

APPENDICES

RECREATION APPENDIX

CAPITAL IMPROVEMENTS

<u>FY</u>	<u>Item</u>	<u>Cost</u>
1981	Landscape improvements	\$ 5,000
1982	Sewage improvements	50,000
	Re-roof lodge	1,000
	Landscape improvements	1,000
1983	Relocate lean-to "Dogwood"	500
	Construct woodsheds	4,000
1984		0
1985	Renovate bathhouse	20,000
1986	Remove toilet building #3	200
1987		0
1988		0
1989		0
1990		0

ATTENDANCE AT MAIDSTONE COMPARED WITH OTHER AREA FACILITIES: 1977-1981

AREA	DAY USE			CAMPING			
	1977	1981	% Increase/ Decrease	1977	1981	% Increase/ Decrease	Absolute Inc/Dec.
Brighton	11,087	11,501	+ 4%	19,784	14,991	-24%	-4793
Crystal Lake	23,512	39,383	+ 41%	-	-	-	-
Elmore	17,001	20,940	+ 19%	12,473	10,489	-16%	-1984
Groton							
New Discovery	1,659	NMD*	- 74%	4,603	3,022	-44%	-1581
Stillwater	-	-	-	18,866	10,590	-44%	-8276
Ricker	-	-	-	12,653	10,590	-16%	-2063
Big Deer	-	-	-	3,655	2,334	-36%	-1321
Boulder Beach	23,840	20,528	- 14%	-	-	-	-
Seyon	1,827	3,128 (1980)	+ 42%	-	-	-	-
Kettle Pond	-	-	-	2,741	2,196	-20%	- 545
Maidstone	5,794	7,064	+ 18%	12,005	10,568	-12%	-1437

* No Meaningful Data--figures for 1981 were an aberration from general trends.

ATTENDANCE
MAIDSTONE STATE PARK

<u>Year</u>	<u>Day Use</u>	<u>Camper Days</u>
1942	1,024	
1943	135	
1944	547	
1945	1,596	
1946	4,140	
1947	8,556	
1948	8,451	
1949	10,017	
1950	8,918	
1951	8,185	
1952	9,673	
1953	12,502	544
1954	10,473	1,156
1955	16,685	2,324
1956	12,357	3,300
1957	13,772	3,521
1958	11,821	4,868
1959	13,070	7,536
1960	14,689	9,812
1961	10,007	11,992
1962	8,453	13,501
1963	8,814	10,722
1964	5,233	14,275
1965	5,095	16,636
1966	5,879	17,085
1967	5,870	18,138
1968	6,019	17,950
1969	5,778	15,603
1970	9,689	20,161
1971	12,685	22,966
1972	11,916	21,771
1973	10,107	18,306
1974	8,770	18,302
1975	11,281	17,486
1976	6,264	12,557
1977	5,794	12,005
1978	7,503	12,649
1979	7,830	10,875
1980	5,945	12,060
1981	7,064	10,568
1982	6,214	10,503



State of Vermont

AGENCY OF ENVIRONMENTAL CONSERVATION

Montpelier, Vermont 05602
 Department of Water Resources
 and
 Environmental Engineering

Department of Fish and Game
 Department of Forests, Parks, and Recreation
 Department of Water Resources & Environmental Engineering
 Division of Protection
 Natural Resources Conservation Council

M E M O R A N D U M

TO: Frederick J. Costello, P.E., Chief Facilities
 FROM: Russell H. Snow, P.E., Facilities Engineer *RHS*
 SUBJECT: Maidstone State Park - Area B Sewage Test Hole
 DATE: August 19, 1981

On August 18, 1981, test holes were dug with a backhoe at the two possible leach field sites in the woods and one at the present Area B sewage disposal field. In attendance and classifying the soil was Roland "Guy" Grenier of the St. Johnsbury Regional Office. Classification is as follows:

Perc Hole #1

0" - 4" - Woods duff
 4" - 24" - Dark brown silt and fine sand, moist large stones
 24" - 30" - Light brown silt, dense, moist
 30" - 54" - Compacted silty sand, mottled, some stone, moist
 54" - 96" - Less compacted sand, gray, coarse sand inclusions,
 96" - Free water entering, no N.T.D.

