North Dakota Game & Fish Dep't.
Bismarck, ND 58501
ATTN: James Ragan

Dear Mr. Ragan:

The enclosed proposal for stocking northern pike into Upper Des Lacs Lake is being submitted for your comments or suggestions.

Please direct any correspondence to:

Project Leader, Des Lacs NWR Complex
P.O. Box 578
Kenmare, ND 58746

Sincerely,

Delano A. Pierce
Project Leader
(TEL: 701/385-4046)

Enc(1)
June 25, 1984

Dear Sirs:

Because the fish stocking proposal for the Upper Des Lacs Lake will affect Canadian waters, you are invited to make comments and recommendations on the proposal.

Please direct your correspondence to:

Project Leader
Des Lacs National Wildlife Refuge Complex
PO Box 578
Kenmare, North Dakota 58746

Sincerely,

Delano A. Pierce
Project Leader
Memorandum

TO : North Dakota Game & Fish Dept.
    Bismarck, ND 58501

FROM : Project Leader, Des Lacs NWR Complex
       Kenmare, ND 58746

DATE: June 25, 1984

SUBJECT: Stocking Proposal, Upper Des Lacs Lake

The enclosed proposal for stocking northern pike into Upper Des Lacs Lake is being submitted for your comments or suggestions.

Please direct any correspondence to:

    Project Leader
    Des Lacs NWR Complex
    PO Box 578
    Kenmare, ND 58746

Sincerely,

[Signature]

Delano A. Pierce

DAP/dh
Encl/1
PROPOSAL FOR STOCKING NORTHERN PIKE ON DES LACS NWR

Des Lacs National Wildlife Refuge, Kenmare, North Dakota

1. NATURE OF PROPOSAL

It is proposed to stock northern pike in the north portion of the Upper Lake of the Des Lacs National Wildlife Refuge. The initial phase of the proposal would be an experimental stocking of approximately two million fry during the spring of 1985. This population would be monitored closely for two years. If information indicates a potential for a fishery program exists, further stockings may be made and consideration will be given to opening the north portion of Des Lacs Lake to public fishing.

2. OBJECTIVE OF THE PROPOSAL

The objective of establishing a northern pike fishery in Upper Des Lacs Lake will be to provide a public fishing program that will be compatible with wildlife objectives of the refuge.

3. JUSTIFICATION FOR THE PROPOSAL

The Des Lacs NWR is located within ten miles of several small towns (Kenmare, Bowbells, Flaxton and Northgate). Fishing opportunities are limited in the immediate area. If a northern pike fishery could become established, the refuge could provide an important public benefit at a low cost to the FWS without sacrificing wildlife values.

Plantings of several species of fish were made in various portions of Des Lacs Lake in the 1930's and 1940's. No plantings have been made since 1948. Some of the plantings were successful for up to three or four years but winter kills were believed to have eventually eliminated populations of stocked fish.

It is highly probable that winter kill would still be the most important mortality factor for any fish population in Des Lacs Lake. However, the following factors or perspectives have changed since 1948 and their sum effects may be that northern pike plantings would be a sound management procedure for this station.

1. In recent years, the State of North Dakota and federal fisheries managers in North Dakota have stocked many waters that have a history of winter kills. The primary reason for taking this risk is that stocking is not prohibitively expensive and many waters provide excellent fishing opportunities for several years before a winter kill occurs. It is better to have good fishing a few years out of ten than to have none at all.

2. A specific goal of the FWS Director is to improve or increase fishery values, including recreational fishing on Service lands, with special emphasis on waters of the National Wildlife Refuge System.

3. In 1983 a water control structure was installed under the Highway 52 overpass. The new structure, replacing open culverts, will give us some degree of control over the waters of the upper lake and we may be able to
prevent or lessen the occurrence or magnitude of winter kills.

4. The City of Kenmare no longer dumps untreated sewage into the lake system. A tertiary treatment plant became operational in the early 1970's. Winter kills prior to that time may have been exacerbated by the decreased oxygen resulting from the sewage.

Other factors that indicate support for the proposal are:

1. Northern pike, a specie indigenous to this locale, are an extremely hardy fish and are surviving well in nearby waters that are not as deep or as large as the Upper Des Lacs Lake.

