculative or questionable uses.
6. Public Relations. In general, the several land managing agencies in the Beltrami-Itasca area retain a good public image. That image, however, is impaired somewhat from time to time, by conditions or incidents which could be avoided by joint planning and closer agency cooperation. Examples

are: occasional untended campsite identified as belonging to county or state; unsightly timber operations close to lakeshore or major highways, inter-agency disagreements concerning best use for certain lands.

Most state forests in this locality lack identity in the public view. Thought needs to be given to the possibility of redefining boundaries consistent with management organization; more adequately marking of boundaries and other features; giving greater publicity to the multiple-use objectives and opportunities in each forest.

Sample Blocks

Fig. 11 shows the location of blocks of land described in Beltrami and Itasca counties.

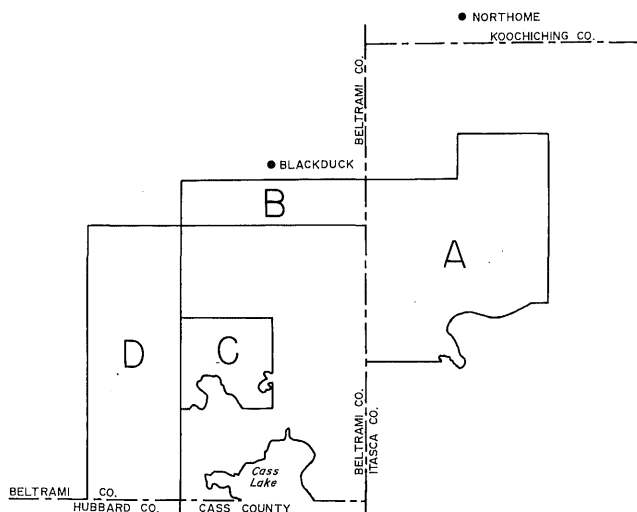


Fig. 11. Four blocks of land described.

Third River Block (A).

This block covers 56,000 acres in northwest Itasca County. It lies completely within the Chippewa National Forest but has been identified as an area which may eventually be excluded after completion of land exchanges with the State. At present, the State owns 49 per cent of the land, the federal government 25 per cent, county and private owners the remainder. (See Fig. 12).

The State now has no personnel in the block itself. Timber sales and other activities on state lands are handled out of Blackduck. The National Forest provides fire protection for the block.

Most of the state land is forested. The prevailed type on the north is aspen with miscellaneous

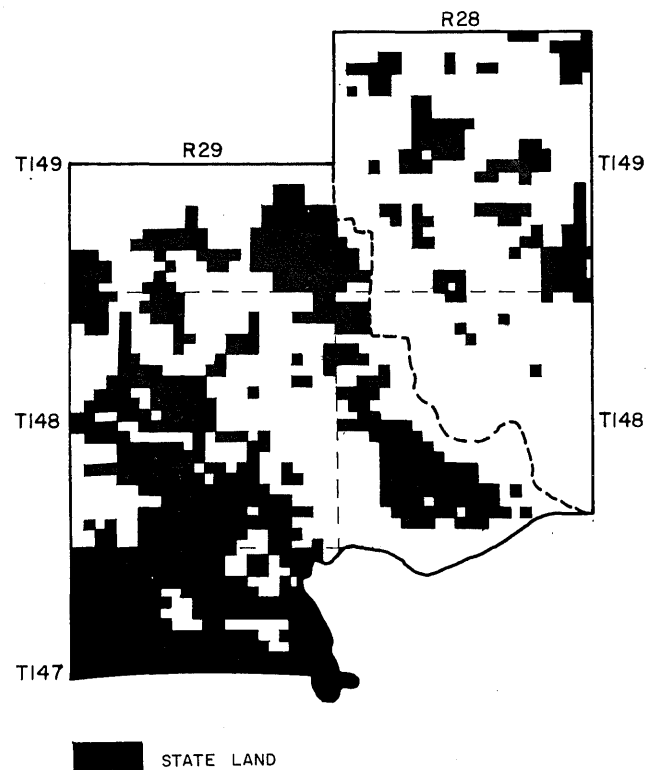


Fig. 12. Location of state land in third river block.

hardwoods. This is interspersed with marshy areas and some fairly extensive tracts of pine. Farther south in Township 147N, Range 29W, wet lands predominate.