Perc Hole #2

0" - 6" - Woods duff
 6" - 24" - Dark brown silt and fine sand, moist
 24" - 36" - Light brown silt and fine sand, moist
 36" - Free water seeping
 36" - 48" - Light brown mottled sand, hard packed, moist
 48" - 108" - Gray hard packed sand, mottled, moist, some coarse sand inclusions. No free water or L.T.D.

Area B Leach Field - N.E. corner

0" - 3" - Topsoil
 3" - 36" - Fill material, clean sandy gravel
 36" - Native soil - Dark brown silty sand, moist

Guy is concerned about the mottles at holes #1 and #2. Will need curtain drain. Guy feels area #1 might be salvaged but does not recommend area #2. However, it is Guy's feeling that the present disposal field may be salvaged. This is because the test hole, taken beside the uppermost line, showed no crushed stone in the trenches. The sandy gravel was dry directly beneath and beside the bermacote line. When the sand was shoveled from directly against the line, the effluent came out. The sand had a jelly-like material, clear in color, packed into the voids. This did not allow any effluent to soak into the sandy gravel fill area. Eventually, the pressure broke through on the lower end of the field. No seeps on the downhill edge of the fill were evident.

Guy has made several viable suggestions to utilizing the present area. Apparently he looked at this a few years ago.

1. Install water savings devices in the toilet building, including a urinal with spring loaded push valve, not lever valve.
2. Calculate flow rate with water saver devices.
3. See if enough room to provide gravity flow distribution system. If so, remove present lines and provide crushed stone lined trenches.
4. If gravity flow area too small, consider mound system with pressure distribution. About 50% more area could be gained going northeast into the woods from the existing disposal system.

Any effort in the existing area will be considerably less expensive than work-up in the woods. Also Guy pointed out there would be a reluctance on the local planning or zoning commission to clear cut an area to provide for a field in the woods.

It is recommended that water saving devices be installed at A area also, before a similar condition occurs.

Please call Guy to discuss the situation. He has been most helpful and will support reasonable efforts to rectify the situation.

The backhoe worked from 10:00 A.M. to 2:30 P.M. plus whatever travel time (estimate 1 hour).

RHS:arm

CC: Reginald A. LaRosa, P.E., Director
Roland Grenier, Regional Engineer

ADDENDUM - TIMBER

The data base for the timber management plan was developed by using a complete prism plot inventory of Maidstone State Forest in January 1982. This plan is limited to the lands shown as "timber management" on the emphasis map (page 36). While timber will be harvested periodically from other "emphasis zones", "recreation" being the only other, it will not be cut on a regulated basis, and was therefore excluded.

The goals in establishing the timber management plan were to develop a regulation system which worked toward accomplishing an even-flow sustained yield, a balanced distribution of age classes, improved species composition, and improved timber quality. We chose, in this case, to use uneven-aged management for the northern hardwood component.

We decided to choose this management system for three reasons: (1) the forest is already progressing towards an uneven-aged stand structure, (2) it will be more efficient than even-aged management which is ideally suited for larger tracts of forest land, and (3) it will provide a continuous forest cover to a sensitive area, a favorable impact on the recreational values of the campground area.

The procedure establishing the cutting plan for the ten-year period follows:

- 1) Inventory all stands classed as "timber management" on the emphasis zone map. (This information is summarized on worksheet #3).
- 2) Determine the type of management appropriate for each stand (all-aged or even-aged management) as well as the general timber type (pioneer, northern hardwood, or softwood).
- 3) Using table 4 in "Uneven-aged Management of Northern Hardwoods in New England", by William B. Leak and Stanley M. Filip (1975) and current inventory information, determine which q-distribution factor to apply to the existing stand to arrive at a residual stand structure between 70 to 80 square feet per acre of basal area and 79 to 184 stems per acre.

