DEPARTMENT OF NATURAL RESOURCES

Office Memorandum

TO

: Morris T. Eng, Supervisor Hydrologic Services Unit DATE: Feb. 26, 1975

FROM

James Nye, Hydrologist Hydrologic Services Unit

SUBJECT: SPIT - OTTERTAIL LAKE, OTTERTAIL COUNTY

The unique sand spit at the north end of Ottertail Lake was the original name sake of Ottertail Lake, Riverrand County.

The discharge of the River at this point has formed a sand spit that averages about 100 feet wide and tapers as it extends a mile in length to the southeast.

The northwestern portion of the sand bar which is called Pleasure Park is connected to the mainland and developed with cottages. The southeastern portion near the mouth of the river is undeveloped and forms a breakwater to protect the frontage of an area know as "Paulson's Addition."

The spit in the past has been breached from time to time by high water causing a new channel on the northwest portion of the spit. This channel has been maintained for easy lake access by property owners on this end of the river.

Some times the mouth of the river becomes blocked by sand and the river is impounded behind the southern portion of the sand spit. When this occurs the flow of the river is shunted to the lake instead of traveling the entire length of the dand bar. The flow of the river tends to improve the new channel and cause the former mouth and back water area to become blocked and form a marrow enclosed lake area.

It should be noted that property owners of 'Pleasure Park" take advantage of the protected waters of the river for their boat docks and so favor the channel on the northwestern end of the sand bar because it shortens the boat run to the lake. Conversely, the residences of Paulson's addition are concerned about the still water and back of lake access caused by the blocked channel in the bay behind the sand bar.

In 1969 permit P.A. 69-1203 was issued to Clarence Paulson to reopen the original channel, block the existing channel, and improve 5000 feet of the channel.

Public sentiment and a subsequent letter from Mr. Paulson requested that the northern channel continue to be kept open.

Morris T. Eng Page 2 February 26, 1975

Compounding the situation is the fact that there is not sufficient flow of water in the river during low river stages to maintain the cutlets and so the up river opening tends to become dominant.

It is reported that erosion of the sand bar is now occurring. Regional Hydrologist Jerry Paul has been contacted by local residences about a plan for stabilizing the spit with timbers (estimated cost \$3,000.00 for 500-700 feet of timbering).

Representative Noe Graba has also been reported to be willing to sponsor a bill to preserve the area as a historic site.

This raises the questions:

- 1. Does DNR wish to become involved in stabilizing the sand bar. Under "natural conditions" the spit has maintained it self since man has settled in the area. A deposit such as a spit is almost a living thing which under natural conditions deposits sand at one time and removes it at another.
- 2. What effect, if any, does the new channel have on altering the deposition patherns that formed and maintained the spit originally.

The following permits have been issued in regard to this matter:

- P.A. 73-4011 Memo dated April 17, 1973 G. Paul to L. Seymour To construct a breakwater permit demied "The proposed work would transform the appearance of this natural phenomena into a vertical wall navigation channel." "It would seem to be more important to preserve this unique natural feature for the benefit of the overall public than to alter it for the convenience of a comparitive few in a new development plat,... therefore, he (Mr. Paulson) should be consigned to the fact that it was his choice to develop land in an area having inherent flow problems and should accept on that basis."...
- P.A. 69-1203 Re-open original channel and block existing opening and improve 5000 feet of channel application submitted by Clarence Paulson Subsequent letter by Paulson requested that northern channel also be kept open.
- P.A. 69-1249 Applicate James Merickel To return river to its original course and open original mouth.
- P.A. 61-531 River breached sand bar in 1958, original mouth closed off. James Ahlf, Ottertail Village council abked that original outlet be restored.

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Minnesota Conservation Department
DIVISION OF WATERS, SOILS AND MINERALS
Centennial Building, St. Paul. 'linnesota 55101

·November 20, 1969

Mr. Clarence R. Paulson 6825 Winsdale North Minneapolis, Minnesota - 55427

Re: P.A. 69-1203

Dear Sir:

Enclosed is a copy of the permit authorizing you to change the course, current, or cross section of Ottertail Lake and Ottertail River,

Ottertail County.

