

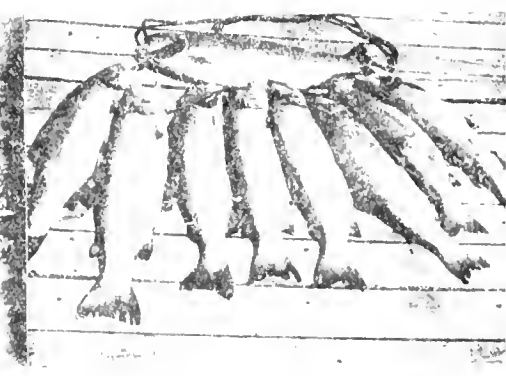


MONTANA
SOIL AND WATER
 AND
CONSERVATION NEEDS
INVENTORY

STATE BOARD OF AGRICULTURE



COLLECTED BY
 STATE BOARD OF AGRICULTURE
 HELENA, MONTANA



MONTANA STATE LIBRARY

S 333 72 S3m 1962 c 1

Montana soil and water conservation need



3 0864 00054012 3

MONTANA SOIL AND WATER CONSERVATION NEEDS INVENTORY

The Inventory was made under the supervision of the State Committee representing agencies and organizations with conservation responsibilities and interests. The chairmanship was assigned to the Soil Conservation Service, Bozeman, Montana, U. S. Department of Agriculture.

The following agencies, institutions and groups were represented on the Montana State Soil and Water Conservation Needs Committee:

UNITED STATES DEPARTMENT OF AGRICULTURE

- Agricultural Marketing Service
- Agricultural Research Service
- Agricultural Stabilization and Conservation Service
- Economic Research Service
- Farmers Home Administration
- Forest Service
- Soil Conservation Service
- Statistical Reporting Service

UNITED STATES DEPARTMENT OF INTERIOR

- Bureau of Indian Affairs
- Bureau of Land Management
- Fish and Wildlife Service
- National Park Service

STATE OF MONTANA

- Agricultural Experiment Station
- Association of Soil and Water Conservation Districts
- Cooperative Extension Service
- Department of State Lands and Investment
- Office of the State Forester
- State Fish and Game Department
- State Planning Board
- State Soil Conservation Committee

The State Committee acknowledges the cooperation and assistance received from other sources.

C O N T E N T S

	Page
Summary	1
Land Resource Area Map (Opposite Page 4)	
Introduction	4
Land Capability Definition	8
Inventory Acreage	9
Land Groups Included in the Inventory	9
Table 1. Land Area of Montana and Use of Inventory Acreage, 1958, and Expected, 1975	11
Table 2. Use of Inventory Acreage 1958 and Expected 1975 . .	12
Estimating the Present Use of Land	13
Estimating Expected Changes in Land Use by 1975	13
Table 3. Use of Inventory Acreage by Class and Sub-Class . .	15
Needs for Conservation Treatment	16
Table 4. Estimate of Needs for Conservation Treatment on Expected Irrigated Cropland Acreage, 1975	17
Table 4A. Estimate of Needs for Conservation Treatment of Dry Cropland Acreage, 1975	18
Table 5. Estimate of Needs for Conservation Treatment on Expected Acreage of Tame Pasture, Native Range, Grazed Woodland and Irrigated Native, 1975	20
Table 6. Estimate of Needs for Conservation Treatment on Expected Acreage of Forest and Woodland, 1975	21
Table 7. Estimate of Needs of Conservation Treatment on Expected Acreage of Other Land, 1975	23
Inventory by Counties	24
Watershed Project Needs	25
Table 10. Watershed Project Needs (Montana 1959)	26
Appendix 1. Department Policy	28
Appendix 2. Procedure for Developing Basic Data	30
Appendix 3. Land Capability Classification	32

SUMMARY

Why the Inventory

Although we are blessed with an abundance of land and water resources, they are not inexhaustible. They must be cared for and used wisely for their productiveness to continue. To assure their wise use basic facts are needed about the physical problems of conservation, their magnitude and relative urgency. This Inventory contains these basic facts. It will be modified and kept current with advances in technology and increased knowledge.

How the Inventory Was Made

The Inventory was initiated in 1957 as part of a National Inventory authorized by the Secretary of Agriculture. It is based upon statistical sampling and upon the knowledge and judgment of people well acquainted with conditions in each county. Detailed soil surveys were made of 160-acre samples drawn in a randomized, statistically sound manner. The data from these samples were scientifically expanded to represent actual conditions in each county and the state. The data were carefully considered by county committees who developed the county reports which were reviewed by the State Committee and in turn by the Department Committee in Washington, D. C.

Who Did It

The Inventory was developed by county committees composed of available representatives of the agencies, institutions and groups listed at the beginning of this report. The county committees received training, guidance and assistance from both the Area Committee and the State Committee.

Conservation Needs

Soil and water conservation includes adjustments in land use; protecting land against soil deterioration; rebuilding eroded and depleted soils; stabilizing runoff and sediment-producing areas; improving cover on crop, forest, pasture and range, and wildlife areas; retaining water for farm and ranch use and reducing water and sediment damage; and water management, distribution, and disposal obtained by draining or irrigating land on existing farms or ranches.

The owners and users of the land would appear to have the immediate responsibility for effecting conservation, and under many circumstances they have the primary interest in it. Many have taken direct action but others may not be expected to evidence this interest until deterioration of the land or water resource is obvious and the effects immediate and costly. Action can be expected when the anticipated direct returns will equal or exceed the costs, usually from a relatively short-term point of view.

Many individuals contribute much more than this to conservation for a great many reasons. They look further ahead for their own direct benefits. They include in their gains the pride in a job well done, the expectation that the

son and the son's son ad infinitum will live on the particular land and the heritage should be left intact, and concern for the future of the Nation and its people.

Despite this, the extent to which the individual land owner and user is interested in conservation tends to lie within his own direct experience, with his actual participation governed by economic considerations. But conservation has much broader implications. Looked at from progressively broader points of view--local, state, national, and even international--conservation assumes importance far beyond the limits of the direct use of the land.

Destruction of the land on one farm can ruin another that is downstream or downwind and it can cause social problems by reducing the population and the economic base of the community. A more complex relationship may be illustrated by a small watershed, occupied by several farms and perhaps a population center. No one farmer can solve the problems of the watershed -- stabilize runoff and control production of sediment in the upper reaches or protect his farm or the town from flood and sediment damage if either lies in the lower reaches. Community effort may be necessary in the application of conservation practices to solve the problems when there are several owners and users of the land and where others may be the beneficiaries.

Moving further from the personal relationship with the land itself to larger social groups, the interest in conservation becomes more general, just as insistent, and in a sense more enduring or farsighted. Public concern is for an adequate and continuing supply of food, fiber, industrial raw materials, a reliable yield of useable water in the streams, protection from excessive flooding and silt deposition; preservation and development of other values associated with the land, and water resource such as recreation and wildlife. These have a set of values to the state consistent with its functions as a political entity in relation to the welfare of its own residents, and its relation with other states and the Nation.

It is the policy of the State of Montana to provide for conservation of all soil and water resources. It provides the legal framework enabling contractual arrangements and group action. It is responsible for management, development and use of the resources it owns.

All the people have major responsibilities for conservation and development of the nation's resources, beyond the immediate interest of the individual owner and user. This represents accumulated common interest, both now and for the future. To this end they share with owners and users of land the costs of those practices with extended and enduring benefits. By this means they insure continuity of the Nation's strength, which arises from the full development and wise use of her varied and abundant resources.

In carrying out these responsibilities in providing for adequate conservation of the Nation's soil and water resources, the Department of Agriculture has constant use for current information on conservation needs. The purpose of the Montana Soil and Water Conservation Needs Inventory is to contribute to the assemblage of such information and to report specifically the needs within the state.

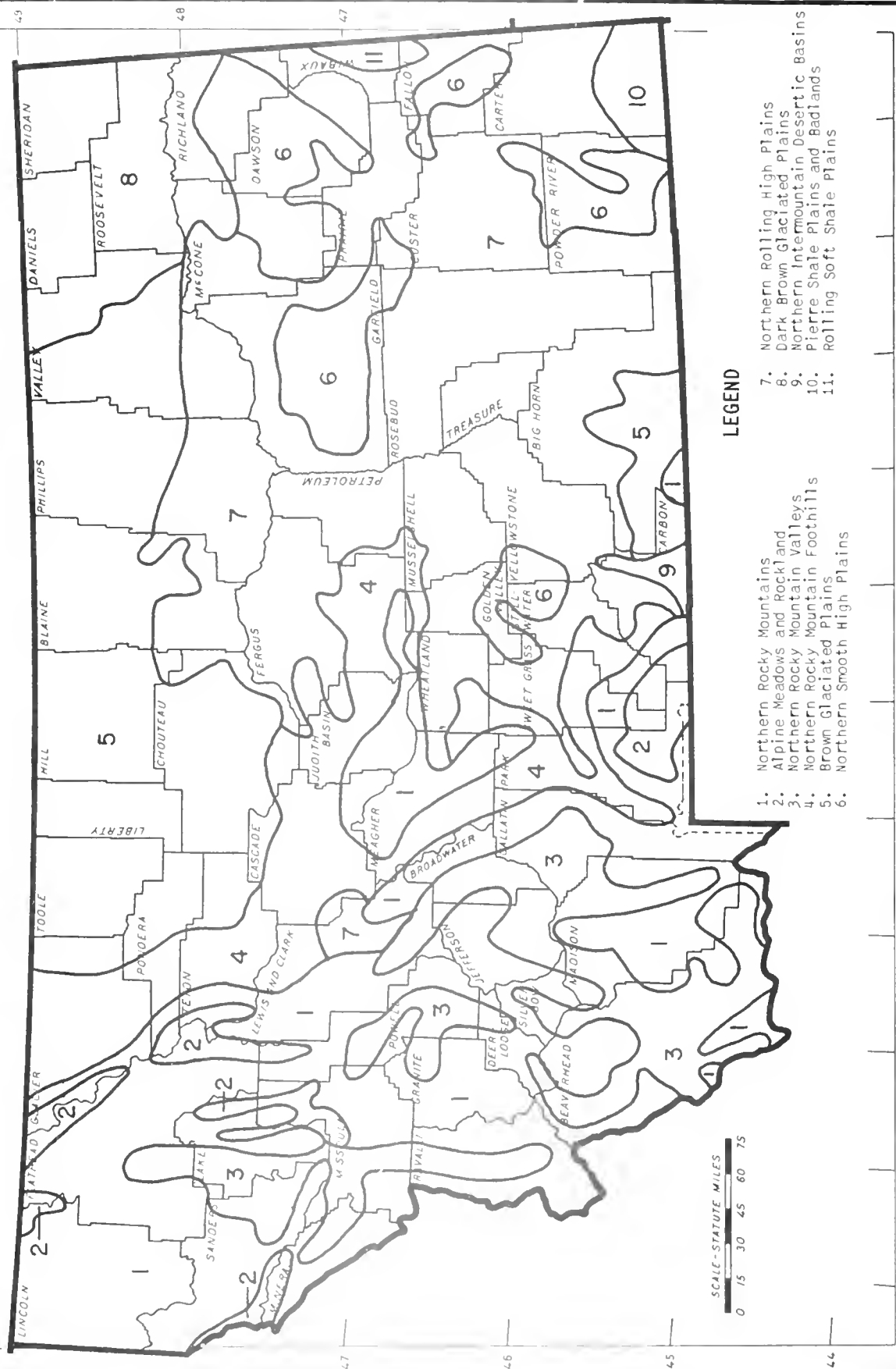
Assumptions

Montana's population will increase to 750,000 by 1975, a rate of growth significantly less than the projected national average. The increased population will be located in urban and industrial areas, expanding residential, industrial and commercial, and recreational areas onto agricultural land.

The acreage of cropland is expected to increase by 1975, accompanied by further irrigation development and local shifts among other land uses.

Demands for the recreation facilities Montana can provide will increase greatly, resulting in further development and increased conflict with agricultural and other uses. At the same time, competition for Montana's water resources will increase, leading to fuller development and utilization.

LAND RESOURCE AREA MAP - MONTANA JANUARY 2, 1962



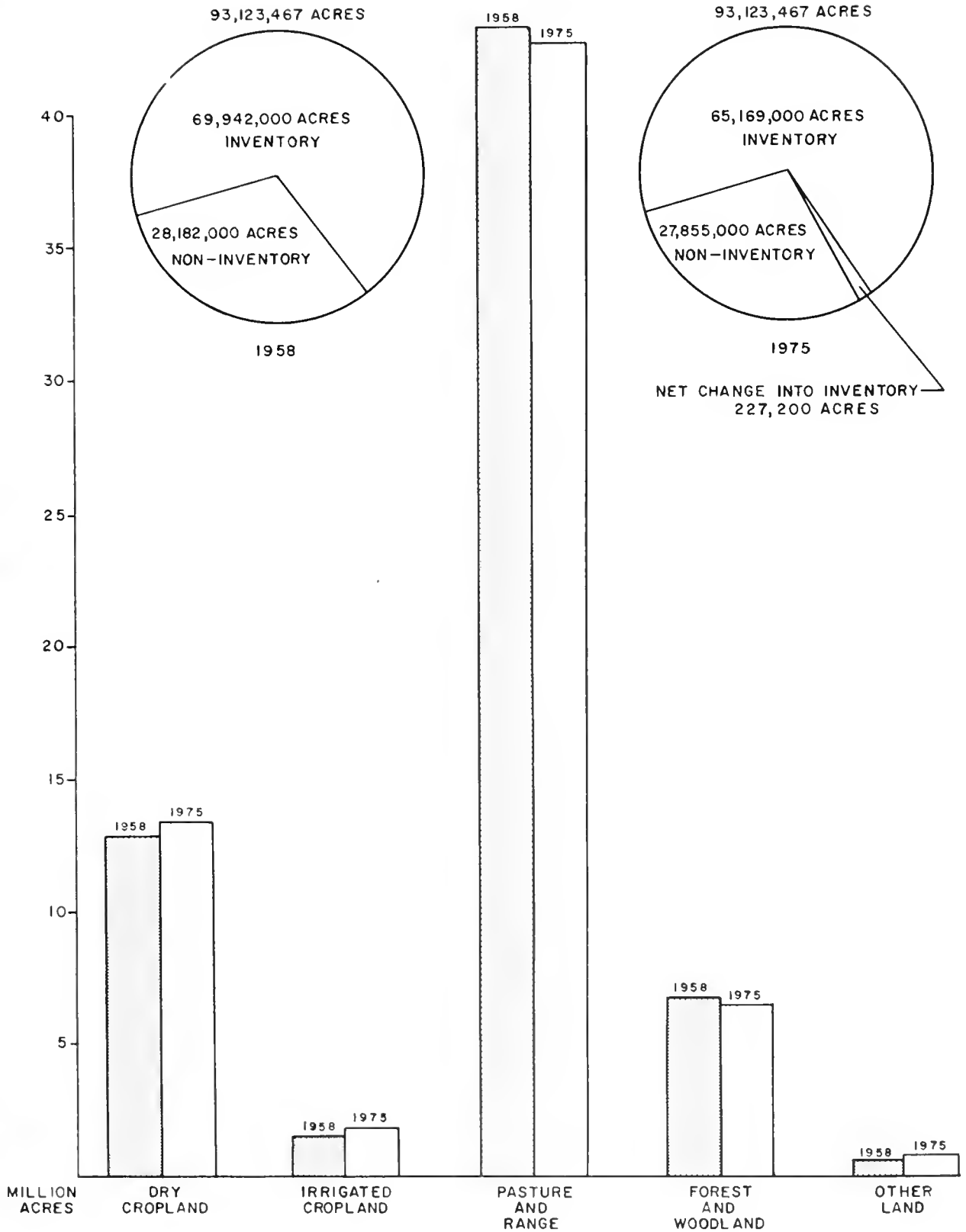
SCALE - STATUTE MILES
 0 15 30 45 60 75

LEGEND

- 1. Northern Rocky Mountains
- 2. Alpine Meadows and Rockland
- 3. Northern Rocky Mountain Valleys
- 4. Northern Rocky Mountain Foothills
- 5. Brown Glaciated Plains
- 6. Northern Smooth High Plains
- 7. Northern Rolling High Plains
- 8. Dark Brown Glaciated Plains
- 9. Northern Intermountain Desertic Basins
- 10. Pierre Shale Plains and Badlands
- 11. Rolling Soft Shale Plains

USE OF INVENTORY ACREAGE MONTANA

FIGURE I



PRESENT LAND USE - TREATED



NON IRRIGATED
CROPLAND



About 50% or approximately 6,584,200 acres are adequately treated



IRRIGATED
CROPLAND



About 45% or approximately 867,200 acres are adequately treated



TAME
PASTURE



About 28% or approximately 493,000 acres are adequately treated

NEEDS TREATMENT



NON IRRIGATED
CROPLAND



About 50% or approximately 6,573,300 acres need treatment and are feasible to treat



IRRIGATED
CROPLAND



About 55% or approximately 1,069,300 acres need treatment and are feasible to treat



TAME
PASTURE



About 72% or approximately 1,253,000 acres need treatment and are feasible to treat

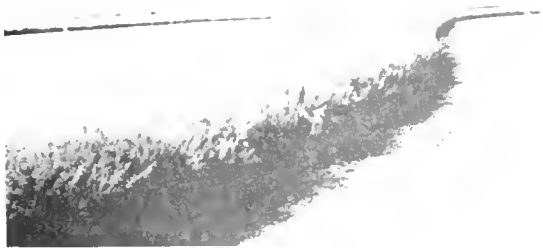
PRESENT LAND USE - TREATED



RANGE



About 29% or approximately 11,703,000 acres are adequately treated



WOODLAND



About 19% or approximately 1,328,400 acres are adequately treated

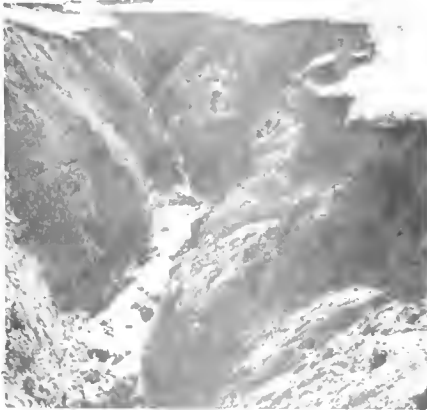


OTHER LAND



About 86% or approximately 532,000 acres are adequately treated

NEEDS TREATMENT



RANGE



About 71% or approximately 28,614,000 acres need treatment and are feasible to treat



WOODLAND



About 81% or approximately 5,416,200 acres need treatment and are feasible to treat



OTHER LAND



About 14% or approximately 85,000 acres need treatment and are feasible to treat

WATERSHEDS



Construction



Storage



Use



Problems



Treatment



Other benefits

Of 565 small watersheds studied, 245 involving 41 million acres need project type action

INTRODUCTION

The Soil and Water Conservation Needs Inventory for Montana was developed as a part of the National Inventory of Soil and Water Conservation Needs established by the Secretary of Agriculture (appendix 1). Data for this report were developed in accordance with the objective, policies, and procedures and within the assumption established for the National Inventory.

The U.S. Department of Agriculture, other federal agencies, state agencies, and organizations have a constant need for current information on conservation needs that will aid in carrying out their responsibilities in providing for adequate conservation of the Nation's soil and water resources. A systematic collection of facts is needed for each county, watershed and river basin regarding soil and water resources, problems in their use, and an estimate of areas needing treatment to maintain and improve their public services. The Inventory assembles such facts for Montana.

Soil, water, forest, range, and wildlife conservation is the protection, use, maintenance, and improvement of these resources to best serve both private and public interest in providing adequate food, fiber, forest products, recreation, and wildlife now and in the future. Conservation is accomplished through making adjustments in land use; protecting land against soil deterioration; rebuilding eroded and depleted soils, stabilizing runoff and sediment-producing areas; improving cover on crop, forest, pasture and range, and wildlife land; retaining water for farm and ranch use and to reduce water and sediment damage; and water management, distribution, and disposal obtained by draining or irrigating land. Areas with excess or inadequate water (or having adverse climatic conditions) were considered as needing conservation treatment when necessary for solution of land use or management problems on farms and ranches, but were not included when treatment was primarily to develop new land or for more intensive use of land in production.

For the purpose of this Inventory, conservation needs were expressed in terms of the acres that require treatment in order to maintain production in line with the national interest as interpreted from the economic framework. Consideration was given to regional and local conditions and the needs of the people for family income.

Inventory estimates were made in accordance with the following assumptions (National assumptions are stated first under each number, followed by further interpretation in relation to Montana conditions):

1. There will be a population increase in the United States for the period 1953 to 1975 from 162 to 210 million. The projected increase in population and moderate rise in per capita consumption of farm products will increase requirements in 1975 to about 40 percent above 1953. Since production is in excess of utilization, an increase in farm output of around 30 percent will meet projected requirements.

State estimates, now (1958) projected only to 1970, visualize for Montana a rate of increase well below the National average because of net out-migration. Extrapolating the 1970 estimate for Montana in relation to the National increase, Montana's population in 1975 should be about 750,000.

If the present trend to larger and fewer farms continues, or even if it should stabilize, the increased population will be located in urban and industrial areas. Therefore, population changes in Montana will result in further encroachment by urban areas on agricultural land. This will be of particular significance in those counties that already have large urban areas and those where there are major opportunities for industrial and commercial development by 1975. Increased urban development will require agricultural land for recreational uses also, such as golf courses and parks. While the total land areas of the counties is involved, most of the larger urban areas are located adjacent to and will expand onto the best agricultural land.

2. Total acreage of crops in the United States, including cropland pasture, will be about 6 percent greater in 1975 than in the period 1951-53.

It is expected that cropland increases in Montana will exceed the National average and will be about eight percent. Additional cropland will come from selected areas of present rangeland suitable for dryland farming, further irrigation development, and clearing such areas as brushland and woodland along streams.

3. With the expected National cropland acreage and fuller adoption by farmers of available technical knowledge in crop production, it appears that market demands in 1975 can be met if certain adjustments are made. Significant shifts will be required in the crops grown. There will also be need for shifts in major land uses, including such changes as the clearing, draining, and irrigating of land for cropland and pasture, reforestation of less productive croplands, and loss of agricultural lands to nonagricultural uses.

In Montana the major shifts in land use will be to increase cropland, irrigate more land, and at the same time lose some of the best agricultural land to urban and highway development. There will be some local shifts between forest and agricultural uses, with a net increase in cropland.

4. The projected increase of population and growth of the Nation's economy will expand the demand for timber products. The 1975 demand for wood products in total (industrial wood and fuel wood) may be as much as 30 percent above 1952 consumption. To meet these timber requirements, more intensive management of all

available commercial forest land will be needed. It will be imperative that commercial forest lands presently nonstocked or poorly stocked be restored to productive conditions. The more critical problems will relate chiefly to increasing the growth of softwood sawtimber and the improvement of productivity of farm and other small forestland ownerships.

Increasing demands for timber products will lead to maximum utilization of Montana's forest resources. Response to the demand will be in terms of improved management of farm and other private woodlands.

5. National demands for recreation facilities and for wildlife will increase more rapidly than the increase of population.

Montana has recreational facilities that are important nationally. The demand for these, including fish and game, will increase even more rapidly than the population. Production of game on public land and recreational uses of forests, mountains, and streams will encroach on agricultural uses. This encroachment will be in the form of balanced grazing use on public land, expansion of restricted-use stream flow control in favor of fisheries and other recreational uses. Presently the State Fish and Game Commission is purchasing land for wildlife grazing land.

6. To meet the National water requirements of the increased population which will be accompanied by expansion of industry intensified agriculture, and other uses, there will be increased competition for available water supplies. This will result in an expansion of water-resource development.

Competition for Montana's available water supplies will increase. Expanded water resource development will lead toward fuller utilization of available water in Montana, in the form of more irrigation, expanded storage facilities, and a greater degree of control oriented to downstream uses.

7. Land owners and operators will be expected to spend no more on conservation measures than will yield a reasonable return to their capital and labor.
8. The public will provide expenditures for soil and water conservation measures in addition to expenditures by land owners and operators when deemed necessary in the public interest to prevent serious permanent damage to soil and water resources.

The Inventory covers two major types of estimates, namely (1) land use, conservation problems, and acreage needing treatment on the inventory acreage, and (2) watershed-project needs on the total acreage.

The Inventory acreage includes all land except: (1) urban and built-up areas as defined on page 9 , and (2) land owned by the Federal Government other than cropland operated under lease or permit. 1/ The Inventory was developed from basic data regarding (1) present acreage in major uses and (2) acreage of each land use classified by physical problems affecting its use (appendix 2). The estimates of needs for conservation treatment, for each major land use, were based on acreages expected for 1975 and the condition of the land or of the vegetative cover as of January 1, 1958, with due regard to the basic economic framework and the locally applicable information and experience in solving conservation problems.

The inventory of watershed project needs is an estimate of the nature and scope of water-management problems that, if met, would require watershed projects of a type and size that are exemplified by those which qualify for assistance under Public Law 566, as amended. All lands were included without regard to type of ownership. The data were reported by watershed-planning units and summarized for the state.

