Temporary File

Bob Fairbanks Loc
Rapid Fill
1982

SILVER LAKE DAM
RECONSTRUCTION
QUANTITY ESTIMATE

PROJECT # 29303
DATE: 7/29/82
PREPARED BY: DuBOIS & KING, INC.

ITEM	DESCRIPTION	QUANTITY
1.	Lowering the Lake and Handling all Flow During Construction	Lump Sum
2.	Excavation and Stockpile	5,000 c.y.
3.	Rock Excavation and Stockpile	100 c.y.*
4.	Earth Embankment	3,000 c.y.
5.	Select Borrow for Earth Embankment	1,000 c.y.
6a.	Bank-run Sand and Gravel Filter Layer	300 c.y.
6b.	Crushed Stone Bedding for Rip-rap	300 c.y.
6c.	Dumped Rip-rap	1,000 c.y.
6d.	Pipe Bedding	700 c.y.
7.	Removal of Existing Outlet Pipes (300± feet)	Lump Sum
8.	36-inch Corrugated Galvanized Metal Pipe	228 L.F.
9.	30-inch Low Level Outlet	89 L.F.
10.	Temporary Road	Lump Sum
11a.	Bituminous Concrete Pavement 2-inches Thick or Greater	350 s.y.
11b.	Bituminous Concrete Pavement Less than 2-inches Thick	50 s.y.*

ITEM	DESCRIPTION	QUANTITY
11c.	Temporary Pavement Replacement	350 s.y.*
12a.	New Steel Beam Guard Rail	100 L.F.
12b.	Remove and Re-install Existing Steel Beam Guard Rail	100 L.F.
13.	Miscellaneous Reinforced Concrete	50 c.y.*
14.	Miscellaneous Earth Excavation and Backfill	100 c.y.*
15.	Dry Hydrant - Removal and Re-installation (50 L.F. of 10-inch Pipe)	Lump Sum
16.	Loaming and Seeding	800 s.y.
17.	Clean up	Lump Sum
18.	ADD-ON, 24" x 36" Cast Iron Sluice Gate (one)	Lump Sum
19.	ADD-ON, Observation Wells (two)	Lump Sum

* Indeterminate; Quantity assumed for comparison of bids.

29303 SILVER LAKE DAM 7/29/82
QUANTITY ESTIMATE

ITEM 1 - LOWERING LAKE & HANDLING FLOW
(LUMP SUM)

ITEM 2 - EXCAVATION & STOCKPILE
X-SECT. AREA = 1,385 #
ASSUME LENGTH OF EXC. = 90'
$\frac{1385^{\#} \times 90'}{27 \text{ c.f./c.y.}} = 4,616$ c.y.

SAY 5,000 c.y.

ITEM 3 - ROCK EXC. & STOCKPILE
ASSUME 100 c.y. (INDETERMINATE)

ITEM 4 - EARTH EMBANKMENT
PLAN. AREA = $\frac{930^{\#} \times 90' \text{ (LENGTH)}}{27 \text{ c.f./c.y.}} = 3,100$ c.y.

SAY 3,000 c.y.

ITEM 5 - SELECT BORROW FOR EARTH EMBANKMENT
ASSUME 1/3 EXCAVATION UNSUITABLE OR LOST.
∴ SAY 1,000 c.y. - BORROW.

ITEM 6 - RIPRAP, STONE, & GRANULAR EMBANKMENT MAT.
ITEM 6a - BANK RUN SAND & GRAVEL FILTER LAYER
PLAN. AREA = 4,815 #
$(4,815^{\#} \times 1' + 14' \times 5' \times 75') \div 27 = 275$ c.y. - SAY 300 c.y.

ITEM 6b - CRUSHED STONE FOR RIP-RAP BEDDING

PLAN. AREA = 4,815 $^{\square}$

$[(4{,}815^{\square} \times 1\frac{1}{2}') + (8' \times 1\frac{1}{2}' \times 75')] \div 27 = 300$ c.y.

SAY 300 c.y.

ITEM 6c - RIP-RAP

PLAN. AREA = 4,815 $^{\square}$ (6' THICK) & 810 $^{\square}$ (3' THICK)

$4{,}815^{\square} - 810^{\square} = 4{,}005^{\square}$

$\frac{4{,}005^{\square} \times 6' + 810^{\square} \times 3'}{27} = 980$ c.y.

SAY 1,000 c.y.

ITEM 6d - PIPE BEDDING MAT.

X-SECT. AREA = $\frac{52'+46'}{2} \times 70'$ (LENGTH) $\times 3' = 10{,}290$ c.f.

PLUS

$= \frac{56+46'}{2} \times 30'$ (LENGTH) $\times 6' = 9{,}180$ c.f.

MINUS

$= \pi(1\frac{1}{2}')^2 \times 4 \times 53'$ (PIPE LENGTH) 1,500 c.f.

TOTAL = 17,970 c.f.

$\frac{17{,}970 \text{ c.f.}}{27} = 665$ c.y.

SAY 700 c.y.

ITEM 7 - REMOVAL OF EXIST. PIPES (PUMP SUMP) (300' ±)

ITEM 8 - INSTALL 36" - CGMP - 4 x 57' = 228'

ITEM 9 - INSTALL 30" LOW-LEVEL OUTLET = 89'

ITEM 10 - TEMPORARY ROAD

(LUMP SUM)

ITEM 11 - PAVEMENT REPLACEMENT

ITEM 11a - 7½" THICK

98' x 26' = 2,548 ♦

PLUS $\frac{12' \times 30'}{2}$ = 180 ♦

PLUS $\frac{10' \times 50'}{2}$ = 250 ♦

TOTAL = 2,978 ♦ ÷ 9 ♦/S.Y. = 330 S.Y.