MAIDSTONE STATE FOREST
CUTTING SCHEDULES 1980 - 1990

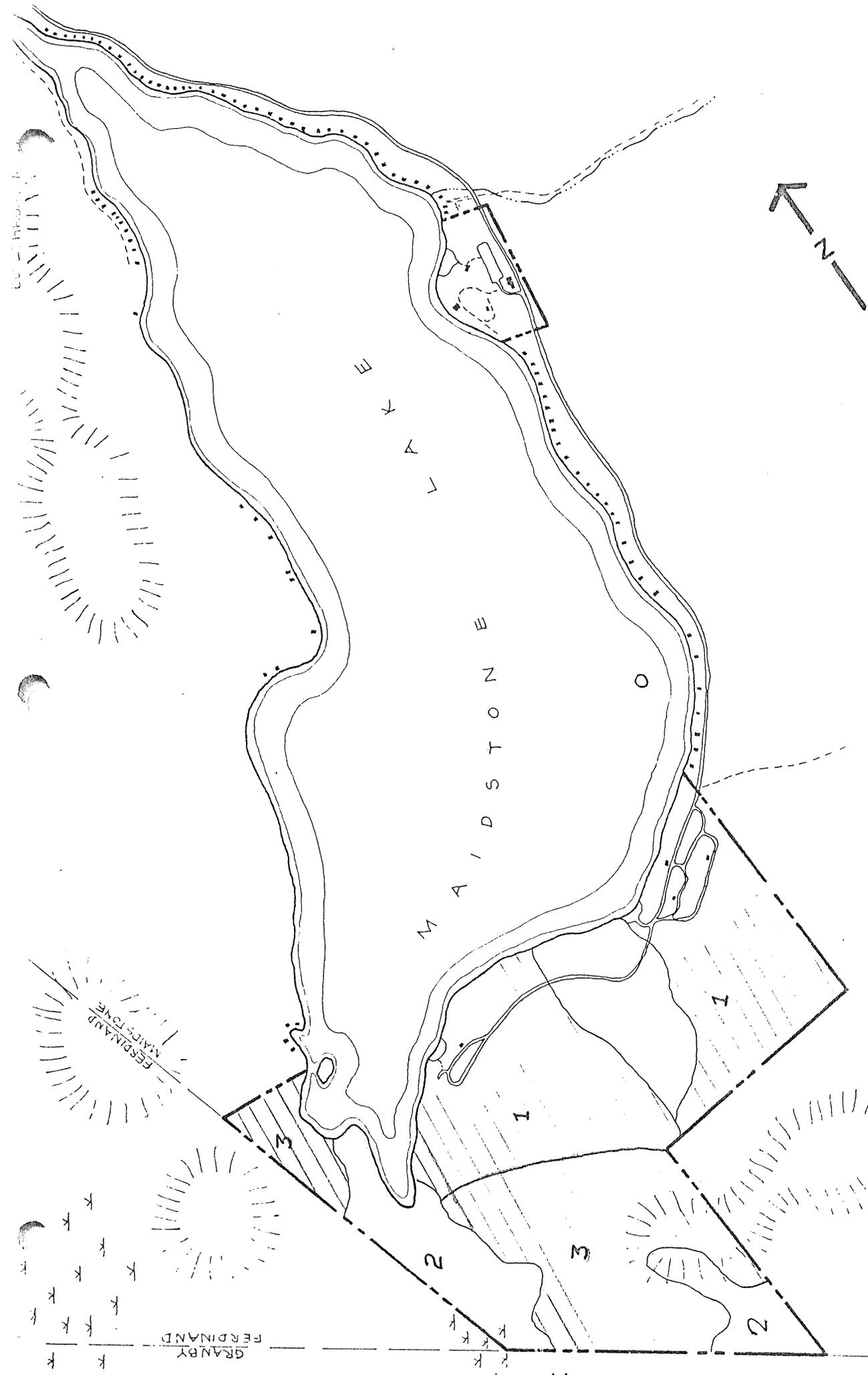
The objective of timber operations will be to maintain the present cover types indefinitely, as they are well-suited to the site.