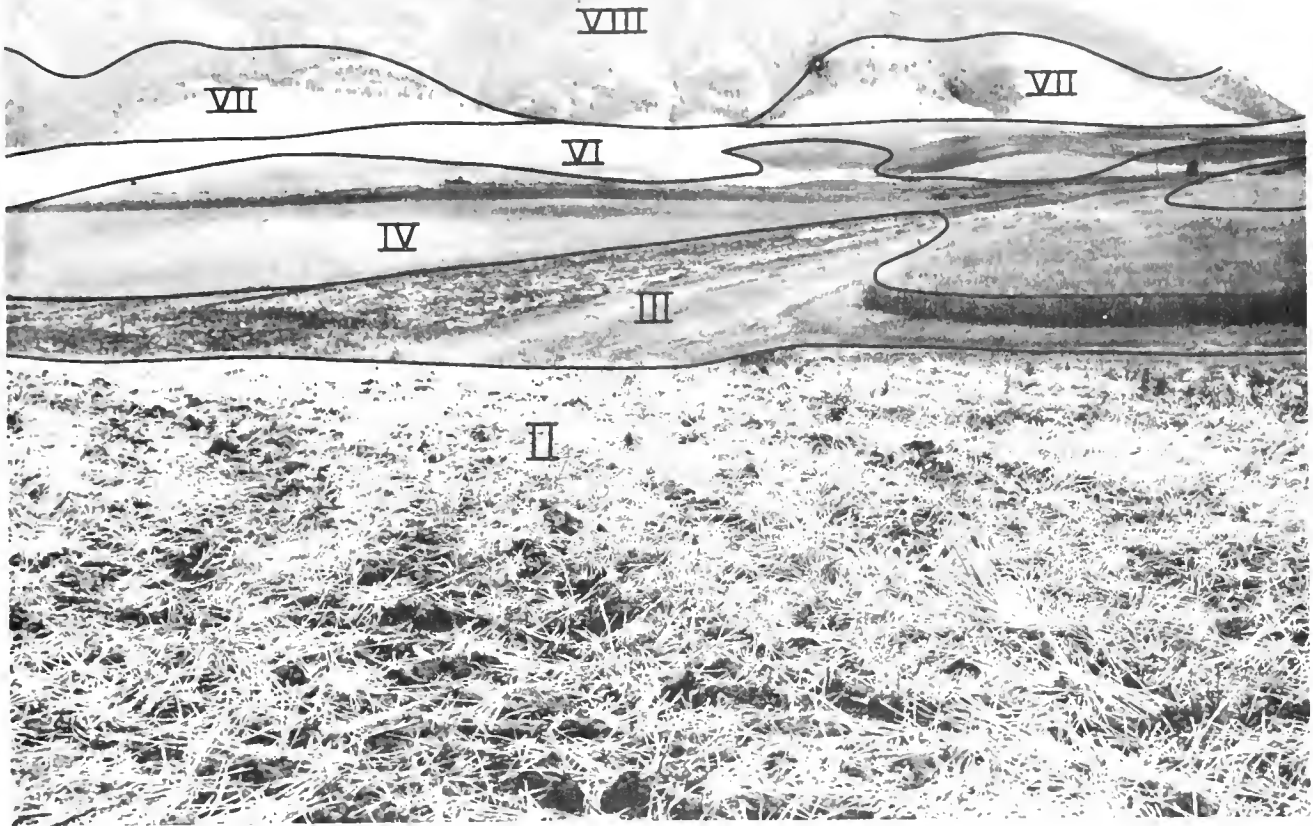
The Department Soil and Water Conservation Needs Committee developed the policies, procedures, and national economic assumptions under which the Inventory was developed. It furnished guidance so the Inventory would be compatible with inventories for other states and it has reviewed and approved the data on which this report is based. The Montana Soil and Water Conservation Needs Committee acted in a similar capacity with the Area and County Needs Committees.

A County Soil and Water Conservation Needs Committee with agency representation similar to that of the State Needs Committee and with guidance from Area Committee members developed the Inventory for each county. After review and approval, data from county inventories were combined to form the State Inventory.

The County Needs Committees were responsible for determining the basic data on land use for the Inventory of Soil and Water Conservation Needs. These estimates of land use are summarized in Tables 1, 2 and 3. Data by counties are given in Table 8. The estimates of land use were based on soil-survey data provided by the Soil Conservation Service and on other basic information supplied by the Forest Service and on that available from State and other Federal agencies.

The Montana Inventory was begun November 7, 1956, and accepted by the USDA Department Committee January 13, 1961.

1/ Conservation needs estimates are already available for most of the land under the jurisdiction of Federal agencies.



LAND CAPABILITY DEFINITION

SUITABLE FOR CULTIVATION			
CLASS I	CLASS II	CLASS III	CLASS IV
Very Good Land No Limitations	Good Land Minor Limitations	Moderately Good Land with Major Limitations	Fairly Good Land Occasional Cultiva- tion with Severe Limitations
NOT SUITABLE FOR CULTIVATION			
CLASS V*	CLASS VI*	CLASS VII	CLASS VIII
Suitable for Pasture, Range and Woodland			Suitable for Wildlife and Watershed
With no Limitations	With Minor Limitations	With Major Limitations	
Increasing Permanent Limitations >>>			

* Some soils in Classes V and VI can be used for crops with unusually intensive management.

The Inventory Acreage

Inventory acreage was the acreage after deduction of Federal land except cropland operated under lease or permit, urban and built-up areas, and water areas less than 40 acres in size or streams less than one-eighth of a mile wide from the total land area of the county. This was the acreage for which the County Needs Committee estimated changes in land use expected to occur by 1975.

The approximate land area, 1954 Census of Agriculture of the county, was used as the total land area of the county. The land areas reported by the Bureau of the Census do not include permanent inland water surface, such as lakes, reservoirs, and ponds having 40 acres or more of area; streams, sloughs, one-eighth of a statute mile or more in width; and islands less than 40 acres.

The 1954 Census of Agriculture data were adjusted for some counties to exclude areas inundated by the construction of new reservoirs, lakes, or ponds of 40 acres or more in size since 1949 when the last adjustment in the land area of counties was made by the Bureau of the Census.

The acreage of water areas of less than 40 acres in size and streams less than one-eighth of a mile wide were determined from the soil surveys and from other sources of information. This acreage was subtracted from the land area of the county in order to arrive at the acreage included in the Inventory.

The acreage of Federal land except that used as cropland was subtracted from the total land area in arriving at the acreage that was included in the Inventory. Cropland owned by the Federal Government and operated under lease or permit was included in the Inventory.

Urban and built-up areas as defined for the Inventory included cities, villages, other built-up areas of more than 10 acres, industrial sites; roads, railroads, railroad yards; cemeteries; airports; golf courses; shooting ranges, and institutional and public administrative sites and similar types of areas.

Land Groups Included in the Inventory

Land groups included in the Inventory acreage were cropland, pasture and range, forest and woodland, and other land. Separate estimates were made for (1) forest and woodland in farms or operated for the production of forest products and (2) other forest and woodland. Other land was subdivided into land in farms and not in farms. A farm as defined for the Inventory is a unit of one or more tracts of land under one management, some portion of which normally is used for the production of field crops, pasture, or range other than for use of the producer's family. It includes forest and woodland or other land commonly considered as part of such a unit.

The following additional subdivisions were made: dry cropland, irrigated cropland, tame pasture, range, irrigated native grassland, and grazed woodland. These subdivisions were additions to, rather than substitutions for, the four main land use groups.

The following definitions of land use were used in making the Inventory:

Cropland -- Land currently tilled including cropland harvested, crop failure, summer fallow, idle cropland, cropland in cover crops or soil-improvement crops not harvested or pastured, rotation pasture, and cropland being prepared for crops or newly seeded crops. Cropland also includes land in vegetables and fruits, including those grown on farms for home use. All tame hay was included as cropland. Meadowland was considered as cropland when (1) it had soil and water conditions capable of producing a hay crop in normal years, (2) was used primarily for the production of hay which is harvested nearly every year, and (3) was locally considered as cropland rather than as pasture or range.

Non-irrigated cropland -- Land to which no supplemental water is applied artificially.

Irrigated cropland -- Land to which water is usually applied by artificial means. The 1958 acreage includes only land which was considered as irrigated cropland in 1957.

Permanent grassland -- All land in grass for five years or longer.

Pasture -- Land in tame grass or other long-term forage that is used primarily for grazing. Does not include pasture in crop rotation.

Range -- Natural grazing land. Forage produced primarily by native grass, forb, legume and browse species. May contain scattered trees with less than 10 percent canopy, but the natural vegetation is such as to identify its use primarily as permanent grazing land.

Irrigated native grassland -- Natural meadows, lowlands and benchlands irrigated to increase production when water is available. Forage may be cut for hay, as in the Big Hole area in Beaverhead County, or harvested by grazing. Forage produced consists primarily of native species.

Forest and woodland -- (a) Lands which are at least 10 percent stocked by forest trees of any size and capable of producing timber or other forest products, or capable of exerting an influence on the water regime; (b) lands from which the trees described in (a) have been removed to less than 10 percent stocking and which have not been developed for other use; and (c) afforested (planted) areas.

Grazed woodland -- This is land which meets the definition of woodland (10 percent or more stocked or cut-over woodland) but which is grazed. Problems are determined in relation to management and improvement of the forage resource, in addition to those associated with woodland management.

TABLE 1. -- LAND AREA OF MONTANA AND USE OF INVENTORY ACREAGE, 1958,
AND EXPECTED, 1975

Item	1958 Acreage <u>1/</u>	1975 Acreage
Inventory acreage:		
Total Cropland <u>2/</u>	14,426,223	15,093,917
Irrigated	1,619,500	1,936,462
Dry	12,806,723	13,157,455
Total Grassland		
Pasture	1,016,927	1,746,718
Range	41,504,391	40,317,512
Irrigated Native	620,965	652,416
Total Forest and Woodland		
Grazed Woodland	6,796,198	6,744,625
.	(3,688,091) <u>6/</u>	(3,638,105)
Other Land	576,987	613,913
Total inventory acreage	64,941,894	65,169,101 <u>5/</u>
Non-inventory acreage:		
Federal land <u>2/</u>	27,190,245	XXX <u>4/</u>
Urban and built-up areas	800,858	XXX <u>4/</u>
Water areas <u>3/</u>	166,720	XXX <u>4/</u>
Total non-inventory acreage.	36,057,523	XXX <u>4/</u>
Total land area	93,099,717	XXX <u>4/</u>

- 1/ Conservation Needs Inventory was begun November 7, 1956, and completed December 21, 1960.
- 2/ Federal land leased or used by permit for cropland is included in inventory.
- 3/ Of less than 40 acres in size and streams less than 1/2 mile in width. Water areas larger than this are not included in total land area.
- 4/ Not available.
- 5/ 151,331 acres out of agricultural use - 378,538 acres into agricultural use - net of 227,207 into agricultural use, primarily from Federal land.
- 6/ Acreage included in total for Forest and Woodland.

In farms or operated for production of forest products -- Forest and woodland which is part of a farm, and all other forest and woodland which is producing or physically capable of producing usable forest crops, is economically available now or prospectively and is not withdrawn from timber utilization.

Other forest and woodland -- Forest and woodland not a part of a farm, which is withdrawn from timber utilization by public agencies, corporations, or private persons, or incapable of yielding usable wood products because of adverse site conditions or so physically inaccessible as to be unavailable economically in the foreseeable future. This will include forest land set aside for special uses other than timber production, such as state parks, monuments, natural areas, and game preserves.

Other land -- Farmsteads, idle land, wildlife areas, and other areas not classified into cropland, pasture and range, forest and woodland, and urban and built-up areas. Idle land includes land formerly used for crops and pasture, now abandoned and not yet reforested or put to other use.

In farms -- Farmsteads, lanes, canals, drains, waste land including all farm land not classified as cropland, range, pasture or woodland.

Not in farms -- Such uses as crossroad filling stations, rural non-farm residential sites, country churches and school grounds, except where any of these uses occur in built-up areas of 10 acres or more, as well as tracts of any size of open, idle rural nonfarm land were classified as other land not in farms.

TABLE 2. USE OF INVENTORY ACREAGE 1958 AND EXPECTED 1975

ITEM	CROPLAND 1,000 <u>Acres</u>	PASTURE- RANGE 1,000 <u>Acres</u>	FOREST- WOODLAND 1,000 <u>Acres</u>	OTHER LAND 1,000 <u>Acres</u>	TOTAL 1,000 <u>Acres</u>
Use in 1958	14,426.2	43,142.2	6,796.2	577.2	64,941.9
Use in 1975					
Cropland	13,599.2	1,444.0	36.4	5.0	15,093.9
Irrigated	1,655.0	257.9	20.5	1.6	1,936.5
Nonirrigated	11,944.2	1,186.1	15.9	3.4	13,157.5
Pasture-Range	761.7	41,572.1	20.9	8.2	42,716.6
Tame Pasture	559.1	1,172.4	7.8	1.5	1,746.7
Range	184.7	39,768.3	11.4	6.7	40,317.5
Irrig. Native	17.9	631.4	1.7		652.4
Forest-Woodland	13.4	9.2	6,709.7	.1	6,744.6
Grazed		1.2	102.6	69.0	3,638.1
Commercial	6.2	6.9	6,004.2		6,029.1
Non-Commercial	7.2	2.3	705.5		715.5
Other Land	9.5	35.5	4.0	561.8	613.9
Out of Inv.	42.5	81.4	25.3	2.2	151.3
Urban-Built Up	35.4	58.2	15.9	1.7	111.2
Into Inventory	9.4	353.8	12.3	3.0	378.5

Estimating the Present Use of Land

For guidance of the County Needs Committees, the State Needs Committee provided data about the land use groups from several sources.

Soil survey data were developed by the Soil Conservation Service showing the acreage and capability classification (Appendix 3).

The "Timber Resources for America's Future" prepared and published by the Forest Service showed forest and woodland acreages. In mapping land samples for this Inventory, the Soil Conservation Service used essentially the same definition for forest as that used by the Forest Service in making forest surveys.

Existing data furnished to the counties included total land area, from the 1954 Census except when reduced by water bodies formed since 1947. The latter were from published sources, and in some cases directly from the agencies involved. The data on areas of Federal land were provided by the agencies responsible for administration of such land or from information furnished by the Department Committee.

Land use included irrigated and dry cropland from the Census, with some reduction for wild hay, and irrigated permanent pasture and native hay derived from the Census and Montana Agricultural Statistics. Pasture and range was based on the Census, but adjusted after forest and woodland and other land on farms were accounted for. The Forest Service supplied data on forest and woodland. Other land on farms came from the Census.

To guide the county committees in their estimates, information from the Bureau of Land Management was supplied on land that might enter the Inventory by 1975, from the Bureau of Reclamation on projects that might be developed, and cropland acreages reported by Agricultural Stabilization and Conservation Service.

The County Needs Committee arrived at an adopted acreage which it believed most accurately represented the present acreage in each of the land uses in the county, after considering the estimates of land uses provided by the State Committee.

Estimating Expected Changes in Land Use by 1975

After the estimates of present land use had been accepted by the State Needs Committee, the County Needs Committee estimated the changes in land use that were expected to occur in the county by 1975. The estimates of changes in land use took into consideration the physical capabilities of the land; present land use and trends; expected demands for agricultural, forest, and other products and services as reflected in the economic framework; and the need for farming systems that are

economically feasible. It was recognized that demands on the land for agricultural production and other purposes as well as size of farm unit and other factors might tend to keep some land in uses not now considered as the most desirable from the physical standpoint. Estimates of acreages for 1975 included the acreage of Federally owned land expected to be transferred into private ownership.

Estimates of land use changes were made by land capability units. Information on land capability was obtained by interpreting information on soils obtained from sample soil surveys. A land capability unit is a grouping of soils that are nearly alike in potential for agricultural use, plant growth, and response to treatment or management. In making capability interpretations, soils are grouped first into capability classes identified by Roman numerals I to VIII. Class I land includes soils having no problem that limits use. The remaining classes have increasing limitations in use. Capability classes are divided into subclasses based on the dominant kind of problem. These are shown by lower case letters with (e) indicating an erosion problem, (w) a problem of excess water, (s) a soil limitation, and (c) a climatic limitation. The addition of an Arabic number following the class and subclass symbol identifies the capability unit.

Secondary problems were not indicated by the land-capability symbol but were recognized by interpreting the soil conditions. This identification of the kind of land and the problems needing treatment was used in estimating land use changes. For further explanation of the land-capability classification see page 32 of the Appendix.

Estimates of land use changes were made by land-resource units and then added together to give county totals. A land-resource unit is a geographical area of land, at least several thousand acres in extent, characterized by a particular combination or pattern of soils (including slope and erosion), climate, water resources, land use, and types of farming. Such a unit may occur in one continuous area or in segments.

TABLE 3. USE OF INVENTORY ACREAGE BY CAPABILITY CLASS AND SUBCLASS, STATE SUMMARY 1/

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	285.2	304.7	75.4	59.1	38.1	31.5	20.3	20.5	419.0	415.8
IE	2583.2	2731.7	1113.9	959.9	155.7	140.1	57.3	59.4	3910.1	3891.1
IW	1993.2	2164.6	797.0	617.2	35.8	32.1	30.3	32.4	2856.3	2846.3
IS	33.6	35.4	17.4	15.2	1.3	1.1	3.6	3.6	55.9	55.3
IC	482.3	487.7	129.9	128.4	117.5	106.0	22.8	22.5	744.6	744.6
	74.1	44.0	169.6	199.1	1.1	.9	.6	.9	245.4	244.9
III	8483.8	9117.7	6817.7	6159.4	347.9	339.0	148.1	150.0	15797.5	15766.1
IIE	6404.0	6986.8	5312.3	4716.8	210.4	206.0	99.5	100.3	12026.2	12009.9
IIS	106.3	119.2	391.8	373.9	20.1	16.4	7.0	8.2	525.2	517.7
IWS	1973.5	2011.7	1113.6	1068.7	117.4	116.6	41.6	41.5	3246.1	3238.5
IV	1981.5	1984.8	4037.0	4041.7	271.9	268.0	35.8	35.4	6326.2	6329.9
IVE	808.6	786.8	1300.5	1328.1	83.6	80.5	11.7	12.6	2204.4	2208.0
IWS	26.3	27.9	100.1	94.7	32.2	33.3	1.0	1.1	159.6	157.0
IC	1146.6	1169.2	2615.3	2597.9	156.1	154.2	23.1	21.7	3943.0	3943.0
	.9	.9	21.1	21.0					21.1	21.9
I-IV	13333.7	14138.9	12044.0	11220.1	813.6	778.6	261.5	265.3	26452.8	26402.9
V	12.9	19.8	305.9	298.5	59.6	57.6	5.0	5.7	383.4	381.6
VS	12.4	19.2	299.0	291.2	53.3	51.7	4.2	4.9	368.9	367.0
	.5	.6	6.9	7.3	6.3	5.9	.8	.8	14.5	14.6
VI	1042.9	912.2	24021.7	24323.4	3731.5	3713.7	82.3	90.5	28878.4	29039.8
VI E	1.1	.1	49.2	50.0	7.7	7.1	.2	.2	51.0	51.0
VI S	19.7	35.6	600.8	586.3	58.7	57.1	4.2	4.5	683.4	683.5
	1022.1	876.5	23371.7	23687.1	3672.1	3655.9	77.9	85.8	28143.8	28305.3
VII	36.9	22.3	6676.8	6802.2	2138.4	2141.2	10.4	10.6	8862.5	8976.3
VIE	3.7	2.3	3858.5	3934.2	1920.2	1923.0	8.5	8.4	5790.9	5867.9
VIS	33.2	20.0	2818.3	2868.0	218.2	218.2	1.9	2.2	3071.6	3108.4
V-VII	1092.7	954.3	31004.4	31424.1	5929.5	5912.5	97.7	106.8	38124.3	38397.7
VIII	.3	.4	94.1	73.0	52.9	52.9	217.3	241.2	364.6	367.5
VIIS	.3	.3	93.6	72.6	52.9	52.9	49.7	49.5	50.2	50.2
							167.6	191.7	314.4	317.3
VIII	.3	.4	94.1	73.0	52.9	52.9	217.3	241.2	364.6	367.5
TOTAL	14426.7	15093.6	43142.5	42717.2	6796.0	6744.0	576.5	613.3	64941.7	65168.1

1/ The Conservation Needs Inventory was begun November 1956 and completed January 13, 1961

2/ Federal land leased or used by permit for cropland is included

NEEDS FOR CONSERVATION TREATMENT

Conservation needs were estimated in acreages having conservation problems and needing treatment.

The problems for cropland and other land are related primarily to the conservation of the soil resource; therefore, land-capability units, singly or in groups, were the basis for these estimates. The problems on pasture, range, irrigated native, and forest and woodland are related to the conservation of the plant cover as well as to the conservation of the soil resource; therefore, the estimates for these land uses were based on the actual condition of the vegetative cover and were made with no direct reference to land-capability units.

The acreage needing treatment for each land use takes into account the treatment needed for acreage coming into such land use from other uses by 1975. For example, the acreage of pasture or range needing establishment or reestablishment (Table 3) includes the acreage coming from other uses into pasture and range.

The Inventory shows that nearly 7.7 million acres of cropland will need appropriate treatment by 1975. Cropland was divided into the following groupings on the basis of problems that limit use:

No problems that limit use -- This is Class I land without conservation problems except those related to the restoration and maintenance of fertility and tilth which may be solved by the methods generally recommended and used in the community. In Montana there are about 305,200 acres of such land.

Water or wind erosion has occurred or is likely to occur under expected use on about 5 million acres of cropland and will therefore require some kind of treatment.

Excess water caused by a high water table or by temporary flooding that prevents or limits use of conservation farming systems was estimated to affect about 157,000 acres.

Unfavorable soil conditions such as salinity, alkalinity, acidity, low fertility, stoniness, shallowness to rock or some other condition that limits root development, or low moisture-holding capacity are estimated to occur on about 2,329,600 acres.

Adverse climatic conditions affect about 60,500 acres as indicated by extremes, in either precipitation or temperature or both.

Tables 4 and 4A show the cropland acreages in each group for each problem that needs conservation treatment.

In Montana there is very little land where none of the conditions are serious enough to impose limits or hazards. Most of the land has one or more of the problems any one of which may be dominant.

TABLE 4 - ESTIMATE OF NEEDS FOR CONSERVATION TREATMENT ON EXPECTED IRRIGATED CROPLAND ACREAGE, MONTANA, 1975.

Type of Problem	Total Acreage <u>1000 Ac.</u>	Adequately <u>1/</u>	Needing
		treated or treatment not feasible	treatment & feasible to treat
	<u>1000 Ac.</u>	<u>1000 Ac.</u>	<u>1000 Ac.</u>
Land with no problems that limit use .	292.7	---	---
Land on which the dominant problem is erosion by water or wind or both . . .	602.7	224.5	378.2
No serious secondary problem	183.1	86.8	96.3
Secondary problem of excess water. . .	0		0
Secondary problems caused by unfavorable soil conditions	2.0	0.7	1.3
Secondary problems caused by adverse climatic conditions	33.4	11.7	21.7
Land on which the dominant problem is excess water	156.9	42.8	114.1
No serious secondary problems	47.1	13.8	33.3
Secondary problems of erosion by water or wind	37.1	8.3	28.8
Secondary problems caused by unfavorable soil conditions	72.4	20.5	51.9
Secondary problems caused by adverse climatic conditions	0.3	0.1	0.2
Land on which the dominant problems are caused by unfavorable soil conditions:	801.1	261.4	539.7
No serious secondary problem	52.0	15.3	36.7
Secondary problems of erosion by water or wind	738.6	240.8	497.8
Secondary problem of excess water. . .	9.6	5.2	4.4
Secondary problems caused by adverse climatic conditions	0.9	0.2	0.7
Land on which the dominant problems are caused by climatic conditions	83.1	25.9	57.2
No serious secondary problem	0		0
Secondary problems of erosion by water or wind	83.1	25.9	57.2
Secondary problem of excess water. . .	0		0
Secondary problems caused by unfavorable soil conditions	0		0
<u>Total acreage of irrigated cropland</u>	<u>1,936.5</u>	<u>867.2</u>	<u>1,069.3</u>

1/ Acreage has been adequately treated or is not feasible to treat under current technology and economic conditions.

TABLE 4A-ESTIMATE OF NEEDS FOR CONSERVATION TREATMENT OF DRY CROPLAND ACREAGE
MONTANA, 1975

Type of Problem	Total Acreage	Adequately	Needing
		treated or treatment & feasible to treat	treatment & feasible to treat
	1000 Ac.	1000 Ac.	1000 Ac.
Land with no problems to limit use. . .	17.6	0	0
Land on which the dominant problem is erosion by water or wind or both . . .	9,656.1	4,918.5	4,737.6
No serious secondary problem	13.4	5.6	7.8
Secondary problem of excess water . .	0	0	0
Secondary problem caused by unfavorable soil conditions	314.7	253.2	61.5
Secondary problem caused by adverse climatic conditions	9,328.0	4,659.7	4,668.3
Land on which the dominant problem is excess water	80.7	38.0	42.7
No serious secondary problem	14.6	10.2	4.4
Secondary problem of erosion by water or wind	58.6	23.0	35.6
Secondary problem caused by unfavorable soil conditions	7.5	4.9	2.6
Secondary problem caused by adverse climatic conditions	0	0	0
Land on which the dominant problems are caused by unfavorable soil	3,398.9	1,609.0	1,789.9
No serious secondary problems	2.1	1.8	0.3
Secondary problem of erosion by wind or water	3,382.7	1,596.3	1,786.4
Secondary problem of excess water . .	14.0	11.0	3.0
Secondary problem caused by adverse climatic conditions	0.2	0.1	0.1
Land on which dominant problems are caused by climate	9.2	6.0	3.2
No serious secondary problems	0	0	0
Secondary problem of erosion by wind or water	8.2	5.0	3.2
Secondary problem of excess water . .	0	0	0
Secondary problems caused by unfavorable soil conditions	1.0	1.0	0
Total acreage of dry cropland	13,157.5	6,584.2	6,573.3

Pasture, Range and Irrigated Native

The conservation needs on pasture, range land and irrigated native were estimated to occur on 12.4 million acres needing treatment of problems related to the establishment and maintenance of cover. Estimates were developed separately for pasture, range, and irrigated native.