The western portion of the Third River Block which has the densest concentration of state lands, also contains a significant acreage of agricultural land, mostly in private ownership. (See Fig. 13).

Primarily, the farmland consists of pasture, rather than cropland. Some clearing is in progress but some other areas are reverting to brush. One wild rice cultivation project was noted. Farming can be integrated with forest management inasmuch as many of the residents seek part-time employment off the farm.

The block also contains some good residential and private resort development notably around Dixon Lake. Public lands will complement the private development by providing some lake frontage for public use, by screening canoe routes and scenic drives, by providing extensive hunting areas. They have possibilities for rustic campgrounds, hiking trails, snowmobile routes, etc.

A trial run of land classification in the north-

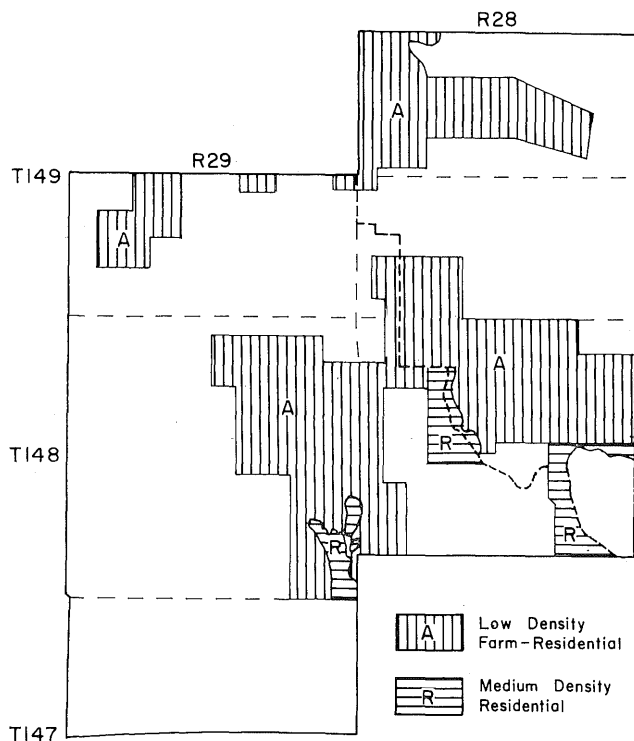
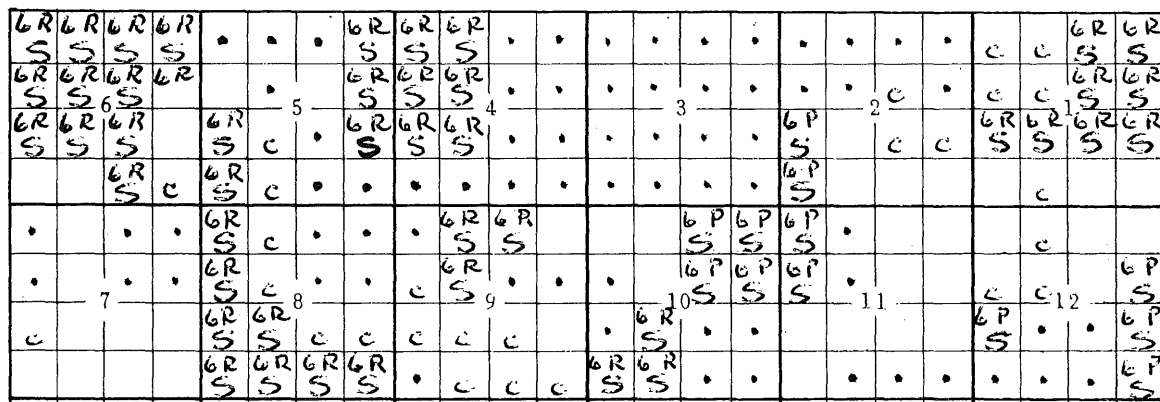


Fig. 13. Agricultural and residential areas as shown by the preliminary Itasca County zoning map.

ern third of Township 148N, Range 29W, gave results as shown in Fig. 14.