2. Food fish, including fathead minnows and sticklebacks, are extremely abundant in the lake.

3. The most recent test netting of the Upper Lake indicated that a large population of three to four year old white suckers, another indigenous specie of ish, exists in the lake. White suckers have a record of being very winter hardy but are susceptible to winter kills during unusually severe winters. If they are surviving, there is a good chance northern pike will survive.

4. NATURE OF PROPOSED PROGRAM

During the summer of 1984 and the winter of 84-85, dissolved oxygen tests will be made to determine survival probabilities for northern pike.

Providing dissolved oxygen tests are favorable, the first step in the stocking program will be to stock about two million northern pike fry into the upper lake during the spring of 1985. Fish would be obtained through the Valley City National Fish Hatchery and would be stocking using normal established procedures.

During the following two years, test nettings and general observations will be made by National Fish Hatchery and refuge personnel to determine fish survival and growth potential. Supplemental plantings may be made during this period.

If fish survival and growth appear favorable and it becomes evident that a viable fishery could be maintained, a fisheries management plan will be written for the refuge in 1986 or 1987. In order to be compatible with refuge wildlife objectives, particularly in regards to waterfowl production, the fisheries plan will probably recommend the lake be opened to fishing only during the winter months.

5. PERMIT REQUIREMENTS AND NEPA COMPLIANCE

Because northern pike is an indigenous species to this portion of North Dakota, has been present in the Des Lacs Lake area in the past and may be already present in small populations, no special permits or NEPA compliance procedure should be necessary for an experimental stocking.

Food fish may become less abundant if a large pike population becomes established. Because of the high reproductive potential of fathead minnows and
sticklebacks and their proven ability to thrive in systems containing an abundance of predatory fish, it is not expected a pike introduction would reduce these food fish enough to significantly affect their availability to fish eating birds.

6. CONSULTATION AND COORDINATION

Copies of this proposal have been sent to North Dakota Game and Fish Department, the Federal Fish Hatchery in Valley City and the Saskatchewan Game and Fish Department for comments and recommendations.
Memorandum

TO: Frank Pfeifer, Fisheries Biologist
Valley City National Fish Hatchery

FROM: Project Leader, Des Lacs NWR Complex
Kenmare, ND

SUBJECT: Fish Plants, Des Lacs

DATE: 5/3/84

This memorandum is a request for planting northern pike in the portion of Des Lacs Lake above the Highway 52 crossing. Fishery Management Biologist R.W. Sharp recommended in 1952 that an experimental stocking of pike fry be made. He reiterated this recommendation in 1954 and 1956. This 1952 recommendation was for the stocking of two million fry, his 1956 recommendation was for "approximately one million" (attachments A,B,C). The FWS has never followed up on these recommendations. There has been an occasional natural run of pike into the lake from the Des Lacs River but for reasons unknown by us at this time, a population has not become established. A possible reason for this failure is that they may have spawned in the lower and middle lake and were frozen out during a subsequent winter before they could become established in the deeper waters of the upper lake.

Prior to 1953, plantings of perch, bullheads, walleye, suckers or crappies were made during five years out of the previous 13 years (see attachment). Good fishing occurred during only one of these years. No planting of any species has been made since 1948.

Most of the plantings were made in the shallow Middle Des Lacs Lake which, for a number of years, received untreated sewage from the City of Kenmare. It should also be noted that walleye fry, introduced into the upper lake in 1948, grew up to three fourths pound in one year and survived two seasons. Walleye are more sensitive to winter kill than are northern pike.

Considering the foregoing, I strongly recommend that we try a large scale (one million or more) pike plant into Upper Des Lacs Lake.

Additional justifications and reasonings for making this planting are:

1. In 1983 a water control structure was installed under the Highway 52 bypass. This will give us some degree of control of upstream water and may be able to prevent or lessen what seems to be inevitable winter kills. The new water control structure replaces open culverts.
2. Pike are an extremely hardy fish and are surviving in nearby waters that are not as deep or as big as Upper Des Lacs Lake.
3. Food fish, notably fathead minnows, are extremely abundant in the lake.
4. The City of Kenmare no longer dumps untreated sewage into the lake system. A tertiary treatment plant became operational in the early 1970's.
5. The Fish and Wildlife Service has a policy of furnishing more compatible outdoor oriented recreation. If a pike fishery were to become feasible, we would maintain compatibility with our objectives by recommending winter fishing only so as not to interfere with breeding bird populations or migrating waterfowl.

