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Report of
NORTH DAKOTA STATE WATER COMMISSION
 State Office Building
 BISMARCK, NORTH DAKOTA
 58501

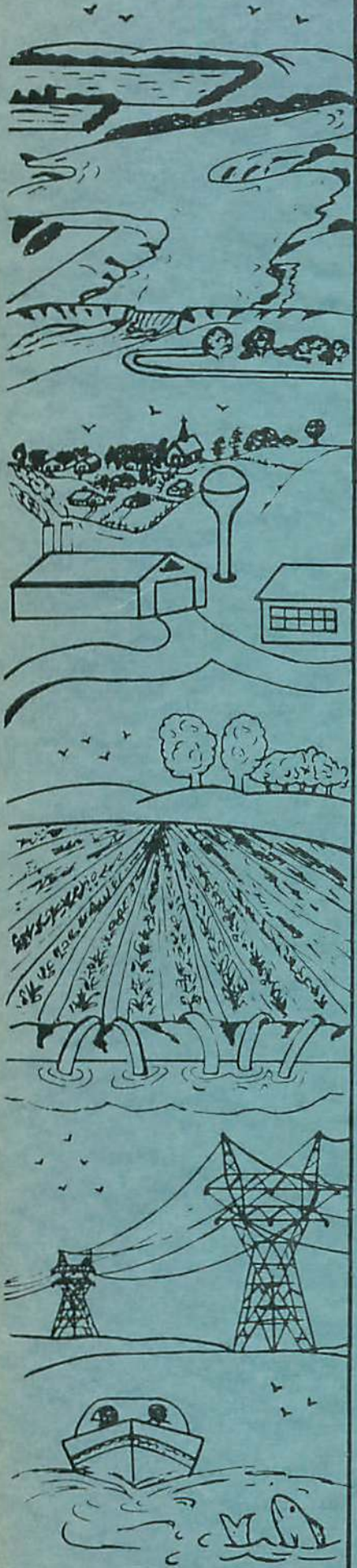
ERIE DAM AND RECREATION COMPLEX
 CASS COUNTY

SWC PROJECT #1471 - SORA PROJECT #9-29

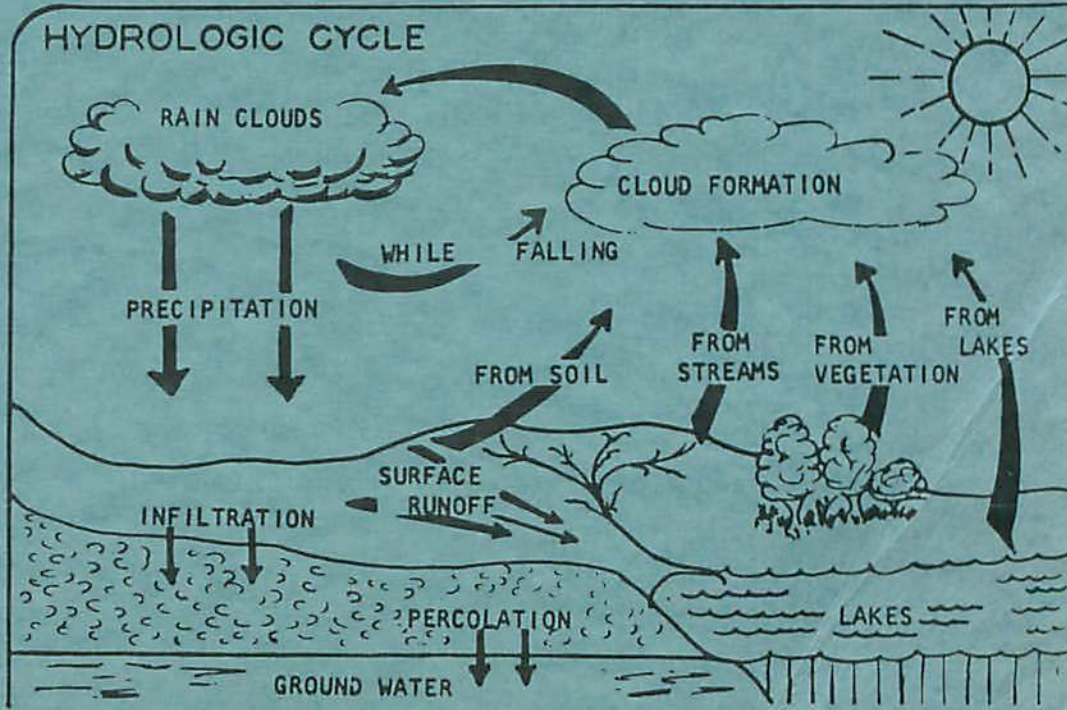
Phase - 1 ~~is~~ well -
Phase - 2

Prepared in cooperation with
 Rush River Water Management District
 State Game and Fish Department
 State Outdoor Recreation Agency

December 24, 1968



HYDROLOGIC CYCLE



NORTH DAKOTA STATE WATER COMMISSION

PROJECT REPORT

NAME: Erie Dam and Recreation Complex, Cass County
PROJECT: SWC #1471 - SORA #9-29
SPONSOR: Rush River Water Management District
DATE: December 24, 1968

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North Dakota State Water Commission

State Office Building

(701) 224-2750

Bismarck, North Dakota 58501

December 24, 1968

John Greenslit, State Liaison Officer
State Outdoor Recreation Agency
State Office Building
Bismarck, North Dakota 58501

RE: Erie Dam and Recreation Complex,
SWC Project #1471 (SORA #9-29)

Dear Mr. Greenslit:

Enclosed are seven (7) copies of an acquisition and development proposal for the Erie Dam and Recreation Complex in Cass County. The proposal was prepared by the State Water Commission in cooperation with the State Game and Fish Department and the Rush River Water Management District, the project sponsor.