Attached is notice to the public of the authority under which this work is being done. This card is to be securely posted in a conspicuous spot at the site of operations before any work is started.

It is your responsibility to notify this office and the local game warden before you undertake any work authorized by the permit in addition to complying with all of the provisions ther of.

Yours very truly,

Director. Division of Waters, Soils and Minerals

Enc: Permit

Public Notice

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for a PERMI	T TO CHANGE THE COU	rse, current, or c	ROSS SECTION of	Ottertai:	Davelapi Lake B	nd Otte	D'tH11	-
River,	Ottertail	County.			Basic Da	la .		
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application	to Minnesota Statutes letters, maps, and pl	Chapter 105 and	on the basis of s	tatements and in	ligewation c e	ntained in	the remit	
part hereof	ny raterance. PERMISSI	ON IS HEREBY GRANTES	to <u>Clarer</u>	ce R. Pau	son			
6825 Win	BUBLE MULT	ess for the purpose 8. Mn. which ed 55427	dress is subject	to change by wi	itten notice	from the	permittee.	
To excav	ate and remove	earthen mat	erials from	the beds	of the	Otterta	11	

PROPERTY DESCRIBED as: Government Lot 4, Section 10, Township 134 North, Range 39

Ottertnil

COUNTY

River and Ottertail Lake in the construction of a 30' wide channel, 4' in depth and 40' in length to re-establish a previously existing connect-

West, for the purpose of navigation improvement.

This permit is granted subject to the following GENERAL and SPECIAL PROVISIONS:

ing channel between said waters, and abutting

GENERAL PROVISIONS

 This permit is permissive only and shall not release the permittee from any liability or obligation imposed by Minnesota Statutes. Federal Law or local ordinances relating thereto and shall remain in force subject to all conditions and limitations now or hereafter imposed by law.

This permit is not assignable except with the written consent of the Commissioner of Conversation.

3. The Director of the Division of Waters, Soils and Minerals shall be notified at least five days in advance of the commencement of the work authorized bereunder and shall be notified of its completion within five days thereafter. The notice of permit issued by the Commissioner shall be kept securely posted in a conspicuous place at the site of operations.

No change shall be made, without written permission previously obtained from the Commissioner of Conservation, in

the hydraulic dimensions, capacity or location of any items of work authorized bereunder.

5. The permittee shall grant access to the site at all reasonable times during and after construction to authorized representatives of the Commissioner of Conservation for inspection of the work authorized hereunder.

6. This Fermit may be terminated by the Commissioner of Conservation, without notice, at any time he deems at necession. sary for the conservation of the water resources of the state, or in the interest of public health and welfare, or for violation of any of the provisions of this permit, unless otherwise provided in the Special Provisions.

SPECIAL PROVISIONS

Construction work authorized under this permit shall be completed on or before November 30. 1970. Upon written request to the Commissioner by the Permittee, stating the reason therefore, an extension of time may be obtained.

II. The excavation of soil authorized herein shall not be construed to include the removal of organic matter helow ordinary high water level - unless the area from which such organic matter is

removed is impervious or is sealed by the application of hentonite after excavation. III. In all cases where the doing by the permittee of anything authorized by this permit shall involve the taking, using, or damaging of any property, rights or interests of any other person or persons, or of any publicly owned lands or improvements thereon or interests therein, the permittee, before proceeding therewith, shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all property, rights and interests necessary therefor.

necessary therefor.

IV. This permit is permissive only. No liability shall be imposed upon or incurred by the State of Minnesota or any of its officers, agents or employees, officially or personally, on account of the granting hereof or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents employees, or contractors relating to any matter hereunder. This permit shall not be construed as estopping or limiting any legal claims or right of action of any person other than the state against the permittee, its agents, employees, or contractors, for any damage or injury resulting from any such act or omission, or as estopping or limiting any legal claim or right of action of the state against the permittee, its agents, employees, or contractors for violation of claws.