6. Somewhere in the past, we began permitting water skiing on a large portion of the upper lake. If we took steps to eliminate this non-compatible use, we would be in a much better position, from a public relations standpoint, if we could substitute another public use such as fishing.

7. In recent years, the State of North Dakota has more or less adopted a philosophy that although winter kills are inevitable on many of the waters in the state, this shouldn't mean the waters should never be stocked. It is better to have two good fishing years out of three, four or even more years than it is to have no fishing at all.

8. We may be entering a new period of easement acquisition or maybe even fee title acquisition of lands and water in North Dakota. We should be showing that we are making serious attempts to make FWS lands more attractive to North Dakotans.

I recommend we make this plant as soon as possible. If large quantities of pike are not available, we should use whatever is available and plan to make more introductions in future years. There is no doubt that it would be better if we had a complete analysis of water chemistry, contour maps, flora and fauna inventories, etc. but this would be very time consuming and we still might not be sure of compatibility until fish were planted. We do know that fish can and do survive in the lake. Winter kills are probable but we may have a great potential here for furnishing fishing to the public on several thousand surface acres of water. If a pike fishery did develop, planting schedules could be made and consideration could be given to planting other species of fish.

We are hoping to announce, during the forthcoming National Fishing Week, our plans to introduce pike to Upper Des Lacs Lake. We will withhold our news releases, however, until we hear more about the feasibility of this recommendation. We will be looking forward to discussing this proposal with you.

Delano A. Pierce
Project Leader

cc/Dale Henry
May 14, 1984
Kenmare, North Dakota

Refer: Des Lacs National Wildlife Refuge Complex
701/385-4046

FOR IMMEDIATE RELEASE

The Fish in the Fish & Wildlife Service

Although not always apparent to the public, the US Fish and Wildlife Service is deeply involved in fish production and fish stocking all across this nation. Their involvement began in the late 1800's and set the groundwork on a national level for today's sport fisheries. One of the more colorful aspects of this history is the use of fish cars to transport fish (both game and nongame) from coast to coast over rails. These railroad cars were heavy and were blamed for causing several bad wrecks - this and the truck pushed them to the salvage yards.

In the last several years federal fish hatcheries have been under the gun due to budget cutbacks. Some were closed and others are slated for closure. North Dakota's two federal hatcheries are going strong producing both cold and cool water species. South Dakota lost two of its federal hatcheries in 1983 due to cutbacks. Both these hatcheries produced cold water species from 52°F water bubbling up from beneath the Black Hills. The Spearfish and McNenny hatcheries produced rainbow trout, brown trout and lake trout. The lake trout went to the cold water of Lake Oahe while the rainbow and brown went to the cold streams of the Black Hills. Federal hatcheries are usually grouped into 3 categories; cold water hatcheries which produce fish like salmon and trout, cool water hatcheries which produce pike, walleye, etc, and warm water hatcheries which produce bass, catfish, bream, etc.

At one time I had an office at the Spearfish hatchery while Public Use Specialist for the FWS's three stations in the Black Hills. Whenever I could I rode with the
stocking crews when they made their runs into the high spruce country. On these trips I would ride atop the trucks, dip net in hand and when we stopped on a bridge I would drop 50 or so catchable rainbows into the clear pool below. What a tough job - fantastic scenery, clean, crisp air and a knowledge of the good fishing spots!

The US FWS is encouraging field stations to look at water they manage with an eye to developing fisheries for the benefit of the general public. This would exclude "put and take" fisheries where a stocking of fish would be fished out by summer's end. Usually these waters are not suitable for fish to reproduce in and are often found near large population areas. The FWS is looking more to waters that would provide at least a 3 year fishery before another stocking is required.

As far as Lostwood WMD is concerned, we have looked at several wetlands with the idea of developing a self-sustaining fishery. One lake on the district has received a stocking of 2800 adult perch from the state which will be followed with a stocking of fingerling pike from the Garrison federal hatchery. I have big hopes for this lake - data collected on the progress of these fish will be monitored by the Valley City federal hatchery.

All of us fishermen sort of gaze at every new lake we run across and wonder what lunkers lie beneath its waters. I do, but in North Dakota the reality of long, cold winters is the fisherman's gloom in terms of winter kills. Fishermen (tax payers) rightfully expect that all waters in their neck of the woods be looked at with an eye toward developing a successful fishery. It doesn't take much to keep most of us fishermen happy - a sunny, January day on the ice with a couple of friends and a few fish will do. Even watching the kids lose a fish because they didn't remember what daddy said about setting the hook is fun.