General recommendations for the Third River Block then are:

1. Complete the classification of state lands, preferably in cooperation with Itasca County.



S - State Forties
C - County Forties
· - Federal Forties

6R - Multiple-use Forest Lands Recommended for Permanent Retention.

6P - Multiple-use Lands With Possible Future Agricultural Use, to be Retained for Time Being.

Fig. 14. Preliminary Classification of State Lands in North One-third of Township 148N, Range 29W.

2. Consider formal establishment of a Third River State Management Unit in the more solidly state-owned western portion of the block.
 - a. Take over fire protection.
 - b. Create a strong state presence — post boundaries and mark features of interest to the public, such as scenic roads, canoe routes, directions to campgrounds and lake access.
 - c. Plan and practice multiple-use management—develop wildlife areas—increase recreational possibilities — improve timberlands.
3. Initiate land exchanges with the National Forest and work out with Itasca County a method of managing intermingled tax-forfeited land.
4. Pending completion of exchanges both State and County should explore possibilities of cooperation with the National Forest in:
 - a. Timing of timber sales.
 - b. Common boundary marking.
 - c. Joint contracts for various types of cultural operations.
 - d. Uniform practices in travel and water zones.

- e. Joint planning of recreational developments.
- f. Cooperation in wildlife management.
- g. Cooperate in aerial detection of fires both inside and outside of national forest boundaries.

Hines-Summit Area (B)

This tract in Beltrami County includes the south half of Township 149N, Range 30W, and Township 149N, Range 31W. It is not within a designated state or county forest, but it lies close to state headquarters at Blackduck and can be easily supervised from there.

All of the block except the triangle lying west of the Northern Pacific Railway tracks is within the Chippewa National Forest. Federal lands are supervised from ranger district headquarters at Blackduck.

The gross area is 22,500 acres of which the State owns 11 per cent, the County 14 per cent, the federal government 25 per cent, and private owners 50 per cent. (See Fig. 15).

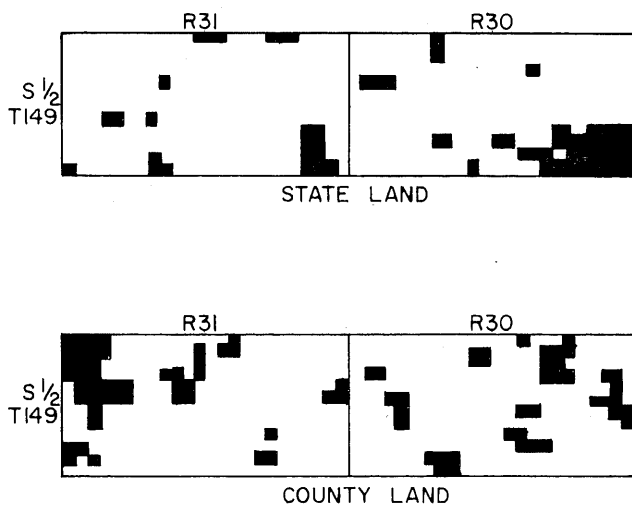


Fig. 15. Location of state and county land in the Hines-Summit area.

The county planning commission has not yet completed zoning. The presumption is that a large portion will be zoned as suitable for low density (agricultural) use.

Detailed classification of state and county land has not been attempted. Before it can be done properly, some basic agreements must be reached on the following:

1. The agricultural potential and what it implies relative to public lands now in timber or being used for other conservation purposes.

This will have a bearing on plans of county, federal and state agencies.

2. Possibility of early exchanges between the State, County and the Chippewa National Forest.

Meanwhile, it would seem logical for the State to retain (provisionally) its lands in these two townships until detailed plans can be formulated.

The State could take over fire protection of the block, including the federal land as partial offset for protection given state lands elsewhere in the National Forest.

Arrangements for cooperative management relative to timber sales, wildlife management, recreational development, screening of roads and waterfrontage can be made pending execution of land exchanges.