Please submit the proposal to the Bureau of Outdoor Recreation for a grant from the Land and Water Conservation Fund. We appreciate the cooperation of the State Outdoor Recreation Agency and others who assisted in the preparation of this report.

Sincerely yours,

Milo W. Holsveen
Milo W. Holsveen
Engineer-Secretary

MWH:JS:ka
cc: Rush River WMD
State Game & Fish Dept.
Comm. Jungroth

Governor William L. Guy
Chairman
Richard P. Gallagher
Vice Chairman-Mandan

Harold Hanson
New England
Russell Dushinske
Devils Lake

Henry J. Steinberger
Donnybrook
James Jungroth
Jamestown

Arne Dahl, Ex-Officio Member
Comm. of Agriculture & Labor
Milo W. Holsveen, Secretary
Chief Engineer & State Engineer

DEPARTMENT OF THE INTERIOR
BUREAU OF OUTDOOR RECREATION
PROJECT PROPOSAL - ACQUISITION

LEAVE BLANK FOR BOR USE ONLY

Date Received	Priority	Project Number
---------------	----------	----------------

Project Officer

Use this form for submission of individual projects for acquiring lands and waters or interests in lands and waters for public outdoor recreation purposes. If concurrent Development is being undertaken, check here

SECTION 1

1. State or Territory
North Dakota

2. Name and address of agency responsible for project
Rush River Water Management District, c/o Ken McIntyre, Chairman,
Harwood, North Dakota 58042

3. Project Title
Erie Dam and Recreation Complex, Cass County - SORA Project #9-29

4. Brief description of project
Located about 35 miles northwest of Fargo, the project includes acquiring 213 acres of land through the Bureau of Outdoor Recreation program and 682 acres with PR-DJ funds; constructing a dam creating a 128 acre reservoir with a 1,675 acre-foot capacity and maximum depth of 33 feet; installing recreation facilities for such activities as boating, fishing, swimming, picnicking and playing outdoor games; and moving and placing underground a power line. The project is designed to meet needs for water-based outdoor recreation facilities in Region VII as stipulated in the State Outdoor Recreation and State Water Resources Plans. General area development is included in the plans to enhance the area's natural beauty.

SWC #1471

5. Duration of project
from 4-1-69 to 12-31-70

6. Federal assistance requested
\$13,300

7. Recommended priority
A

8. Name, Organization, and Title of individual having day-to-day responsibility for direction of project
Rush River Water Management District
c/o Ken McIntyre, Chairman
Harwood, North Dakota 58042

9. Name and Address to appear on check
Milo W. Hoisveen, State Fiscal Officer
State Office Building
Bismarck, North Dakota 58501

10. TERMS AND CONDITIONS: In submitting this Project Proposal, the State hereby accepts the Terms and Conditions set forth in the BOR Grants-in-Aid Manual, which will be a part of the Project Agreement for any grant awarded under this proposal.

11. CERTIFICATION: As the official designated to represent the State and act for the State for purposes of the Land and Water Conservation Fund Act, I recommend that assistance be made available from the Fund, when monies are available, in accordance with the recommended priority. No financial assistance has been given or promised under any other Federal program or activity with regard to the proposed project. The State or public agency to be responsible for the proposed project has the ability and intention to finance its share of the costs of this project. The Applicant will not discriminate against any person on the basis of race, color, or national origin in the use of any property or facility acquired or developed pursuant to this proposal, and shall comply with the terms and intent of Title VI of the Civil Rights Act of 1964, P. L. 88-354 (1964), and of the regulations promulgated pursuant to such Act by the Secretary of the Interior and contained in 43 CFR 17.