Hang in there, fishermen!

Copies Mailed To: Kenmare News Dale Henry
Burke Co. Tribune Stanley Paper
Harold Jones
TO: Frank Pfeifer, Fishery Biologist
FROM: Project Leader, Des Lacs NWR Complex
Kenmare, ND
SUBJECT: Shell Lake NWR

DATE: May 16, 1984

This last week a hoop net was placed in Shell Lake (NWR) located 15 miles north of Parshall. The net was placed here by Lostwood WMD Manager, Frank Kartch, in response to "stories" of pike and carp inhabiting the lake over the years.

The net was placed about ¼ mile from outlet (Shell Creek) on the south side of the lake. Twenty one pike were captured in the net—it was apparent others escaped through two softball size holes. It appears three different year classes were represented. The net contained: two 3/4 lb pike, sixteen 2-3 lb and three 5 lb pike after being set in the water for three days. One regurgitated carp was also recovered.

Question: Can we assume from the differences in size that the pike are surviving through the winter in the lake?—many, no doubt, run up Shell Creek from Lake Sakakawea every spring to spawn. All the captured pike seemed to be on the thin side.

Question: should additional nettings be conducted to determine the extent of this pike fishery? What would you surmise from this catch?

If a fishery exists here, we no doubt would look at this resource with an eye toward utilization. The refuge has never been open to fishing since its beginning in the 1950's. We have no historical data regarding fishing. Shell Lake is a low waterfowl production basin but is used by sizeable numbers of migratory birds in the spring and fall months. No data on depth has been collected.

Would appreciate your thoughts on this situation.
May 10, 1984

Kenmare, North Dakota

Refer: Des Lacs National Wildlife Refuge Complex
701/385-4046

FOR IMMEDIATE RELEASE

DES LACS REFUGE COMPLEX REPORT
by Del Pierce, Project Leader

At least four Canada goose nests at the Des Lacs Refuge were destroyed during the days following the blizzard. Eggs were eaten by predators but the nests may have already been abandoned. Ordinarily, goose nests on islands or rafts suffer very little predation. Geese nesting on bales and platforms in the Crosby Wetland Management District seemed to have fared better. We have no reports of any nests lost there, possibly because less snow fell in that area during the blizzard.

The lake rose only a few inches during the two weeks following the blizzard. Eventually, the soils absorbed most of the moisture from the snow.

Youth Conservation Corps (YCC) enrollees have been selected and will begin work in mid-June. We hope to have confirmation for the group leader position this week.

Oil drilling activities will commence on the Drawbond Waterfowl Production Area (WPA) in June. The 320 acre tract located west of Crosby is like most of our WPA's in that the Fish and Wildlife Service does not own the mineral rights. We have worked out an agreement with the Conoco Oil Company wherein drilling activities can take place with a minimum of damage being done to wildlife habitat.

A crude oil pipeline break south of Lignite presented a threat to wildlife and wildlife habitat on the Beaver Lake WPA but the flow was stopped before it reached that far. Some private land suffered damage, however.

It looks very promising for an experimental northern pike plant in Des Lacs Lake in 1985. Fisheries Biologist Frank Pfeifer has indicated that our recently submitted proposal sounds good to him and he is scheduling some tests for the lake this winter to determine oxygen levels. If everything works out, we are hoping to introduce one or two million pike fry to the area north of Highway 52 crossing during the spring of 1985. If nature treats the small fish kindly and if it is determined that a fishing program is compatible with other refuge programs, we may be able to have a fishing season in 1986 or 1987. Because the primary purpose of the refuge is for waterfowl management, we would recommend the area not be opened to fishing other than during the winter months.
TO: Del Pierce, Project Leader, Des Lacs NWR Complex
FROM: Fishery Management Biologist, Valley City FAO
SUBJECT: Fish Population of Upper Des Lacs Lake

On June 12-13, 1984 Gene Heise, Valley City NFH, and myself sampled the fish population of Upper Des Lacs Lake. Two small mesh 3' x 4' frame nets and two 125' experimental gill nets were set north of the Highway 52 crossing. The nets fished for 24 hours each.