SAY 350 S.Y.

ITEM 11b - < 2" THICK

ASSUME 50 S.Y. (INDETERMINATE)

ITEM 11c - TEMPORARY PAVT. REPLACEMENT

ASSUME SAME AS FINAL = 350 S.Y.

(INDETERMINATE)

ITEM 12 - STEEL BEAM GUARD RAILS

ITEM 12a - NEW GUARD RAIL - 100'

ITEM 12b - REMOVE & REINSTALL EXIST. G.R. 100'

ITEM 13 - MISC. REINF. CONCRETE - ASSUME 50 C.Y. (INDERMINATE)

ITEM 14 - MISC. EARTH EXC. ASSUME 100 C.Y. (INDETERMINATE)

ITEM 15 - HYD. REMOVAL & REINSTALLATION

(LUMP SUM) (50' - 10" PIPE)

ITEM 16 - LOAMING & SEEDING

PLAN AREA: 100' x 120' = 12,000 ft²

MINUS RIP-RAP AREA: 4,815 ft²

7,185 ft²

7,185 ft² / 9 ft²/s.y. = 798 s.y. SAY 800 s.y.

ITEM 17 - CLEAN-UP (LUMP SUM)

ITEM 18 - ADD-ON - SLUICE GATE - (1) (LUMP SUM)

ITEM 19 - ADD-ON - OBSERVATION WELLS - (LUMP SUM) (2)

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
Natural Resources Conservation Council

M E M O R A N D U M

TO: Robert Wernecke
DuBois & King, Inc.

FROM: Robert B. Finucane, P.E., Facilities Eng.

SUBJECT: Silver Lake Dam - Barnard, Vermont

DATE: June 23, 1982

As discussed, I enclose a copy of the Lake Sadawga Operations and Maintenance Inspection and Emergency Manual. Lowell isn't completed yet.

The following specification sections should be deleted: 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10, 6.18(4), S400A.3, S400A.4, 703.6, 703.8.

S400A should be retitled. Section 801.71 should be amended to provide due care for salvage of the 36" CGMP.

Section 801.19 should be amended to provide for re-installation in place. Section 6.20 could show September 1, as the start date.

Thank you.

RBF:arm
CC: Reginald A. LaRosa, P.E., Director
A. Peter Barranco, Jr., P.E., Dam Safety Engineer

6/21/82

June 17, 1982

Curtis L. Bourdon
Bourdon & Bourdon
Attorneys at Law
24 Elm Street
Woodstock, VT 05091

Re: Herbert Hirschland - State of Vermont - Silver Lake Dam, Barnard, Vermont

Dear Mr. Bourdon:

Thank you for your letter of June 2, 1982. Attached are copies of a variety of materials relating to Silver Lake Dam as requested in your letter. We have not begun drafting a release or deed for these lands yet, but we will let you know when we have progress to report.

If you have any questions please call me at 828-3361.

Sincerely,

Robert B. Finucane, P.E.
Facilities Engineer

RBF:arm
Enc: as noted above
CC: Reginald A. LaRosa, P.E., Director
A. Peter Barranco, Jr., P.E., Dam Safety Engineer

COPY

June 11, 1982

Mr. Robert Wernecke
DuBois & King, Inc.
Box 339
Randolph, VT 05060

Re: Contract No. 0263025

Dear Mr. Wernecke:

We have looked at the material you sent us for review dated May 17, 1982 and have the following comments:

1. We are not sure that the progress of this project is commensurate with the charges invoiced as of May 14, 1982. We note that the "upset figure" is at hand and work promised has not been delivered as described below. I propose to defer payment against the invoice dated May 14, 1982 until the substantial work of the contract is submitted.

2. The technical specifications should be thoroughly purged of inappropriate or inapplicable provisions.

3. Please submit for our review copies of calculations of factors of safety and stability of the downstream slope and embankment for all failure modes investigated. Show why the 45 foot top width of the dam is desireable or necessary.

4. Please submit quantity estimates suitable for submittal to contractors for bidding and construction. Baseline, tie, station, offset, and area information used to develop

quantity estimate should be included.

5. Sluice gate specification should be complete with model number and materials description.

6. Hirschland, the property owner at the north end of the dam insists that the temporary road cross the right end of the concrete cut-off wall and avoid his barn and trees. Adjust the centerline, temporary road to meet this requirement.

7. Barnard Fire Department insists on keeping the fire hydrant where it is. Provision for making the hydrant safe in its present location should be designed with consideration to the use of anti seep collars.

8. Operation, maintenance and inspection procedure manuals should be drafted to accompany the plans.

Thank you for your cooperation on this project.

Sincerely,

Robert B. [illegible], P.E.
Pa[illegible]

RBF:arm
CC: Reginald A. LaRosa, P.E. Director
A. Peter Sarranco, Jr.

M E M O R A N D U M

TO: John Chase, Assistant Attorney General

FROM: Robert B. Finucane, P.E., Facilities Engineer

SUBJECT: Proposed Silver Lake Dam Reconstruction
Land Acquisition - Barnard, Vermont

DATE: July 1, 1982

COPY

Attached are copies of a variety of documents relating to the proposed reconstruction of Silver Lake Dam. It appears that we own the dam but only a portion of the land thereunder, the right bank and downstream left bank landowners (B and C in Andy Rouleau's sketch of February 8, 1968) have expressed some interest in conveying to the State. (Owner A quitclaimed to us already) Pete Barranco and I agree that we should acquire these lands if possible.