(Signature)

John Greenslit

(Name)

(Date)

State Liaison Officer

(Title)

12. For State use
DIST.
SORA (7)
Rush River WMD
G & F Dept.
Comm. Jungroth
SWC (10)

December 24, 1968

SECTION 11

1. Nature and Extent of Use - A. For entire area in which acquisitions are to be made:

Cropland and pasture

B. For area to be acquired:

Cropland and pasture

2. BOR Classification of area 111	3. Check one <input checked="" type="checkbox"/> New Site <input type="checkbox"/> Addition to existing site	4. Location County <u>Cass</u> Town <u>Fargo</u> Town population <u>56,000</u> Miles from Town <u>35</u>
5. Total acres to be acquired 682 PR-DJ Funds 213 BOR Funds	6. Cover, acres in A. Forest _____ B. Rock _____ C. Cutover _____ D. Swamp _____ E. Grass _____ F. Desert _____ G. Water _____	
7. Topography, acres in A. Flat _____ B. Hilly _____ C. Rolling <u>985</u> D. Mountainous _____	8. Waterfront, feet on A. Ocean _____ B. Lake _____ C. Stream _____	9. Roadfront, feet on A. Dirt _____ B. Gravel _____ C. Paved _____

10. PARCELS TO BE ACQUIRED

PARCEL NUMBER	ACRES	ESTIMATED VALUE	NUMBER OF BUILDINGS	ESTIMATED VALUE	METHOD OF ACQUISITION	APPROX. DATE OF ACQUISITION	TOTAL VALUE
1	213	\$26,600	--	--	Fee Simple	4-1-69	\$ 26,600
2	483	44,950	--	--	Fee Simple	4-1-69	44,950
3	160	13,280	--	--	Fee Simple	4-1-69	13,280
4	39	2,150	--	--	Fee Simple	4-1-69	2,150

FOR CONCURRENT ACQUISITION AND DEVELOPMENT PROJECT SUBMISSIONS

TOTAL ESTIMATED VALUE \$ 86,980

Total estimated acquisition value	86,980 *	Amount of Federal acquisition assistance requested	13,300
Total estimated development costs	166,750		
TOTAL	253,730	Source of remainder of funds	

Total amount of Federal assistance requested 96,675

Source of remainder of funds *incl. \$60,380 PR-DJ funds

Rush River Water Management District
Game & Fish Department
State Outdoor Recreation Agency
State Water Commission

Tract 1 - Bureau of Outdoor Recreation and Game & Fish Department
Tracts 2,3 & 4 - Game & Fish Department with PR-DJ Funds

"No other Federal funds have been requested for Tract 1."

Attach, by reference number, the following supplemental documents necessary to process this Acquisition Project Proposal:

- A-660-1 *Project Justification.* A. Description of how the proposed project is in accord with the State outdoor recreation plan and would help meet priority needs identified in the plan. Indicate how the natural beauty of the area will be preserved. B. Indicate other organizations consulted during formulation of this proposal. C. Plans for Operations and Maintenance.
- A-660-2 *Maps and Charts.* A. Simple plot plan or map showing the total area to be acquired and its relationship to the surrounding area. Annotate any plans for streets, highways, waterlines, sewers, etc. to be located on or near the involved area. (Key to show location within State, County, or city.) B. Description of any improvements on lands to be acquired. C. Description of all legal rights to be held by applicant and any other person or organization.
- A-660-3 *Agreements.* A. Agreements or arrangements made with other organizations for participating in the project, or in later operation and maintenance of the completed project.

The items shown below need *not* be submitted with the project proposal. However, during the course of execution of an approved project, the applicant should be prepared to submit them to the Bureau for review, as follows:

- A-660-4 Appraisal reports and other documentation of cost.
- A-660-5 Satisfactory evidence of title (such as an opinion by the State Attorney General) for each parcel.
- A-660-6 Five-year history of conveyances for each parcel listed in project proposal (name of parties involved, dates, interest conveyed and consideration).

IN HUNTING & FISHING



VARIETY



NORTH DAKOTA GAME AND FISH DEPARTMENT

BISMARCK, N. DAK.
58501

November 18, 1968 **NOV 19 1968**

#1471

Mr. John Greenslit, Coordinator
State Outdoor Recreation Agency
Bismarck, North Dakota

Dear Mr. Greenslit:

STATE OUTDOOR RECREATION AGENCY		
COORDINATOR	✓	JG
OFFICE MANAGER		
PLANNER		
ACCOUNTING		
EXEC. OFFICER		

Enclosed please find one copy of an appraisal statement for land to be purchased for the Erie Dam project with B. O. R. assistance.

You will note that an additional 682 acres will be acquired by the Department. These lands will be purchased with Pittman-Robertson and Dingell-Johnson funds. The fair market value of these lands are: tract 2, 483 acres - \$44,950.00; tract 3, 160 acres - \$13,280.00; and tract 4, 39 acres - \$2,150.00. A total cost of three tracts will be \$60,380.00 if they can be purchased at these values.

Yours truly,

Wilbur Boldt
Deputy Commissioner

b

cc: Howard Stout
Land Negotiator

RUSSELL W. STUART
COMMISSIONER

WILBUR BOLDT
DEPUTY COMMISSIONER

H. H. SPITZER
CHIEF, ENFORCEMENT DIVISION

DALE HENEGAR
CHIEF, FISHERIES DIVISION

C. R. GRONDAHL
LEADER, GAME INVESTIGATIONS

R. L. MORGAN
LEADER, HABITAT DEVELOPMENT

PERSHING CARLSON
CHIEF, PUBLIC RELATIONS DIVISION

Appraisal Statement

As a result of my appraisal analysis following current professional appraisal practices involving the application of standard market data techniques, it is my opinion that the fair market value of the property described below, in its condition as of November 12, 1968, is:

\$26,600.00.