The gill nets caught a total of 49 adult white suckers and the frame nets caught approximately 700 pounds of fathead minnows and a few brook sticklebacks. The lake apparently has a tremendous minnow population.

Attached is a "Water Chemistry Data" sheet showing the results of our water quality analysis.

From the looks of things Upper Des Lacs Lake could probably support a northern pike fishery. The forage base is certainly there.

I plan on coming up late this winter and sample the dissolved oxygen levels. Provided they are satisfactory, I will request two million northern pike fry for stocking in May of 1985. I would suspect growth rates to be excellent and you could expect to have 18" fish by ice fishing time in late 1986.

If you have any other questions, please call.

Frank K. Pfeifer

Attachment
WATER CHEMISTRY DATA

Water: Upper Des Lacs Lake
Weather Conditions: Cloudy & NE Wind at 5 MPH
Location: About 1/2 Mile North of Highway 52 Bypass
Date: 6/12/84 Time: 3:30 PM

<table>
<thead>
<tr>
<th>Depth</th>
<th>Water Temperature</th>
<th>D.O. (ppm)</th>
<th>pH</th>
<th>Specific Conductance</th>
<th>Turbidity (FTU)</th>
<th>Ortho Phos.</th>
<th>Nitrate (NO₃-N) mg/l</th>
<th>Sulphate (SO₄-N) mg/l</th>
<th>H₂S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>62°F</td>
<td>10.8</td>
<td>9.2</td>
<td>771</td>
<td>0.31 mg/l</td>
<td>0.03</td>
<td>210</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
July 6, 1984

Mr. Delano A. Pierce,
Project Leader,
United States Department of the Interior,
Fish and Wildlife Service,
Des Lacs National Wildlife
Refuge Complex Office,
Kenmare, North Dakota,
U.S.A., 58746.

Dear Mr. Pierce:

Thank you for the correspondence of June 25, 1984 concerning the pike stocking proposal for the Upper Des Lacs Lake, and the opportunity for the Saskatchewan Department of Parks and Renewable Resources to comment on this project.

We do not seem to have any information in our files on Riviere Des Lacs, which appears to be the Canadian extension of the Upper Lake of Des Lacs Lake. The drainage from this lake seems to go south and presumably empties into the Mouse River in North Dakota.

The work we have done in this area indicates pike are widespread through the Souris drainage.

On this basis, we see no problems with your proposal. If the project is successful, the border residents will benefit from an established pike fishery.

Good luck in your endeavors!

Yours sincerely

R. P. Johnson, Chief,
Inventory and Consulting Services,
Fisheries Branch.

---

TO: Del Pierce, Des Lacs NWR, ND

FROM: Fishery Management Biologist, Valley City NFH, ND

SUBJECT: Fish Plants for Upper Des Lacs Lake

I've reviewed your proposal for stocking northern pike in Upper Des Lacs Lake and fully support it. I will include the two million northern pike fry request in my fish requests for 1985.

Another reason for proposal justification is that the new water control structure should preclude most downstream movement out of the lake. In the past the open culverts provided no barrier.

Frank K. Pfeifer

United States Department of the Interior
FISH AND WILDLIFE SERVICE
NATIONAL FISH HATCHERY
RR#1
VALLEY CITY, NORTH DAKOTA 58072
TELEPHONE (701) 845-3464
July 10, 1984
DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

INTER-OFFICE TRANSMITTAL

<table>
<thead>
<tr>
<th></th>
<th>Regular Mail</th>
<th>Air Mail</th>
<th>Action</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Director, ________________________  Project Leader, ________________________
Regional Director, ________________________  Project Leader, ________________________

☑️ Ned Peabody, Wildlife Resources, Region 6, Denver, CO

FROM

<table>
<thead>
<tr>
<th>Project Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Des Lacs NWR Complex, Kenmare, ND</td>
</tr>
</tbody>
</table>

DATE

SUBJECT

Attached paper: Supplemental Information for "Proposal for Stocking Northern Pike on Des Lacs NWR"
SUPPLEMENTAL INFORMATION FOR "PROPOSAL FOR STOCKING NORTHERN PIKE ON DES LACS NWR"

Should a northern pike stocking program be successful, public fishing will be recommended for Upper Des Lacs Lake. Should approval be given and if the initial proposed stocking of two million fry in the spring of 1985 is successful, public fishing could occur by the winter of 1987-1988.