The total acreage needing treatment and feasible to treat is shown by problem areas in Table 5. The estimates of acreages needing establishment or reestablishment do not duplicate those needing improvement; however, acreages estimated for any of the other problems may duplicate some of the other acreages.

Establishment or reestablishment of vegetation -- The acreage expected to be converted from other uses to pasture, range, and irrigated native plus land in pasture, range and irrigated native species in such poor condition in 1958 that it needs to be completely reestablished amounts to about 1.4 million acres.

Improvement of vegetative cover -- Another 14.4 million acres had inadequate cover in 1958. It is estimated that most of this acreage could be restored to satisfactory condition by improvement measures short of complete reestablishment.

Protection of vegetative cover -- The 1958 acreage which needs protection from one or more of the following:

Overgrazing -- The Inventory shows that about 18.3 million acres have inadequate vegetative cover but which could be restored to satisfactory condition by the management of livestock or installation of supplemental water facilities. Also, includes any acreage in the estimates for establishment or reestablishment of vegetation or the improvement of vegetative cover on which stockwater facilities are needed on about 6.8 million acres; the acreage thus included is the only duplication of acreage which occurs among these three items.

Fire -- Serious fire hazards which can be protected by improvement and intensification of fire protection measures occur on about 16.8 million acres.

Erosion -- The Inventory reveals there are about 2.1 million acres gullied or other seriously washed and windblown areas which need control measures to prevent further deterioration.

Rodents -- The acreage with serious rodent damage that can be corrected by chemical, mechanical, or other measures amounts to about 400 thousand acres.

Encroachment of woody and noxious plants -- The encroachment of woody and noxious plants had destroyed or threatened the grass cover on about 2.1 million acres which can be protected by chemical or mechanical means. This acreage does not include any pasture on which woody and noxious plants would be eradicated in the establishment or reestablishment of the pasture.

TABLE 5 - ESTIMATE OF NEEDS FOR CONSERVATION TREATMENT ON EXPECTED ACREAGE OF TAME PASTURE, NATIVE RANGE, GRAZED WOODLAND AND IRRIGATED NATIVE - MONTANA, 1975

Item	Tame Pasture	Native Range	Grazed Woodland	Irrigated Native
	1000 acres	1000 acres	1000 acres	1000 acres
Total area	1,747	40,317	3,638	652
Area not needing treatment or not feasible to treat	493	11,703	1,419	248
Area needing treatment	1,253	28,614	2,219	404
Type of problem and area affected:				
Establishment or reestablishment of vegetation	674	683	59	37
Improvement of vegetative cover	257	13,878	723	221
Protection of vegetative cover from:				
Overgrazing	241	12,529	1,311	64
Fire	306	16,447	- 1/	4
Erosion	112	2,005	-	7
Rodents	54	415	-	7
Encroachment of woody and noxious plants	69	1,978	358	61
Insects and disease	144	4,416	-	13
Water Management:				
Excess water	10	147	9	145
Water conservation	159	1,856	65	211
Development of stockwater	84	6,664	383	10

1/ Dashes (-) figures are included in Table 6 - Forest and Woodland

Water Management

Excess water -- The 1958 acreage on which excess water prevents the adequate establishment, maintenance, and use of desirable vegetative cover amounts to about 302 thousand acres.

Water conservation -- The 1958 acreage on which desirable vegetative cover can be feasibly established or improved by water-conserving measures is about 2.2 million acres.

Forest and Woodland

The conservation needs on forest and woodland were estimated in acres needing treatment for problems associated with the development and management of the forest and soil resources.

Forest land withdrawn from timber utilization or incapable of yielding useable wood products because of adverse site conditions or so physically inaccessible as to be unavailable economically in the foreseeable future was not considered in estimating conservation needs except for measures necessary for the protection of such areas for watershed, wildlife, or recreational uses or for the protection of adjacent productive forest and woodland.

Table 6 shows that there are about 907 thousand acres of forest and woodland estimated as needing treatment in each of the problem groups

TABLE 6 - ESTIMATE OF NEEDS FOR CONSERVATION TREATMENT ON EXPECTED ACREAGE OF FOREST AND WOODLAND, MONTANA, 1975

Item	Acreage
	<u>1000 Ac.</u>
Total area	6,744.6
Area needing treatment by:	
Establishment and reinforcement of timber stand	907.1
Improvement of timber stand	2,010.0
Protection of timber from:	
Fire	5,416.2
Insects and disease	4,662.1
Animals, including rodents	1,503.9
Erosion control	232.4
Establishment of shelterbelts and windbreaks -	
acres	24.0
miles	5,500

Establishment and reinforcement of timber stand -- The acreage is made up of three components. First, land expected to shift to forest and woodland from other uses by 1975 except for the acreage which needs trees to check erosion and the acreage of shelterbelts and windbreaks. Secondly, land classified as forest and woodland in 1958 but which was less than 10 percent stocked, or stocked with unsatisfactory species. Thirdly, land in forest and woodland in 1958 more than 10 percent stocked which needed reinforcement. Ordinarily this did not include any acreage stocked to 40 percent or more. The acreage estimates includes only the proportionate part of the acreage needing reinforcement. For example, if a total area of 100,000 acres needed reinforcement but it was estimated that the planting needed to accomplish this would be equal to only 40,000 acres of full-scale establishment, the 40,000 acres was the amount included in the estimate.

Improvement of timber stand -- The Inventory shows that approximately 2 million acres of forest land on which stand-improvement measures are recommended as feasible under good forest management. Estimates were limited to acreages and timber types expected to return the costs of improvement investment.

Protection of timber stand from:

Fire -- The acreage of forest land which in 1958 was not receiving protection adequate to meet the fire situation in the worst years and under critical conditions amounts to about 5.4 million acres.

Insects and disease -- The acreage of forest land not included in 1958 in an effective program of protection from insect and disease outbreaks is shown by the Inventory to amount to about 4.7 million acres.

Animals, including rodents -- The acreage of forest land which in 1958 was not receiving adequate protection from animals, including rodents, and on which protection is considered feasible and practical under good forest management. This estimate of about 1.5 million acres includes the need for protection from domestic animals.

Erosion control -- There are about 232 thousand acres of Forest and Woodland that is expected to be planted to trees to halt erosion plus the acreage of forest land on which erosion and water-disposal measures are needed to check gullies, control sheet erosion, stabilize dunes and blow-outs, contain slide or slide areas, and control logging road and skid trail erosion.

Establishment of shelterbelts and windbreaks -- There are about 24 thousand acres on which windbreaks and shelterbelts to influence wind currents and thus reduce soil blowing, control snowdrifting, conserve moisture, and protect buildings, fields, gardens, and feed lots are feasible.

Forest and woodland grazed -- Substantial acreages of land classified as forest and woodland and expected to be used for pasture and range in 1975 are shown in Table 5. Also included are the estimates of the acreages needing treatment for each of the problems previously described for pasture and range except for the items covering protection of vegetative cover from fire, erosion, and rodents since the acreage affected by these problems were estimated in the consideration of the forest and woodlands needs.

Other Land

In arriving at the estimate of about 85 thousand acres needing treatment and feasible to treat (Table 7) it was recognized that (1) other land is not subject to the problems that accompany tillage, (2) some of the acreage had such a low potential for productive use that treatment was not economically feasible, and (3) that problems on other land affecting nearby cropland, pasture and range, or forest and woodland have been considered in the estimates for those land uses.

Other land was divided into groupings identical to those for cropland. However, the estimates shown in Table 7 do not show the subgroupings of secondary problems. Such estimates were developed by County Needs Committees and summarized for the state but were not considered of sufficient importance to include in this table. Of the "other land" needing treatment about 62,000 acres are in farms. About 21,000 acres of "other land" had no problem.

TABLE 7 - ESTIMATE OF NEEDS OF CONSERVATION TREATMENT ON EXPECTED ACREAGE OF OTHER LAND, MONTANA, 1975

Type of Problem	Total Acreage ¹ 1000 Ac.	Adequately	Needing	
		treated or not feasible ¹ to treat 1000 Ac.	treatment & feasible ¹ to treat 1000 Ac.	Needing treatment in farms 1000 Ac.
Land with no problems that limit use	21	-	-	-
Land on which the dominant problem is erosion by water or wind or both	177	148	29	-
Land on which dominant problem is excess water	22	14	8	-
Land on which the dominant problems are caused by unfavorable soil conditions . .	388	342	46	-
Land on which the dominant problems are caused by climatic conditions	6	4	2	-
Total acreage other land	617	532	85	62

INVENTORY BY COUNTIES

The land areas of the counties, use of inventory acreage by land-capability classes, and needs for conservation treatment in acres for the dominant problems on cropland, pasture and range, forest and woodland, and other land are summarized in Tables 8 through 10.

Conservation needs on cropland and other land were based on problems caused by erosion, excess water, unfavorable soil, and adverse climatic conditions. Conservation needs for pasture and range, and forest and woodland were based on problems related to the establishment, improvement, and protection of vegetative cover, and water management. All estimates are in acres.

NON-FEDERAL LAND

County	Year	Total County Acreage	Total Cropland	Irrigated Cropland	Non-Irrigated Cropland	Total Range & Pasture	Range-Land	Tame Pasture	Irrigated Native	Total Forest & Woodland	Forest in Farms	Other Forests	Grazed Woodland	Other Land	Urban & Built up	Deducted from Inventory Acreage Water Areas less than 40 Acres in size
BEAVERHEAD	1958	3,555.8	98.0	80.0	18.0	1,294.1	1,034.1	10.0	250.6	24.0	23.0	1.0	23.0	11.6	16.5	3.3
	1975	109.7	99.7	10.0	1,286.0	971.5	63.9	10.5	250.6	24.1	23.1	1.0	23.0	11.6	16.5	3.3
	1975	2,821.1	298.0	50.5	2,667.9	2,654.4	4.5	3.0	200.0	178.0	10.8	22.0	100.9	10.8	10.0	.7
BIGHORN	1958	2,730.9	338.1	19.9	288.1	1,780.1	1,756.1	8.0	16.0	55.0	38.0	17.0	50.0	3.7	16.0	4.1
	1975	505.8	469.4	76.4	1,573.4	1,493.7	53.3	26.3	37.5	50.0	4.0	37.5	7.0	8.6	.3	
	1975	766.7	95.0	37.6	361.7	348.9	10.9	9.9	36.2	48.5	8.0	36.2	8.0	8.6	.3	
CARBON	1958	1,324.8	176.8	84.8	92.0	513.3	318.4	42.2	5.6	14.0	13.0	1.0	12.0	12.8	8.0	5.0
	1975	185.7	91.3	9.3	548.2	521.7	13.1	10.5	10.5	14.0	13.0	1.0	12.0	12.7	6.6	5.8
	1975	2,120.3	157.5	1.5	1,337.6	1,288.6	21.0	34.0	40.0	10.0	10.0	2.7	10.0	2.7	6.6	5.8
CARTER	1958	1,701.6	495.6	35.3	812.2	1,337.6	1,258.7	38.6	40.0	10.2	10.2	34.0	84.0	7.4	35.0	4.1
	1975	476.7	38.1	438.6	837.0	802.2	8.0	2.0	128.0	94.0	7.4	34.0	83.8	7.4	35.0	4.1
	1975	2,508.8	1,100.0	15.0	1,085.0	1,163.0	23.6	2.1	23.6	2.1	128.5	34.0	36.0	11.7	26.8	7.5
CHOUTEAU	1958	1,100.0	1,131.7	21.9	1,109.8	1,101.9	104.2	100.6	2.0	39.0	36.0	3.0	36.0	11.7	26.8	7.5
	1975	2,409.6	126.3	23.3	1,878.5	1,855.1	7.6	15.8	15.8	22.0	22.0	21.9	6.9	12.8	8.0	9.1
	1975	95.4	29.2	66.4	1,902.5	1,875.9	10.1	16.5	16.5	21.6	21.6	21.5	22.0	11.7	12.8	8.0
DANIELS	1958	923.5	517.8	1.0	516.8	377.7	357.2	15.5	5.0	3.0	3.0	1.1	2.7	4.8	13.5	1.1
	1975	552.8	378.1	13.2	364.8	1,034.5	1,003.0	24.0	7.5	7.0	6.0	1.0	6.5	7.1	29.7	2.2
	1975	1,509.1	373.9	20.6	353.3	1,039.5	988.1	50.6	6.8	8.0	6.9	1.0	6.3	7.3	29.7	2.2
DEER LODGE	1958	472.3	15.0	11.8	3.2	144.1	133.3	8.8	10.0	126.0	107.0	19.0	63.0	19.4	14.3	.5
	1975	15.8	13.0	2.9	144.2	133.4	1.6	6.2	9.2	127.0	108.0	19.0	62.3	19.4	14.3	.5
	1975	2,045.1	239.3	1.2	238.1	667.8	656.5	9.8	1.5	1.5	1.5	1.3	1.3	3.4	10.5	1.3
FALLON	1958	215.8	55.0	1.8	234.0	695.1	661.3	28.2	2.5	1.7	1.7	1.3	1.3	8.2	18.8	9.6
	1975	537.8	378.1	13.2	364.8	1,034.5	1,003.0	24.0	7.5	7.0	6.0	1.0	6.5	7.1	29.7	2.2
	1975	2,716.2	55.0	16.0	519.0	1,423.0	1,380.6	42.0	.5	219.0	215.0	4.0	209.6	4.2	18.8	9.6
FERGUS	1958	3,289.5	131.5	17.6	131.9	82.5	58.5	21.0	3.0	218.8	214.8	4.0	209.6	4.2	18.8	9.6
	1975	139.3	139.3	30.8	108.5	84.5	45.6	29.9	9.0	666.8	645.3	21.5	184.0	40.0	17.1	6.5
	1975	2,964.0	296.0	96.0	200.0	393.6	335.6	48.0	10.0	229.0	192.0	37.0	82.0	12.5	18.1	3.5
GALLATIN	1958	2,940.8	119.5	4.5	151.0	1,988.1	1,945.1	40.0	3.0	38.0	37.0	1.0	36.5	6.7	34.1	2.0
	1975	97.7	6.5	91.3	2,021.1	1,955.6	60.5	60.5	5.1	38.4	37.4	1.0	36.5	6.9	34.1	2.0
	1975	1,903.4	260.5	10.6	249.9	1,082.6	1,077.5	5.1	5.1	120.0	100.0	20.0	75.0	17.9	9.8	5.6
GLACIER	1958	753.9	73.4	3.3	70.1	619.8	594.8	6.3	2.2	119.0	99.0	20.0	89.3	17.9	9.8	5.6
	1975	71.8	71.8	5.0	66.8	621.9	596.1	25.1	.7	13.0	13.0	13.0	13.0	5.0	7.0	.7
	1975	1,109.1	28.3	23.4	5.0	213.8	201.5	7.4	5.0	151.0	140.0	11.0	70.9	7.4	5.4	.8
GRANITE	1958	34.6	29.5	5.1	207.7	190.9	9.2	7.6	154.8	143.8	11.0	11.0	70.6	7.4	5.4	.8
	1975	1,872.6	1,005.7	8.9	996.8	758.9	698.0	59.6	1.4	8.0	8.0	8.0	8.0	10.1	28.7	2.7
	1975	1,056.6	48.1	17.7	30.4	359.6	344.6	6.1	1.3	61.0	60.0	.7	8.0	9.7	28.7	2.7
JEFFERSON	1958	2,218.4	111.0	40.8	70.2	677.1	640.1	25.6	11.3	296.2	278.6	17.0	174.7	12.6	17.3	1.4
	1975	921.2	525.1	2.5	522.6	343.0	334.5	8.0	.5	4.0	3.0	1.0	3.5	12.6	12.2	1.8
	1975	2,377.6	32.8	21.2	11.5	43.9	40.9	2.0	1.0	7.0	5.4	1.6	4.9	3.6	12.2	1.8
JUDITH BASIN	1958	2,259.2	103.5	83.5	20.0	949.8	908.8	7.5	1.0	530.0	482.5	38.5	299.7	6.0	12.2	4.0
	1975	119.0	119.0	101.0	18.1	933.9	869.8	34.9	29.1	112.1	112.1	30.0	110.0	14.4	10.9	2.9
	1975	1,660.2	461.4	3.5	457.9	895.3	832.7	61.0	1.6	4.3	3.2	1.1	3.5	6.2	21.6	4.5
LEWIS & CLARK	1958	477.6	13.9	16.0	46.0	817.9	800.9	2.0	15.0	159.0	155.0	4.0	105.0	4.9	6.8	3.0
	1975	57.2	64.0	18.0	46.0	820.6	800.1	5.0	15.5	159.0	154.0	5.0	105.0	4.9	6.8	3.0
	1975	1,506.6	57.2	16.0	46.0	820.6	800.1	5.0	15.5	159.0	154.0	5.0	105.0	4.9	6.8	3.0

TABLE 8

LAND USE - PRESENT (1958) AND EXPECTED (1975)

NON-FEDERAL

County	Year	Total County Acreage	X Total Cropland		Irrigated Cropland		Non-Irrigated Cropland		X Total Range & Pasture	Range-Land	Tame Pasture	Irrigated Native	Total Forest & Woodland	Forest in Farms	Other Forests	Grazed Woodland	Other Land	Urban & Built up	Deducted from Water Areas less than 40 Acres in size		
			1000 Ac.	%	1000 Ac.	%	1000 Ac.	%												1000 Ac.	%
MINERAL	1958	782.7	5.5	1.2	4.3	4.8	4.4	1.1	3	115.6	110.9	4.7	34.9	34.9	4.7	8.0	.9	8.0	.5		
	1975	782.7	5.6	2.1	3.5	6.6	5.8	.6	.3	110.5	105.8	4.7	34.8	34.8	4.7	13.5	.9	13.5	.9		
	1975	1,673.3	61.0	25.7	35.3	100.0	95.5	2.5	2.0	772.4	695.4	77.0	256.6	256.6	77.0	8.3	8.3	13.5	.9		
MISSISSIPPI	1958	1,207.0	71.2	10.7	60.8	750.0	730.8	17.8	1.4	241.0	243.0	1.0	211.0	211.0	1.0	5.9	5.9	13.8	1.5		
	1975	1,681.3	122.1	57.7	64.5	512.0	477.0	30.0	5.0	125.0	129.1	28.0	78.0	78.0	6.0	6.0	18.7	3.7	18.7	3.7	
	1975	1,056.1	36.5	9.2	29.3	582.2	573.9	6.3	2.0	23.9	23.9	27.9	77.9	77.9	6.1	6.1	9.1	.4	9.1	.4	
PHILLIPS	1958	3,345.8	302.1	45.2	256.8	1,680.9	1,616.1	51.1	13.7	13.7	6.0	3.0	3.0	3.0	3.0	5.0	5.8	17.8	6.4	17.8	6.4
	1975	3,345.8	302.6	67.0	235.6	1,650.3	1,587.2	48.4	11.8	5.6	5.6	2.6	2.6	2.6	3.0	3.0	4.8	6.3	17.8	6.4	
	1975	1,051.5	543.8	85.5	458.3	351.3	330.9	11.8	5.6	12.0	5.0	7.0	12.0	5.0	7.0	12.0	7.4	12.8	2.7	12.8	2.7
POWDER RIVER	1958	2,102.0	133.2	4.9	128.3	1,295.4	1,286.8	8.0	5.5	67.0	67.0	50.2	60.0	60.0	16.8	6.1	6.1	1.6	1.6	16.8	6.1
	1975	1,495.7	45.0	30.0	15.0	323.6	288.6	5.0	20.0	393.0	301.0	92.0	110.5	110.5	8.0	10.5	8.0	10.5	8.0	10.5	8.0
	1975	1,105.3	45.3	31.5	13.8	326.9	300.7	6.8	19.4	393.0	300.6	92.0	109.5	109.5	8.8	8.8	8.8	.9	8.8	.9	
RAVALLI	1958	1,525.8	103.5	91.5	12.0	111.2	95.1	10.1	2.7	2.0	2.0	17.0	168.0	168.0	9.0	158.0	17.0	7.7	158.0	17.0	
	1975	1,321.6	435.4	32.4	403.0	779.0	757.8	19.1	2.0	12.1	10.2	10.2	178.8	170.4	8.4	157.2	17.7	7.7	157.2	17.7	
	1975	1,526.4	720.0	10.1	709.9	683.8	671.5	9.3	3.0	11.5	9.8	9.8	16.8	16.8	1.8	8.5	24.7	2.8	24.7	2.8	
ROSEBUD	1958	3,220.5	128.5	30.0	98.5	2,629.6	2,610.6	17.4	1.6	103.0	103.0	3.8	103.0	103.0	3.8	4.6	4.6	4.6	3.1	4.6	3.1
	1975	1,791.2	54.3	13.5	40.8	167.2	151.7	13.1	2.4	624.0	550.0	74.0	312.0	312.0	6.0	14.2	6.0	14.2	1.5	14.2	1.5
	1975	1,088.0	619.3	1.9	617.3	407.4	395.6	11.4	4.4	2.0	2.0	2.0	17.0	17.0	2.0	14.1	10.0	14.1	3.0	14.1	3.0
SILVERBOW	1958	458.2	3.7	1.6	2.1	151.5	141.1	1.1	5.4	45.0	36.0	9.0	42.7	42.7	1.3	11.5	1.3	11.5	.1	11.5	.1
	1975	1,150.1	227.7	33.7	194.0	610.2	579.5	27.5	3.2	92.0	91.0	1.0	83.1	83.1	1.3	9.9	1.0	9.9	.9	9.9	.9
	1975	1,151.4	83.4	41.1	42.3	719.7	663.8	44.7	10.2	57.0	46.0	11.0	46.0	46.0	25.8	7.0	25.8	.5	7.0	.5	
TETON	1958	1,468.2	523.0	80.0	443.0	560.0	520.0	20.0	20.0	27.0	8.0	19.0	20.0	20.0	17.3	4.0	17.3	4.0	17.3	4.0	
	1975	1,218.0	579.2	3.4	575.8	569.0	562.5	6.0	5.5	9.0	9.0	9.0	9.0	9.0	11.7	6.7	11.7	6.7	11.7	6.7	
	1975	699.8	59.4	17.1	42.3	528.6	487.5	40.8	3.1	24.0	24.0	2.1	24.0	24.0	2.1	3.1	2.1	3.1	1.2	3.1	1.2
VALLEY	1958	3,175.0	690.0	30.0	660.0	1,220.0	1,220.0	39.5	18.0	16.8	16.8	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
	1975	3,175.0	730.4	49.4	681.0	1,174.9	1,174.9	58.0	15.7	15.4	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
	1975	910.1	51.8	16.9	34.9	773.1	729.9	28.0	15.2	6.0	1.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
WHEATLAND	1958	569.0	181.1	18.1	163.0	345.6	332.0	13.4	2.2	5.0	2.3	2.3	2.3	2.3	2.7	5.0	5.8	6.0	1.2	5.8	1.2
	1975	569.0	173.3	98.8	173.3	358.1	320.4	37.5	2.2	5.4	2.3	2.3	2.3	2.3	3.1	5.0	5.8	6.0	1.2	5.8	1.2
	1975	1,686.4	307.8	307.8	209.0	1,167.3	1,160.9	4.3	2.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
YELLOWSTONE	1958	93,099.7	14,426.2	1,619.5	12,806.7	43,112.3	41,504.4	1,016.9	621.0	6,796.2	6,096.6	699.6	3,688.1	3,688.1	699.6	3,688.1	577.2	800.9	3,688.1	166.7	
	1975	15,093.9	1,936.5	13,157.5	12,716.6	40,317.5	39,317.5	1,746.7	652.4	6,744.6	6,029.1	715.5	3,638.1	3,638.1	715.5	3,638.1	613.9	800.9	3,638.1	166.7	
	1975	15,093.9	1,936.5	13,157.5	12,716.6	40,317.5	39,317.5	1,746.7	652.4	6,744.6	6,029.1	715.5	3,638.1	3,638.1	715.5	3,638.1	613.9	800.9	3,638.1	166.7	

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

BEAVERHEAD COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	.5		10.7	10.6					11.2	10.6
II	75.5	42.3	122.6	154.2						
IES	28.5	24.6	22.0	5.0				.2	197.9	196.7
	18.5	15.2	3.4	5.7					30.5	29.6
	28.5	2.5	117.0	143.5					21.9	20.3
								.2	145.5	146.2
III	21.9	65.2	341.3	291.5		.1			363.2	358.3
IES	3.0	42.8	153.0	113.3		.1		1.5	156.6	157.1
	9.3	13.2	188.3	176.2				.5	197.3	191.9
		9.2						.1	9.3	9.3
IV		1.1	23.2	22.0					23.2	23.2
S		1.1	23.2	22.0					23.2	23.2
I-IV	97.9	108.6	497.6	478.3		.1		1.8	595.5	588.8
V		1.0	27.9	27.1					27.9	28.2
W		1.0	27.9	27.1					27.9	28.2
VI			724.3	736.4	23.9	23.9			748.2	760.5
WS			24.2	34.1					24.2	34.1
			700.1	712.3	23.9	23.9			724.0	736.5
VII			44.2	44.2		.1	.1		44.3	44.3
IES			22.5	22.5		.1	.1		21.7	21.7
									22.6	22.6
V-VII		1.0	796.4	807.7	24.0	24.0		.3	820.4	833.0
VIII							11.6	11.6	11.6	11.6
W							11.6	11.6	11.6	11.6
VIII							11.6	11.6	11.6	11.6
TOTAL	97.9	109.6	1294.0	1286.0	24.0	24.1	11.6	13.7	1427.5	1433.4