The legal description of the property is as follows:

Southeast Quarter (SE/4) of Section 20; that portion of the Northeast Quarter (NE/4) of Section 20 lying south and west of the Great Northern Railway right-of-way; all in Township 142, Range 53, Cass County, North Dakota. **213 ACRES.**

My qualifications as a real estate appraiser are attached. I have no interest, present or contemplated, in the property. I have personally inspected the subject property and the comparable sales properties. I have verified the salesor offers to sell with either the seller, the buyer, or both.

C. G. James
C. G. James
Review Appraiser

Howard R. Stout
Howard R. Stout

I have reviewed the appraiser's documentation and find it satisfactorily substantiates the appraiser's opinion of fair market value.

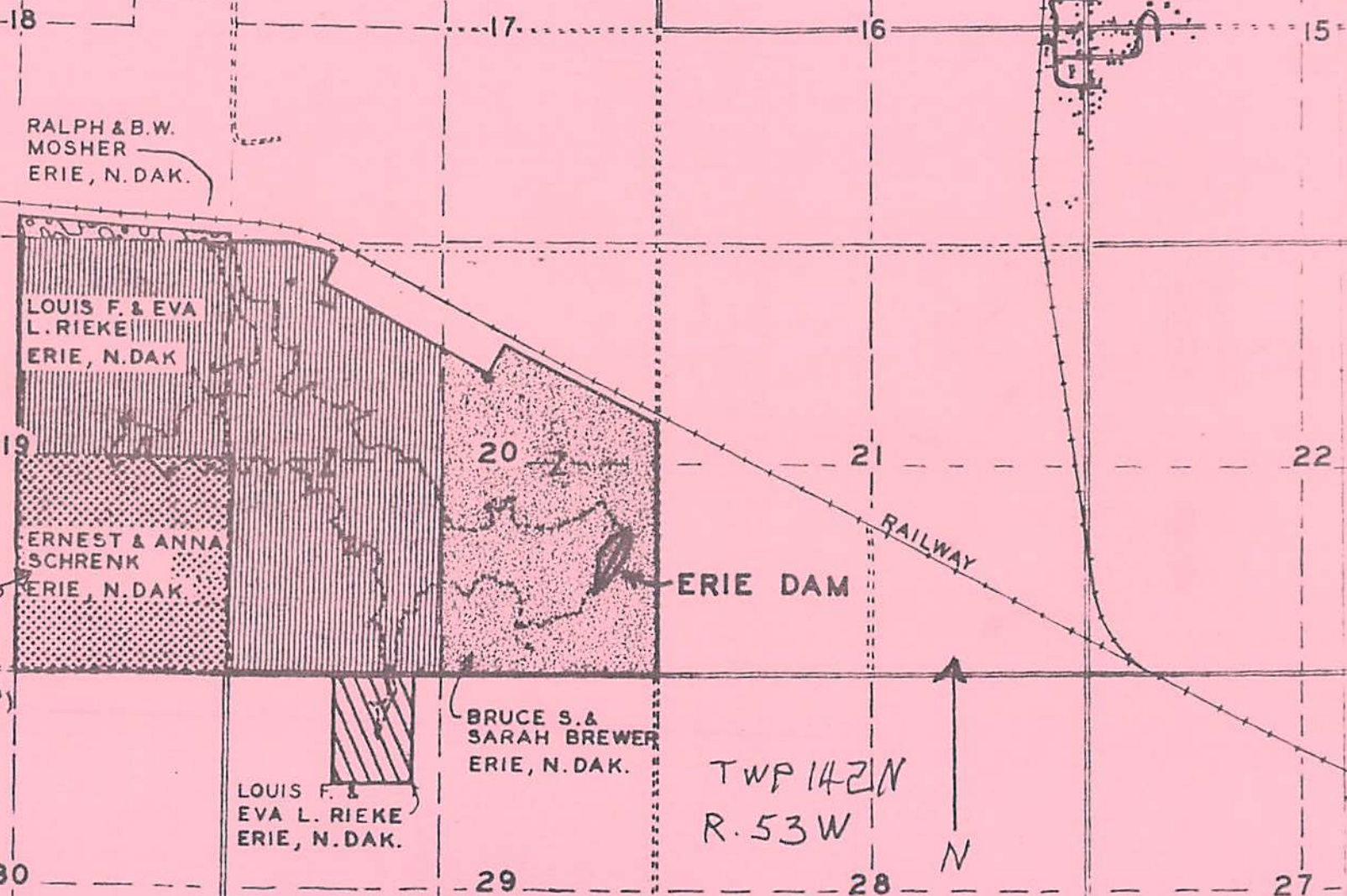
Nov. 19, 1968
Date

John Deems
State Liaison Officer

Dam site Area Map - Proposed Erie Dam

Taking and Ownership Map
Shows Boundaries of
Proposed Reservoir

ERIE



NORTHERN

RALPH & B.W.
MOSHER
ERIE, N. DAK.

LOUIS F. & EVA
L. RIEKE
ERIE, N. DAK.