I hope that you could review these materials and then advise me on how to proceed.

I will be bank from vacation on July 20th and will call for an appointment with you.

RBF:arm
CC: A. Peter Barranco, Jr., P.E.
Reginald A. LaRosa, P.E., Director

Enc: as noted above

M E M O R A N D U M

TO: Malcolm Franz, State Lands Management Chief

FROM: Robert B. Finucane, P.E., Facilities Engineer

SUBJECT: Proposed Land Acquisition - Silver Lake Dam - Barnard, Vermont

DATE: July 29, 1982

COPY

Department of Water Resources proposes to acquire two small parcels of land near the outlet of Silver Lake Dam in Barnard, Vermont. I ask your section's assistance in the property survey and preparation of deed descriptions.

At the southwest abutment of the dam, ASA Properties owns approximately 1/2 acre parcel of steep, wooded land. ASA has offered to sell this land to the State for $1,000 and we find the price reasonable. We need a survey and deed description for this parcel.

The northwest abutment is adjacent to a one acre, more or less, parcel owned by Hirschland. We hope tooobtain rights to a portion of this land and need a survey plan and description of their lands and of the dam itself. A line between these two pieces is to be negotiated but our offering line is to be staked in the field. After discussion with the Hirschlands and possible change in the boundary, we'll need a plan and deed description for this parcel. Field work on this piece should be delayed until the Hirschlands comment is received on our approach to the problem.

We have some materials in this office which might be useful in preparation of the survey. I appreciate your help in this matter.

CC: Reginald A. LaRosa, P.E., Director
A. Peter Barranco, Jr., P.E.
John Chase, Attorney General's Office

M E M O R A N D U M

TO: Canute Dalmasse, Director

FROM: Robert B. Finucane, P.E., Facilities Engineer

SUBJECT: Hirschland - State of Vermont - Request for Jurisdictional Ruling - Barnard, Vermont

DATE: July 26, 1982

COPY

In 1947, Elizabeth Mussay conveyed the dam at the outlet of Silver Lake in Barnard along with mill and water rights to the Town of Barnard. A small parcel was retained. Attached is a copy of the deed abstract.

The town has since conveyed the dam to the State of Vermont and Mussay has been succeeded by Hirschland. We propose to establish a boundary line between State lands and Hirschland's by an exchange of quit claim deeds.

I hope that you would send me a written opinion that no permit is required for this transaction.

Thank you.

RBF:arm
CC: Reginald A. LaRosa, P.E., Director
A. Peter Barranco, Jr., P.E.
John Chase
Curtis L. Bourdon

July 26, 1982

Mr. Curtis L. Bourdon
Bourdon & Bourdon
24 Elm Street
Woodstock, Vermont 05091

Re: Herbert Hirschland - State of Vermont - Silver Lake Dam - Barnard, Vermont

Dear Mr. Bourdon:

This letter is a more complete response to your letter of June 2, 1982. I have met with Assistant Attorney General John Chase to discuss the matter and here is how we would like to proceed.

With your permission, we would like to establish the description and find the corners of the Hirschland land west of North Road. We would at the same time temporarily mark a proposed boundry line between the dam and the Hirschland's property. We would then prepare a plan and description of the proposed boundary.

We hope to establish this boundary line by exchange of quit claim deeds to reflect the division of the lands involved which occurred in 1947. In consideration of the expense and inconvenience to the Hirschlands which this involves and in compensation for any additional rights or lands not included in the 1947 conveyance, we offer to prepare a recordable map of the Hirschland's lands West of North Road, to move the garage to a nearby foundation which is to be prepared by the Hirschlands at the time the dam reconstruction occurs, and to pay $2,000.00. I enclose two copies of an approximate

sketch of the boundary as we envision it.

This is a step-by-step procedure affording the Hirschlands an opportunity to review the proposed boundary line before a description or deed is written. I hope that you would obtain approval of the survey steps and let me know.

Thank you.

Sincerely,

Robert B. Pinucane, P.E.
Facilities Engineer

RBP:arm
CC: Mr. & Mrs. H.E. Hirschland
295 Newton Tpke
Wilton, CT 06897
Reginald A. LaRosa, P.E., Director
G. Peter Barranco, Jr., P.E.
John Chase

REPORT ON

REGULATING THE USE OF THE SURFACE WATERS OF SILVER LAKE

Town of Barnard
County of Windsor
State of Vermont

VERMONT DEPARTMENT OF WATER RESOURCES
August, 1971

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INTRODUCTION

Silver Lake is located in the Town of Barnard, which is in the County of Windsor. The lake is among the public waters of the State and subject to regulation as provided by Title 10, Vermont Statutes Annotated, Sections 1100-1105, a copy of which is included in Appendix A.

Section 1103(a) of the aforementioned Statutes states:

"The board may establish rules to regulate the use of the public waters and public shorelands by:

1. Defining areas on public waters and public shorelines wherein certain uses may be conducted;
2. Defining the uses which may be conducted in the defined areas;
3. Regulating the conduct in these areas, including but not limited to the size of motors allowed, size of boats allowed, allowable speeds for boats, and prohibiting the use of motors or houseboats;
4. Regulating the time various uses may be conducted."

This report and the corresponding hearing to be held on August 18, 1971, are in response to both the petition received on July 13, 1971, signed by 12 persons and stating a specific rule they would like adopted, and the letter received from the Selectmen on July 16, 1971. A petition was informally received by the Department of May 27, 1971, that had 36 signers who requested a hearing; however, they made no mention as to what type of motor boat regulations they desired, and thus, no action was taken until the specific aforementioned petition of July 13, 1971 was received.