BIG HORN COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	10.0	10.0	.7	.7			.8	.8	11.5	11.5
II	65.2	67.6	142.6	139.6	2.6				210.9	210.3
IES	44.8	47.2	113.0	110.0	2.6		.5	.5	160.4	159.8
	1.1	1.1	1.7	1.7					2.8	2.8
	19.3	19.3	27.9	27.9			.5	.5	47.7	47.7
III	167.1	170.2	379.9	376.1	3.3		3.4		551.4	550.8
IES	139.9	142.4	290.6	287.5	2.1		2.2	1.1	432.7	432.2
	27.2	27.8	89.3	88.6	1.2		1.2	1.0	118.7	118.6
IV	17.3	16.3	158.3	159.2	2.2		2.2		177.8	177.7
WS	1.4	3.8	82.5	80.1	2.2				86.1	86.1
	15.9	12.0	75.8	78.7					90.8	90.7
I-IV	259.6	264.1	681.5	675.6	8.1	8.2	2.4	2.4	951.6	950.3
V			6.5	6.5					6.5	6.5
W			6.5	6.5					6.5	6.5
VI	38.5	37.2	1355.4	1358.3	72.4	72.6	2.5	2.5	1468.8	1470.6
WS	.3	.3	55.2	55.2	.3	.3			55.8	55.8
	38.2	36.9	1300.2	1303.1	72.1	72.3	2.5	2.5	1413.0	1414.8
VII			624.3	628.3	118.6	118.6			742.9	746.9
IES			407.7	411.7	118.6	118.6			526.3	530.3
			216.6	216.6					216.6	216.6
V-VII	38.5	37.2	1986.2	1993.1	191.0	191.2	2.5	2.5	2218.2	2224.0
VIII			.3	.3	.9	.9	5.1	5.1	6.3	6.3
S			.3	.3	.9	.9	5.1	5.1	6.3	6.3
VIII			.3	.3	.9	.9	5.1	5.1	6.3	6.3
TOTAL	298.1	301.3	2668.0	2669.0	200.0	200.3	10.0	10.0	3176.1	3180.6

BLAINE COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	21.9	33.1	22.4	13.9	7.0	4.0	.2	.3	51.5	51.3
II	1.0	53.3	87.6	35.2					88.7	88.6
IES	1.0	51.5	86.4	34.8				.1	86.4	86.3
		1.8	1.2	.4				.1	2.3	2.3
III	192.4	264.7	146.5	73.6			.2	.9	339.7	339.4
IES	166.9	236.3	139.4	69.3			.2	.4	306.7	306.4
	25.5	28.4	7.1	4.1				.4	33.0	33.0
IV	49.8	123.3	323.8	250.0					373.6	373.3
WS	14.2	22.8	58.8	50.8					73.0	73.0
	33.2	98.3	263.9	198.6					297.1	296.9
I-IV	265.1	474.4	580.3	372.7	7.0	4.2	1.1	1.3	853.5	852.6
V	.4			.4					.4	.4
W	.4			.4					.4	.4
VI	71.1	68.9	877.9	879.7			2.4	2.5	951.4	951.1
WS		.8	1.7	.9					1.7	1.7
	71.1	68.1	876.2	878.8			2.4	2.5	949.7	949.4
VII	1.4	2.6	314.7	313.4	48.0	48.0	.1	.1	364.2	364.1
IES			92.2	92.1					92.2	92.1
	1.4	2.6	222.5	221.3	48.0	48.0	.1	.1	272.0	272.0
V-VII	72.9	71.5	1192.6	1193.2	48.0	48.0	2.5	2.6	1316.0	1315.6
VIII			7.1	7.1					7.1	7.1
S			7.1	7.1					7.1	7.1
VIII			7.1	7.1					7.1	7.1
TOTAL	338.0	545.9	1780.0	1573.3	55.0	52.2	3.6	3.9	2176.6	2175.3

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

BROADWATER COUNTY, MONTANA

CLASS	CROPLAND 2/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	8.8	8.5					.1	.3	8.9	8.8
II E S	17.8 11.9 5.9	15.6 10.2 5.4		1.9 1.5 .4			.4 .1 .3	.6 .3 .3	18.2 12.0 6.2	18.1 12.0 6.1
III E S	60.6 48.2 3.4 9.0	66.8 57.6 1.8 7.4	69.7 61.5 7.9 7.3	64.6 53.0 2.5 9.1	.8 .8	.4 .4	3.5 2.9 .2 1.7	3.4 2.9 .2 1.3	134.6 113.4 4.5 16.7	135.2 113.9 4.5 16.8
IV E S	3.7 1.6 1.9	5.4 1.6 2.3 1.5	31.0 10.5 7.3 13.2	29.7 11.0 6.1 12.6			.4 .1 .3	.5 .1 .3	35.1 12.2 7.5 15.4	35.6 12.7 7.5 15.4
I-IV	90.9	96.3	100.7	96.2	.8	.4	4.4	4.8	196.8	197.7
V W		.1 1.1	1.4 1.4	1.2 1.2	.5 .5	.5 .5			1.9 1.9	1.8 1.8
VI W S	2.8 2.8	4.0 4.0	208.4 1.5 206.9	210.7 1.5 209.2	36.4 .8 35.6	35.4 .8 34.6	1.6 1.6	1.9 1.9	249.2 2.3 246.9	252.0 2.3 249.7
VII E S	1.2 1.2	.2 .2	51.2 12.6 38.6	55.2 15.0 40.2	12.2 10.7 1.5	12.1 10.6 1.5		.2 .2	64.6 23.3 41.3	67.7 25.8 41.9
V-VII	4.0	4.3	261.0	267.1	49.1	48.0	1.6	2.1	315.7	321.5
VIII S							1.1 1.1	1.1 1.1	1.1 1.1	1.1 1.1
VIII							1.1	1.1	1.1	1.1
TOTAL	94.9	100.6	361.7	363.3	49.9	48.4	7.1	8.0	513.6	520.3

CARBON COUNTY, MONTANA

CLASS	CROPLAND 2/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	10.8	10.7	1.5	1.4			.5	.5	12.8	12.6
II E W S C	45.2 9.7 .3 5.9 29.3	46.3 9.5 .3 6.2 30.3	23.3 1.4 .7 5.1 16.1	22.1 1.4 .7 4.8 15.2	.2 .2	.2 .2	1.6 .3 .1 .6 .6	1.6 .3 .1 .6 .6	70.3 11.4 1.1 11.8 46.0	70.2 11.2 1.1 11.8 46.1
III E W S	52.2 43.6 7.5 1.1	54.0 43.7 8.0 2.3	22.8 12.0 5.8 5.0	20.7 11.7 3.3 3.7	1.1 1.1	1.1 1.1	.4 .2 .2 .2	.4 .2 .2 .2	76.5 59.3 14.4 6.3	76.2 59.6 14.4 6.2
IV E S C	41.2 18.0 23.2	43.6 18.1 24.6 .9	100.3 43.1 36.1 21.1	98.9 43.0 34.9 21.0			.7 .4 .3	.7 .4 .3	142.2 61.5 59.6 21.1	143.2 61.5 59.8 21.9
I-IV	149.4	154.6	147.9	143.1	1.3	1.3	3.2	3.2	301.8	302.2
V W	3.6 3.6	4.2 4.2	11.4 11.4	10.8 10.8	.1 .1	.1 .1	.6 .6	.6 .6	15.7 15.7	15.7 15.7
VI W S	23.9 1.1 23.8	26.9 1.1 26.7	297.3 8.9 288.4	305.9 8.8 297.1	12.3 10.3 2.0	12.3 10.3 2.0	.5 .2 .3	.5 .2 .3	334.0 19.5 314.5	345.6 19.5 326.1
VII E S C			82.9 70.0 12.9	84.5 71.6 12.9	.3 .3	.3 .3			83.2 70.0 13.2	84.8 71.6 13.2
V-VII	27.5	31.1	391.6	401.2	12.7	12.7	1.1	1.1	432.9	446.1
VIII W S		.1 .1	3.9 3.2	3.9 3.4			8.4 7.6 7.8	8.4 7.6 7.8	12.3 1.1 11.2	12.4 1.2 11.2
VIII		.1	3.9	3.9			8.4	8.4	12.3	12.4
TOTAL	176.9	185.8	543.4	548.2	14.0	14.0	12.7	12.7	747.0	760.7

CARTER COUNTY, MONTANA

CLASS	CROPLAND 2/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I E	11.5 11.5	18.4 18.4	13.8 13.8	6.9 6.9			.1 .1		25.3 25.3	25.4 25.4
II E S	48.4 48.4	55.0 54.0 1.0	117.9 106.4 11.5	111.3 100.8 10.5	10.0 10.0	10.1 10.1			176.3 164.8 11.5	176.4 164.9 11.5
IV S		5.3 5.3	44.2 44.2	39.2 39.2					44.2 44.2	44.5 44.5
I-IV	59.9	78.7	175.9	157.4	10.0	10.2			245.8	246.3
VI W S	97.5 2.5 92.0	94.0 8.5 85.5	1123.0 19.9 1112.1	1139.8 3.9 1133.9		.1 .1	2.7 2.7	2.7 2.7	1223.2 14.4 1208.8	1236.6 14.4 1222.2
VII E S			38.6 30.6 8.0	40.1 31.8 8.3					38.6 30.6 8.0	40.1 31.8 8.3
V-VII	97.5	94.0	1161.6	1179.9		.1	2.7	2.7	1261.8	1276.7
TOTAL	157.4	172.7	1337.5	1337.3	10.0	10.3	2.7	2.7	1507.6	1523.0

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

CASCADE COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	14.6	15.0	2.5	1.9			1.3	1.3	18.4	18.2
II	54.9	57.4	23.1	20.5	.5	.4	1.3	1.3	79.8	79.6
ES	37.6	40.0	22.3	19.8			1.3	1.3	61.2	61.1
	17.3	17.4	1.8	.7	.5	.4			18.6	18.5
III	321.4	313.8	92.4	97.4	3.1	3.3	4.8	4.8	421.7	419.3
ES	189.5	185.9	80.7	83.3		.1	4.5	4.4	275.1	273.7
W	131.9	127.6	11.6	14.1	3.1	3.1	.2	.3	146.2	145.1
IV	66.7	62.0	76.9	81.0	44.9	44.8			188.5	187.8
ES	34.0	32.9	26.0	27.2	35.9	35.8			95.9	95.9
W	11.8	9.8	1.6	3.6	9.0	9.0			13.4	13.4
S	20.9	19.3	49.3	50.2					79.2	78.5
I-IV	457.6	448.2	194.9	200.8	48.5	48.5	7.4	7.4	708.4	704.9
V			2.4	2.4					2.4	2.4
W			2.4	2.4					2.4	2.4
VI	20.2	21.0	334.0	337.7	14.1	14.1			368.3	372.8
ES	20.2	21.0	4.2	4.2	14.1	14.1			4.2	4.2
			329.8	333.5					364.1	368.6
VII	17.9	7.7	259.3	274.5	55.6	56.2			332.8	338.4
ES	17.7	7.7	246.1	249.8	55.6	56.2			301.9	306.0
			13.2	24.7					30.9	32.4
V-VII	38.1	28.7	595.7	614.6	69.7	70.3			703.5	713.6
VIII			21.7	21.7	9.7	9.7			31.4	31.4
S			21.7	21.7	9.7	9.7			31.4	31.4
VIII			21.7	21.7	9.7	9.7			31.4	31.4
TOTAL	455.7	476.9	812.3	837.1	127.9	128.5	7.4	7.4	1443.2	1449.1

CHOUTEAU COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	7.6	7.6							7.6	7.6
II	84.3	91.1	12.6	5.9			1.5	1.6	98.4	98.6
ES	84.3	91.1	12.6	5.9			1.5	1.6	98.4	98.6
III	844.3	879.0	285.6	249.0	20.9	21.1	3.1	3.0	1153.9	1152.1
ES	597.6	631.0	199.9	165.6	15.2	15.1	3.1	3.0	815.8	814.7
W	246.7	248.0	85.7	83.4	5.7	6.0			338.1	337.4
IV	157.2	147.7	178.2	188.5			.2	.2	336.2	336.4
ES	81.6	82.6	66.7	66.2			.2	.2	148.5	149.0
S	76.2	65.1	111.5	122.3					187.7	187.4
I-IV	1074.0	1125.4	476.4	443.4	20.9	21.1	4.8	4.1	1596.1	1594.7
V			7.2	7.2					7.2	7.2
W			7.2	7.2					7.2	7.2
VI	5.8	6.3	409.4	409.7	15.2	15.2			430.4	431.2
ES	5.8	6.3	409.4	409.7	15.2	15.2			430.4	431.2
VII			270.1	283.6	3.0	3.0			273.1	286.6
ES			195.8	206.8	3.0	3.0			198.8	219.8
W			74.3	76.8	3.0	3.0			74.3	76.8
V-VII		6.1	686.7	700.5	18.2	18.2			710.7	725.1
VIII							6.7	6.7	6.7	6.9
S							6.7	6.7	6.7	6.9
TOTAL		111.7	1163.1	1143.9	39.1	39.1	11.1	11.1	2111.7	2116.6

GLADE COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1975	1958	1975	1958	1975	1958	1975	1958	1975	
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	
I		1.8	.3	.3					2.1	2.1
II		3.4	16.5	16.3	2.3	1.7			20.1	21.6
ES		1.5	16.4	16.0	2.3	1.7			19.6	20.6
III	71.2	71.7	47.9	47.1	5.5	5.5	.7	.9	125.8	125.2
ES	59.5	58.9	43.2	43.7	5.5	5.5			117.6	117.6
W	11.7	12.8	4.7	3.4				.1	15.4	15.0
IV	6.9	10.3	71.2	71.0	.9	.9		.2	78.1	82.4
ES	5.5	8.7	66.7	66.5	.9	.9		.2	72.5	76.5
W	8.9	9.7	63.5	62.5				.0	72.5	72.5
I-IV	85.4	87.2	136.9	134.7	8.7	8.3	.6	1.1	231.6	231.3
V	40.9	8.2	1459.7	1496.5	13.3	13.3	6.0	6.0	1519.9	1524.1
ES	4.1	4.7	58.3	57.5	6.0	6.0		.4	68.8	68.0
W	36.8	3.5	1401.4	1439.0	7.3	7.3		5.6	1411.2	1456.1
VII			67.2	271.5					26.4	271.5
ES			14.8	116.6					14.8	116.6
W			52.4	154.7					11.6	154.9
VIII	40.9	8.1	1726.7	1767.1	13.3	13.3		6.0	1740.1	1780.4
ES			14.8	116.6					14.8	116.6
W			52.4	154.7					11.6	154.9
TOTAL	135.1	6.5	1778.7	1811.5	22.0	22.0		22.0	2011.0	2041.1

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

DANIELS COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	208.8	229.7	41.4	20.3					253.1	252.9
FE	204.0	224.9	41.1	20.0			2.9	2.8	247.8	247.6
WS	4.7	34.7	.3	.3		.1	.2	.2	5.2	5.2
S	.1	.1							.1	.1
II	218.9	229.2	57.9	47.3			.8	.6	277.4	277.9
FE	147.4	159.8	53.1	40.8			.5	.6	201.3	201.7
WS	71.5	69.4	4.8	6.5			.3	.6	76.3	76.2
IV	64.7	62.9	64.5	66.6			.1		129.2	130.0
FE	54.9	53.8	50.0	51.5				.4	104.9	105.7
WS	3.0	3.0	1.7	1.7				.4	4.7	4.7
S	6.8	6.1	12.8	13.4			.1		19.6	19.6
I-IV	492.4	521.8	163.8	134.2		1.0	3.5	3.8	659.7	660.8
VI	25.5	31.0	214.0	211.3	3.0	3.2	1.0	1.0	243.5	246.5
WS	8.8	8.8	8.9	8.9					9.7	9.7
S	24.7	30.2	205.1	202.4	3.0	3.2	1.0	1.0	233.8	236.8
V-VII	25.5	31.0	214.0	211.3	3.0	3.2	1.0	1.0	243.5	246.5
TOTAL	517.9	552.8	377.8	345.5	3.0	4.2	4.5	4.8	903.2	907.3

DAWSON COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	4.6	4.8	2.2	2.0			.4	.4	7.2	7.2
FE	77.2	77.4	17.2	15.7		.2	.8	.1	94.6	94.0
WS	7.2	75.0	14.2	13.0		.2	.1	.1	89.4	88.8
S	2.0	2.4	3.0	2.7					5.2	5.2
II	177.7	189.9	251.5	236.6	1.4	1.6	5.7	5.8	436.3	433.9
FE	159.4	171.2	227.1	212.8	1.4	1.6	5.3	5.3	393.2	390.9
WS	18.3	18.7	24.4	23.8			.4	.5	43.1	43.0
IV	96.4	92.0	137.0	140.3	.3	.3	.2	.3	233.9	232.9
FE	96.4	92.0	136.9	140.2	.3	.3	.2	.3	233.5	232.5
S			.1	.1					.4	.4
I-IV	355.9	364.1	407.9	394.6	1.9	2.7	6.3	6.6	772.0	768.0
V			.2	.2					.2	.2
WS			.2	.2					.2	.2
VI	22.1	9.7	419.0	434.3	5.1	5.1	.6	.6	446.8	449.7
FE	2.4	7.7	9.7	9.3	1.1	1.1	.6	.6	11.2	11.1
WS	21.7	9.0	409.3	425.0	4.0	4.0	.6	.6	435.6	438.6
VII			207.3	210.4					207.3	210.4
FE			106.3	108.7					106.3	108.7
S			101.0	101.7					101.0	101.7
V-VII	22.1	9.7	626.5	644.9	5.1	5.1	.6	.6	654.3	660.3
VIII							.2	.2	.2	.2
S							.2	.2	.2	.2
VIII							.2	.2	.2	.2
TOTAL	378.0	373.8	1034.4	1039.5	7.0	7.8	7.1	7.4	1426.5	1428.5

DEER LODGE COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	9.5	10.0	12.8	12.3	.7	.7			23.0	23.0
FE	1.5	2.1	2.8	2.3					4.4	4.4
WS	.2	.2							.2	.2
S	4.1	4.1	.6	.6	.7	.7			5.4	5.4
I-IV	3.6	3.6	9.4	9.4					13.0	13.0
II	4.8	5.2	23.0	22.6	1.8	1.8	.1	.1	29.7	29.7
FE	3.2	2.9	13.9	14.2	1.8	1.8	.1	.1	19.0	19.0
WS	.2	.9	6.7	6.0					6.9	6.9
S	1.4	1.4	2.4	2.4					3.8	3.8
IV	.6	.6	12.0	10.0	.2	.2			12.8	10.8
FE	.3	.2	3.3	3.4					3.6	3.6
WS			5.6	3.6					5.6	3.6
S	.3	.4	3.1	3.0	.2	.2			3.6	3.6
I-IV	14.9	15.8	47.8	44.9	2.7	2.7	.1	.1	65.5	63.5
V			10.8	10.7	1.3	1.3			12.1	12.0
WS			10.8	10.7	1.3	1.3			12.1	12.0
VI	.1	.1	71.7	71.7	54.0	54.0			125.8	125.8
FE			1.0	1.0	1.1	1.1			2.1	2.1
S	.1	.1	70.7	70.7	52.9	52.9			123.7	123.7
VII			13.5	15.5	67.9	68.9			81.4	84.4
FE			9.0	9.0	67.1	68.1			76.1	77.1
WS			4.5	6.5	.8	.8			5.3	7.3
V-VII	.1	.1	96.0	97.9	123.2	124.2			219.3	222.2
VIII			.3	.3			19.2	19.2	19.5	19.5
WS			.3	.3			1.6	1.6	1.6	1.6
S							17.6	17.6	17.9	17.9
VIII			.3	.3			19.2	19.2	19.5	19.5
TOTAL	15.0	15.9	144.1	143.1	125.9	126.9	19.3	19.3	304.3	305.2

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

FALLON COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE-RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
II E S	3.4 3.1 .3	3.8 3.5 .3	3.7 3.7	3.3 3.3					7.1 6.8 .3	7.1 6.8 .3
III E S	102.8 82.0 40.8	103.1 63.0 40.1	76.9 61.2 15.7	76.2 60.0 16.2		.2 .1 .1		.1 .1	179.7 123.2 56.5	179.6 123.2 56.4
IV E S	80.8 13.7 67.1	73.2 13.0 60.2	44.5 1.8 42.7	52.1 2.5 49.6				.1 .1	125.3 15.5 109.8	125.4 15.5 109.9
I-IV	187.0	180.1	125.1	131.6		.2		.2	312.1	312.1
VI S	52.2 52.2	35.7 35.7	473.6 473.6	495.8 495.8	1.5 1.5	1.5 1.5		.5 .5	527.3 527.3	533.5 533.5
VII E			65.1 65.1	67.6 67.6			3.4 3.4	3.6 3.6	68.5 68.5	71.2 71.2
V-VII	52.2	35.7	538.7	563.4	1.5	1.5	3.4	4.1	595.8	604.7
VIII S			3.8 3.8					3.8 3.8	3.8 3.8	3.8 3.8
VIII			3.8					3.8	3.8	3.8
TOTAL	239.2	215.8	667.6	695.0	1.5	1.7	3.4	8.1	911.7	920.6

FERGUS COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE-RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	1.4	1.4							1.4	1.4
II E W S C	204.7 198.0 5.1 .8	209.3 202.6 5.1 .8	40.6 40.6	35.8 35.8	9.6 9.6	9.6 9.6	.1 .1	.1 .1	255.0 248.3 5.1 .8	254.8 248.1 5.1 .8
III E W S	191.8 72.7 3.4 118.7	197.0 77.4 2.5 117.1	115.5 78.4 2.8 28.8	110.5 73.7 2.2 28.6	6.5 6.5	6.3 6.3	.6 .6	.6 .6	314.4 151.1 10.7 152.6	314.4 151.1 10.7 152.6
IV E S	92.1 50.6 48.5	95.6 49.6 46.0	149.1 64.5 84.6	152.6 65.5 87.1	.3 .3	.3 .3	.1 .1	.1 .1	248.6 115.4 133.2	248.6 115.4 133.2
I-IV	497.0	503.3	305.2	298.9	16.4	16.2	.8	.8	819.4	819.2
VI W S	37.8 .3 37.5	23.0 .3 22.7	973.3 21.3 952.0	991.7 21.2 970.5	125.2 125.2	125.2 125.2	3.4 3.4	3.4 3.4	1139.7 21.6 1118.1	1143.3 21.5 1121.8
VII E S			124.3 31.1 93.2	128.1 31.1 97.0	77.4 36.7 40.7	77.4 36.7 40.7			201.7 67.8 133.9	205.5 67.8 137.7
V-VII	37.8	23.0	1097.6	1119.8	202.6	202.6	3.4	3.4	1341.4	1348.8
VIII S			20.3 20.3	20.3 20.3					20.3 20.3	20.3 20.3
VIII			20.3	20.3					20.3	20.3
TOTAL	534.8	526.3	1423.1	1439.0	219.0	218.8	4.2	4.2	2181.1	2188.3

FLATHEAD COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	19.7	21.5	1.4		1.2	.9		.1	22.3	22.5
II E W S	53.5 30.6 2.6 20.3	57.2 30.1 2.6 24.5	6.6 2.5	8.7 3.5	13.2 2.3	6.7 1.7	.3 .1	.8 .2	73.6 35.5 2.6 35.5	73.4 35.5 2.6 35.3
III E W S	22.9 11.5 2.6 8.8	29.7 13.6 5.1 11.0	16.2 7.2 6.4 2.6	13.4 7.4 4.4 1.6	39.1 26.3 5.2 7.6	34.7 23.7 4.7 6.3	.2 .2	.4 .3	78.4 45.2 14.2 19.0	78.2 45.0 14.2 19.0
IV E W S	25.5 4.0 1.3 20.2	21.7 3.0 1.2 17.5	17.1 .4 8.3 8.4	20.7 1.4 8.4 10.9	23.9 2.2 23.7	23.9 .2 23.7	.1 .1	.2 .2	66.6 4.4 9.8 52.4	66.5 4.4 9.8 52.3
I-IV	121.6	130.1	41.3	42.8	77.4	66.2	.6	1.5	240.9	240.6
V W S	2.1 2.1	2.1 2.1	17.9 17.7 .2	17.9 17.7 .2	10.9 10.5 .4	10.9 10.5 .4	.1 .1	.1 .1	31.0 30.4 .6	31.0 30.4 .6
VI S	7.8 7.8	7.1 7.1	22.5 22.5	22.9 22.9	442.1 442.1	440.1 440.1	.2 .2	.3 .3	472.6 472.6	470.4 470.4
VII E S			.9 .9	.9 .9	150.6 150.6	149.8 149.8			151.5 150.6 .9	150.7 149.8 .9
V-VII	9.9	9.2	41.3	41.7	603.6	600.8	.3	.4	655.1	652.1
VIII W S							39.2 32.1 7.1	39.2 32.1 7.1	39.2 32.1 7.1	39.2 32.1 7.1
VIII							39.2	39.2	39.2	39.2
TOTAL	131.5	139.3	82.6	84.5	681.0	667.0	40.1	41.1	935.2	931.9