ERNEST & ANNA
SCHRENK
ERIE, N. DAK.

ERIE DAM

BRUCE S. &
SARAH BREWER
ERIE, N. DAK.

LOUIS F. &
EVA L. RIEKE
ERIE, N. DAK.

TWP 142N
R. 53W



*Schrenk
sold this
quarter to
Ed Steffes,
1968*

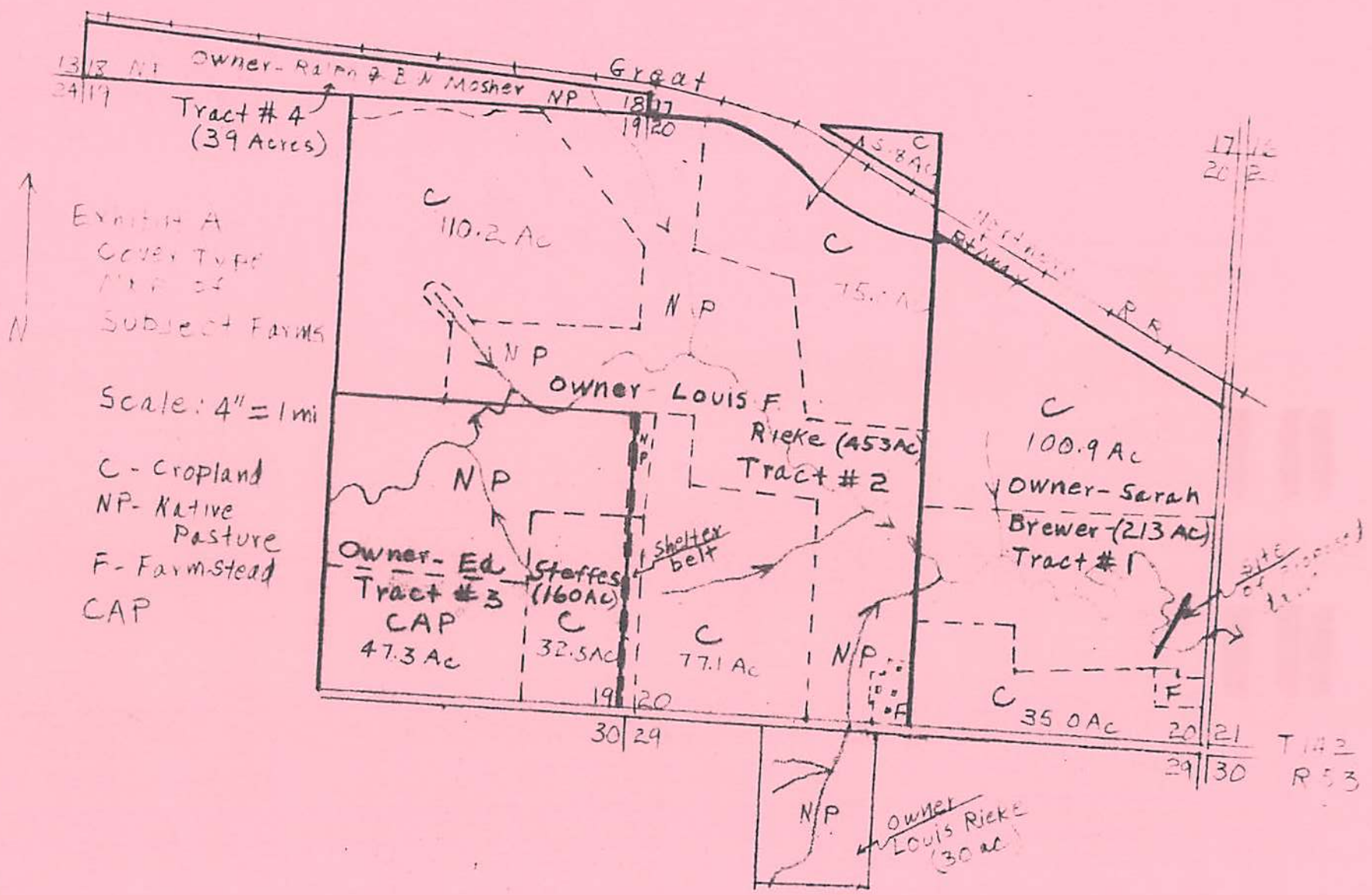


EXHIBIT A
COVER TYPE
MAP OF
SUBJECT FARMS

Scale: 4" = 1 mi

- C - Cropland
- NP - Native Pasture
- F - Farmstead
- CAP

Qualifications of Howard R. Stout

Since September 1 of 1968, Howard R. Stout has been employed as Land Negotiator for the North Dakota State Game and Fish Department. The work consists of the appraisal of, and negotiation for, lands being acquired by the Game and Fish Department.

From 1956 to July 1968 he was employed by the federal Soil Conservation Service as Soil Scientist at Bismarck, North Dakota. During this period he was party chief for the standard soil survey of Burleigh County from its inception in 1956 to its completion in 1965. The report for this survey, which he authored, is to be published in the near future.