There are 272 acres of site class II northern hardwood recommended for uneven-aged management, requiring treatment in the next 10 years. All operations are coded to the map that follows. There are also 87 acres of site class II spruce-fir that will be managed under the even-aged system. One-third (1/3) of this timber type will be regenerated, and none of it will be thinned, due to danger of blow-down.

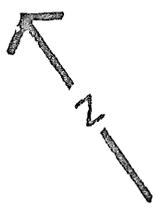
Cut #1: compartment 1, stand 1 - 74 acres and compartment 2, stand 1 - 62 acres. This 136 acre selection cut has been designed to proceed towards an ideal distribution in all age classes. The residual stand will have 74 square feet of basal area and 147 stems/acre. This stand will be ready for another selection cut in 20 years.

Cut #2: compartment 2, stand 2. This will be a clear cut to start regenerating a mature stand of spruce-fir. It will be completed in three stages. One-third of the area will be harvested in the initial cut by systematically locating small patches of about three acres in size. Another cut is scheduled in about five to eight years, or after the cut area has become re-established.

Cut #3: compartment 2, stand 1. Same as cut #1.



MAIDSTONE STATE FOREST
 ACREAGE TO BE
 TREATED IN 10 YEARS
 Scale: 1" = 1320' (20 chains)



NUMBERS CORRESPOND TO TEXT

-  REGENERATION CUT
-  THINNING

GRANBY
 FERDINAND

COMPARTMENT RECORDS

Maidstone STATE FOREST South BLOCK COMPARTMENT # 1
 AREA 146 ACRES ACQUISITION DATE 1938
 COMPARTMENT INVENTORY COMPLETED yes YEAR COMPLETED 1982
 PHOTO COVERAGE yes 1962 SERIES _____ 74-75 SERIES 19-130, 131
 MASTER MAP COMPLETED 1939 (YEAR) LOCATION _____
 MASTER PLAN COMPLETED 1982 (YEAR) APPROVED _____

Detailed acreage breakdown and land summaries located in green notebook.

TIMBER SALE, CULTURAL OPERATIONS, ROADS & TRAILS DATA

FISCAL YEAR:

- 1939-40 - TSI by CCC - 51 acres - no cost figures available. (39-40 Bien. Rept.)
- 1941-42 - TSI by CCC crews, (girdling) - 25 acres worked
- 1951-52 - Salv. ctg. by VFS of balsam fir for lumber & fuel - self use - no fig's.
(vol. or acres)
- 1963 - Harv. by Bradford Veneer, (adv. pay't.) \$3078.70 - no cut as yet
- 1963 - Salv. on new rd. by Bolduc - 9340 b.f. - income of \$259.79 - acres, 3
- 1963 - Salv. on new rd. by Vt. Parks - 40 cds. - self use - acres, 3
- 1964 - Salv. on new rd. by Vt. Parks - 20 cds. - self use - acres, 2
- 1964 - Harvest by Bradford Veneer, cut of 298432 b.f., income of \$12314.80
(split this income later between both comp.'s. Stpge. this yr. assigned
this comp.)
- 1971 - Pks. beautification (sanitation)
- 1976 - Timber sale, Armand Baillargeon - 162 MBF & 292 cords (comp. 1 & 2).
Hazardous fire removal in campground area.
- 1983 - Maidstone Lake Selection Sale#1, Mike Fournier, Sale completed,
Final Volume 107 MBF, 258 cords. (As estimated in contract)
72 acres.

COMPARTMENT RECORDS

Maidstone STATE FOREST South BLOCK COMPARTMENT # 2
 AREA 298 ACRES ACQUISITION DATE 1938
 COMPARTMENT INVENTORY COMPLETED yes YEAR COMPLETED 1982
 PHOTO COVERAGE yes 1962 SERIES _____ 74-75 SERIES 19-130, 131
 MASTER MAP COMPLETED 1939 (YEAR) LOCATION _____
 MASTER PLAN COMPLETED 1982 (YEAR) APPROVED _____

Detailed acreage breakdown and land summaries located in green notebook.