I. No enterial executed by authority of this permit or applicable provisions of law.

1. No material excavated by authority of this permit nor material from any other source, except as specified herein. shall be placed or any portion of the bed of said waters which lies below ordinary high water

lt shal' be the duty of the permittee to determine correctly all pertinent eleva-

VI. Any extension of the surface of said waters resulting from work authorized by this purmit shall become public waters and left upon and unobstructed for use by the public

SPECIAL PROVISIONS

VII. Beceipt is hereby acknowledged of 17.80 as payment for 178 cubic yards of sand, gravel or ruck assessment at the rute of ten cents per cubic sand for said and prayed and two cents per cubic said for muck and silt.

Permittee acres is a ceptance of this permit is shown by commonwent at such authorized becomed to now it ceptifical course, but, or postal course of the parable to the State Itensurer and delivered to the Director, Division of Witers, Sails and Vibrads, Department of Conservation, Contennal Office Boilding, St. Paul, Minusera 55101, for any material removed rize the fed of public saters to excess of that su estimated, at the above rate within thirry days after completion of the week authorized becomes.

CC: Paul Kruger
State Conservation Officer
Box 193
Perham, Minnesota 56573

Ottertail Village ATTENTION: Jim Ahlfs, Clerk Ottertail, Kinnesota 56571

AND	DATED AT ST. PAUL, MINNESOTA, THIS 31st DAY OF
NACES HOMEOGRAPHICAL STATES	October STATE OF HINNESOFA DEPARTMENT OF CONSERVATION
#	Esigane R. Gen.

August 13, 1970

6-1203

Minnesota Conservation Department Division of Waters, Soils & Minerals Centennial Building Saint Paul, Minnesota 5,101

Re: Permit No. 69-1249

Gentlemen:

In accordance with the Ottertail Lake Property Owners Association and the Conservation Department, we would like the original permit amended as follows:

Instead of closing the channel from the river into Ottertail Lake, we will leave an opening 16 ft. in width and approximately four to five feet in depth to permit boat passage. This opening will be reinforced with rock as well as the banks on each side of this opening.

The purpose of this request for amendment is to furnish property owners lake access nearer their respective property lines.

This work will be done by a local contractor and shall be completed early this fall.

Sincerely,

Clarence R. Paulson

James Merickel

Otter Tail Lake Property Owners Association, Inc.

Battle Lake, Minnesota

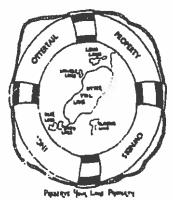
TELEPHONE 864-8181

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Division of Waters S 115 & Numerals

ZIP 56515



69-1203

August 25, 1970

69. 1203

Dept. of Conservation Division of Lands & Minerals Centennial Office Building Saint Paul, Minnesota

Re: Permits No. 16-1203 and 16-1249

Gentlemen:

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In accordance with the Ottertail Lake Owners Association, improvements are planned as follows:

- 1. This opening will be reduced to a width of 16 ft, and a depth of approximately 4' to 5'. This opening will be reinforced with rock as well as the banks on each side. The peninsula north of this opening will be reinforced with rock on the lake side to prevent further erorsion.
- 2. This section of the river will have a uniform width of 50 ft.
- 3. This section of the river has an area approximately 50 ft. wide and 100 ft. long which will require removal of material from the river beds to a depth of 4 ft. The present depth is approximately 2 feet.
- 4. This opening will have an overall depth of 4 feet and will be reinforced on the south side by rock.

Yours very truly,

Clarence R. Paulson

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STATE OF MINNESOTA Department of Conservation DIVISION OF WATERS, SOILS AND MINERALS

September 25, 1970

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Supervisor		
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Yours very mily.

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