From April 16 through May 31, 1968, he took the course "Agricultural Economics 484 - Farm Appraisals", offered by North Dakota State University. He received 3 quarter hours of graduate credit for completion of this course.

From 1947 through 1955, he was employed by the federal Bureau of Reclamation, working in land classification for irrigation. During this time he classified lands for irrigation potential in Montana, Wyoming and North Dakota.

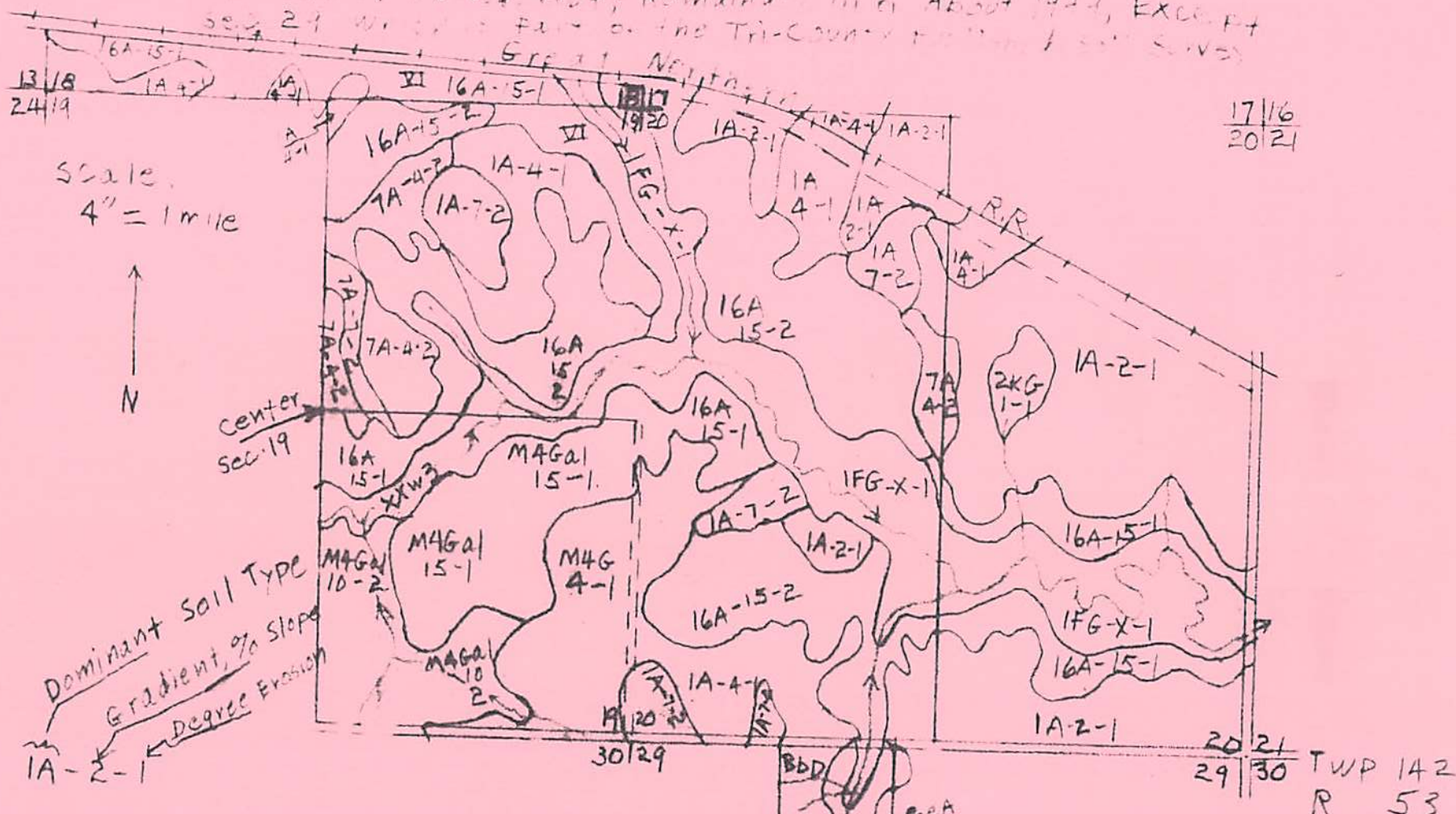
From 1938 to 1947, he was employed by the federal Soil Conservation Service as soil scientist on soil survey, working in several states, chiefly North Dakota and South Dakota.

Graduate, B.S. degree in Agriculture, South Dakota State University, 1938, with majors in Agricultural Economics and in soils.