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

GALLATIN COUNTY, MONTANA

CLASS	CROPLAND 1/2		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	1.9			1.7					1.9	1.7
II	86.4	79.7	10.9	16.1		.2	1.8	2.8	99.1	98.8
ES	69.7	62.5	1.3	6.1		.2		2.0	71.0	70.8
CS	16.7	17.2		9.5			1.8	.8	18.5	18.5
			9.6	9.5					9.6	9.5
III	127.4	113.0	28.3	44.0	4.7	3.6	2.8	1.8	163.2	162.4
EW	98.1	91.0	20.2	28.4	1.1	1.2	2.3	.9	121.7	121.5
WS	22.7	15.1	4.7	12.6	2.4	1.4	.5	.9	30.3	30.0
S	6.6	6.9	3.4	3.0	1.2	1.0			11.2	10.9
IV	57.1	45.8	54.2	63.6	3.2	4.2	1.9	2.0	116.4	115.6
EW	30.6	28.4	23.5	26.4	2.8	2.0			56.9	56.8
WS	26.5	16.8	8.2	5.5		2.0	.5	.5	8.7	8.6
S			22.5	31.7	.4	.2	1.4	1.5	50.8	50.2
I-IV	272.8	238.5	93.4	125.4	7.9	8.0	6.5	6.6	380.6	378.5
V		1.1	7.6	6.4				.1	7.6	7.6
W		1.1	7.6	6.4				.1	7.6	7.6
VI	23.3	11.1	185.2	197.9	113.6	112.5	3.2	4.0	325.3	325.5
WS	23.3	11.1	184.2	196.9	113.6	112.5	3.2	4.0	324.3	324.5
			1.0	1.0					1.0	1.0
VII			107.4	107.4	99.0	98.9		.1	206.4	206.4
ES			39.4	39.4	98.4	98.3		.1	137.8	137.8
S			68.0	68.0	.6	.6			68.6	68.6
V-VII	23.3	12.2	300.2	311.7	212.6	211.4	3.2	4.2	539.3	539.5
VIII					8.4	8.4	3.1	3.1	11.5	11.5
S					8.4	8.4	3.1	3.1	11.5	11.5
VIII					8.4	8.4	3.1	3.1	11.5	11.5
TOTAL	296.1	250.7	393.6	437.1	228.9	227.8	12.8	13.9	931.4	929.5

GARFIELD COUNTY, MONTANA

CLASS	CROPLAND 1/2		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	.3	.3							.3	.3
IS	.2	.2							.2	.2
II	76.8	72.3	232.1	236.3		.4	4.6	4.5	313.5	313.5
ES	76.8	72.1	196.7	201.1		.4	4.6	4.5	278.1	278.1
S		.2	35.4	35.2					35.4	35.4
IV	33.4	20.3	70.0	83.0				.1	103.4	103.4
E	33.4	20.3	70.0	83.0				.1	103.4	103.4
I-IV	110.7	93.1	302.1	319.3		.4	4.6	4.6	417.4	417.4
VI	8.8	4.6	1457.0	1472.8	36.5	36.5	2.1	2.4	1504.4	1516.3
WS	8.8	4.6	1439.2	1455.0	36.5	36.5	2.1	2.4	1486.6	1498.5
			17.8	17.8					17.8	17.8
VII			228.9	228.9	1.5	1.5			230.4	230.4
ES			113.5	113.5	1.5	1.5			116.9	116.9
S			115.4	115.4					113.5	113.5
V-VII	8.8	4.6	1685.9	1701.7	38.0	38.0	2.1	2.4	1734.8	1746.7
TOTAL	119.5	97.7	1988.0	2021.0	38.0	38.4	6.7	7.0	2152.2	2164.1

GLACIER COUNTY, MONTANA

CLASS	CROPLAND 1/2		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
IE	6.3	20.1	20.3	6.5					26.6	26.6
EW		12.0	17.8	5.8					17.8	17.8
S		.7	1.4	.7					1.4	1.4
	6.3	7.4	1.1	.7					7.4	7.4
III	220.8	299.8	279.3	200.1			10.4	10.4	510.5	510.3
ES	189.1	268.1	274.2	195.0			5.7	5.7	469.0	468.8
S	31.7	31.7	5.1	5.1			4.7	4.7	41.5	41.5
IV	17.8	29.8	96.4	84.4					114.2	114.2
ES	16.6	20.6	51.6	47.6					68.2	68.2
S	1.2	9.2	44.8	36.8					46.0	46.0
I-IV	244.9	349.7	396.0	291.0			10.4	10.4	651.3	651.1
V			44.7	44.7	25.0	24.0			69.7	68.7
W			44.7	44.7	25.0	24.0			69.7	68.7
VI	15.7	7.1	539.9	549.8	90.3	90.3	3.8	3.8	649.7	651.0
S	15.7	7.1	539.9	549.8	90.3	90.3	3.8	3.8	649.7	651.0
VII			101.9	101.9	4.7	4.7			106.6	106.6
ES			86.3	86.3	4.7	4.7			91.0	91.0
S			15.6	15.6					15.6	15.6
V-VII	15.7	7.1	686.5	696.4	120.0	119.0	3.8	3.8	826.0	826.3
VIII							3.8	3.8	3.8	3.8
S							3.8	3.8	3.8	3.8
VIII							3.8	3.8	3.8	3.8
TOTAL	260.6	356.8	1082.5	987.4	120.0	119.0	18.0	18.0	1481.1	1481.2

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

GOLDEN VALLEY COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	2.7	3.6	.6	.1	1.0	.7	.1	.1	4.4	4.5
II	.7	1.0	.2	.1	.2	.1	.2	.2	1.3	1.4
IIIS	.5	.7	.2	.1	.1	.1	.1	.1	.9	.9
III	.2	.3			.1	.1	.1	.1	.4	.5
IIIS	57.8	57.9	91.1	91.1			.4	.4	149.3	149.4
IIIS	57.7	57.7	77.6	77.6			.3	.3	135.6	135.6
IIIS	.1	.2	13.5	13.5			.1	.1	13.7	13.8
IV	6.6	6.3	96.0	96.3			1.6	1.5	104.2	104.1
IVS	6.6	6.3	6.9	6.9			.6	.6	7.5	7.5
IVS			89.1	89.4			1.0	.9	96.7	96.6
I-IV	67.8	68.8	187.9	187.6	1.2	.8	2.3	2.2	259.2	259.4
VI	5.5	3.0	353.3	355.7	2.6	2.5	1.5	1.5	362.9	362.7
VIS	5.5	3.0	2.2	2.2	2.6	2.5	1.5	1.5	2.2	2.2
VIS			351.1	353.5					360.7	360.5
VII			78.6	78.6	9.1	9.1	1.1	1.1	88.8	88.8
VIIIS			59.3	59.3	9.1	9.1	1.1	1.1	69.5	69.5
VIIIS			19.3	19.3					19.3	19.3
V-VII	5.5	3.0	431.9	434.3	11.7	11.6	2.6	2.6	451.7	451.5
VIIIS							.1	.1	.1	.1
VIIIS							.1	.1	.1	.1
VIIIS							.1	.1	.1	.1
TOTAL	73.3	71.8	619.8	621.9	12.9	12.4	5.0	4.9	711.0	711.0

GRANITE COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
II	7.3	8.7	6.1	4.6			1.2	1.2	14.6	14.5
IIIS	6.5	7.9	5.0	3.5			1.2	1.2	12.7	12.6
IIIS	.8	.8	.4	.7					1.5	1.5
IIIS				.4					.4	.4
III	20.1	23.0	37.8	33.7	3.0	3.0	.8	.8	61.7	60.5
IIIS	6.9	8.8	22.5	20.0			.8	.8	30.2	29.6
IIIS	9.6	10.8	14.2	12.4					23.8	23.2
IIIS	3.6	3.4	1.1	1.3	3.0	3.0			7.7	7.7
IV	.6	1.3	22.7	21.7	2.0	2.0			25.3	25.0
IVS	.2	.9	17.9	17.0	2.0	2.0			20.1	19.9
IVS	.4	.4	4.8	4.7					5.2	5.1
I-IV	28.0	33.0	66.6	60.0	5.0	5.0	2.0	2.0	101.6	100.0
V	.4	.4	2.9	2.8					3.3	3.2
VIS	.4	.4	2.9	2.8					3.3	3.2
VI	1.2	1.2	118.0	118.3	30.3	29.9			148.3	149.4
VIS			118.0	118.3	30.3	29.9			148.3	149.4
VII			25.5	25.9	110.6	114.8			136.1	140.7
VIIIS			1.8	1.8	110.6	114.8			112.4	116.6
VIIIS			23.7	24.1					23.7	24.1
V-VII	.4	1.6	146.4	147.0	140.9	144.7			287.7	293.3
VIIIS			.7	.7	5.2	5.2	5.3	5.3	11.2	11.2
VIIIS			.7	.7	5.2	5.2	5.3	5.3	11.2	11.2
VIIIS			.7	.7	5.2	5.2	5.3	5.3	11.2	11.2
TOTAL	28.4	34.6	213.7	207.7	151.1	154.9	7.3	7.3	400.5	404.5

HILL COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	3.8	3.7	.3	.3					4.1	4.0
II	5.4	5.9	2.7	2.1			.8	.7	8.9	8.7
IIIS	1.8	2.4	2.7	2.1			.8	.7	5.3	5.2
IIIS	3.6	3.5							3.6	3.5
III	850.2	876.5	268.4	242.7		.6	4.4	4.1	1123.0	1123.9
IIIS	723.9	763.7	242.8	204.0		.4	4.4	4.1	971.1	972.2
IIIS	126.3	112.8	25.6	38.7		.2			151.9	151.7
IV	138.6	138.1	163.3	164.6					301.9	302.7
IVS	41.5	38.6	29.3	32.2					70.8	70.8
IVS	97.1	99.5	134.0	132.4					231.1	231.9
I-IV	998.0	1024.2	434.7	409.7		.6	5.2	4.8	1437.9	1439.3
V							.6	.6	.6	.6
VIS							.6	.6	.6	.6
VI	1.8	14.3	304.3	298.7	8.0	8.0	4.3	4.3	318.4	325.3
VIS	1.8	14.3	304.3	298.7	8.0	8.0	4.3	4.3	318.4	325.3
VII	5.9	2.7	19.9	27.1					25.8	29.8
VIIIS	.2		19.3	23.5					19.5	23.5
VIIIS	5.7	2.7	.6	3.6					6.3	6.3
V-VII	7.7	17.0	324.2	325.8	8.0	8.0	4.9	4.9	344.8	355.7
TOTAL	1005.7	1041.2	758.9	735.5	8.0	8.6	10.1	9.7	1782.7	1795.0

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

JEFFERSON COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	.7	.7					.1	.1	.8	.8
II E W S C	17.3 8.4 1.2 2.0 5.7	11.8 8.0 1.0 1.8 1.0	10.8 .1	15.8 .4 .2 1.8 15.0			.2 .1	.3 .2	28.3 8.6 1.2 2.1 16.4	27.9 8.6 1.2 2.1 16.0
III E W S	27.1 23.0 2.6 1.5	22.2 18.7 2.0 1.5	68.9 49.9 15.3 3.7	72.8 53.3 15.8 3.7		.1 .1	2.0 1.8 .1 .1	2.2 1.9 .2 .1	98.0 74.7 18.0 5.3	97.3 74.0 18.0 5.3
IV E W S	1.9 1.2 .7	1.6 1.6 .6	21.6 7.9 1.3 12.4	21.8 8.0 1.3 12.5	.3 .3	.3 .3	.3 .1 .1 .1	.3 .1 .1 .1	24.1 9.5 1.4 13.2	24.0 9.4 1.4 13.2
I-IV V W S	47.0	36.3	101.3	110.4	.3	.4	2.6	2.9	151.2	150.0
V E W S	1.1	1.7	218.1 3.3	215.3 3.3	44.0 1.3	42.7 1.3	1.0	6.2	264.2 4.6	265.9 4.6
VII E W S	1.1	1.7	214.8	212.0	42.7	41.4	1.0	6.2	259.6	261.3
V-VII			26.8 25.9	26.7 25.8	15.6 14.2 1.4	15.4 14.0 1.4			42.4 15.1 27.3	42.1 14.9 27.2
VIII E W S					60.7	59.0	1.0	6.3	321.0	322.4
VIII E W S							2.7 2.4 2.3	2.7 2.4 2.3	2.7 2.4 2.3	2.7 2.4 2.3
VIII E W S							2.7	2.7	2.7	2.7
TOTAL	48.1	38.2	359.5	365.6	61.0	59.4	6.3	11.9	474.9	475.1

JUDITH BASIN COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
II E W S	135.2 128.8 2.0 4.4	138.9 132.6 2.4 3.9	29.6 28.4 1.2	25.7 24.4 8.4 5.3					164.8 157.2 3.2 4.4	164.6 157.0 3.2 4.4
III E W S	108.7 44.9 9.7 54.1	109.2 44.9 10.2 54.1	138.9 61.9 8.9 68.1	138.8 62.3 8.4 68.1	1.0 1.0	.5 .5	1.4 1.4	1.4 1.4	250.0 107.8 18.6 123.6	249.9 107.7 18.6 123.6
IV E W S	35.8 16.5 19.3	33.6 15.8 17.8	74.6 26.6 48.2	77.4 27.7 49.7	.9	.5	.2	.2	111.7 44.2 67.5	111.7 44.2 67.5
I-IV V W S	279.7	281.7	243.3	241.9	1.9	1.0	1.6	1.6	526.5	526.2
V E W S	5.2	4.5	277.7 14.1 263.6	281.7 14.1 267.6	15.8	12.4			298.7 14.1 284.6	298.6 14.1 284.5
VII E W S			47.7 21.0 26.7	47.7 21.0 26.7	11.3 11.3	11.3 11.3			59.0 32.3 26.7	59.0 32.3 26.7
V-VII	5.2	4.5	325.4	329.4	27.1	23.7			357.7	357.6
TOTAL	284.9	286.2	568.7	571.3	29.0	24.7	1.6	1.6	884.2	883.8

LAKE COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	.9	.9							.9	.9
II E W S	12.9 10.9 2.0	13.8 10.7 3.1	7.2 1.2 5.7	6.0 1.2 4.5					20.1 14.4 7.7	19.8 12.2 7.6
III E W S	80.8 23.3 1.6 55.9	92.5 32.3 3.6 56.6	32.7 24.4 2.0 6.3	22.0 15.4 1.0 5.6	14.2 11.2 1.6 1.4	12.9 11.2 1.6 1.1	.7 .4 .3	.7 .4 .3	128.4 59.3 63.9	128.1 59.3 63.6
IV E W S	33.5 14.7 18.7	27.5 11.7 15.7	41.6 14.5 26.3	49.3 17.7 30.1	30.1 1.4 10.8 17.9	28.4 1.2 10.8 16.9			105.2 30.6 11.7 62.9	105.2 30.6 11.7 62.9
I-IV V W S	128.1	134.7	81.5	77.3	44.3	41.3	.7	.7	254.6	254.0
V E W S		1.0 1.0	7.5 7.5	6.5 6.5					7.5 7.5	7.5 7.5
VI E W S	.5	.5	122.0 1.1 121.9	122.0 1.1 121.9	167.8 1.7 166.3	167.0 1.7 166.3	.1 .1	.1 .1	290.4 1.8 288.6	289.6 1.8 288.8
VII E W S			9.9 3.8 6.1	9.9 3.8 6.1	173.4 173.4	173.0 173.0			183.3 177.2 6.1	182.9 176.8 6.1
V-VII	.5	1.5	139.4	138.4	341.2	340.0	.1	.1	481.2	480.0
VIII E W S			.2 4.2	.2 4.2	16.5 16.5	16.5 16.5	22.7 22.7	22.7 22.7	43.4 43.4	43.4 43.4
VIII E W S			4.2	4.2	16.5	16.5	22.7	22.7	43.4	43.4
TOTAL	128.6	136.2	225.1	199.9	402.0	397.8	23.5	23.5	774.2	774.4

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

LEWIS AND CLARK COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	1.2	1.1							1.2	1.1
II	13.1	13.3	8.0	6.7	3.3	3.1	.1	.4	24.5	23.5
III	7.5	8.0	4.9	3.9				.1	12.4	12.0
IV	4.0	2.6	2.2	.4					2.6	2.6
V	3.6	3.0	2.0	.3	2.5	2.5	.1	.2	6.4	6.0
VI		.1	2.3	2.1	.8	.6		.1	3.1	2.9
VII	72.1	77.8	72.5	60.2	1.6	1.5	3.8	3.8	150.0	143.3
VIII	66.1	64.5	49.0	44.7	5.5	.6	3.1	3.1	118.7	112.9
IX	4.9	6.7	12.3	8.2	1.1	.9	.1	.1	16.4	15.9
X	3.1	6.6	11.2	7.3			.6	.6	14.9	14.5
XI	2.3	7.1	19.6	14.1	.6	.6			22.5	21.9
XII	.1	3.7	12.4	8.7					12.5	12.4
XIII	2.2	1.5	6.3	4.3	.1	.1			6.4	5.9
XIV		1.9	6.9	1.1	.5	.5		.1	3.6	3.6
XV	88.7	99.3	100.1	81.0	5.5	5.2	3.9	4.3	198.2	189.8
XVI		.9	5.8	4.9	.3	.3			6.1	6.1
XVII		.9	5.8	4.9	.3	.3			6.1	6.1
XVIII	2.8	10.7	402.2	386.1	155.8	154.4	.4	1.2	561.2	552.4
XIX			13.8	13.6	.6	.6			14.4	14.2
XX	2.8	10.7	388.4	372.5	155.2	153.8	.4	1.2	546.8	538.2
XXI			200.3	205.0	138.9	135.8		.3	339.2	341.1
XXII			35.6	37.7	130.5	127.5		.1	166.1	165.3
XXIII			164.7	167.3	8.4	8.3		.2	173.1	175.8
XXIV	2.8	11.6	608.3	596.0	295.0	290.5	.4	1.5	906.5	899.6
XXV					.5	.5	6.9	6.8	7.4	7.3
XXVI					.5	.5	6.9	6.8	7.4	7.3
XXVII					.5	.5	6.9	6.8	7.4	7.3
TOTAL	91.5	110.9	708.4	677.0	301.0	296.2	11.2	12.6	1112.1	1096.7

LIBERTY COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I										
II	2.5	3.0	4.7	4.2					7.2	7.2
III	2.5	3.0	4.7	4.2					7.2	7.2
IV	462.7	482.8	127.9	106.7		.6	3.7	3.7	594.3	593.8
V	411.6	425.6	91.6	76.6		.5	3.7	3.7	506.9	506.4
VI	51.1	57.2	36.3	30.1		.1			87.4	87.4
VII	57.1	57.2	58.0	57.9					115.1	115.1
VIII	19.1	21.1	43.1	41.1					62.2	62.2
IX	36.0	36.1	14.9	16.8					52.9	52.9
X	522.3	543.0	190.6	168.8		.6	3.7	3.7	716.6	716.1
XI	2.8	.8	107.8	115.8	4.0	6.0			114.6	122.6
XII	2.8	.8	107.8	115.8	4.0	6.0			114.6	122.6
XIII			44.6	46.2		.4			44.6	46.6
XIV			44.6	46.2		.4			44.6	46.6
XV	2.8	.8	152.4	162.0	4.0	6.4			159.2	169.2
TOTAL	525.1	543.8	343.0	330.8	4.0	7.0	3.7	3.7	875.8	885.3

LINCOLN COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	1.7	1.8	.1						1.8	1.8
II	11.6	13.2	1.4	1.4	51.9	48.8	.8	.8	65.7	64.2
III	3.1	3.4	1.0	.9	2.8	2.5			6.9	6.8
IV	2.8	7.5	.4	.5	48.8	46.0	.8	.8	55.8	54.8
V	2.7	2.3			.3	.3			3.0	2.5
VI	9.3	8.7	7.6	9.9	95.7	94.8	.2	.2	113.8	113.6
VII	6.2	5.2	1.4	3.2	53.4	52.4	.2	.2	61.0	61.0
VIII	2.3	2.3	6.0	6.5	39.2	38.7			47.5	47.5
IX	8.2	8.1	2.7	3.4	43.5	42.9			54.4	54.4
X	.9	2.8	.6	1.3	8.9	8.0			10.6	10.6
XI	5.1	5.2	1.7	1.9	4.2	4.0			6.3	6.3
XII	2.2	1.7			30.4	30.2			37.3	37.3
XIII	30.8	31.8	11.8	14.7	192.1	186.5	1.0	1.0	235.7	234.0
XIV					.9	.9			.9	.9
XV					.9	.9			.9	.9
XVI	1.3	1.0	28.1	29.3	301.0	297.6	2.7	2.7	333.1	330.6
XVII	1.3	1.0	28.1	29.3	301.0	297.6	2.7	2.7	333.1	330.6
XVIII			3.8	3.8	34.4	34.3			38.2	38.1
XIX			3.8	3.8	34.4	34.3			38.2	38.1
XX	1.3	1.0	31.9	33.1	336.3	332.8	2.7	2.7	372.2	369.6
XXI					1.6	1.6	2.2	2.2	3.8	3.8
XXII					1.6	1.6	2.1	2.1	3.7	3.7
XXIII					1.6	1.6	2.2	2.2	3.8	3.8
TOTAL	32.1	32.8	43.7	47.8	530.0	520.9	5.9	5.9	611.7	607.4

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

MC CONE COUNTY, MONTANA

CLASS	CROPLAND 1/2		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	.8	.8	.1						.9	.8
II	14.4	15.4	2.4	1.2		.1			16.8	16.7
ES	11.7	12.7	2.3	1.1		.1			14.0	13.9
	2.7	2.7	.1	.1					2.8	2.8
III	276.3	296.8	208.0	188.7	1.9	.6	6.1	6.4	492.3	492.5
ES	272.4	288.1	190.1	175.7	1.9	.6	6.1	6.2	470.5	470.6
	3.9	8.7	17.9	13.0					21.8	21.9
IV	76.5	74.1	21.1	24.2					97.6	98.3
ES	26.9	28.3	6.6	5.0					33.5	33.3
	49.6	45.8	14.5	19.2					64.1	65.0
I-IV	368.0	387.1	231.6	214.1	1.9	.7	6.1	6.4	607.6	608.3
V						.2			.2	.2
W						.2			.2	.2
VI	93.5	90.4	574.1	580.5	2.2	2.2			669.8	673.1
ES		2.1	8.5	5.4					8.5	8.5
	93.5	88.3	565.6	574.1	2.2	2.2			661.3	664.6
VII			89.8	91.4					89.8	91.4
ES			78.4	78.3					78.4	78.3
			11.4	13.1					11.4	13.1
V-VII	93.5	90.4	663.9	671.9	2.4	2.4			759.8	764.7
VIII										
IX										
TOTAL	461.5	477.5	895.5	886.0	4.3	3.1	6.1	6.4	1367.4	1373.0

MADISON COUNTY, MONTANA

CLASS	CROPLAND 1/2		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	16.6	16.5					.2	.2	16.8	16.7
II	44.4	44.7	5.2	4.6			1.2	1.3	50.8	50.6
ES	10.0	10.5	5.2	4.6			.9	1.3	15.2	15.4
	34.4	34.2							35.3	35.2
III	27.4	46.0	148.4	129.0		.1	3.4	4.1	179.2	179.2
ES	12.3	24.5	98.4	85.9		.1	1.8	1.3	111.5	111.4
	15.1	4.5	35.2	28.5			1.4	1.5	34.6	34.5
		17.4	16.8	14.6			1.2	1.3	33.1	33.3
IV	9.4	9.0	124.3	124.8			1.4	1.5	135.1	135.3
ES	6.4	5.0	84.4	85.8			.9	.9	91.7	91.7
	3.0	4.0	39.9	39.0			.5	.6	43.4	43.6
I-IV	97.8	116.2	277.9	258.4		.1	6.2	7.1	381.9	381.8
V			1.2	1.2					1.2	1.2
W			1.2	1.2					1.2	1.2
VI	5.9	2.9	558.6	562.3	95.0	94.9	3.4	3.6	662.9	663.7
ES			.7	.6					.7	.6
	5.9	2.9	557.9	561.7	95.0	94.9	3.4	3.6	662.2	663.1
VII			112.1	112.0	47.0	47.0	.2	.2	159.3	159.2
ES			94.5	94.4	14.6	14.6			106.7	106.6
			94.5	94.4	12.0	12.0	.2	.2	106.7	106.6
V-VII	5.9	2.9	671.9	675.5	142.0	141.9	3.6	3.8	823.4	824.1
VIII				.1			4.6	4.5	4.6	4.6
ES				.1			.7	.7	4.6	4.6
							3.9	3.9	3.9	3.9
VIII				.1			4.6	4.5	4.6	4.6
TOTAL	103.7	119.1	949.8	934.0	142.0	142.0	14.4	15.4	1209.9	1210.5

MEAGHER COUNTY, MONTANA

CLASS	CROPLAND 1/2		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
II	29.8	32.5	46.6	43.7			2.1	2.2	78.5	78.4
ES	17.9	20.4	39.5	36.9			.1	.1	57.6	57.4
	1.8	1.6	1.6	1.6					5.5	5.5
	10.1	10.3	5.5	5.2					15.6	15.5
III	22.9	26.8	169.5	165.4	2.2	2.2	.3	.5	194.9	194.9
ES	18.0	19.8	93.9	92.0			.1	.2	112.0	112.0
	1.0	1.5	11.4	10.7					12.4	12.4
	3.9	5.5	64.2	62.5	2.2	2.2	.2	.3	70.5	70.5
IV	4.2	4.4	42.6	42.4					46.8	46.8
ES	2.7	2.9	35.3	32.1					38.0	38.0
	.8	.8	6.4	6.4					7.2	7.2
	.7	.7	.9	.9					1.6	1.6
I-IV	56.9	63.7	258.7	251.5	2.2	2.2	2.4	2.7	320.2	320.1
V			3.0	3.0					3.0	3.0
W			3.0	3.0					3.0	3.0
VI			490.7	496.7	139.5	139.5	2.3	2.3	632.5	638.5
ES			4.7	4.7	2.5	2.5	2.1	2.1	9.3	9.3
			486.0	492.0	137.0	137.0	.2	.2	623.2	629.2
VII	.3	.3	65.5	69.3	17.3	17.3			83.1	86.9
ES			3.2	5.0					3.2	5.0
	.3	.3	62.3	64.3	17.3	17.3			79.9	81.9
V-VII	.3	.3	554.2	569.0	156.8	156.8	2.3	2.3	718.6	728.4
TOTAL	57.2	64.0	817.9	820.5	159.0	159.0	4.7	5.0	1036.6	1048.6