Concern for regulating the use of motor boats was expressed by the Selectmen in July of 1970. They petitioned the Water Resources Board for a hearing, but as previously mentioned, were not specific in their request.

We informed them that some recommended rules were required, but the matter was not pursued. A group calling themselves, "Friends of Silver Lake", which is not a recognized lake association, for it is not filed with the Secretary of State, also presented in the summer of 1970, rules they wanted on the lake. Copies of all these aforementioned petitions are included in Appendix B.

The intent of this report is to provide the Board with all pertinent information as described in V.S.A. 10, Section 1103(b), and present Staff recommendations for the Board to consider.

LAKE AND ADJACENT LAND DESCRIPTIONS

Silver Lake has a water surface of approximately 98 acres, is 1,305 feet above sea level, and is Class "B" water in accordance with V.S.A. 10, Section 903(2). The lake has an established water level of 1,307.5 feet above mean sea level, U.S.G.S. datum, during the summer recreation season, and 1,306.0 feet above mean sea level during the winter. Said elevations were established by the Board on June 7, 1968. Said water levels are controlled by the outlet structure which was reconstructed in 1969 and which is located at the junction of Vermont Route 12 and the Barnard-Bethel Road (SA-3). The lake extends from this outlet structure approximately 3,600 feet in a southernly direction and is 1,500 feet wide at the widest point. The lake has a maximum depth of 30 feet and a map showing the actual depths in 10-foot contours is included in Appendix D. In addition, all waters from the lake flow into Pond Brook, which is a tributary of the White River.

The drainage area of the lake is about 2 square miles. Said area rises on the north, south and east sides of the lake to elevations around 1,700 feet. Because of this relatively small drainage area, the lake is fed by no major inlets, but by several perennial streams which are located along the north and east shorelines.

The adjacent lands that surround the lake are divided into the village area at the outlet, private camps along the southern and eastern shore, State Park at the northwest corner and undeveloped forest land on the north shore.

The undeveloped forest land, which is directly in view from the outlet and in view for anyone passing on Vermont Rout 12 gives the lake

its scenic beauty. The owner of this land, Miss M. Crosby, has expressed a desire to have said land remain undeveloped. Therefore, the recreational potentials of the lake may be increased and the scenic beauty preserved.

The State Park also enhances the scenic beauty and recreational uses of the area. Moreover, the majority of the individual camps are built behind the shoreline and have sufficient tree and vegetation cover so that they do not distract entirely from the natural surroundings. Only two camps on the southeast end of the lake are built out into the water; and because the Town of Barnard is ready to consider a permanent zoning ordinance, which has shoreline zoning provisions in compliance with the proposed State Regulations, there may correspondingly be control over future development.

WATER USAGE

The waters of the lake are used primarily for recreational purposes, although it also serves as a water supply to a few residences within the Village.

The recreational uses of the lake are sailboating, canoeing, water skiing, fishing and swimming. The State Park provides excellent facilities for the previously mentioned uses except water skiing and also has facilities for camping and picnicing. The Park maintains a public beach having a length of 200 linear feet. The majority of the individual camp owners use the waters in front of their camps for swimming and the private campground maintains a beach of its own. Furthermore, Ralph Lessard owns the land on the south side of the outlet, and presently permits the local people to use same as a swimming area.

The State Park has no boat launching facilities; however, permits all persons to launch boats only if they can carry them into the water. The private campground follows the same policy. Moreover, Silver Lake has no public boat launching access. Thus, only the individual private camps have access for using power boats on the lake.

Silver Lake, according to Fish Biologist, Leonard C. Halnon, is a warm water lake that experiences high temperatures during the summer, lacks oxygen, and therefore supports only warm water species, such as bass and perch. The fishing, for the past two seasons has been good, according to the summer populace.

COMMENTS AND RECOMMENDATIONS FROM OTHER DEPARTMENTS

Letters of comment from the Department of Forests and Parks, and the Vermont Aeronautics Board are respectively included in Appendix C.

No comments were received at the time of this report writing from: the Department of Public Safety, Environmental Protection and Department of Fish and Game.

FINDINGS

Silver Lake is adaptable to sailboating and canoeing; however, the size of the lake is restrictive to use by power boats. Surveys by the Department of Water Resources and Department of Recreation show that sailboats and small power boats require 10 acres of surface area, and water skiing requires 20 acres. Although the surface area of Silver Lake is 98 acres, V.S.A. 25, Section 310 c prohibits power boating in excess of 5 M.P.H. within 200 feet of any shoreline whereon persons are accustomed to bathing, a copy of which is included in Appendix D. Considering this restriction, as well as natural restrictions which include shallow water and submerged boulders, there are approximately 45 acres of usable surface area on Silver Lake for high speed motor boat operation and water skiing.

There are presently about a dozen power boats on the lake and they have horsepower ranging from 3 H.P. to 65 H.P. The majority of the power boats, nevertheless, have 40 H.P. motors and said boats with motors of this size are used primarily for water skiing. These power boats, water skiers and boating in general on the lake have caused no mentionable trouble. Also, interviews with the people living around the lake and personal observations failed to find any objectionable gasoline or oil films.

STAFF RECOMMENDATIONS

The following Staff recommendations based on limited capacity of the surface waters, previously mentioned findings, requests of the petitioners, personal observations and concern for the safety of the people, are made to the Board to optimize the recreational capabilities of the surface waters of Silver Lake:

1. That all power boats be limited to headway speed which, for the purpose of these recommendations, be defined as the slowest speed that a power boat may be operated and maintain steerage way, but in no case to exceed five miles per hour. (Authority, V.S.A. 10, Section 1102(a) (3))
2. That the Town of Barnard be authorized to enforce any rules that the Board may establish.