11/15/68

Soil Survey, Cass County, Erie Dam Vicinity (By SCS)

SE 1/4 sec 4 Maped 1924; Remainder in or About 1924, EXCEPT
 sec 24 which is part of the Tri-County Survey (see notes)



Scale
 4" = 1 mile



Dominant Soil Type
 Gradient, % Slope
 Degree Erosion

- IA; M4G; and BbB = Svea-Barnes loams
- 7A Deep fine sandy loams
- 2KG Poorly drained (Prob. Tonka soils)
- 16A; MAGa; and BbD Barnes-Buse loams - (steeper areas Class VI, better areas, IX)
- IFG; and XXw3 wet Alluvial soils
- GeA Gardena loam
- BbD Buse soils

DEPARTMENT OF THE INTERIOR
BUREAU OF OUTDOOR RECREATION
PROJECT PROPOSAL - DEVELOPMENT

LEAVE BLANK FOR BOR USE ONLY

Date Received	Priority	Project Number
---------------	----------	----------------

Project Officer

Use this form for submission of individual projects which will develop lands and waters to facilitate their use by the public for outdoor recreation. If concurrent Acquisition is being undertaken, check here

SECTION 1

1. State or Territory
North Dakota

2. Name and address of agency responsible for project
Rush River Water Management District, c/o Ken McIntyre, Chairman,
Harwood, North Dakota 58042

3. Project Title
Erie Dam and Recreation Complex, Cass County - SORA Project #9-29

4. Brief description of project
Located about 35 miles northwest of Fargo, the project includes acquiring 213 acres of land through the Bureau of Outdoor Recreation program and 682 acres with PR-DJ funds; constructing a dam creating a 128 acre reservoir with a 1,675 acre-foot capacity and maximum depth of 33 feet; installing recreation facilities for such activities as boating, fishing, swimming, picnicking, and playing outdoor games; and moving and placing underground a power line; the project is designed to meet needs for water-based outdoor recreation facilities in Region VII as stipulated in the State Outdoor Recreation and State Water Resources Plans. General area development is included in the plans to enhance the area's natural beauty.

SWC #1471

5. Duration of project
from 4-1-69 to 12-31-71

6. Federal assistance requested
\$83,375

7. Recommended priority
A

8. Name, Organization, and Title of individual having day-to-day responsibility for direction of project
Rush River Water Management District
c/o Ken McIntyre, Chairman
Harwood, North Dakota 58042

9. Name and Address to appear on check
Milo W. Hoisveen, State Fiscal Officer
State Office Building
Bismarck, North Dakota 58501

10. TERMS AND CONDITIONS: In submitting this Project Proposal, the State hereby accepts the Terms and Conditions set forth in the BOR Grants-in-Aid Manual, which will be a part of the Project Agreement for any grant awarded under this proposal.

11. CERTIFICATION: As the official designated to represent the State and act for the State for purposes of the Land and Water Conservation Fund Act, I recommend that assistance be made available from the Fund, when monies are available, in accordance with the recommended priority. No financial assistance has been given or promised under any other Federal program or activity with regard to the proposed project. The State or public agency to be responsible for the proposed project has the ability and intention to finance its share of the costs of this project. The Applicant will not discriminate against any person on the basis of race, color, or national origin in the use of any property or facility acquired or developed pursuant to this proposal, and shall comply with the terms and intent of Title VI of the Civil Rights Act of 1964, P. L. 88-354 (1964), and of the regulations promulgated pursuant to such Act by the Secretary of the Interior and contained in 43 CFR 17.

(Signature)

John Greenslit

(Name)

(Date)

State Liaison Officer

(Title)

12. For State use
DIST.
SORA (7)
Rush River WMD
G & F Dept.
Comm. Jungroth
SWC (10)

SECTION 11 - TABULAR SUMMARY OF PROJECT ELEMENTS AND COSTS

Identify the phase or element of the Development Project suggested by the line items. Indicate additional breakdown of work elements necessary and desirable to allocate work assignments and costs.

	DATE OF		ESTIMATED COST	TOTAL ESTIMATED COST		\$ 166,750	
	BEGINNING	COMPLETION		Amount of Federal development assistance requested		83,375	
DEVELOP SITE PLANS & SPECIFICATIONS				Source of remainder of funds Rush River Water Management District State Outdoor Recreation Agency State Water Commission			
A.							
B.							
DEVELOP CONSTRUCTION PLANS AND SPECIFICATIONS				FOR CONCURRENT ACQUISITION AND DEVELOPMENT PROJECT SUBMISSIONS			
A.				Total estimated acquisition value	\$ 86,980 *		
B.				Total estimated development costs	\$ 166,750		
				TOTAL		\$ 253,730	
PREPARE SITE				Total amount of Federal assistance requested	\$ 96,675 (BOR Only)		
A.				*include \$60,380 PR-DJ funds			
B.				Source of remainder of funds Rush River Water Management District Game & Fish Department State Outdoor Recreation Agency State Water Commission			
UNDERTAKE CONSTRUCTION				SIZE IN ACRES OF ENTIRE AREA OR PARK		SIZE IN ACRES OF AREA TO BE DEVELOPED UNDER THIS PROPOSAL	
A. Dam	4-1-69	12-31-70	112,200				
B. Recreation facilities	4-1-69	12-31-71	47,800				
OTHER							
A. Power Line	4-1-69	12-31-69	6,750	Land	Water	Land	Water
B. Relocation				895		767	128

SECTION 111 - ATTACHMENTS

"No other Federal funds have been requested for the development phase of this project."