Initial recommendations for public fishing will probably be for ice fishing only.

If fishing success proves to be reasonably good, we could expect approximately 1,000 fishing visits and 4,000 activity hours by fishermen each month for about four months or 4,000 visits and 16,000 activity hours for the ice fishing season.

Approximately 26 days (.1 FTE) would be required for law enforcement and administration of the program. Most of this would occur during the period of the year that is considered "slack" time on waterfowl production refuges so we expect no significant conflicts with other programs. No additional help would be required to manage a winter fishing program on Upper Des Lacs Lake.

Graveled boat ramps should be constructed off Highway 52 and the Northgate crossing to accommodate ice fishermen. These could be constructed for approximately $1,000 apiece.

As indicated by the attached copy of a correspondence from Mr. R. P. Johnson from the Saskatchewan Department of Parks and Renewable Resources, this agency would be amenable to the stocking proposal.

Also attached is a memorandum from Fishery Management Biologist, Frank Pfeifer, supporting the proposal.

North Dakota Game and Fish Department has not commented on the proposal yet. Their comment will be submitted soon.
TO: Del Pierce, Des Lacs NWR, ND
FROM: Fishery Management Biologist, Valley City NFH
SUBJECT: Fish Plants for Upper Des Lacs Lake

I've reviewed your proposal for stocking northern pike in Upper Des Lacs Lake and fully support it. I will include the two million northern pike fry request in my fish requests for 1985.

Another reason for proposal justification is that the new water control structure should preclude most downstream movement out of the lake. In the past the open culverts provided no barrier.

Frank K. Pfeifer
July 6, 1984

Mr. Delano A. Pierce,
Project Leader,
United States Department of the Interior,
Fish and Wildlife Service,
Des Lacs National Wildlife
Refuge Complex Office,
Kenmare, North Dakota,
U.S.A., 58746.

Dear Mr. Pierce:

Thank you for the correspondence of June 25, 1984 concerning the pike stocking proposal for the Upper Des Lacs Lake, and the opportunity for the Saskatchewan Department of Parks and Renewable Resources to comment on this project.

We do not seem to have any information in our files on Riviere Des Lacs, which appears to be the Canadian extension of the Upper Lake of Des Lacs Lake. The drainage from this lake seems to go south and presumably empties into the Mouse River in North Dakota.

The work we have done in this area indicates pike are widespread through the Souris drainage.

On this basis, we see no problems with your proposal. If the project is successful, the border residents will benefit from an established pike fishery.

Good luck in your endeavors!

Yours sincerely,

R. P. Johnson, Chief,
Inventory and Consulting Services,
Fisheries Branch.

MEMORANDUM

To: Project Leader
Des Lacs Complex

From: Deputy Assistant Regional Director
Wildlife Resources, Region 6

Subject: Fish Stocking Proposal—Upper Des Lacs Lake

Your proposal to stock northern pike in Upper Des Lacs is hereby approved upon concurrence of the North Dakota Game and Fish Department. Based on this action, a fisheries management plan should be developed next winter with Frank Pfeifer, FAO, Valley City, assisting in the plan (7 RM 12.1E). An environmental assessment will not be required as the northern pike has been and may still be present in the lake. The stocking does not constitute a major Federal action. However, the extent of future fishing programs, possibly influenced by public pressures, should be looked at carefully and plans formulated. An environmental assessment will be required prior to opening the area to fishing.

[Signature]

Maurice J. Clement
April 4, 1985

Mr. Del Pierce
Des Lacs National Wildlife Refuge
Box 578
Kenmare, ND 58746

Dear Del:

It has been brought to my attention that the new water control structure through Highway 52 will retain sufficient water depth in the upper Des Lacs area to maintain a fishery.

It is requested, 1 to 2 million northern pike fry be stocked into this area in hopes of providing an additional winter fishery for the area. The forage bases that exists in the lake should sustain a reasonable pike population. Stocking of additional pike and/or other species such as yellow perch will be dependent upon fish population and water quality studies within the next two years.