TITLE 10, VERMONT STATUTES ANNOTATED

CHAPTER 34. PROTECTION OF NAVIGABLE WATERS AND SHORELANDS

§ 1100. Policy

To aid in the fulfillment of the state's role as trustee of its navigable waters and to promote public health, safety, convenience and general welfare, it is declared to be in the public interest to make studies, establish policies, make plans, make rules, and authorize municipal shoreland zoning bylaws for the efficient use, conservation, development and protection of the state's water resources. The purposes of the rules shall be to further the maintenance of safe and healthful conditions, prevent and control water pollution; protect spawning grounds, fish and aquatic life; control building sites, placement of structures and land uses, preserve shore cover and natural beauty, and provide for multiple use of the waters in a manner to provide for the best interests of the citizens of the state. --1969, No. 281 (Adj. Sess.), § 13, eff. July 1, 1970

§ 1101. Definitions

In this section, unless the context clearly requires otherwise:

(1) "Board" means water resources board;
(2) "Department" means department of water resources;
(3) "Navigable water" or "navigable waters" means Lake Champlain, Lake Memphremagog, the Connecticut River, all natural inland lakes within Vermont and all streams, ponds, flowages and other waters within the territorial limits of Vermont, including the Vermont portion of boundary waters, which are boatable under the laws of this state;
(4) "Public shorelands" means state-owned lands adjacent to navigable waters;
(5) "Public waters" means navigable waters excepting those waters in private ponds and private preserves as set forth in sections 5204, 5205, 5206 and 5210 of this title;
(6) "Shorelands" means the lands being between the normal mean water mark of a lake or pond exceeding 20 acres and a line not less than 500 feet nor more than 1000 feet from such mean water mark. --1969, No. 281 (Adj. Sess.), § 13, eff. July 1, 1970.

§ 1102. Water resources and shoreland use plan

(a) The department shall make studies, establish policies and make plans for the efficient use, conservation, development and protection of the state's water resources and:

(1) On the basis of these studies and plans make recommendations to the environmental board and existing state agencies relative to their water resource activities;

(2) Locate and maintain information relating to the state's water resources. The department shall collect pertinent data available from state, reginonal and federal agencies, the University of Vermont, Vermont state colleges, local units of government and other sources;

(3) Public shorelands in which the existing use is exclusively as a public water supply and public shorelands in which the potential use may be as a public water supply shall be classified on that basis;

(4) Serve as a clearinghouse for information relating to water resources including referring citizens and local units of government to the appropriate sources for advice and assistance in connection with particular water use problems.

(b) The department shall prepare a comprehensive plan relating to water resources and guide for the preparation of a state, regional, or municipal land use or development plan. The plan shall be based on the classification of waters pursuant to chapter 33 of this title. The plan shall to the extent possible give consideration to any existing regional or municipal plans which are compatible with the interests of the state. The primary purpose of the plan shall be for the preventive control of pollution, giving due consideration to necessary development and growth. The plans shall be governed by the following general standards:

(1) Domestic uses shall be generally preferred;

(2) Uses not inherently a source of pollution within an area shall be preferred over uses that are or may be a pollution source;

(3) Areas in which the existing or potential economic value of public, recreational or similar uses exceeds the existing or potential economic value of any other use shall be classified primarily on the basis of the higher economic use value;

(4) Use locations within an area tending to minimize the possibility of pollution shall be preferred over use locations tending to increase that possibility;

(5) Use dispersions within an area shall be preferred over concentrations of uses or their undue proximity to each other;

(6) Particular attention shall be given to safe and healthful conditions for the enjoyment of aquatic recreation; the demands of water traffic, boating and water sports; the capability of the water resource; requirements necessary to assure proper operation of septic tank disposal fields near navigable waters; building setbacks from the water; preservation of shore growth and cover; conservancy uses for low lying lands; and shoreland layout for residential and commercial development. --1969, No. 281 (Adj. Sess.) § 13, eff. July 1, 1970.

§ 1103. Use of public waters and shorelands

(a) The board may establish rules to regulate the use of the public waters and public shorelands by:

(1) Defining areas on public waters and public shorelines wherein certain uses may be conducted;

(2) Defining the uses which may be conducted in the defined areas;

(3) Regulating the conduct in these areas, including but not limited to the size of motors allowed, size of boats allowed, allowable speeds for boats, and prohibiting the use of motors or houseboats;

(4) Regulating the time various uses may be conducted.

(b) The board in establishing rules shall consider the size and flow of the navigable waters, the predominant use of adjacent lands, the depth of the water, the predominent use of the waters prior to regulation, the uses for which the water and lands are adaptable, the availability of fishing, boating and bathing facilities, the scenic beauty and recreational uses of the area.

(c) The board shall attempt to manage the public waters and public shorelands so that the various uses may be enjoyed in a reasonable manner, in the best interests of all the citizens of the state. To the extent possible, the board shall provide for all normal uses.

(d) If another agency has jurisdiction over the waters and lands otherwise controlled by this section, such other agency's rules shall apply, if inconsistent with the rules promulgated under this section. The board may not remove the restrictions set forth in section 318 and 319 of Title 25.

(e) On a petition signed by not less than ten freemen or the legislative body of a municipality the board shall hold a hearing and consider the adoption of rules authorized or promulgated under this section. --1969, No. 281 (Adj. Sess.), § 13, eff. July 1, 1970.