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

MINERAL COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	3.7	4.0	.4	.6	3.3	2.3	.1	.1	7.5	7.0
II	.9	1.0	.8	.7	.4	.2	.3	.3	2.7	2.5
III	.4	.5	.3	.3	.4	.2	.1	.1	1.2	1.1
IV	.5	.4	.7	1.2	10.5	10.1	.1	.1	11.8	11.8
V	.2	.2	.1	.2	5.3	4.9	.1	.1	5.7	5.4
VI	.3	.2	.6	1.0	4.7	4.7	.2	.2	5.6	5.9
VII	5.1	5.4	1.9	2.6	14.5	12.8	.5	.5	22.0	21.3
VIII	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
IX	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
X	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
XI	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
XII	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
XIII	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
XIV	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
XV	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
XVI	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
XVII	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
XVIII	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
XIX	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
XX	.3	.2	2.9	4.0	100.9	97.5	.1	.1	104.2	101.8
TOTAL	5.4	5.6	4.0	6.7	115.5	110.4	1.0	1.0	126.8	123.7

MISSOULA COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	3.8	3.5					.6	.6	4.4	4.1
II	20.6	19.0	7.4	4.9	3.7	2.2			31.7	27.1
III	12.0	10.6	3.9	2.6					15.9	13.2
IV	9.9	9.9	.4	.1					10.3	10.0
V	5.8	5.7	3.1	2.2	3.7	3.2			12.6	11.1
VI	1.9	1.8							1.9	1.8
VII	23.6	23.4	17.0	13.6	49.6	48.5	1.7	1.5	91.9	87.0
VIII	6.3	7.1	12.7	9.5	49.6	48.5	1.7	1.5	70.3	66.6
IX	17.3	16.3	4.3	4.1					21.6	20.4
X	9.3	8.7	17.9	15.9	13.8	13.8	.3	.3	41.3	38.7
XI	2.6	2.2	6.2	5.4	1.9	1.6			10.7	9.2
XII	1.4	1.5	3.0	2.7	5.0	4.9	.1	.1	9.5	9.2
XIII	5.3	5.0	8.7	7.8	6.9	7.3	.2	.2	21.1	20.5
XIV	57.3	54.6	42.3	34.4	67.1	65.5	2.6	2.4	169.3	156.9
XV		.1	.4	.4	2.4	2.3			2.8	2.8
XVI		.1	.4	.4	2.4	2.3			2.8	2.8
XVII	3.9	1.8	53.4	54.8	703.1	700.4	.1	.1	760.5	757.1
XVIII	3.9	1.9	52.8	54.0	703.1	700.4	.1	.1	759.7	756.1
XIX			3.8	3.8					3.8	3.8
XX			3.8	3.8					3.8	3.8
XXI	3.9	1.9	57.6	59.0	705.5	702.7	.1	.1	767.1	763.7
XXII							5.6	5.6	5.6	5.6
XXIII							4.7	4.7	4.7	4.7
XXIV							4.9	4.9	4.9	4.9
XXV							5.6	5.6	5.6	5.6
TOTAL	61.2	56.5	99.9	93.4	772.6	768.2	8.3	8.1	942.0	926.2

MUSSELSHELL COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	9.6	12.5	4.2	2.5	2.3	1.1	.4	.4	16.5	16.5
II	2.6	4.0	.8	.1	1.5	.8	.1	.1	5.0	5.0
III	2.2	3.0	.7	.1	.3	.1	.1	.1	3.3	3.2
IV	.4	1.0	.1	.1	1.1	.6			1.5	1.6
V	39.1	39.7	98.8	98.1	.5	.5	.3	.2	138.7	138.5
VI	39.0	39.1	88.0	87.8			.2	.2	127.2	127.1
VII	.1	.6	10.8	10.3	.5	.5	.1	.1	11.5	11.4
VIII	12.4	11.6	92.6	93.3			2.6	2.6	107.6	107.5
IX	7.9	7.6	17.3	17.5			2.1	2.1	27.3	27.2
X	4.5	4.0	75.3	75.8			.5	.5	80.3	80.3
XI	63.7	67.8	196.4	194.0	4.3	2.4	3.4	3.3	267.8	267.5
XII			3.0	3.0					3.0	3.0
XIII			3.0	3.0					3.0	3.0
XIV	7.7	10.0	482.6	480.1	17.0	17.0	.4	.4	507.7	507.5
XV	7.7	10.0	477.2	474.8	17.0	17.0	.4	.4	502.4	502.2
XVI			68.1	68.1	219.6	219.5			287.7	287.6
XVII			67.8	67.8	219.6	219.5			287.4	287.3
XVIII			.3	.3					.3	.3
XIX	7.7	10.0	553.7	551.2	236.6	236.5	.4	.4	798.4	798.1
XX							2.1	2.1	2.1	2.1
XXI							2.1	2.1	2.1	2.1
XXII							2.1	2.1	2.1	2.1
XXIII							2.1	2.1	2.1	2.1
TOTAL	71.4	77.8	750.1	745.2	240.9	238.9	5.9	5.8	1068.3	1067.7

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

PARK COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	3.0	3.0	.1	.1					3.1	3.1
II	46.4	47.6	14.2	12.7					60.6	60.3
III	47.4	52.9	38.5	33.0	1.9	1.3	.1	.2	87.9	87.4
IV	22.2	17.1	17.8	24.6	2.9	2.4			42.9	44.1
1-IV	119.0	120.6	70.6	70.4	4.8	3.7	.1	.2	194.5	194.9
VI	3.1	2.1	206.2	309.6	64.2	63.9	2.8	2.8	376.3	378.4
VII	3.1	2.1	135.2	134.8	55.9	55.8	1.8	1.8	359.3	361.0
V-VII	3.1	2.1	441.4	444.4	120.1	119.7	2.8	2.8	567.4	569.0
VIII							3.1	3.1	3.1	3.1
VIII							3.1	3.1	3.1	3.1
TOTAL	122.1	122.7	512.0	514.8	124.9	123.4	6.0	6.1	765.0	767.0

PETROLEUM COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	2.7	3.2			21.3	20.8	1.0	1.0	25.0	25.0
II	3.4	3.7	12.5	12.1	2.3	2.3	2.7	2.7	20.9	20.8
III	16.8	19.2	53.1	50.5			1.2	1.3	71.1	71.0
IV	4.7	5.9	68.9	67.7					73.6	73.6
1-IV	27.6	32.0	134.5	130.3	23.6	23.1	4.9	5.0	190.6	190.4
VI	10.8	7.3	396.0	407.2			2.6	2.6	409.4	417.1
VII	10.8	7.3	396.0	407.2			2.6	2.6	409.4	417.1
V-VII	10.8	7.3	446.7	460.2			2.6	2.6	460.1	470.1
VIII			1.2	1.2	.3	.3			1.5	1.5
VIII			1.2	1.2	.3	.3			1.5	1.5
TOTAL	38.4	39.3	582.4	591.7	23.9	23.4	7.5	7.6	652.2	662.0

PHILLIPS COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	11.2	11.1	.1	.1					11.3	11.2
II	5.6	6.3	1.1	.4					6.7	6.7
III	148.7	175.5	312.8	286.7	.1	.1	2.2	2.3	463.8	464.5
IV	41.5	51.3	240.7	233.4	.4	.2	3.0	3.3	285.6	288.2
1-IV	207.0	244.2	554.7	527.6	.5	.2	5.2	5.6	767.4	770.6
VI	92.3	96.4	872.9	875.6	5.4	5.4	.5	.5	972.1	978.1
VII	1.6	1.6	242.4	244.0	.1	.1	.1	.1	244.1	246.1
V-VII	75.0	96.4	1126.2	1120.1	5.5	5.5	.5	.6	1227.3	1234.3
VIII							.1	.1	.1	.1
VIII							.1	.1	.1	.1
TOTAL	302.0	342.5	1681.0	1650.5	6.0	5.7	5.9	6.2	1994.8	2004.9

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

PONDERA COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	6.3	7.0	1.7	1.1					8.0	8.1
II	78.3	86.2	31.4	23.0		.1	2.4	2.4	112.1	111.7
ES	49.0	57.0	30.1	21.7		.1	1.7	1.7	80.8	80.5
	29.3	29.2	1.3	1.3			.7	.7	31.3	31.2
III	409.7	413.0	77.0	71.8	1.5	1.7	1.6	1.6	489.8	488.1
EW	334.4	337.1	53.7	49.8	1.5	1.7	1.4	1.4	391.0	389.7
WS	74.9	75.5	22.5	21.5			.2	.2	97.4	97.0
IV	42.5	40.4	41.6	43.9	.4	.4			84.5	84.7
EW	33.1	31.0	12.2	14.6	.2	.2			45.5	45.8
WS	9.1	9.1	27.6	27.5	.2	.2			36.9	36.8
I-IV	536.8	546.6	151.7	139.8	1.9	2.2	4.0	4.0	694.4	692.6
V	.4	.3	10.7	10.8					11.1	11.1
W	.4	.3	10.7	10.8					11.1	11.1
VI	6.4	3.6	124.0	129.2	9.4	9.4			139.8	142.2
WS	6.4	3.6	119.1	124.3	9.4	9.4			134.9	137.3
VII			62.9	63.8	.8	.8			63.7	64.6
ES			31.8	32.2	.8	.8			31.8	32.2
			31.1	31.6	.8	.8			31.9	32.4
V-VII	6.8	3.9	197.6	203.8	10.2	10.2			214.6	217.9
VIII	.3	.3	1.9				3.3	5.2	5.5	5.5
S	.3	.3	1.9				3.3	5.2	5.5	5.5
VIII	.3	.3	1.9				3.3	5.2	5.5	5.5
TOTAL	543.9	550.8	351.2	343.6	12.1	12.4	7.3	9.2	914.5	916.0

POWDER RIVER COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	.6	1.4	.9	.2					1.5	1.6
II	.2	3.7	16.6	13.2	.3	.2			17.1	17.1
ES	.2	3.3	16.5	13.2	.3	.2			16.5	16.5
		.4	.1						.6	.6
III	128.7	147.3	133.2	115.9	2.0	1.9	.4	.4	264.3	265.5
EW	43.3	58.9	91.7	76.3	.2	.2	.2	.2	135.4	135.6
WS	85.4	88.4	41.5	39.6	1.8	1.7	.2	.2	128.9	129.9
IV	1.0	1.1	17.1	17.1					18.1	18.2
S	1.0	1.1	17.1	17.1					18.1	18.2
I-IV	130.5	153.5	167.8	146.4	2.3	2.1	.4	.4	301.0	302.4
VI	2.6	9.5	1050.7	1049.4	36.2	36.4			1089.5	1095.3
WS	2.6	4.5	34.3	29.8					34.3	34.3
		5.0	1016.4	1019.6	36.2	36.4			1055.2	1061.0
VII			76.5	77.7	28.3	28.5			104.8	106.2
ES			58.7	59.7	28.3	28.5			87.0	88.2
			17.8	18.0					17.8	18.0
V-VII	2.6	9.5	1127.2	1127.1	64.5	64.9			1194.3	1201.5
VIII			.3				4.8	5.1	5.1	5.1
S			.3				4.8	5.1	5.1	5.1
VIII			.3				4.8	5.1	5.1	5.1
TOTAL	133.1	163.0	1295.2	1272.5	66.8	67.0	5.2	5.5	1500.4	1509.0

POWELL COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	.2	.9	4.1	3.5					4.3	4.4
II	25.6	25.6	21.8	21.4	2.0	2.0	3.0	3.0	52.4	52.0
ES	17.2	17.1	15.5	15.5	2.0	2.0			34.7	34.6
	8.4	8.5	6.3	5.9			3.0	3.0	13.5	13.2
			4.2	4.2					4.2	4.2
III	13.3	13.2	59.7	59.5	1.1	1.0			74.1	73.7
EW	2.7	2.5	16.1	16.3	.9	.9			19.7	19.7
WS	1.3	1.7	10.0	9.4	.2	.1			11.5	11.2
	9.3	9.0	33.6	33.8					42.9	42.8
IV	1.9	1.6	38.9	39.5	22.5	22.2			63.3	63.3
EW	.8	.8	11.9	11.9	3.5	3.5			16.3	16.3
WS	.1	.1	11.9	12.1	7.4	7.1			19.3	19.3
	1.1	.7	15.1	15.5	11.6	11.6			27.8	27.8
I-IV	41.0	41.3	124.5	123.9	25.6	25.2	3.0	3.0	194.1	193.4
V		.9	7.0	5.9					7.0	6.8
W		.9	7.0	5.9					7.0	6.8
VI	4.1	3.1	190.4	191.3	367.4	367.4		.1	561.9	561.9
WS	4.1	3.1	186.5	187.5	365.3	365.3		.1	555.9	556.0
VII			1.7	5.7					1.7	5.7
S			1.7	5.7					1.7	5.7
V-VII	4.1	4.0	199.1	202.9	367.4	367.4		.1	570.6	574.4
VIII							1.2	1.2	1.2	1.2
S							1.2	1.2	1.2	1.2
VIII							1.2	1.2	1.2	1.2
TOTAL	45.1	45.3	323.6	326.8	393.0	392.6	4.2	4.3	765.9	769.0

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

PRAIRIE COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	1.1	1.1							1.1	1.1
II	4.4	4.5	14.2	14.0					18.6	18.5
II S	3.3	3.3	2.6	2.6					5.9	5.9
II S	1.1	1.2	11.6	11.4					12.7	12.6
III	86.1	90.1	85.9	81.5			5.2	5.2	177.2	176.8
III S	76.0	79.6	67.8	63.9			2.2	2.2	144.0	143.7
III S	10.1	10.5	18.1	17.6			5.0	5.0	33.2	33.1
IV	10.1	9.3	51.8	52.5					61.9	61.8
IV S	8.4	7.6	12.6	13.4					21.0	21.0
IV S	1.7	1.7	39.2	39.1					40.9	40.8
I-IV	101.7	105.0	151.9	148.0			5.2	5.2	258.8	258.2
V	2.2	2.2							2.2	2.2
V S	2.2	2.2							2.2	2.2
VI	13.8	11.7	190.0	193.3	1.8	1.8	.7	.7	206.3	207.5
VI S	2.1	1.7	11.7	11.2					13.8	13.8
VI S	11.7	8.6	178.3	182.1	1.8	1.8	.7	.7	192.5	193.7
VII	.2	.2	175.8	176.6	.2	.2	.1	.1	176.3	177.1
VII S	.2	.2	156.5	157.3	.2	.2	.1	.1	156.7	157.5
VII S	.2	.2	19.3	19.3					19.6	19.6
V-VII	16.2	14.1	365.8	369.9	2.0	2.0	.8	.8	384.8	386.8
VIII			1.1					1.1	1.1	1.1
VIII S			1.1					1.1	1.1	1.1
VIII S			1.1					1.1	1.1	1.1
TOTAL	117.9	119.1	518.8	517.9	2.0	2.0	6.0	7.1	644.7	646.1

RAVALLI COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	8.3	8.3	.1	.1			.6	.6	9.0	9.0
II	28.9	28.7	3.7	3.4	.2	.2	3.1	3.1	35.9	35.4
II S	5.6	5.5	.2	.2			.2	.2	6.0	5.9
II S	7.1	7.2	1.3	1.2			2.6	2.6	9.0	8.9
II S	16.2	16.0	2.2	2.1	.2	.2	2.3	2.3	20.9	20.6
III	40.3	40.6	10.3	9.7	.6	.6	3.9	3.9	55.1	54.8
III S	2.4	2.4	.3	.3			.4	.4	3.1	3.1
III S	1.1	1.5	2.1	1.7			3.3	3.3	3.5	3.5
III S	36.8	36.7	7.9	7.7	.6	.6	3.2	3.2	48.5	48.2
IV	93.1	23.9	11.4	11.2	14.8	14.8	3.5	3.5	53.5	53.4
IV S	1.1	9.3	1.4	1.2			1.0	1.0	11.5	11.5
IV S	1.1	1.1	.6	.6			2.2	2.2	1.9	1.9
IV S	13.6	13.5	9.4	9.4	14.8	14.8	2.3	2.3	40.1	40.0
I-IV	101.3	101.5	25.5	24.4	15.6	15.6	11.1	11.1	153.5	152.6
V	1.2	1.9	31.3	31.4	9.7	8.9	1.5	1.5	43.7	43.7
V S	.7	1.3	24.6	24.3	4.5	4.2	.7	.7	30.5	30.5
V S	.5	.6	6.7	7.1	5.2	4.7	.8	.8	13.2	13.2
VI	1.1	.1	15.1	13.6	16.7	19.2	.5	.5	33.4	33.4
VI S	.9		1.8	2.7					2.7	2.7
VI S	.2	.1	13.1	10.7	16.7	19.2	.5	.5	30.2	30.2
VII			39.4	39.4	135.0	135.0	.5	.5	174.9	174.9
VII S			5.8	5.8	132.4	132.4	.5	.5	138.7	138.7
VII S			33.6	33.6	2.6	2.6			36.2	36.2
V-VII	2.3	2.0	85.8	84.4	161.4	163.1	2.5	2.5	252.0	252.0
VIII							4.3	4.3	4.3	4.3
VIII S							4.3	4.3	4.3	4.3
VIII S							4.3	4.3	4.3	4.3
TOTAL	103.6	103.5	111.3	108.8	177.0	178.7	17.9	17.9	409.8	408.9

RICHLAND COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	15.2	15.3	3.3	2.9			1.8	1.8	20.3	20.0
II	121.3	126.4	19.5	14.6	3.2	3.1	7.5	7.4	151.5	151.5
II S	115.3	120.1	18.7	14.0	3.2	3.1	6.9	6.8	144.1	144.0
II S	.5	.5							.5	.5
II S	5.5	5.8	.8	.6			.6	.6	6.9	7.0
III	195.7	192.2	125.4	129.3	.7	.7	10.3	10.2	332.1	332.4
III S	158.0	154.3	114.5	119.8			8.2	8.1	280.8	281.2
III S	2.9	2.8	.6	.6			.7	.7	4.2	4.1
III S	34.8	35.1	10.2	9.9	.7	.7	1.4	1.4	47.1	47.1
IV	56.7	43.8	41.6	55.4	.4	.4	2.0	2.2	100.7	101.8
IV S	34.9	29.5	37.9	41.3			1.5	1.6	63.4	63.8
IV S	21.7	23.2	3.7	14.1	.4	.4	.5	.6	37.3	38.3
I-IV	388.9	377.7	189.8	202.2	4.3	4.2	21.6	21.6	604.6	605.7
V			5.2	5.2			.3	.3	5.5	5.5
V S			5.2	5.2			.3	.3	5.5	5.5
VI	46.4	28.0	465.3	490.5	7.8	7.5	2.8	2.6	522.3	522.6
VI S			16.2	16.5	6.8	6.5			23.0	23.0
VI S	46.4	28.0	449.1	474.0	1.0	1.0	2.8	2.6	499.2	505.6
VII			116.9	121.1					116.9	121.1
VII S			68.4	72.5					68.4	72.5
VII S			48.5	48.6					48.5	48.6
V-VII	46.4	28.0	587.4	616.8	7.8	7.5	3.1	2.8	644.7	655.2
VIII			1.7	1.7			.2	.2	1.9	1.9
VIII S			1.7	1.7			.2	.2	1.9	1.9
VIII S			1.7	1.7			.2	.2	1.9	1.9
TOTAL	435.3	405.7	779.6	926.7	12.1	11.7	24.9	24.7	1251.7	1262.8

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

ROOSEVELT COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL		
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975	
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	
I	2.6	2.5							.1	2.6	2.6
II	197.0	232.7	74.1	41.0	7.9	3.9	1.0	1.1	280.0	278.7	
E	197.0	232.7	74.1	41.0	7.9	3.9	1.0	1.1	280.0	278.7	
III	384.2	453.8	193.6	121.8	.2	1.1	4.6	5.3	582.6	582.0	
E	272.1	319.9	137.2	88.3			2.7	3.0	412.0	411.8	
S	112.1	133.9	56.4	33.5	.2		1.9	2.3	170.6	170.2	
IV	116.2	115.4	139.1	145.1	3.2	1.8	6.7	2.6	265.2	264.9	
E	55.8	57.7	98.3	96.3					154.1	154.0	
S	60.4	57.7	40.8	48.8	3.2	1.8	6.7	2.6	111.1	110.9	
I-IV	700.0	804.4	406.8	307.9	11.3	6.8	12.3	9.1	1130.4	1128.2	
V			.1	.1					.1	.1	
W			.1	.1					.1	.1	
VI	20.2	20.2	264.9	269.5	.3	.3	2.0	1.2	287.4	291.2	
W			3.3	3.3					3.3	3.3	
S	20.2	20.2	231.6	236.3	.3	.3	2.0	1.2	254.1	258.0	
VII			12.0	13.8			2.8	2.0	14.8	15.8	
E			12.0	13.8			2.8	2.0	14.8	15.8	
V-VII	20.2	20.2	277.0	283.4	.3	.3	4.8	3.2	302.3	307.1	
VIII			.8	.8			7.8	7.0	7.8	7.8	
S			.8	.8			7.8	7.0	7.8	7.8	
VIII			.8	.8			7.8	7.0	7.8	7.8	
TOTAL	720.2	824.6	683.8	592.1	11.6	7.1	24.9	19.3	1440.5	1443.1	

ROSEBUD COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	15.7	17.4	7.4	6.6	4.7	3.7	5.1	5.1	32.9	32.8
II	34.3	34.3	6.5	6.2	3.1	2.9	.5	.5	44.4	43.9
E	1.9	2.1	2.5	2.2			1.1	1.1	4.5	4.4
S	32.4	32.2	4.0	4.0	3.1	2.9	.4	.4	39.9	39.5
III	56.7	59.9	198.3	194.3	2.5	2.5	1.8	1.8	259.3	258.5
E	53.7	57.1	196.2	192.1	2.5	2.5	1.7	1.7	254.1	253.4
S	3.0	2.8	2.1	2.2			.1	.1	5.2	5.1
IV	8.2	8.0	46.9	46.9			.2	.2	55.3	55.1
E	.8	.8	6.4	6.4					7.2	7.2
S	7.4	7.2	40.5	40.5			.2	.2	48.1	47.9
I-IV	114.9	119.6	259.1	254.0	10.3	9.1	7.6	7.6	391.9	390.3
VI	13.1	15.7	1474.6	1477.0	45.5	45.1	1.6	1.6	1534.8	1539.4
W			99.7	99.7	2.7	2.7	.5	.5	102.9	102.9
S	13.1	15.7	1374.9	1377.3	42.8	42.4	1.1	1.1	1431.9	1436.5
VII	.4		887.9	897.7	47.3	47.3			935.6	945.0
E			655.6	658.2	47.2	47.2			702.8	702.8
S	.4		232.3	239.5	47.1	47.1			279.8	286.6
V-VII	13.5	15.7	2362.5	2374.7	92.8	92.4	1.6	1.6	2470.4	2484.4
VIII			8.1	8.1			4.7	4.7	12.8	12.8
S			8.1	8.1			4.7	4.7	12.8	12.8
VIII			8.1	8.1			4.7	4.7	12.8	12.8
TOTAL	128.4	135.3	2629.7	2636.8	103.1	101.5	13.9	13.9	2875.1	2887.5

SANDERS COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	3.3	3.3							3.3	3.3
II	22.1	21.2	3.8	3.8	36.3	37.2	.1	.1	62.3	62.3
E	13.3	13.0	.7	.7					14.0	14.0
S	8.8	8.2	3.1	3.1	36.3	36.9	.1	.1	48.3	48.3
III	23.2	21.5	19.8	21.5	48.7	48.7	.1	.1	91.8	91.8
E	14.8	14.0	16.4	17.5	15.3	15.0	.1	.1	46.6	46.6
W	2.7	2.7							2.7	2.7
S	5.7	4.8	3.4	4.0	33.4	33.7			42.5	42.5
IV	5.2	4.0	18.8	19.9	49.7	50.2	.1	.1	73.7	74.2
E	1.4	1.4	3.3	3.3	13.9	13.9			18.6	18.6
W	.3	.3	3.2	3.2	4.0	4.0			7.5	7.5
S	3.5	2.3	12.3	13.4	31.8	32.3	.1	.1	47.6	48.1
I-IV	53.8	50.0	42.4	45.2	134.7	136.1	.2	.3	231.1	231.6
V			2.0	2.0	5.0	5.1			7.0	7.1
W			2.0	2.0	4.3	4.3			6.3	6.3
S					.7	.8			.7	.8
VI	.4	.4	92.5	92.5	243.1	243.5			336.0	336.4
S	.4	.4	92.5	92.5	243.1	243.5			336.0	336.4
VII			30.2	30.2	239.0	239.0	.4	.4	269.6	269.6
E			30.0	30.0	220.0	220.0	.4	.4	221.4	221.4
S			30.0	30.0	18.5	18.5			48.5	48.5
V-VII	.4	.4	124.7	124.7	487.1	487.6	.4	.4	612.6	613.1
VIII					2.2	2.2	5.2	5.2	7.4	7.4
W					2.2	2.2	4.4	4.4	7.0	7.0
S					2.2	2.2	4.8	4.8	7.0	7.0
VIII					2.2	2.2	5.2	5.2	7.4	7.4
TOTAL	54.2	50.4	167.1	169.9	624.0	625.9	5.8	5.9	851.1	852.1