Sugar Bush Area (C)

This block consisting of Township 147N, Range 31W, lies within the Buena Vista State Forest and the Chippewa National Forest. It is protected by the United States Forest Service. State land is supervised out of Cass Lake, national forest land out of Blackduck, tax-forfeited land out of Bemidji.

The gross area is 19,340 acres of which the National Forest has 55 per cent, the State 13 per cent, the County 9 per cent, and private owners 23 per cent. The location of state land is shown on Fig. 16. Except Section 16, it is badly frag-

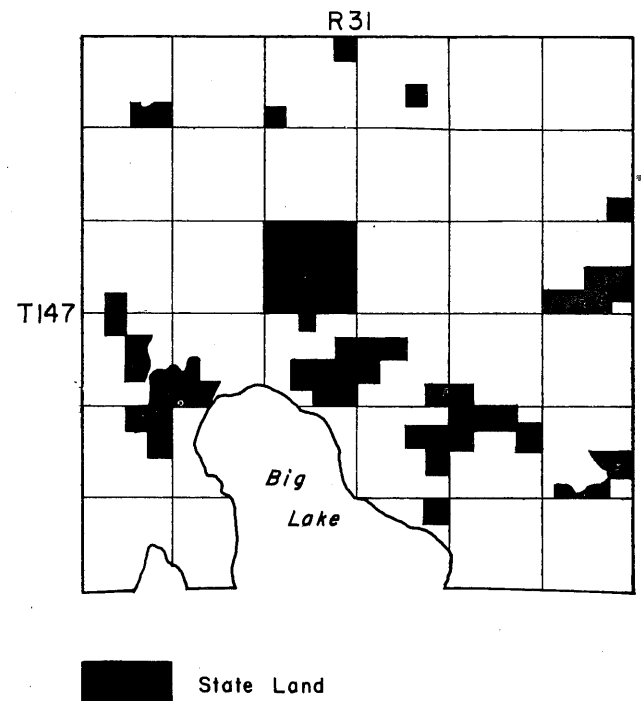


Fig. 16. Location of state land in Sugar Bush Township.

mented and intermingled with land of other owners. The north half of the township, as well as the southeast, is predominantly federal. The 1940 Beltrami County zoning map showed most of the south half and the center of the north half as suitable for residential and agricultural use. (See Fig. 17). Actual development has been much less extensive. Most residents are resorters, and a large share of even the private land supports timber.

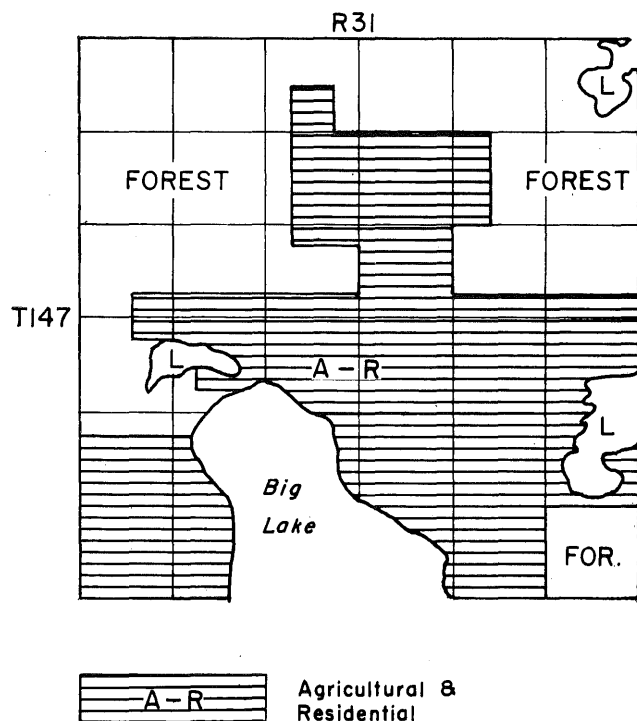


Fig. 17. 1940 zoning map for Sugar Bush Township.

Sample classification of public lands here and there indicated that almost all fell in the category of multiple-use conservation land.

It would appear logical for the State to exchange out of this township. Also, it would appear desirable for the County to seek legal authority to sell directly to the United States Forest Service (at appraised price) as has been done in parts of Cass County.