§ 1104. Shoreland protection bylaws

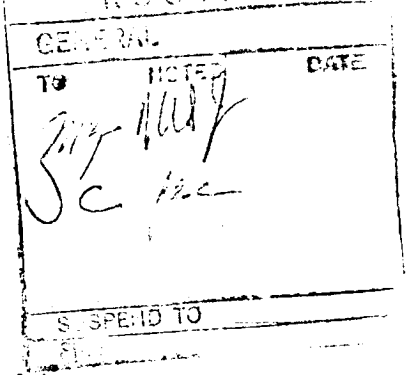
(a) To assist municipalities in complying with section 4410a of Title 24, the department shall prepare and provide general recommended standards and criteria for bylaws utilizing the criteria set forth in section 1102 of this title. The department shall assist the central planning office in preparing model bylaws which conform to the intent of this section.

(b) The department, the municipalities and all state agencies shall mutually cooperate to accomplish the objective of this section. To that end, the department shall consult with the governing bodies of municipalities to secure voluntary uniformity of rules, so far as practicable, and shall extend all possible assistance therefor. The central planning office shall provide model bylaws.

(c) This section and section 4410a of Title 24 shall be construed together to accomplish the purposes and objectives of this section. --1969, No. 281 (Adj. Sess.), § 13, eff. July 1, 1970.

§ 1105. Penalty

Any person who violates a provision of this chapter or a rule promulgated thereunder shall be fined not more than $100 or be imprisoned not more than thirty days, or both. --1969, No. 281 (Adj. Sess.), § 13, eff. July 1, 1970.



Mrs. Hans Meijer
Box 96
Barnard, Vermont 05031
July 8, 1971

Mr. Martin Johnson
Water Resources Board
Montpelier, Vermont

Dear Mr. Johnson:

Enclosed please find a petition for the banning of internal combustion machines from Silver Lake in Barnard.

As per our phone conversation of last week, the situation is a potentially hazardous one as traffic on the lake increases daily with hot water and the influx of summer visitors.

I hope you can do something...the Selectmen have been sent a copy of this petition.

Sincerely,

Petie Meijer (Joan E.)

STATE OF VERMONT
WINDSOR COUNTY, SS

IN RE SILVER LAKE,
BARNARD, VERMONT

WATER RESOURCES BOARD

PETITION

Now comes we the Petitioners, freemen of the Town of Barnard, Vermont, and request that the Water Resources Board hold a hearing pursuant to 10 V.S.A. 1103 (e) to consider the adoption of rules and regulations of conduct on a body of public water, to wit, Silver Lake in Barnard, Vermont, which rules and regulations may be adopted pursuant to 10 V.S.A. 1103 (A)(3) in support thereof the petitioners respectfully represent as follows:

1) Silver Lake constitutes "public waters" under 10 V.S.A. 1101 (5) and land adjacent to Silver Lake constitutes "shore lands" within the meaning of 10 V.S.A. 1101 (6)

2) Presently there exists completely unregulated use of motor powered boats upon Silver Lake.

3) Silver Lake is adjacent to residential property with a large number of permanent homes within sight and ear shot.

4) The waters of Silver Lake are truly inadequate for the support of any activity involving the use of boats or other motor vehicles powered by internal combustion engines.

5) Significant use is being made of the area for hiking, fishing, swimming, canoeing and sightseeing.

6) The incursion of powered motor vehicles is destroying the multiple uses for which the Silver Lake area is best suited.

7) The signficant development of various forms of aquatic and bird life in the area is jeopardized by the existence of power boating on Silver Lake.

8) The conglomerate noises constitutes a public nuisance to the adjacent residential area.

9) Gasoline and oil pollution resulting from the use of such motor powered boats cannot be controlled and accumulation of such contaminates will destroy the present beauty and usefulness of Silver Lake.

Wherefore, the petitioners pray that the board adopts rules and regulations pursuant to 10 V.S.A. 1103 (a) (3) banning and prohibiting the use of boats and other motor vehicles powered by internal combustion engines on the body of water known as Silver Lake in the Town of Barnard, County of Windsor, State of Vermont.

Douglass R. Symmes, Barnard, June 30

Ethel Symmes Barnard, July 4 1971

Name, Address, and Date

Barnard, Vermont
July 14, 1971

Mr. Edmund V. Rotkewicz
Vermont Dept. of Water Resources
Montpelier, Vermont 05602

Dear Ed:

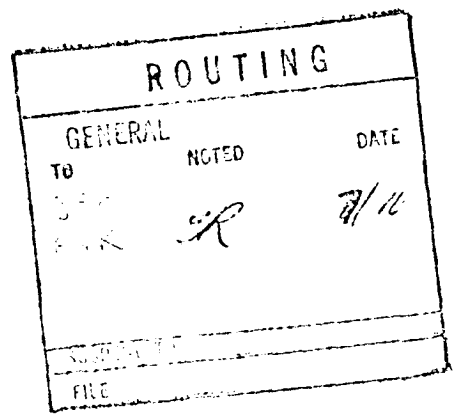
In regard to the boating regulations we discussed during our last meeting with you, we feel that the following regulations may be acceptable to the majority.

Water skiing from 9:00 A.M. to 6:00 P.M.

Please note we recommend restrictions as to buoy lines and speed limits on enclosed map. We are also recommending to the Silver Lake Camping area and private beach owners to put out buoys at their swimming areas.

Please advise us when it would be convenient for you to attend a public hearing.