TIMBER SALE, CULTURAL OPERATIONS, ROADS & TRAILS DATA

FISCAL YEAR:

- 1939-40 - TSI by CCC - 51 acres worked (no costs avail.)
- 1941-42 - TSI, (girdling) by CCC crews - 25 acres worked
- 1949 - Harv. by Gil Wymer Co., Inc. - cut of 1945 b.f.
- 1951-52 - Salv. by VFS of balsam fir for lumber & fuel - no fig's. on acres or vol.
- 1938-62 - 50 MBF & 251.25 cords cut cumulative
- 1963 - Salv. by R. Major (new rd.) - 1500 b.f. - income of \$22.00
- 1962-64 - Timber sale, comp. #1 & 2 - Bradford Veneer & Panel Co. - 345 MBF
(volume estimate: 391 MBF & 149 cords spruce-fir pulp)
- 1965 - Harv. ctg. by Bradford Veneer - 69018 b.f. - no income pd. last yr.
- 1965 - Harvest by Bradford Veneer - cut of 47.71 cds. of balsam fir pulp & 69018 b.f. of sawlogs - prepaid
- 1966 - Harvest by Bradford Veneer & final settlement of the over-run of logs
- 1984 - Maidstone Lake Selection Sale, 88 acres, purchased by True Temper Corporation, Sale closed June 8, 1984. Final volumes, 182.715 MBF, 1252 cords; 2,500 feet winter quality road built.

COMPARTMENT RECORDS

Maidstone STATE FOREST East BLOCK COMPARTMENT # 3
AREA 25 ACRES ACQUISITION DATE 1939
COMPARTMENT INVENTORY COMPLETED _____ YEAR COMPLETED _____
PHOTO COVERAGE yes 1962 SERIES _____ 74-75 SERIES 21-094, 095
MASTER MAP COMPLETED 1939 (YEAR) LOCATION _____
MASTER PLAN COMPLETED 1982 (YEAR) APPROVED _____

Detailed acreage breakdown and land summaries located in green notebook.

TIMBER SALE, CULTURAL OPERATIONS, ROADS & TRAILS DATA

FISCAL YEAR:

1981 - Clean-up of blowdown by District V forestry personnel and contracted services of Ralph Hatch of Groton.

ROAD IMPROVEMENTS

Maidstone State Forest

FISCAL YEARS

1981 - 1990

Fiscal Year	Project	Estimated Cost	Allocation	Year of Work	Percent Complete	Actual Cost
1981	Resurface 3 miles of access road			1981	100	\$ 20,000.00
1983	Replace 2 culverts	\$ 1,000				
1984	Replace 2 culverts	\$ 1,000				
	2,500' winter quality truck road	\$ 2,500	Timber Sale	1984	100	\$ 2,500.00
1985	Replace 2 culverts	\$ 1,000				
1986	Resurface 2 miles of access road	\$17,000				
1987	No forestry division activities					

USE VALUE APPRAISAL OF STATE LAND

To help compensate towns for loss of taxes because of State ownership of real estate within the town, the Legislature mandated that lands under the jurisdiction of the Agency of Environmental Conservation pay the towns 1% of the current use value or fair market value, whichever is less, each year. *

Current use values are established by the current use advisory board from time to time. These values are based on the productive capacity of the land, assigned to four categories: Forest site I, potential wood growth of more than 85 cubic feet per acre per year; site II, 50 to 85 cubic feet; site III, 20 to 49 cubic feet; and site IV, less than 20 cubic feet.

For 1982 these values are set at \$100/acre on site I, \$60/acre on site II, \$20/acre on site III, and \$~~5~~¹⁰/acre on site IV.

To qualify, the land must have a management plan for production of forest products, and be accompanied by a map indicating the various sites and where different management is to be done.