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

SHERIDAN COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I			.8	.8					.8	.8
IES	173.2	275.2	31.4	29.4	.5	4.0	3.5	308.6	308.6	308.6
	260.2	262.2	17.7	15.7	.5	4.0	3.5	281.9	281.9	281.9
	13.0	13.0	13.7	13.7				26.7	26.7	26.7
II	272.3	276.4	84.8	80.3	.6	4.7	4.5	361.8	361.8	361.8
IEWS	191.2	194.3	59.6	56.2	.5	2.7	2.5	253.5	253.5	253.5
	81.1	82.1	3.9	3.9				3.9	3.9	3.9
			21.3	20.2	.1	2.0	2.0	104.4	104.4	104.4
IV	56.5	54.6	65.2	67.2			.7	122.4	122.5	122.5
IEWS	42.7	41.9	45.8	46.6			.7	89.2	89.2	89.2
	13.8	12.7	2.2	2.2				2.2	2.2	2.2
			17.2	18.4				31.0	31.0	31.0
I-IV	602.0	606.2	182.2	177.7	1.1	9.4	8.7	793.6	793.7	793.7
VI	17.0	16.1	191.1	199.4			.4	208.5	215.9	215.9
IEWS	17.0	16.1	189.4	197.7			.4	206.8	214.2	214.2
	.4	.4	34.1	35.8	2.0	2.0		36.5	38.2	38.2
IEWS	.4	.4	24.4	26.1	2.0	2.0		26.4	28.1	28.1
			9.7	9.7				10.1	10.1	10.1
V-VII	17.4	16.5	225.2	235.2	2.0	2.0	.4	245.0	254.1	254.1
TOTAL	619.4	622.7	407.4	412.9	2.0	3.1	9.8	9.1	1038.6	1047.8

SILVER BOW COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	.8	.8	.4	.2					1.2	1.0
IES	.2	.2	.2	.1				.6	.2	.2
IC	.4	.4	.2	.1				.4	.5	.5
	.2	.2	.2	.1				.4	.3	.3
II	1.7	1.8	19.5	19.2			.1	.1	21.3	21.1
IEWS	1.2	1.4	19.5	19.2			.1	.1	20.8	20.7
	.3	.3							.3	.3
	.2	.1							.2	.1
IV	.8	.8	1.8	1.8			.1	.1	2.7	2.7
IEWS	.5	.3	.4	.6			.1	.1	1.0	1.0
	.3	.5	.5	.5					.5	.5
			.9	.7					1.2	1.2
I-IV	3.3	3.4	21.7	21.2			.2	.2	25.2	24.8
V			5.0	5.0	.2	.2			5.2	5.2
W			5.0	5.0	.2	.2			5.2	5.2
VI	.4	.2	100.3	99.2	13.4	13.3	.5	.5	114.6	113.2
IEWS	.2	.1	47.4	47.3	.7	.7	.2	.2	48.5	48.3
	.2	.1	52.9	51.9	12.7	12.6	.3	.3	66.1	64.9
VII			24.4	25.2	31.3	31.6			55.7	56.8
IEWS			23.8	24.6	30.7	31.0			31.3	31.3
					.6	.6			24.2	25.2
V-VII	.4	.2	129.7	129.4	44.9	45.1	.5	.5	175.5	175.2
VIII							.5	.5	.5	.5
IEWS							.5	.5	.5	.5
VIII							.5	.5	.5	.5
TOTAL	3.7	3.6	151.4	150.6	44.9	45.1	1.2	1.2	201.2	200.5

STILLWATER COUNTY, MONTANA

CLASS	CROPLAND ^{1/2}		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	2.8	3.0	.7	.5			.3	.3	3.8	3.8
IES	10.4	10.2	5.1	5.0			2.6	2.6	18.1	17.9
	3.6	3.6	4.3	4.3			.1	.1	4.5	4.4
	6.8	6.7	4.3	4.3			2.5	2.5	13.6	13.5
II	135.0	135.6	74.4	72.8			4.2	4.9	213.6	213.3
IEWS	118.8	120.2	59.8	57.6			4.0	4.7	182.6	182.5
	3.6	3.7	2.6	3.4					7.2	7.1
	11.6	11.7	12.0	11.8			.2	.2	23.8	23.7
IV	68.9	58.8	55.8	64.8			.8	1.9	125.5	125.5
IEWS	2.8	2.2	25.9	28.6			.8	1.1	29.5	29.5
	66.1	56.6	29.9	36.6				.8	96.0	96.0
I-IV	217.1	207.7	136.0	142.1			7.9	9.7	361.0	360.5
V	1.8	1.1	18.1	18.5	1.5	1.5		.3	21.4	21.4
W	1.8	1.1	18.1	18.5	1.5	1.5		.3	21.4	21.4
VI	8.7	6.3	310.9	314.2	26.7	26.4	2.2	2.6	348.5	349.5
IEWS	.1	.1	9.0	9.0	3.0	2.8		.2	12.1	12.1
	8.6	6.2	301.9	305.2	23.7	23.6	2.2	2.4	336.4	337.4
VII	.1	.1	145.1	146.5	63.9	63.8	.2	.3	209.3	210.7
IEWS	.1	.1	85.5	86.7	60.0	59.9		.1	145.9	145.7
			59.2	59.8	3.9	3.9	.2	.2	63.4	64.0
V-VII	10.6	7.5	474.1	479.2	92.1	91.7	2.4	3.2	579.2	581.6
VIII							1.9	1.9	1.9	1.9
IEWS							.8	.8	.8	.8
VIII							1.9	1.9	1.9	1.9
TOTAL	227.7	215.2	610.1	622.3	92.1	91.7	12.2	14.8	942.1	944.0

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

SWEET GRASS COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	3.2	3.4	.3	.1			.2	.2	3.7	3.7
II E	10.7	13.0	17.9	15.6			1.0	1.0	29.6	29.6
II W	5.7	7.9	17.7	15.5			.4	.4	23.8	23.8
II S	5.0	5.1	.2	.1			.6	.6	5.8	5.8
III E	43.3	48.0	81.2	75.7	.1	.1	5.5	5.5	130.1	129.3
III W	27.5	31.5	37.6	33.3			3.3	3.3	68.4	68.1
III S	10.7	10.7	16.5	15.6	.1	.1	.9	.9	27.6	27.2
IV E	5.7	5.8	27.1	26.8			1.3	1.3	34.1	33.9
IV W	25.4	24.1	96.3	97.2			2.6	2.6	124.3	123.9
IV S	9.5	8.7	22.8	23.5			.8	.8	33.1	33.0
I-IV	15.9	15.4	65.8	66.0			1.7	1.7	7.8	7.8
V									83.4	83.1
V W	82.6	88.5	195.7	188.6	.1	.1	9.3	9.3	287.7	286.5
V S	.3	.3	1.6	1.6					1.9	1.9
VI E	.5	.5	420.7	423.8	3.0	2.0	1.4	1.4	425.6	427.7
VI W			7.2	8.3	2.1	1.1			9.3	9.4
VI S	.5	.5	413.5	415.5	.9	.9	1.4	1.4	416.3	418.3
VII E			101.6	107.4	53.9	55.1	.1	.1	155.6	162.6
VII W			89.0	93.9	51.0	52.1	.1	.1	140.1	146.1
VII S			12.6	13.5	2.9	3.0			15.5	16.5
V-VII	.8	.8	523.9	532.8	56.9	57.1	1.5	1.5	583.1	592.2
VIII E							15.0	16.0	15.0	16.0
VIII W							3.3	3.3	3.3	3.3
VIII S							14.7	15.7	14.7	15.7
VIII							15.0	16.0	15.0	16.0
TOTAL	83.4	89.3	719.6	721.4	57.0	57.2	25.8	26.8	885.8	894.7

TETON COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	25.5	26.4	6.3	5.7			4.4	4.1	36.2	36.2
II E	136.9	133.9	33.7	36.6	1.6	1.4	6.0	6.3	178.2	178.2
II W	112.7	110.8	29.4	31.7	1.6	1.4	5.1	5.1	149.0	149.0
II S	1.1	.8	.8	.8					1.6	1.6
III E	23.1	22.3	3.6	4.1			.9	1.2	27.6	27.6
III W	267.3	292.0	123.1	118.2	2.4	2.6	3.0	3.3	415.8	416.1
III S	160.5	165.3	61.0	56.0			2.1	2.1	223.6	223.5
IV E	1.0	1.0	29.6	28.9	2.4	2.4	.1	.1	32.0	32.0
IV W	126.8	125.7	32.5	33.3			.9	1.2	160.2	160.3
IV S	58.4	56.5	91.4	94.7			2.1	2.1	151.9	153.2
I-IV	38.3	37.0	51.2	52.8			1.2	1.2	91.7	91.0
V	19.6	18.7	14.2	14.3			.9	.9	14.7	15.1
V W	508.1	508.8	254.5	255.2	4.0	4.0	15.5	15.8	782.1	783.8
V S			4.2	4.5					4.2	4.5
VI E	13.5	12.3	260.6	267.9	11.4	11.5	8.3	8.3	292.9	300.0
VI W			4.5	4.7					4.5	4.7
VI S	13.5	12.3	256.1	263.2	11.4	11.5	8.3	8.3	289.3	295.3
VII E	1.4	1.4	38.0	38.7	4.2	4.2			43.6	44.5
VII W			6.2	6.2	3.2	3.2			9.4	9.4
VII S	1.4	1.4	31.8	32.5	1.0	1.0			34.2	34.9
V-VII	14.9	13.7	302.8	311.1	15.6	15.7	8.3	8.3	341.6	348.8
VIII E			2.5	2.5	7.5	7.5	.5	.5	10.5	10.5
VIII W			2.5	2.5	7.5	7.5	.5	.5	10.5	10.5
VIII S										
VIII			2.5	2.5	7.5	7.5	.5	.5	10.5	10.5
TOTAL	523.0	522.5	519.8	568.8	27.1	27.2	24.3	24.6	1134.2	1143.1

TOOLE COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE-RANGE		FOREST-WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
II E	10.6	13.0	4.9	2.5					15.5	15.5
II W	10.6	13.0	4.9	2.5					15.5	15.5
III E	483.5	584.9	228.1	126.0			.2	8.3	719.9	719.4
III W	437.8	545.3	219.0	110.8			.1	5.8	662.6	662.0
III S	2.4	3.0	.9	1.3			2.5	2.5	5.8	5.8
IV E	43.3	37.6	8.2	13.9			.1		51.5	51.6
IV W	59.3	52.5	45.7	52.5					105.0	105.0
IV S	34.8	30.0	11.3	16.1					48.1	48.1
I-IV	24.5	22.5	34.4	36.4					58.9	58.9
V	553.4	650.4	278.7	181.0			.2	8.3	840.4	839.9
V W	.3	.1	1.6	1.8					1.9	1.9
V S	.3	.1	1.6	1.8					1.9	1.9
VI E	25.5	10.2	182.9	208.9	9.0	9.0			217.4	228.1
VI W			19.8	19.8	9.0	9.0			28.8	28.8
VI S	25.5	10.2	163.1	189.1					188.6	199.3
VII E			105.8	117.8					105.8	117.8
VII W			76.0	86.0					76.0	88.0
VII S			29.8	29.8					29.8	29.8
V-VII	25.8	10.3	290.3	328.5	9.0	9.0			325.1	347.8
VIII E							9.7	11.7	9.7	11.7
VIII W							9.7	11.7	9.7	11.7
VIII S										
VIII							9.7	11.7	9.7	11.7
TOTAL	579.2	660.7	569.0	509.5	9.0	9.2	18.0	20.0	1175.2	1199.4

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

TREASURE COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	4.3	4.6	.2		.5	.2			5.0	4.8
II	10.5	12.1	2.3	1.1	2.5	1.4	.9	.9	16.2	15.5
III	1.4	1.4	1.3	.2					1.7	1.6
IV	5.2	6.0	1.9	.6	2.4	1.2	.5	.5	5.9	5.7
V					2.1		.4	.4	3.6	3.2
VI	39.8	38.9	69.7	70.4					109.5	109.3
VII	33.9	33.8	47.7	47.7					81.6	81.5
VIII	5.9	5.1	22.0	22.7					27.9	27.8
IX	4.6	3.2	28.2	29.6					32.8	32.8
X	3.2	1.8	25.9	27.3					29.1	29.1
XI	1.4	1.4	2.3	2.3					3.7	3.7
XII	59.2	58.8	100.4	101.1	3.0	1.6	.9	.9	163.5	162.4
XIII	.3	.2	306.5	308.5	12.0	12.0	.4	.4	319.2	321.1
XIV	.3	.2	306.5	308.5	12.0	12.0	.4	.4	319.2	321.1
XV			121.8	121.9	9.0	9.0			130.8	130.9
XVI			84.5	84.3	7.1	7.1			91.6	91.4
XVII			37.3	37.6	1.9	1.9			39.2	39.5
XVIII	.3	.2	428.3	430.4	21.0	21.0	.4	.4	450.0	452.0
XIX							.6	.6	.6	.6
XX							.6	.6	.6	.6
XXI							.6	.6	.6	.6
TOTAL	59.5	59.0	528.7	531.5	24.0	22.6	1.9	1.9	614.1	615.0

VALLEY COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	6.3	6.0							6.3	6.0
II	136.2	141.8	16.8	10.7		.3			153.0	152.8
III	41.4	47.6	15.8	9.4		.1			57.4	57.4
IV	94.5	93.3	1.0	1.3			.2		95.5	95.4
V										
VI	415.3	441.6	267.1	245.5	16.4	14.6	12.3	12.0	711.1	713.7
VII	238.7	258.0	212.1	197.1	7.7	6.0	4.3	4.4	462.8	465.2
VIII	176.6	183.6	55.0	48.4	8.7	8.6	8.0	7.6	248.3	248.2
IX	42.5	50.5	189.1	181.9				.5	231.6	233.0
X	3.5	4.0	4.0	3.0					7.5	7.5
XI	39.0	47.0	185.1	175.9				.5	224.1	223.5
XII	600.3	639.9	473.0	438.1	16.4	15.0	12.3	12.5	1102.0	1105.5
XIII		1.5	26.8	25.2			1.6	1.7	28.4	28.4
XIV		1.5	26.8	25.2			1.6	1.7	28.4	28.4
XV	89.6	88.9	684.0	685.1	.4	.4	6.5	6.7	780.5	781.1
XVI			33.0	33.0					33.0	33.0
XVII	89.6	88.9	651.0	652.1	.4	.4	6.5	6.7	747.5	748.1
XVIII			100.2	100.2					100.2	100.2
XIX			40.1	40.1					40.1	40.1
XX			60.1	60.1					60.1	60.1
XXI	89.6	90.4	811.0	810.5	.4	.4	8.1	8.4	909.1	909.7
TOTAL	689.9	730.3	1284.0	1248.6	16.8	15.4	20.4	20.9	2011.1	2015.2

WHEATLAND COUNTY, MONTANA

CLASS	CROPLAND 1/		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I			1.7	1.7	.1	.1			1.8	1.8
II	14.3	15.9	22.7	21.3	3.1	2.9	.3	.1	40.4	40.2
III	11.6	17.1	14.4	12.9					26.0	26.0
IV	1.5	2.0	5.4	3.4	.1	.1			6.3	6.3
V			2.9	3.0	3.0	2.8	.3	.1	8.1	7.9
VI	12.7	15.8	149.7	146.6			1.1	1.1	163.5	163.5
VII	12.1	15.1	143.4	140.4			1.1	1.1	156.6	156.6
VIII	.1	.5	1.0	.9					1.1	1.1
IX			5.3	5.3					5.8	5.8
X	24.5	27.5	177.1	174.4			1.3	1.5	202.9	203.4
XI	6.2	6.2	6.3	6.4					12.5	12.6
XII	18.2	21.1	2.9	2.9					3.0	3.0
XIII	51.5	59.2	351.2	344.0	3.2	3.0	2.7	2.7	408.6	408.9
XIV	.1	.3	4.9	4.7	.1	.1			5.1	5.1
XV	.1	.3	4.9	4.7	.1	.1			5.1	5.1
XVI	.2	.2	324.8	326.3	2.6	2.6	.3	.3	327.9	329.4
XVII			11.5	11.5					11.5	11.5
XVIII	.2	.2	313.3	314.8	2.6	2.6	.3	.3	316.4	317.9
XIX			92.3	92.3	.2	.2			92.5	92.5
XX			92.3	92.3	.2	.2			92.5	92.5
XXI	.3	.5	422.0	423.7	2.9	2.9	.3	.3	425.5	427.0
TOTAL	51.8	59.7	773.2	767.3	6.1	5.9	3.0	3.0	834.1	835.9

Table 9. Use of Inventory Acreage by Capability Class and Subclass, by County 1/

WIBAUX COUNTY, MONTANA

CLASS	CROPLAND $\frac{1}{2}$		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	47.4	47.6	14.5	14.2			1.5	1.5	63.4	63.3
ES	47.4	47.6	14.5	14.2			1.5	1.5	63.4	63.3
III	89.2	87.2	43.9	45.4		.4	3.0	1.8	136.1	134.8
ES	80.3	78.6	39.5	40.9		.3	1.8	1.8	121.6	121.6
	8.9	8.6	4.4	4.5		.1	1.2	1.8	14.5	13.2
IV	20.7	19.6	21.9	22.8			.8	.8	43.4	43.2
ES	11.5	10.7	14.6	15.1			.3	.3	26.2	26.1
	9.2	8.9	7.5	7.7			.5	.5	17.2	17.1
I-IV	157.3	154.4	80.3	82.4		.4	5.3	4.1	242.9	241.3
VI	21.9	17.9	114.8	122.4			.3	.3	137.0	140.6
ES	21.9	17.9	114.8	122.4			.3	.3	137.0	140.6
VII	2.0	1.0	150.5	153.3	5.0	5.0	.2	.2	157.7	159.5
ES	2.0	1.0	76.7	79.6	2.0	2.0	.2	.2	80.9	82.8
			73.8	73.7	3.0	3.0			76.8	76.7
V-VII	23.9	18.9	265.3	275.7	5.0	5.0	.5	.5	294.7	300.1
TOTAL	181.2	173.3	345.6	358.1	5.0	5.4	5.8	4.6	537.6	541.4

YELLOWSTONE COUNTY, MONTANA

CLASS	CROPLAND $\frac{1}{2}$		PASTURE RANGE		FOREST WOODLAND		OTHER LAND		TOTAL	
	1958	1975	1958	1975	1958	1975	1958	1975	1958	1975
	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres	1,000 Acres
I	27.0	27.0	.7	.3			2.2	2.2	29.9	29.5
II	34.5	35.2	15.9	14.5			3.4	3.4	53.8	53.1
ES	11.7	12.7	14.6	13.4			.6	.6	26.9	26.7
	.6	.6	.1	.1			.1	.1	.8	.8
	22.2	21.9	1.2	1.0			2.7	2.7	26.1	25.6
III	150.5	152.4	295.6	292.0	.1	.1	5.6	5.6	451.8	450.1
ES	130.4	133.2	247.0	243.4			3.5	3.5	380.9	380.1
	20.1	19.2	48.6	48.6	.1	.1	2.1	2.1	70.9	70.0
IV	68.2	69.0	77.5	76.5			1.8	1.8	147.5	147.3
ES	12.4	12.3	9.4	9.4			.5	.5	22.3	22.2
	55.8	56.7	68.1	67.1			1.3	1.3	125.2	125.1
I-IV	280.2	283.6	389.7	383.3	.1	.1	13.0	13.0	683.0	680.0
V			1.3	1.3	.4	.4	.3	.3	2.0	2.0
W			1.3	1.3	.4	.4	.3	.3	2.0	2.0
VI	23.7	22.1	443.1	444.8	9.3	9.3	2.2	2.2	478.3	478.4
ES	23.7	22.1	443.1	444.8	9.3	9.3	2.2	2.2	478.3	478.4
VII	4.1	4.1	333.2	333.7	46.2	46.2	1.3	1.3	384.8	385.3
ES			174.1	174.6	46.2	46.2			220.3	220.8
	4.1	4.1	159.1	159.1			1.3	1.3	164.5	164.5
V-VII	27.8	26.2	777.6	779.8	55.9	55.9	3.8	3.8	865.1	865.7
VIII							3.2	3.2	3.2	3.2
ES							3.2	3.2	3.2	3.2
VIII							3.2	3.2	3.2	3.2
TOTAL	308.0	309.8	1167.3	1163.1	56.0	56.0	20.0	20.0	1551.3	1548.9

WATERSHED PROJECT NEEDS

Certain types of soil and water conservation needs cannot be adequately solved by local people except by their action through local groups such as soil conservation districts, drainage districts, irrigation districts, irrigation companies, and counties, towns or municipalities. Aid from State and Federal agencies may also be needed. These conservation needs are primarily forms of water management, such as flood prevention, agricultural water management, nonagricultural water management.

The Watershed Protection and Flood Prevention Act, Public Law 566, as amended, makes it possible to meet many of the soil and water conservation needs that cannot be met under other programs of assistance to agriculture or through federal public works projects on major rivers, planned and constructed by such agencies as the Corps of Engineers or Bureau of Reclamation. The Department of Agriculture administers this law which provides a means by which local organizations can apply for and obtain assistance in the planning and installation of works of improvement for flood prevention and the conservation, development, utilization, and disposal of water in watershed areas not exceeding 250,000 acres in size.

This part of the Inventory gives the nature and scope of the water management problems that can be met by project action of organized groups such as these authorized by Public Law 566. It does not give an evaluation of the economic feasibility of the projects. In Montana 565 small watersheds or planning units (250,000 acres or less in size) with a total of about 94 million acres were studied. The Inventory estimates (1) there are 245 small watersheds or planning units (250,000 acres or less) on which the water-management problems cannot be solved without the installation of structural measures for water management, (2) the extent or magnitude of the need for each development, and (3) the types of water-management problems requiring project action associated with each of the planning units, including (a) flood prevention to reduce floodwater and sediment-damage and erosion, (b) agricultural water developments, and (c) nonagricultural water management for municipal or industrial water supply, fish and wildlife, recreation, and other nonagricultural water developments.

The following definitions are applicable to terms used in Table 10 and the preceding discussion:

Watershed-project problems are water-management problems that cannot be solved by the individual actions of the people affected by them. Ordinarily a project to meet one or more of these problems requires project action for installation and group benefits for justification.

A watershed or planning unit consists of any watershed, planning unit, or combination of not more than 250,000 acres which has a flood-prevention or agricultural water-management problem of sufficient magnitude to require project action. In Montana there were 565 such watersheds delineated.

Acreage having the problem is the total acreage subject to the watershed project problem to which the estimate applies even though it may have been met already by individual or project action. For example, the acreage of land with a drainage problem includes all land subject to problems of excess water even though it may have an adequate system of drainage. The estimates for this item were provided by the Soil Conservation Service for non-federal lands and by administering Federal agencies for public land.

TABLE 10 - WATERSHED PROJECT NEEDS, (Montana, 1959)

Number of watersheds needing project action: 245

Total acreage in watersheds needing project action: 40,900,500 acres

Watershed project problems	Acreage having the problem	Acreage needing project action	Projects needing action	Farms affected
	<u>1,000 acres</u>	<u>1,000 acres</u>	<u>Number</u>	<u>Number</u>
Flood prevention:				
Flood water and sediment damage reduction	2,160	1,313	139	2,448
Erosion damage reduction	5,348	1,059	110	2,925
Agricultural water management:				
Drainage	779	378	89	2,333
Irrigation	2,157	1,726	173	3,513
Other (Irrig. water management and water spreading).	82	69	15	346
Nonagricultural water-management developments:				
Municipal or industrial water supply	0	0	0	0
Recreation development	53	29	38	0
Other (Big game damage).	69	0	0	0
Other (Stabilize stream flow).	1	1	2	0

Note: The totals shown in the columns may exceed the totals shown at the top of this table since many watershed projects will be multi-purpose.