Yours truly,



To Whom It May Concern:

We, the undersigned, petition the Water Resources Board to hold a hearing on the regulation of the use of motor boats on Silver Lake in Barnard, Vermont at the earliest possible time.

36 signatures

Pg-2 of 3

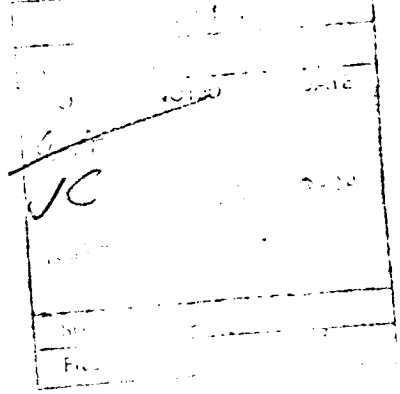
To Whom It May Concern:

We, the undersigned, petition the Water Resources Board to hold a hearing on the regulation of the use of motor boats on Silver Lake in Barnard, Vermont at the earliest possible time.

To Whom It May Concern:

We, the undersigned, petition the Water Resources Board to hold a hearing on the regulation of the use of motor boats on Silver Lake in Barnard, Vermont at the earliest possible time.

Mrs Roy Lockwood
Ross Fox
Carl Edwards



July 14, 1970

A. W. Albert
Water Resourse
Montpelier, Vermont

Roger Webster Chairmen
Board of Selectmen
Barnard, Vermont 05031

Dear Mr. Albert:

I should like to petition your office for a public hearing concerning boating, water skiing, swimming, and general use of Silver Lake in Barnard, Vermont. Pollution will also be a very important topic of conversation should a hearing be arranged.

Thank-you

Roger Webster

RW:vs

Friends of Silver Lake, Barnard, Vermont.

We, the undersigned would like to present the following rules for motorboats on Silver Lake.

1. Only ~~Lake~~ Barnard property owners can have one motorboat and two other boats on the lake.
2. No other motorboats will be allowed to be launched on the lake. the only exception will be, if a cottage is rented, and the owner has no boat on the lake and gives his right to his rentee.
3. The Silver Lake Camping Area can only have one motorboat, campers cannot bring their own motorboats, and only two extra boats can be used at a time.
4. The motorboats have to circle from the right side of the lake to the left side, looking at the lake from the store. In other words " One Way Traffic."
5. No motorboat may go closer than 100 feet to a swimmer, another boat, or the shore except when landing.
6. All boats have to slow down to a very slow speed, where the lake narrows, and approach the store area with great caution. 2 buoys should be put up as warning signal.
7. No child under 10 should be allowed to drive a boat, and no child under 12 should be allowed to waterski any one.
8. The state laws should be enforced: 2 persons in a boat whilst watersking, life belts on every boat.
9. No waterskiing before 9 A M and after 7 P. M.

Richard Sherman	Woodstock Vt
Samuel C. Paul	Woodstock Vt.
Bill Bee	BARNARD
Naoma Hull	Barnard Vt
Ralph L Leonard	Barnard Vt.
Allen F. Abbott	Barnard, Vt.
Lee Richey (Robert Messer Sopht. Vt.)	Tarrytown N.J.
Ila Charlotte Farnum	Barnard
Elizabeth L. Paul	Woodstock, Vt
Lester Grant	
Robert Martin	
Pearl G. Watson	Taftsville, Vt.
James H. Watson	Taftsville Vt.
Ralph Woodward	
Louise Woodward	

TA CLIFFORD	BETHEL, VT
Walter J Barnett	Woodstock
W. Wendell Maccini	Barnard, VT
Sara R. Haynes	Woodstock, VT.
Alice R. Gould	Woodstock, Vt.
Michael Lewis	Barnard, VT.
Eugene E. Roy	Woodstock
Nancy R. Roy	"
John N. Davis	Dallas, Pa.
Lucy Woodward	W. of J & VT
Evelyn Woodward	" "
Jack Harvey Cook	Ormond Beach, Florida
Marion H. Walker	"
Thomas J. Harvey	" " "
Nancy Henderson	" " "
Robert C. Hatter	New Hyde Park, N. Y.
Elaine Wottal	" "
Clifton & Marjorie Morse	White River Jct., VT.
Wendy-Lee Dogood (Gibb-Mace cottage)	White River Jct., VT.
Sharon D. B. Tibbetts	Barnard, VT.
Joseph G Camellia Jr.	Newton Mass.
Karen Bretell	Barnard, VT.
Thomas Kidd	Barnard, VT.
Esther Dickens	BARNARD VT

RICHARD A. SNELLING, CHAIRMAN
GERALD R. MARTEL
E. ANDREW DEEDS

CHARLES R. MIEL, COMMISSIONER
RICHARD F. HURD, AERONAUTICS SUPERVISOR
G. H. SHEPARDSON, AIRPORT ENGINEER
W. E. HOUGHTON, MGR. STATE AIRPORTS



STATE OF VERMONT
VERMONT AERONAUTICS BOARD
MONTPELIER
05602

August 9, 1971

Edmund V. Rotkewicz
Department of Water Resources
Montpelier, Vermont 05602

Dear Ed,

We have given considerable thought to your memorandum of July 26, 1971, relating to " Regulating the uses of public waters - Silver Lake, Town of Barnard. " Our study of the history of this lake, its size, and the topography around it has shown it to be a body of water of no particular interest to seaplane operators.

Under present Vermont Aeronautics Statutes, if a seaplane operator was to become interested in putting his seaplane onto a lake and fly from such, he would be required to file with this Board for our approval and such operations would be controlled in this manner. Due to the size of this lake, such an application would not be looked upon favorably.