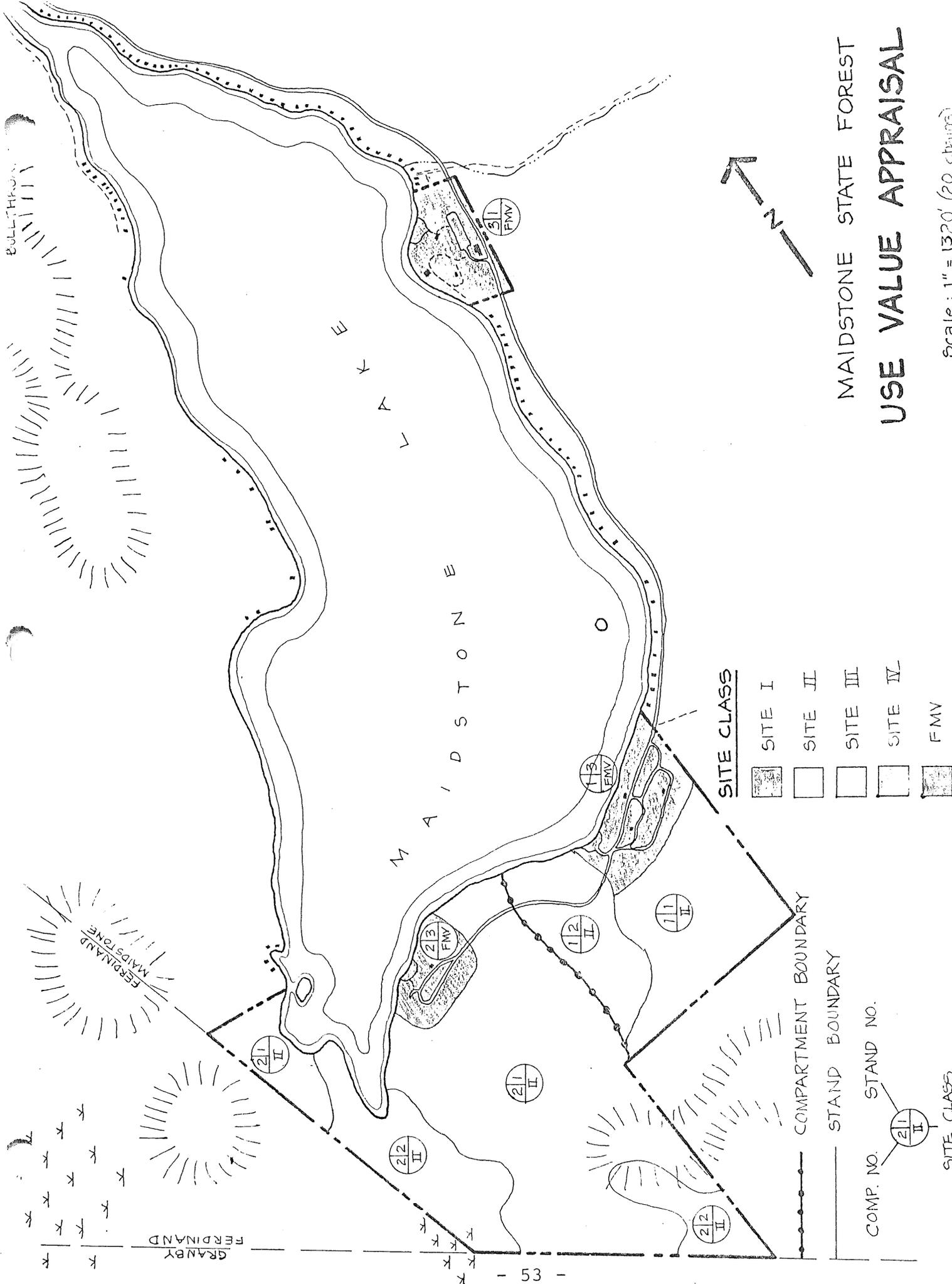
* Title 32, Section 3660 VSA.