Pending completion of exchanges, the State, County, and National Forest should discuss means of coordinating management in a manner similar to that enumerated for the Third River Block.

Chippewa Border Area (D)

This area consists of three townships; Port Hope (48N-32W), Turtle River (47N-32W), and Frohn (46N-32W), lying just west of the Chippewa National Forest. The area contains the villages of Tenstrike, Farley and Turtle River and,

of course, is very close to Lake Bemidji and the City of Bemidji.

The privately-owned lands, as indicated by the 1940 zoning plan, are suited to agricultural and residential use. This is true generally of private land lying adjacent to highways and resort lakes. However, the state and county lands which make up about one-third of the total area appear to be primarily suited to conservation uses. The five principal aggregates of state and county land shown in Fig. 18 are believed to be potential conservation management units.

1. The Three-Island Lake Unit consists of about 3,900 acres of which the County owns 87 per cent, the State 7 per cent, and private owners 6 per cent. This is part of a three-parcel tract which Harland Bartholomen & Associates recently recommended to the Beltrami County Planning Advisory Commission for a county park. The unit lies within the boundaries of the Buena Vista State Forest. It has good possibilities for intensive water-based recreation, plus more primitive recreational use, wildlife management and timber production.
2. The Tenstrike Unit contains 4,100 acres; 70 per cent county land, 28 per cent state land, and 2 per cent private land. It is a mixture of timbered upland and swamp with a few small clearings and open marshes. It is quite similar to the adjoining land within the Chippewa National Forest. It has certain recreational and aesthetic value. For example, state Section 36 contains a portion of the Turtle River canoe route. The unit abuts scenic Highway #71 on the north and County 22 on the south. It also has possibilities for game management and timber production. County lands are supervised by the Land Commissioner at Bemidji, but the tract is not at present considered a memorial forest. Most of the unit lies within the Buena Vista State Forest and state lands are supervised from Bemidji.
3. The Bass Lake Unit contains 4,600 acres; 83 per cent county, 15 per cent state, and 2 per cent private. It is a mixture of aspen uplands and swamps. It has no significant waterfrontage but has potential for extensive types of recreation and can be quite valuable for wildlife management and timber growing. It is crossed by scenic Highway County #20. The unit is accessible from Turtle River Village and from Lake Bemidji State Park.