Very sincerely,

Donald C. Daar
Project Leader, Fisheries
North Dakota Game & Fish Dept.
Rt. 1, Box 56
Dickinson, ND 58601

DCD/bu

CC: Jim Ragan, ND Game & Fish
    Frank Pfeifer, Valley City Nat. Fish Hatchery
MEMORANDUM

TO: Del Pierce, Refuge Manager, Des Lacs NWR
FROM: Fishery Management Biologist, Valley City FAO, ND
SUBJECT: Test Netting in Des Lacs Refuge

On June 9, 1987 I set 2-125' experimental gill nets in Upper Des Lacs Lake. I set the nets on the south side of the gravel road between Northgate and Sherwood, ND. The nets fished for 17 hours each and caught a total of five white suckers.

I also set three 3'x4' small mesh traps in the lake just north of the Highway 52 crossing. These nets fished for two days and were full of fathead minnows. Approximately 800 lbs. of minnows were hauled back to Valley City NFH for forage.

No northern pike were captured in either of these netting operations.

Frank Pfeifer

June 15, 1987
Background on fish and fishing on the Des Lacs Refuge

1940 - 4000 perch planted in summer of this year. (Middle Lake)
1941 - Minnows noted in winter-time.
    2500 bullheads, 1000 suckers, 700 perch planted. (Middle Lake)
1942 - 5000 bullheads, 300 crappies (yrl), 15 adult crappies planted.
    (Middle Lake)
1943 - Some winter kill occurred - all small fish noted (perch, bullhead, crappies
    - Test nettings in summer revealed only bullheads.
    - 3600 bullheads, 400 perch planted in Middle Lake.
1944 - Nettings revealed only bullheads, tho perch, crappies, bullheads
    and suckers had been seen in Middle & Upper Lakes in winter.
    - First reference made to possible detrimental effects of raw sewage
        from City of Kenmare.
1945 - Some winter kill noted - bullheads, perch.
    - Good fishing was had in summer of '45 in Middle Lake - perch, crappies,
        bullheads.
1946 - Considerable winter kill due to low water and heavy snow blanket;
    kill of bullheads, suckers, perch.
    - Test nettings revealed no fish - probably attributable to winter kill
        plus the effects of raw sewage.
1947 - Minnows, bullheads & suckers noted.
    A few bullheads caught in Middle Lake.
1948 - Heavy winter kill of minnows and suckers, no game fish noted.
    - Test nettings revealed no fish. (Soundings in Upper Lake - 9 to 15')
1949 - State planted 1,000,000 walleye fry in Upper Lake in May
1949 - Severe winter kill on minnows and young walleyes.
    - Test nettings however in following summer showed good pop. of
        walleyes 9 to 11" long and up to 3/4 lbs. Good growth for one year.
1950 - No winter kill noted, tests in winter showed sufficient O2.
    - Test nettings in May revealed walleyes present in Middle Lake of
        legal size. No success had on fishing however.
    - Action being initiated to amend regulations to open portion of
        Upper Lake to fishing.
1951 - Winter tests showed insufficient O2 supply. Heavy winter kill
    occurred in Upper Lake; approx. 4000 dead walleyes found in coulee
    in Upper Lake.
    - June test nettings revealed no fish present; winter kill apparently
        very severe, if not complete.
    - Authorization received to open Upper Lake - but too late considering
        winter kill that had occurred!
1952 - Winter tests indicated ample O2 supply in both Middle & Upper Lakes.
    - Test Nettings in May revealed no game fish - only suckers.

13 year summary

{ Plantings made 5 years out of 13.
  Good fishing, only one year out of 13. }
DATE: AUG 21 1978

REPLY TO ATTN OF: Fishery Management Biologist Bismarck, North Dakota

SUBJECT: Trip Report - Upper Des Lacs Lake

TO: Refuge Manager, Des Lacs NWR Kenmare, North Dakota

Date of Trip: August 15-16, 1978

Purpose of Trip: Sample fish population in Upper Des Lacs Lake

Persons Making Trip:

1. Dave Houseworth, Fishery Resources Supervisor
2. Frank Pfeifer, Fishery Management Biologist

Person Contacted: John Venegoni, Refuge Manager

Remarks: Three 125' experimental gillnets were set for 20 hours each in Upper Des Lacs Lake. The catch consisted of three adult white suckers and nine mudpuppies. The lake was experiencing a heavy bloom of the blue-green algae Aphanizomenon flos-aquae.

Recommendations:

1. I suggest you put an article in the local paper outlining the catch of this netting operation. That should answer some of the local concern about opening the refuge for fishing.

2. Continue to monitor the fishery and, if at some time the game fish population increases, the refuge manager may wish to open the refuge to winter fishing.