USE VALUE APPRAISAL SUMMARY SHEET

TOWN OF MAIDSTONE - MAIDSTONE STATE PARK

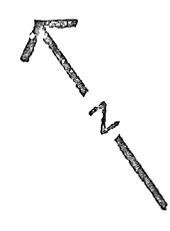
<u>Compartment</u>	<u>Stand</u>	<u>Acres</u>				<u>FMV</u>	<u>Management Recommendation</u>
		<u>Site I</u>	<u>Site II</u>	<u>Site III</u>	<u>Site IV</u>		
1	1		74				3a
1	2		44				3a
1	3					28	10a
2	1		198				3a
2	2		87				4a
2	3					13	10a
3	1					25	10a
		403				66	

- 3a. Single tree selection. Apply cutting throughout entire diameter range, leaving between 60 to 80 square feet of basal area at 15 to 20 year intervals.
- 4a. Clear cut patches to regenerate a new stand.
- 10a. Developed recreation areas. Tree removal for sanitation, safety or aesthetics primarily. Plant where necessary, or release and protect individual young trees.



MAIDSTONE STATE FOREST
USE VALUE APPRAISAL

Scale: 1" = 1320' (20 chains)



SITE CLASS

	SITE I
	SITE II
	SITE III
	SITE IV
	FMV

COMPARTMENT BOUNDARY
 STAND BOUNDARY

COMP. NO. STAND NO.
 SITE CLASS

BENEFITS - MAIDSTONE STATE FOREST

Year	Products			Day Use	Camper Days	Dispersed	Leases & Permits
	MBF	Cords	Other				
1981	Estimate Actual	NONE	NONE	7500 7064	11,000 10,568	Minimal	NONE
1982	Estimate Actual	NONE	40 0	7500	11,000		
1983	Estimate Actual	289 107	426 258	7500	11,000		
1984	Estimate Actual	90 183	1200 1252	7500	11,000		
1985	Estimate Actual	NONE	NONE	7500	11,000		
1986	Estimate Actual	NONE	NONE	7500	11,000		
1987	Estimate Actual	90 52	600 137	7500	11,000		
1988	Estimate Actual	NONE	NONE	7500	11,000		
1989	Estimate Actual	NONE	NONE	7500	11,000		
1990	Estimate Actual	NONE	NONE	7500	11,000		

ACCOMPLISHMENT EVALUATION

Maidstone State Forest

FISCAL YEAR 1981

Proposed Project	Action	Comments
<p>Repair wind damage in picnic area.</p>	<p>Blown down trees were removed, stumps removed, and area rough graded. Replaced 400' of 1½" galvanized water pipe. Installed perforated underdrain.</p>	<p>Area needs some finish land-scaping.</p>
<p>Roof repairs</p>	<p>10 lean-to roofs replaced</p>	

ACCOMPLISHMENT EVALUATION Maidstone State Forest

FISCAL YEAR 1982

Proposed Project	Action	Comments
No activities		

ACCOMPLISHMENT EVALUATION Maidstone State Forest

FISCAL YEAR 1983

Proposed Project	Action	Comments
Maidstone Lake Selection Sale #1	Sale completed.	107 MBF, 258 cords cut.

ACCOMPLISHMENT EVALUATION Maidstone State Forest

FISCAL YEAR 1984

Proposed Project	Action	Comments
Maidstone Lake Selection Sale (#2)	Sale completed.	183 MBF, 1252 cords cut.

ACCOMPLISHMENT EVALUATION Maidstone State Forest

FISCAL YEAR 1985

Proposed Project	Action	Comments
No activities.		

ACCOMPLISHMENT EVALUATION

Maidstone S. F.

FISCAL YEAR *

Proposed Project	Action	Comments
* 1986	No activities	
* 1987	Maidstone Lake softwood selection sale marked & sold F. Rancloes	

GLOSSARY

block -- a land management planning unit.

dispersed recreation -- outdoor recreation activities requiring few if any support facilities.

even-aged -- a stand of timber managed to maintain three or less distinct age classes.

intensive recreation -- outdoor recreation activities requiring major structures and facilities.

protection forest -- lands which will be adversely affected by minimal disturbance, or which are designated to remain undisturbed.

special use -- lands which are leased, or designated for a specific purpose usually beyond the scope of normal department operations.

sustained yield -- continuous production with the aim of achieving, at the earliest practicable time, an approximate balance between net growth and harvest.

timber lands -- properties that are managed primarily for the maximum production of forest products.

uneven-aged -- a stand of timber managed to maintain four or more distinct age classes.

wildlife habitat -- lands supplying a critical habitat need for any species of wildlife, especially that which requires specific treatment and is of limited acreage.