In view of these circumstances, we would feel that the question of seaplane operations need not be considered at this time.

Thank you for reviewing this matter with us.

With best regards,

Richard Hurd
Aeronautics Supervisor

RH:sl

State of Vermont

AGENCY OF ENVIRONMENTAL CONSERVATION
Montpelier, Vermont 05602
DEPARTMENT OF FORESTS AND PARKS

Department of Fish and Game
Department of Forests and Parks
Department of Water Resources
Environmental Board
Division of Environmental Protection
Division of Recreation
Interagency Committee on Natural Resources
Natural Resource Conservation Council

August 9, 1971

MEMO TO: Edmund V. Rotkewicz, Department of Water Resources

FROM: Rodney A. Barber, Director of Parks

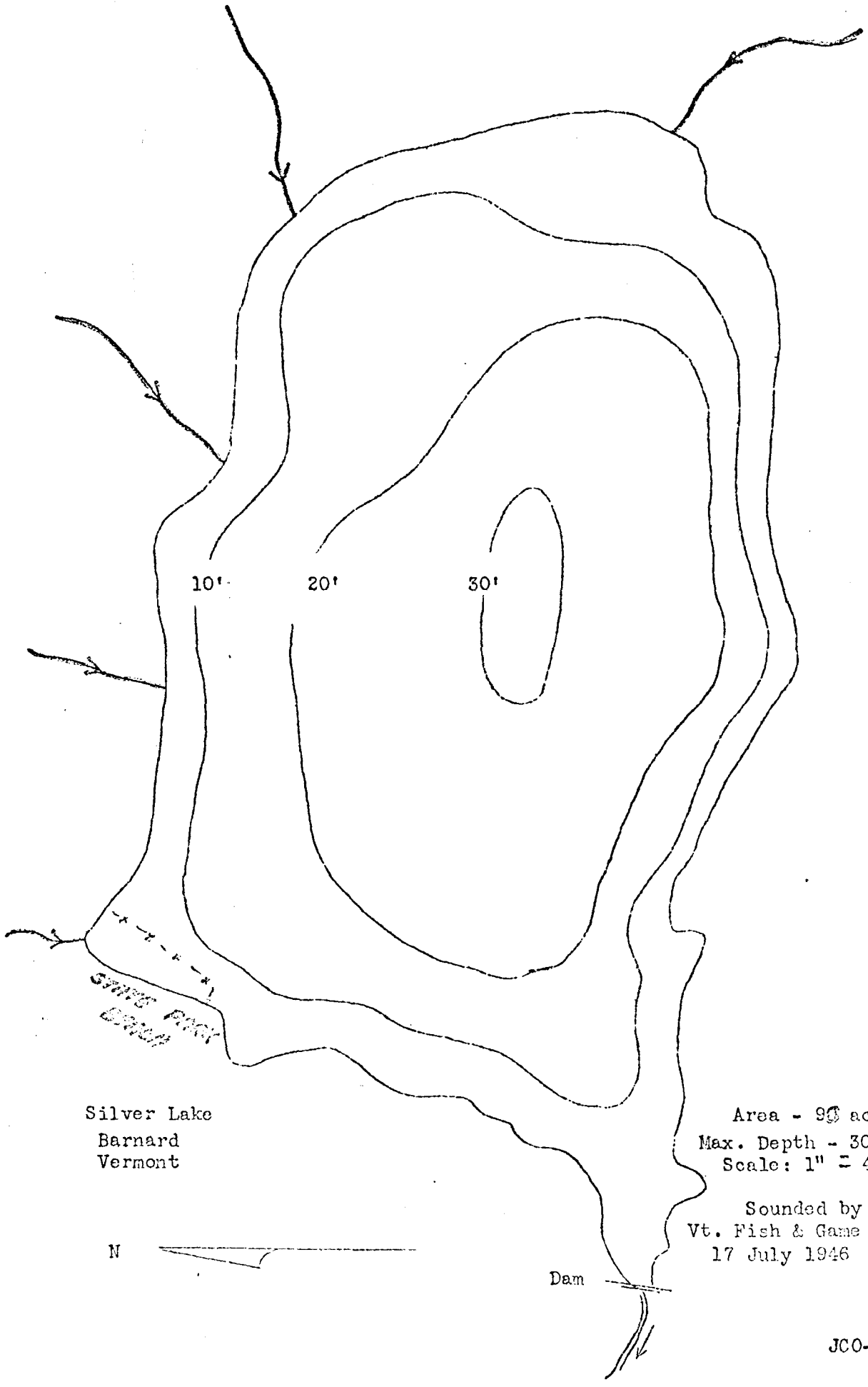
SUBJECT: Silver Lake, Town of Barnard, Regulations

To date, power boating on Silver Lake has not been a serious problem at the State Park. Power boats are not permitted to launch at the Park, and the power boats presently on the Lake have respected the sanctity of the public swimming area. Canoes and other small car top boats may be launched at the Park.

Silver Lake is a relatively small body of water, and it is possible that power boating could be a problem. The Department of Forests and Parks would support some forms of restrictions that would prevent serious conflicts from occurring.

ROUTING		
GENERAL		
TO	NOTED	DATE
[illegible]		
[illegible]		
SUSPEND TO		
FILE		

RAB:gms
cc: Mr. Heitmann


10'
20'
30'
Silver Lake
Barnard
Vermont
Area - 93 acres
Max. Depth - 30 ft.
Scale: 1" = 440'
Sounded by
Vt. Fish & Game Service
17 July 1946
N
Dam
JCO-LCH