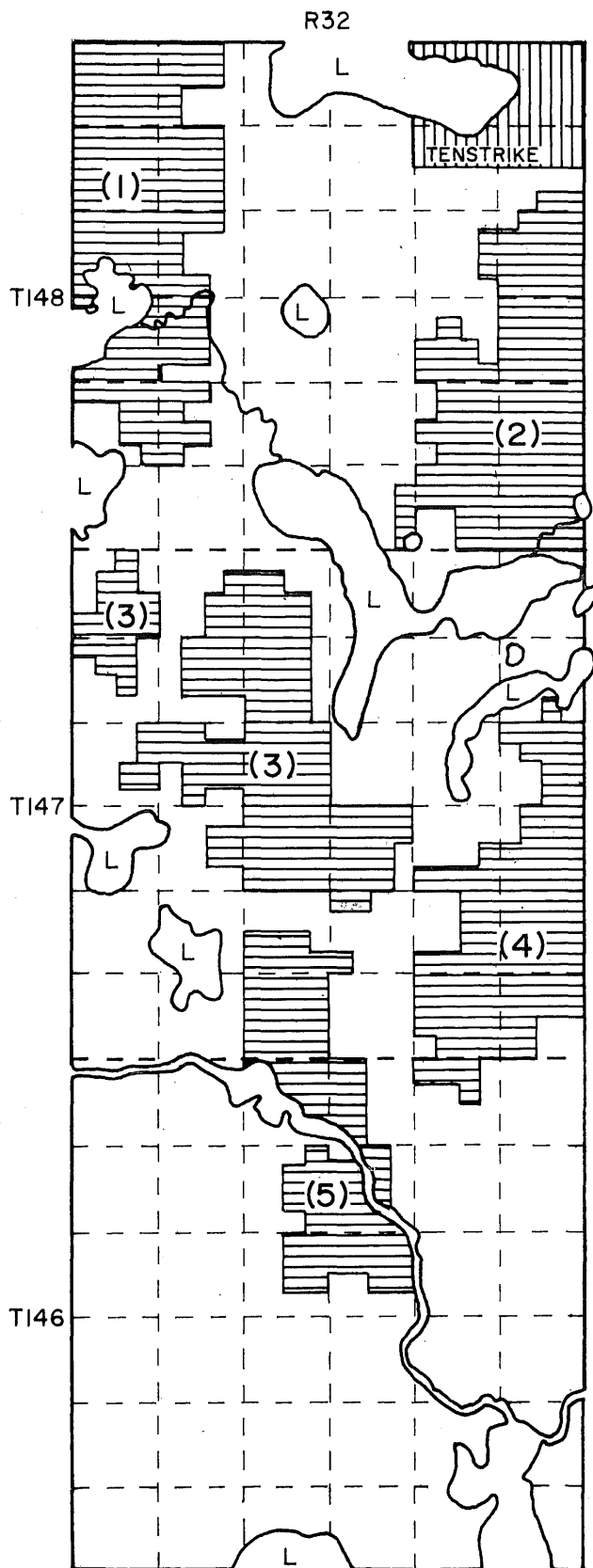


Fig. 18. Location of five potential management units in the Chippewa border area.

4. The Long Lake Unit contains 3,600 acres; 84 per cent county, 8 per cent state, 8 per cent private. It is mostly forested with considerable pine on the sandy soils. Both uplands and swamps have good possibilities for wildlife management. The State has about one-half mile of frontage on Long Lake. Otherwise, recreational features are of an extensive nature.
5. The North Frohn Unit contains 2,750 acres; 74 per cent county, 13 per cent state, and 13 per cent private. It is almost identical with the Mississippi River County Park proposed by Harland Bartholomen & Associates in their January, 1968, plan. At an earlier date, most of this area was designated Bemidji Game Refuge. Essentially, it is a multiple-use area needing management for water, timber, game and recreation. County land is managed out of Bemidji but not as a memorial forest. State land is protected and managed from Bemidji.

It is notable that the five units contain a preponderance of county land; roughly 15,000 acres compared with 2,800 acres state.

A few conclusions seem justified:

1. Beltrami County should classify its lands in the three townships.
2. Areas found chiefly valuable for conservation purposes should be set aside as memorial forests.
3. Lands not needed for conservation or other purposes can be offered for sale in an orderly manner over a period of years. (The same procedure would be advisable for state land.)
4. The County and State should open discussions on protection, timber harvesting, wildlife management, recreational development, seeking an efficient cooperative relationship.
5. Within the memorial forests, special-use areas, such as recreational areas, wildlife projects, scenic travel corridors, waterfront preserves, may be identified (by name, if desired).

Next Steps in Beltrami and Itasca Counties

1. It would be desirable to start a complete land classification of state and county lands within the very near future. On the part of

the State, this will require designation of a Department representative in each county to direct work on state lands. On the part of the counties, presumably it will require resolution by the County Board and delegation of responsibility for classifying tax-forfeited lands.

2. To assist in classifying doubtful areas and to contribute suggestions on management, it will be desirable to have a technical advisory committee made up of individuals representing various aspects of conservation, including agricultural people, recreational interests, fish and game specialists, mining engineers, water experts. The local federal and state land managing agencies should be represented.
3. The classification presumably will identify some tracts of public land suited to private use. The advisory committee should help devise methods of orderly disposal.
4. The classification doubtless will indicate need for additions and alterations in memorial forests and state forests. Again, the advisory committee can be helpful.
5. The United States Forest Service, in its land adjustment program, has identified areas where it is interested in consolidating federal ownership by exchange or purchase. Its multiple-use plan and map is one form of classification. The next step will be to

identify tracts which it will recommend for disposal by exchange, including some suitable for agricultural and industrial development.