The Purpose and Objectives of Land Management
By the Department of Forests, Parks and Recreation

In addressing the natural resource needs of the people of the State of Vermont, the Legislature has established the Department of Forests, Parks and Recreation, as a part of the Agency of Environmental Conservation. A major assignment of the Department is the responsibility for management of lands acquired to fulfill these needs.

Consistent with legislative direction, and through a policy of economic management of its lands, the Department will protect, conserve and enhance resource qualities and provide recreational opportunities, timber products, varied plant and wildlife habitat, clean water, and natural beauty for the enjoyment and use of the people of the State.

Management of public land will be in accordance with the interests of the people of Vermont, as expressed through the democratic process, and through a systematic assessment of needs. Decisions will consider both public needs and inherent resource capabilities, through application of interdisciplinary review by a staff of professional personnel.

Public ownership shall complement private ownership by fulfilling needs which are not readily met by the private sector. The continuity of public ownership provides the opportunity to meet long-range goals and objectives, an assurance of public access to diverse natural resources, their availability for use by future generations, and the opportunity for research, education, and study for the enrichment of society.

Public management shall be consistent, yet flexible enough to adapt to changing public needs, technological advances, and relevant economic conditions. The Department recognizes the legislative charge to manage for the

purposes implied by its title and jurisdictions: the forest, recreation, and natural areas of the State, but will consider and incorporate all other values consistent with expressed goals and policy.

To achieve the Department assignment of fulfilling resource needs through state lands stewardship, the Department will be guided by the following objectives:

- A. To manage the land for the greatest benefit of the people of the State, consistent with the capability of the resource, under the concept of integrated use, while favoring the highest and best use, by:
 - 1. Establishing land-use definitions, categories, and objectives,
 - 2. Identifying resource capacity through an inventory process,
 - 3. Assessing and integrating public needs,
 - 4. Establishing an input process by other state divisions and departments, individuals, and special interest groups,
 - 5. Developing long-range plans and goals for the land,
 - 6. Formulating work plans which outline specific tasks to be achieved over a 15-year period,
 - 7. Reviewing and updating plans regularly,
 - 8. Establishing a method of monitoring progress on plans, and,
 - 9. Continually reviewing the public land ownership pattern, and making recommendations with respect to acquisition and/or disposition of property.

- B. To protect the resources by:
 - 1. Identifying for acquisition those lands needed to enhance or protect existing State ownership,
 - 2. Identifying and recommending acquisition of lands which have outstanding scenic quality, vital ecosystems needing preservation, vulnerable habitat or landforms,

3. Devising and implementing a fire protection plan,
4. Reducing insect and disease damage through silvicultural practices, or where necessary, other appropriate techniques,
5. Implementing the best erosion control measures feasible in all activities,
6. Including educational efforts in all plans to encourage knowledgeable public use of the lands,
7. Monitoring all uses of State lands to ensure protection of the resource and to revise or adjust uses as needs demonstrate,
8. Locating and marking all property lines to maintain the integrity of the property, and
9. Designing facilities which direct use to areas most suited to certain activities.

C. To provide a suitable variety of services and products by:

1. Developing outdoor recreational opportunities such as campgrounds, beaches, trails, picnic areas, and other facilities, where compatible with the resource and where need is demonstrated,
2. Harvesting the timber growth through an orderly sales program, to provide fuelwood, logs, pulpwood, and other marketable forest products, based on a sound silvicultural management system,
3. Maintaining, enhancing, and creating a variety of wildlife habitat,
4. Acquiring and developing access for public use of State lands,
5. Allowing limited special uses through a permit system, where such uses are clearly beneficial to an individual or group, and fully compatible with the primary objectives of the parcel, and,

6. Administering all leases in a professional and timely manner, demonstrating appropriate and constructive attention to natural resources, viability of private sector interests, economics and the general public good.