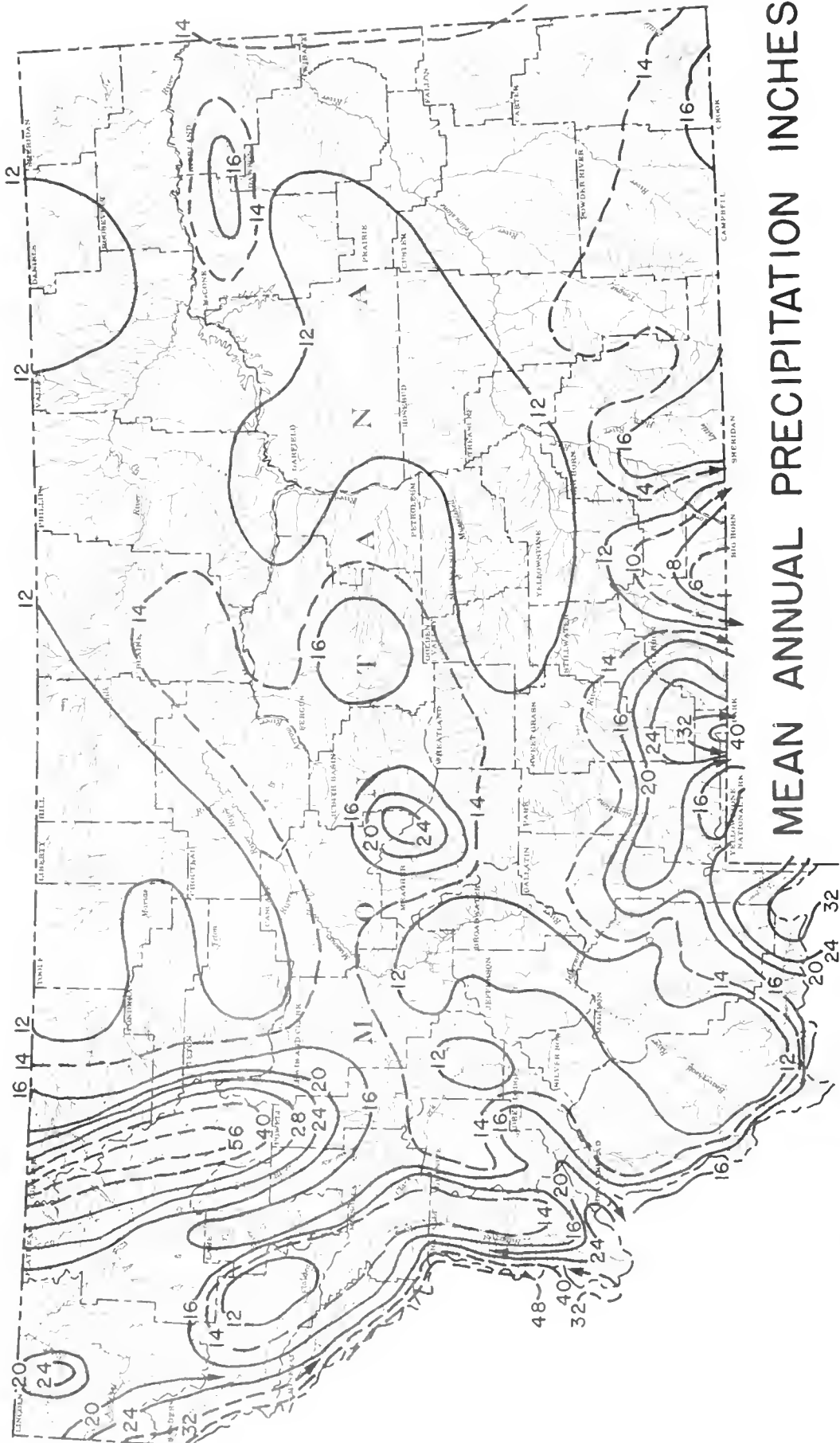
Acreage needing project action is the acreage that cannot be adequately protected or treated by individuals or groups without the assistance of organized groups such as those authorized by Public Law 566. These same acreages may also require additional assistance under other programs.

Project action is considered as that cooperative action which can be effected only through formal organizations which have a legal status under state law and has usually given them the power to negotiate contracts, levy taxes, make assessments or otherwise raise funds, and to disburse monies for the installation, operation, and maintenance of works of improvement. Requirements for project action are found in pamphlet USDA PA 392. The principal benefits of project action will ordinarily be off-site.

Projects needing action are the number of watershed projects having water problems needing conservation treatments. In Montana 245 project size watersheds with approximately 49 million acres were identified.

Farms affected are the number of farms that have some acreage with a water problem that requires project action

MONTANA



MEAN ANNUAL PRECIPITATION INCHES



Isoines are drawn through points of approximately equal value. Caution should be used in interpolating on these maps, particularly in mountainous areas.

Based on period 1931 - 55

APPENDIX 1

UNITED STATES DEPARTMENT OF AGRICULTURE
Office of the Secretary
Washington 25, D. C.

April 10, 1956

MEMORANDUM NO. 1396

National Inventory of Soil and Water Conservation Needs

The Department has constant need and use for information that can be gained only through a national inventory of soil and water conservation needs. This inventory would equip the Department to more effectively plan and carry out its responsibility in soil and water conservation. From it the Department could arrive at reasonable estimates of the magnitude and urgency of the various conservation measures needed to maintain and improve the country's productive capacity for all the people. The following policies, therefore, are hereby established:

1. A National Inventory of Soil and Water Conservation Needs will be made and kept current by the Department of Agriculture. This Inventory will be developed for each county in the United States and for appropriate subdivisions of the Territories. The goal for initial completion will be three years. The Forest Service has recently completed an intensive survey of the Nation's timber resources. County estimates for forestry, insofar as is possible, will be developed from this timber survey and other available forest resource information.
2. The Department agencies concerned with land use, soil and water conservation and the management of land resources which are to cooperate in this endeavor are: Agricultural Conservation Program Service, Agricultural Research Service, Commodity Stabilization Service, Federal Extension Service, Farmers Home Administration, Forest Service and Soil Conservation Service. Other agencies of the Department will be called upon where they can make a contribution. The Soil Conservation Service is hereby assigned responsibility for leadership.
3. A Department Soil and Water Conservation Needs Committee, comprised of one representative from each of the agencies named in paragraph 2, will be established. This committee, under leadership of a chairman from the Soil Conservation Service, will aid in the development and review of proposed procedures, furnish guidance in the cooperative effort, and make periodic reviews of progress for the information of the participating agencies.

4. A Soil and Water Conservation Needs Committee will be established in each State or Territory. Its membership will consist of representatives who work within the State or Territory for the Department agencies named in paragraph 2. The Soil Conservation Service representative will serve as chairman. The State Conservationist of the Soil Conservation Service will invite representation on the committee from the Land-Grant College, the State Forester, and other appropriate State agencies and groups who may be able to provide assistance and useful data. The State or Territorial committee will develop a plan for making the Inventory, and will submit it to the Administrator of the Soil Conservation Service for review and consideration of the Department Committee and the Assistant Secretary, Federal-States Relations.
5. Data will be developed separately for privately owned and publicly owned land. The Soil Conservation Service will be responsible for collecting basic physical data on soil and water on non-federally owned lands. The Forest Service will be responsible for the adequacy of the physical data on forestry on non-federally owned lands. The Forest Service and other land management agencies will be responsible for making the Inventory on lands under their jurisdiction.
6. Cooperation of State and local agencies, organizations, and groups concerned with soil, water, forest, range and wildlife conservation, utilization, and management will be actively solicited in the development and review of the Inventory. The Department of Agriculture will also seek and encourage the cooperation of other Federal agencies, responsible for land management activities, in the development of data which can be utilized in the National Inventory of Soil and Water Conservation Needs.

/S/ Ezra Taft Benson
Secretary

APPENDIX 2

PROCEDURES FOR DEVELOPING BASIC DATA ON SOIL AND LAND USE CONDITIONS

The basic data on soil and land use conditions in Montana were secured from soil surveys. A set of randomized samples to represent every county were selected by the statistical laboratory at Iowa State University. The sample units were located on county base maps. The map showed the boundaries and symbols of land-resource units. Boundaries of federally owned land were shown on the maps.

Land-resource units were used in the selection of samples. The State SCS office informed the laboratory that it wanted samples drawn by land-resources units and indicated whether or not a higher or lower sampling rate was wanted for certain land-resource units.

Provision was made for identifying all samples by land-resource units so that data could be combined on that basis for study of special problems. It was necessary, therefore, to have a land-resource map of the State.

A land-resource map shows the geographic distribution of land-resource units. A land-resource unit is a geographic area of land, usually several thousand acres in extent, characterized by a particular combination or pattern of soils (including slope and erosion), climate, water resource, land use, and types of farming. Such a unit may occur in one continuous area or as several separate but nearby areas.

The standard size of sample units was 160 acres. The basic sampling rate was 2 percent. As standard procedure, the statistical laboratory selected two separate sets of sample units in each county, each set representing approximately 2 percent of the county. In a county or other area of 250,000 to 500,000 acres, a 2 percent sampling provided data of an acceptable degree of reliability. In counties of this size, therefore, it was necessary to map only one set of sample units. In larger areas, the rate was reduced, but in smaller ones it was increased in order to maintain the same degree of reliability.

The laboratories used the following procedure in selecting sample units: The county, or land-resource area within the county, was divided into blocks (called "strata") which were then further subdivided into equal-sized sample units. One sample unit was selected at random from each block for each of the two sets of samples.

In Montana where section lines were easily identified, both on the photographs and on the ground, the designated quarter sections were delineated.

The laboratory outlined one set of samples in red and the other in blue, on the county map. From this map sample unit boundaries were transferred to the aerial photographs on which the mapping was done.

In counties where one set of sample units provided adequate data, the set outlined in red was used. No substitution or intermingling of the two sets was permitted.

All possible use was made of existing soil-survey information. For counties with recently completed surveys no additional field work was needed. In other counties, onsite surveys produced new maps that provided the information.

On sample units not already mapped, soil surveys were made on the regular aerial photograph field sheets at the scale locally used. In partially mapped counties, surveys of sample units were made according to the legend in use in the county. Insofar as possible, all new mapping was done according to legends that could be used in the standard soil survey.

In mapping the samples, urban and built-up areas were classified as to land use only.

Federal land identified on the sample unit map was generally not mapped. If the Federal land included cropland farmed under lease or permit rather than by the agency, and if a total acreage of such land in the county could be obtained from the agency, that falling in sample units was mapped. On Indian lands, the Bureau of Indian Affairs assisted in getting survey information.

All existing maps of sample units were field checked before use. The map was revised if the soil survey was not adequate or if the land use shown did not agree with present conditions on the ground or with the inventory definitions. Revisions were made on copies of the maps instead of on the original soil-survey field sheets.

One of the major values of the survey data will be to show the relation of land use to the physical conditions of the land. Land use was mapped on all sample areas. The condition found at the time of the mapping was shown, with no attempt to predict the intent of the operator.

Land use was designated as : Irrigated cropland, nonirrigated cropland, pasture range, irrigated native grassland, forest and woodland, and other land. Definitions used in soil-survey mapping were those used for the Inventory of Soil and Water Conservation Needs.

In measuring sample unit maps, each individual mapping unit was measured separately so the data could be combined by land-capability units or other desired interpretative groupings.

The soil and land use data from the sample units were then expanded to give figures representing the total acreages of conditions in the county. This expansion was done by Iowa State University.

APPENDIX 3

THE LAND-CAPABILITY CLASSIFICATION

The standard soil-survey map shows the different kinds of soil that are significant and their location in relation to other features of the landscape. These maps are intended to meet the needs of users with widely different problems and, therefore, contain considerable detail to show important basic soil differences.

The information on the soil map must be explained in a way that has meaning to the user. These explanations are called interpretations. The capability classification is one of a number of interpretive groupings made primarily for agricultural purposes. As with all interpretive groupings the capability classification begins with the individual soil-mapping units, which are building stones of the system. In this classification the arable soils are grouped according to their potentialities and limitations for sustained production of the common cultivated crops that do not require specialized site conditioning or site treatment. Nonarable soils (soils unsuitable for longtime sustained use for cultivated crops) are grouped according to their potentialities and limitations for the production of permanent vegetation and according to their risks of soil damage if mismanaged.

The individual mapping units on soil maps show the location and extent of the different kinds of soil. Mapping units permit making the greatest number of precise statements about the individual soils and predictions about their use and management. The capability grouping of soils is designed to (1) help landowners and others use and interpret the soil maps, (2) introduce users to the detail of the soil map itself, and (3) make possible broad generalizations based on soil potentialities, limitations in use, and management problems.

The capability classification provides three major categories: (1) Capability unit, (2) capability subclass, and (3) capability class. The first category is the capability unit, which is a grouping of soils that have about the same influence on production and responses to systems of management of common cultivated crops and pasture plants. Soils in any one capability unit are adapted to the same kinds of common cultivated and pasture plants and require similar alternative systems of management for these crops. Longtime estimated yields of adapted crops for individual soils within the unit under comparable management do not vary more than 25 percent.

The second category in the classification is the subclass. This is a grouping of capability units having similar kinds of limitations and hazards. Four kinds of limitations or hazards are recognized: (1) erosion hazard, (2) wetness, (3) root zone limitations, and (4) climate.

The third and broadest category in the capability classification places all the soils in eight capability classes. The risks of soil damage or limitations in use become progressively greater from Class I to Class VIII.

Soils in the first four classes are capable under good management of producing adapted plants, such as forest trees or range plants, and the common cultivated field crops and pasture plants. Soils in Classes V, VI, and VII are suited to the use of adapted native plants. Some soils in Classes V and VI are also capable of producing specialized crops, such as certain fruits and ornamentals, and even field and vegetable crops under highly intensive management involving elaborate practices for soil and water conservation. Soils in Class VIII do not return onsite benefits for inputs of management for crops, grasses, or trees.

The grouping of soils into capability units, subclasses, and classes is done primarily on the basis of their capability to produce common cultivated crops and pasture plants without deterioration over a long period. To express suitability of the soils for range and woodland use the soil-mapping units are grouped into range sites and woodland sites.

CAPABILITY CLASSES

Land suited for cultivation and other uses

Class I.--Soils in Class I have few limitations that restrict their use.

Soils in this class are suited to a wide range of plants and may be used safely for cultivated crops, pasture, range, woodland, and wildlife. The soils are nearly level, 1/ and erosion hazard (wind or water) is low. They are deep, generally well drained, and easily worked. They hold water well and are either fairly well supplied with plant nutrients or highly responsive to inputs of fertilizer.

The soils in Class I are not subject to damaging overflow. They are productive and suited for intensive cropping. The local climate must be favorable for growing many of the common field crops.

In irrigated areas, soils may be placed in Class I if the limitation of the arid climate has been removed by relatively permanent irrigation works. Such irrigated soils (or soils potentially useful under irrigation) are nearly level, have deep rooting zones, have favorable permeability and water holding capacity, and are easily maintained in food tilth. Some of the soils may require initial conditioning including leveling to the desired grade, the leaching of a light accumulation of soluble salts, or the lowering of the seasonal water table. Where limitations due to salts, water table, overflow, or erosion are likely to recur, the soils are regarded as subject to permanent natural limitations and are not included in Class I.

1/ Some rapidly permeable soils in Class I may have gently slopes.

Soils that are wet and have slowly or very slowly permeable subsoils are not placed in Class I. Some kinds of soil in Class I may be drained as an improvement measure for increased production and ease of operation.

Soils in Class I that are used for crops need ordinary management practices to maintain productivity--both soil fertility and soil structure. Such practices may include the use of one or more of the following: Fertilizers and lime, cover and green-manure crops, conservation of crop residues and animal manures, and sequences of adapted crops.

Class II.--Soils in Class II have some limitations that reduce the choice of plants or require moderate conservation practices.

Soils in this class require careful soil management, including conservation practices, to prevent deterioration or to improve air and water relations when the soils are cultivated. The limitations are few and the practices are easy to apply. The soils may be used for cultivated crops, pasture, range, woodland, or for wildlife food and cover.

Limitations of soils in Class II may include singly or in combination the effects of (1) gentle slopes; (2) moderate susceptibility to wind or water erosion, or moderate adverse effects of past erosion; (3) less than ideal soil depth; (4) somewhat unfavorable soil structure and workability; (5) slight to moderate salinity or alkalinity, easily corrected but likely to recur; (6) occasional damaging overflow; (7) wetness correctible by drainage but existing permanently as a moderate limitation; and (8) slight climatic limitations on soil use and management.

The soils in this class provide the farm operator less latitude in the choice of either crops or management practices than soils in Class I. They may also require special soil-conserving cropping systems, soil conservation practices, water-control devices, or tillage methods when used for cultivated crops. For example, deep soils of this class with gentle slopes that are subject to moderate erosion when cultivated may need one of the following practices or some combination of two or more: terracing, stripcropping, contour tillage, crop rotations that include grasses and legumes, vegetated water-disposal areas, cover on green-manure crops, stubble mulching, fertilizers, manure, and lime. The exact combinations of practices vary from place to place, depending on the characteristics of the soil, the local climate, and the farming system.

Class III.--Soils in Class III have severe limitations that reduce the choice of plants or require special conservation practices, or both.

Soils in Class III have more restrictions than those in Class II, and when used for cultivated crops, the conservation practices are usually more difficult to apply and maintain. They may be used for cultivated crops, pasture, woodland, range, or for wildlife food and cover.

Limitations of soils in Class III restrict the amount of clean cultivation; timing of planting, tillage, and harvesting; choice of crops or a combination of these items. The limitations may result from the effects of one or more of the following: (1) moderately steep slopes; (2) high susceptibility to water or wind erosion or severe adverse effects of past erosion; (3) frequent overflow accompanied by some crop damage; (4) very slow permeability of the subsoil; (5) wetness or some continuing waterlogging after drainage; (6) shallow depths to bedrock, hardpan, fragipan, or claypan that limits the rooting zone and the water storage; (7) low moisture-holding capacity; (8) low fertility not easily corrected; (9) moderate salinity or alkalinity, or (10) moderate climatic limitations.

When cultivated, many of the wet, slowly permeable but nearly level soils in Class III require a drainage system and a cropping system that maintains or improves the structure and tilth of the soil. To prevent puddling and to improve permeability it is commonly necessary to supply organic material to such soils and to avoid working them when they are wet. In some irrigated areas, part of the soils in Class III have limited use because of high water table, slow permeability, and the hazard of salt or alkali accumulation. Each distinctive kind of soil in Class III has one or more alternative combinations of use and practices required for safe use, but the number of practical alternatives for average farmers is less than for soils in Class II.

Class IV.—Soils in Class IV have very severe limitations that restrict the choice of plants, require very careful management, or both.

The restrictions in use for these soils are greater than those in Class III, and the choice of plants is more limited. When these soils are cultivated, more careful management is required and conservation practices are more difficult to apply and maintain. Soils in Class IV may be used for crops, pasture, woodland, range, or for wildlife food and cover.

Soils in Class IV may be well suited to only two or three of the common crops or the amount of harvest produced may be low in relation to inputs over a long period. Use for cultivated crops is limited as a result of the effects of one or more permanent features such as (1) steep slopes, (2) severe susceptibility to water or wind erosion, (3) severe effects of past erosion, (4) shallow soils, (5) low moisture-holding capacity, (6) frequent overflows accompanied by severe crop damage, (7) excessive wetness with continuing hazard of waterlogging after drainage, (8) severe salinity or alkalinity, or (9) moderately adverse climate.

Many sloping soils in Class IV in humid regions are suited for occasional but not regular cultivation. Some of the poorly drained, nearly level soils placed in Class IV are not subject to erosion but are poorly suited to intertilled crops because of the time required for the soil to dry out in the spring and because of low productivity for cultivated crops. Some soils in

Class IV are well suited to one or more of the special crops, such as fruits and ornamental trees and shrubs, but this suitability itself is not sufficient to place a soil in Class IV.

In subhumid and semiarid regions soils in Class IV may produce good yields of adapted cultivated crops during years of above average rainfall; low yields during years of average rainfall; and failures during years of below average rainfall. During the low rainfall years the land must be protected even though there can be little or no expectancy of a marketable crop. Special treatments and practices to prevent soil blowing, conserve moisture, and maintain soil productivity are required. Sometimes crops must be planted or emergency tillage used for the primary purpose of maintaining the soil during years of low rainfall. These treatments must be applied more frequently or more intensively than on soils in Class III.

Land limited in use--generally not suited for cultivation

Class V.--Soils in Class V have little or no erosion hazard but have other limitations that are impractical to remove that limit their use largely to pasture, range, woodland, or wildlife food and cover.

Soils in this class have limitations that restrict the kind of plants that can be grown and that prevent normal tillage of cultivated crops. They are nearly level but some are wet, are frequently overflowed by streams, are stony, have climatic limitations, or have some combination of these limitations. Examples of Class V are (1) soils of the bottom lands subject to frequent overflow that prevents the normal production of cultivated crops, (2) nearly level soils with a growing season that prevents the normal production of cultivated crops, (3) level or nearly level stony or rocky soils, and (4) ponded areas where drainage for cultivated crops is not feasible but where soils are suitable for grasses or trees. Because of these limitations, cultivation of the common crops is not feasible but pastures can be improved and benefits from proper management can be expected.

Class VI.--Soils in Class VI have severe limitations that make them generally unsuited for cultivation and limit their use largely to pasture or range, woodland, or wildlife food and cover.

Physical conditions of soils placed in Class VI are such that it is practical to apply range or pasture improvements, if needed, such as seeding, liming, fertilizing, and water control with contour furrows, drainage, ditches, diversions, or water spreaders. Soils in Class VI have continuing limitations that cannot be corrected, such as (1) steep slope, (2) severe erosion hazard, (3) effects of past erosion, (4) stoniness, (5) shallow rooting zone, (6) excessive wetness or overflow, (7) low-moisture capacity, (8) salinity or alkalinity, or (9) severe climate. Due to one or more of these limitations these soils are not generally suited for cultivated crops. But they may be used for pasture, range, woodland, or wildlife cover or some combination of these.

Some soils in Class VI can be safely used for the common crops provided unusually intensive management is used. Some of the soils in this class are also adapted to special crops such as sodded orchards, blueberries, etc., requiring soil conditions unlike those demanded by the common crops. Depending upon soil features and local climate the soils may be well or poorly suited to woodlands.

Class VII.--Soils in Class VII have very severe limitations that make them unsuited for cultivation and that restrict their use largely to grazing, woodland, or wildlife.

Physical conditions of soils in Class VII are such that it is impractical to apply such pasture or range improvements as seeding, liming, fertilizing, and water-control measures such as contour furrows, ditches, diversions, or water spreaders. Soil restrictions are more severe than those in Class VI because of one or more continuing limitations that cannot be corrected, such as very steep slopes, erosion, shallow soil, stones, wet soil, salts or alkali, unfavorable climate, or other limitations that make them unsuited for common cultivated crops. They can be used safely for grazing or woodland or wildlife food and cover, or some combination of these under proper management.

Depending upon the soil characteristics and local climate, soils in this class may be well or poorly suited to woodland. They are not suited to any of the common cultivated crops; in unusual instances, some soils in this class may be used for special crops under unusual management practices. Some areas of Class VII may need seeding or planting to protect the soil and to prevent damage to adjoining areas.

Class VIII.--Soils and landforms in Class VIII have limitations that preclude their use for commercial plant production and restrict their use to recreation, wildlife, water supply, or aesthetic purposes.

Soils and landforms in Class VIII cannot be expected to return significant onsite benefits from management for crops, grasses, or trees, although benefits from wildlife use, watershed protection, or recreation may be possible.

Limitations that cannot be corrected may result from the effects of one or more of the following: (1) erosion or erosion hazard, (2) severe climate, (3) wet soil, (4) stones, (5) low moisture capacity, and (6) salinity or alkalinity.

Badlands, rock outcrop, sandy beaches, river wash, mine tailings, and other nearly barren lands are included in Class VIII. It may be necessary to give protection and management for plant growth to soils and landforms in Class VIII in order to protect other more valuable soils, to control water, or for wildlife or aesthetic reasons.

CAPABILITY SUBCLASSES

Subclasses are groups of capability units within classes that have the same kinds of dominant limitations for agricultural use as result of soil and climate. Some soils are subject to erosion if they are not protected, while others are naturally wet and must be drained if crops are to be grown. Some soils are shallow or droughty, or have other soil deficiencies. Still other soils occur in areas where climate limits their use. The four kinds of limitations recognized at the subclass level are: risks of erosion, designated by the symbol (e); wetness, drainage, or overflow (w); root-zone limitations (s); and climatic limitations (c). The class and subclass provide the map user information about both the degree and kind of limitation. Subclasses are not recognized in Capability Class I.

Subclass (e) erosion is made up of soils where the susceptibility to erosion is the dominant problem or hazard in their use. Erosion susceptibility and past erosion damage are the major soil factors for placing soils in this subclass.

Subclass (w) excess water is made up of soils where excess water is the dominant hazard or limitation in their use. Poor soil drainage, wetness, high water table, and overflow are the criteria for determining which soils belong in this subclass.

Subclass (s) soil limitations in the root zone is made up of soils where root-zone limitations are the dominant hazard or limitation in their use. These limitations are the results of such factors as shallow soils, stoniness, low moisture-holding capacity, low fertility difficult to correct, and salinity or alkalinity.

Subclass (c) climatic limitation is made up of soils where the climate (temperature and lack of moisture) is the only major hazard or limitation in their use.

Limitations imposed by erosion, excess water, shallow soils, stones, low moisture-holding capacity, salinity or alkalinity can be modified or partially overcome and take precedence over climate in determining subclasses. The dominant kind of limitation or hazard to the use of the land determines the assignment of capability units to the (e), (w), and (s) subclasses. Capability units that have no limitation other than climate are assigned to the (c) subclass.

Where two kinds of limitation which can be modified or corrected are essentially equal, the subclasses have the following priority: e, w, and s. For example, we need to group a few soils in humid regions that have both an erosion hazard and an excess water hazard; with them the e takes precedence over the w; with soils having both an excess water limitation and a root-zone limitation the w takes precedence over the s. In grouping soils of subhumid and semiarid regions that have both an erosion hazard and a climatic limitation, the e takes precedence over the c, and in grouping soils with both root-zone limitations and climatic limitations the s takes precedence over the c.

CAPABILITY UNITS

The capability units provide more specific and detailed information than the subclass for application to specific fields on a farm or ranch. A capability unit is a grouping of soils that are nearly alike in suitability for plant growth and responses to the same kinds of soil management. That is, a reasonably uniform set of alternatives can be presented for the soil, water, and plant management of the soils in a capability unit, assuming that effects of past management are properly considered. Soils grouped into capability units respond in a similar way and require similar management although they may have soil characteristics that put them in different soil series.

Soils grouped into a capability unit should be sufficiently uniform in the combinations of soil characteristics that influence their qualities to have similar potentialities and continuing limitations or hazards. Thus the soils in a capability unit should be sufficiently uniform to (a) produce similar kinds of cultivated crops and pasture plants with similar management practices, (b) require similar conservation treatment and management under the same kind and condition of vegetative cover, and (c) have comparable potential productivity. (Estimated average yields under similar management systems should not vary more than about 25 percent among the kinds of soil included with the unit.)