6. It is to be hoped that the classification activity will expedite land exchanges and, pending completion of these exchanges, will lead to closer cooperation between the federal, state and county agencies in such things as:
 - a. Comparable rules of management and protection of aesthetic values in waterfront zones and adjoining public roads.
 - b. Coordination of timber sales; timing of sales, joint boundary surveys.
 - c. Tying together of recreation plans; location and maintenance of campgrounds, posting of trails and canoe routes, publicity.
 - d. Combining some reforestation efforts, particularly contract operations, where lands join; ground preparation, insect and weed control.
 - e. Planning wildlife management more or less regardless of ownership.
7. To facilitate cooperation, the several agencies should create a task force which will meet annually or oftener to review objectives and lay out operating plans.

LAND CLASSIFICATION CODE

(Used in Pilot Studies)

- | | | | |
|-------|--|-------|--|
| 1- 2 | COUNTY
Numbers as in Land Records | 38-41 | PARKS (State or County)
Numbers as in Land Records |
| 3-10 | TOWNSHIP - RANGE - SECTION | 42- | NATIONAL PARKS |
| 11-15 | DESCRIPTION
According to Government Survey | | 1. In National Park
2. In proposed National Park |
| 16-21 | ACREAGE (To Nearest Acre) | 43- | MINERAL STATUS |
| 22- | ACQUISITION | | 1. Taconite Lease
2. Natural Iron Ore Lease
3. Other Mineral Leases
4. Mineral Potential |
| | 1. Trust Fund (School & Swamp)
2. Acquired
3. Consolidated Conservation
4. L. U. P. (Leased)
5. 50 - 50 Lands
6. University
7. Volstead
8. Salt Springs
9. Tax-forfeited | 44- | ACCESSIBILITY |
| 23-24 | OWNERSHIP & USE | | 1. On all-weather road
2. Within 1½ Miles of all-weather road
3. Within 1½-3 Miles of all-weather road. Not readily reached by land but:
4. On navigable water (no portage)
5. On navigable water (portage)
6. Not readily accessible
7. Not accessible |
| | 20. Lands & Forestry State Forest
21. Lands & Forestry Non-State Forest
30. Game & Fish
40. Parks
50. Highways
60. Other State Agencies
70. County Forests
71. County Parks
72. County Right-of-Way
73. Other County Land | 45- | COUNTY ZONING
(adopt classes in local ordinance) |
| 25- | ENCUMBRANCES | 46-47 | CLASSIFICATION |
| | 1. Timber Permit
2. Surface Lease
3. Mineral Surface Lease
4. Easement
5. Mineral Lease
6. Commercial Deposits, Gravel, Peat or Marl | | 1. Urban Development
2. Agricultural
3. Agricultural (no year long occupancy)
4. Mining & Mining Facilities
5. Recreational or Aesthetic
6. Multiple-Use Forestry including Watershed
7. Game or Fish (include flowage)
8. Commercial Peat or Gravel
9. Access to Lake or other Land |
| 26- | MANAGEMENT OF LAND | 48- | INTENSITY OF MANAGEMENT JUSTIFIED |
| | 1. In Management Unit
2. In proposed Management Unit | | 1. Extensive management
2. Intensive management |
| 27-28 | STATE FOREST
Numbers as in Land Records | 49- | RECOMMENDED DISPOSITION |
| 29-32 | COUNTY FOREST
Numbered according to county | | 1. Retain Permanently (Conservation)
2. Retain Permanently (Other)
3. Retain Provisionally (Custodial)
4. Dispose (By Sale)
5. Exchange |
| 33- | FEDERAL FORESTS | 50-55 | LAKE IDENTIFICATION (as used by the Division of Waters, Soils & Minerals) |
| | 1. Chippewa National Forest
2. Superior National Forest (regular)
3. Superior National Forest BWCA (Interior)
4. Superior National Forest BWCA (Portal)
5. Superior National Forest Other Shipsted-Nolan | 56-58 | RIVER IDENTIFICATION (as used by the Division of Waters, Soils & Minerals) |
| 34-37 | GAME & FISH UNITS
Numbers as in Land Records | 59-60 | WATERSHED IDENTIFICATION—(numbered 1 to 39 as per map) |
| | | 61-70 | LATITUDE & LONGITUDE
Overall land identification system |

NAME

[illegible]