Attach, by reference number, the following supplemental documents necessary to process this Development Project Proposal:

- D-660-1 *Project Plan and Justification.* A. Description of how the proposed project is in accord with the State outdoor recreation plan and would help meet priority needs identified in the plan. B. Summary of area, its nature and relation of development to the area. Indicate how the natural beauty of area will be enhanced. C. Descriptive outline of proposed accomplishments with funds requested. Indicate contemplated other uses of the area. D. List of names of organizations which will undertake the development and how this will be performed. E. Economic feasibility data, or other types of data to indicate extent and kind of use to be made of the completed area or facility. F. Plans for operations and maintenance.
- D-660-2 *Maps and Charts.* A. Simple site plans or maps showing total area, in addition to area to be developed. Annotate to show plans for, or existing streets, highways, waterlines, sewers, etc. to be located on or near the area. (Key to allow location within State, County, or city.) Indicate uses now made of the area by applicant or other agencies or individuals. B. Description of all legal rights to the area to be held by applicant and any other person or organization.
- D-660-3 *Agreements.* A. Agreements or arrangements made with other organizations for participating in project, including operation and maintenance of completed facility.

The terms shown below need *not* be submitted with the project proposal. However, during the course of execution of an approved project, the applicant should be prepared to submit them to the Bureau for review, as follows:

- D-660-4 *Plans.* A. Site plans, specifications and cost estimates. B. Construction plans, specifications and cost estimates. These *must* be submitted for review and approval before construction may proceed on a structure to cost in excess of \$100,000.
- D-660-5 *Contracts.* A. Copies of pertinent contracts, as specifically required by the Bureau of Outdoor Recreation.

NORTH DAKOTA STATE WATER COMMISSION

Acquisition and Development Project Justification Report

Erie Dam and Recreation Complex, Cass County
SWC Project #1471
SORA Project #9-29

December 24, 1968

A-D:660-1. PROJECT PLAN AND JUSTIFICATION

A. State Plan Accord

The Erie Dam and Recreation Complex will provide outdoor recreation opportunities for boating, water skiing, fishing, picnicking, swimming and playing outdoor games and sports.

"Outdoor Recreation in North Dakota", the State Plan, (page 44, paragraphs 5, 7, 8 and 9) states: "Planning Region VII has generally adequate areas and facilities for playing outdoor games and sports, ice skating, outdoor cultural events and equestrian trails to meet needs of the residents as projected to 1980. There may be instances of local unmet needs.

"Acquisition and development programs should generally be directed towards providing additional areas and facilities for fishing, boating, water skiing, swimming beaches and pools, camping, hunting, bicycle trails, picnicking, walking and hiking trails, scenic drives, sledding, tobogganing, and snow skiing. Action by all levels of government and by the private sector must be expanded if the growing future needs of the people are to be met.

"Water resources of the region are limited. The terrain of the Red River Valley is relatively flat and there is limited potential for suitable dam sites. The rich farming land is expensive and may provide greater economic return from agricultural

operations than it would from reservoir impoundments. Much of the demand for water oriented activities by residents of the region is now satisfied in the lake and resort areas close by in Minnesota.

Water oriented recreation developments in adjacent planning regions of North Dakota will play an ever increasing part in the future recreation needs for Planning Region VII, however, consideration should be given to development of feasible water projects within Planning Region VII."

The project is in accord with the state comprehensive outdoor recreation plan and will serve to meet priority needs identified in the plan. It is accorded Bureau of Outdoor Recreation priority designation "A".



John Greenslit
State Liaison Officer - Coordinator

B. Summary of Area

The proposed project is to be located about 35 miles northwest of Fargo in Cass County, North Dakota. Economic Region VII is known for its deficiency of adequate quality water-related outdoor recreation facilities.

Topography is ideal for the installation of a structure to retain a 128 surface acre reservoir for water-related outdoor recreation purposes. A power line in the reservoir area is to be moved and placed underground at an estimated \$6,750 cost. The telephone line along the railroad track will not be in the heavy use area. General layout of the project features contemplates

enhancement of the area's appearance and add to its natural beauty. There are no flooding or pollution problems at the proposed reservoir and recreation area.

C. Outline of Project Features

A \$112,200 dam is planned which will create a 128 acre reservoir with an 11 square mile drainage area, 1,675 acre-feet capacity and 33 feet maximum depth. A detailed cost estimate, design, hydrology, and soils report are included with this proposal. The water has been allocated, by permit of the State Engineer, to recreation.

About 985 acres of land are to be acquired in fee for the reservoir and public use recreation areas adjacent to the reservoir. The estimated land cost is \$86,980. Appraisal reports are included with this proposal. Of the 985 acres, only 213 acres are to be acquired with Bureau of Outdoor Recreation funds with the remainder being acquired by the State Game and Fish Department with Pittman-Robertson and Dingell Johnson funds. The 213 acre area is primarily for intensive use and will be leased to the Rush River Water Management District, project sponsor, by the State Game and Fish Department.

Recreation facilities are to be installed by the Rush River Water Management District for public use activities such as fishing, boating, swimming, picnicking, and playing outdoor games. No charges are anticipated at the project for use of the area for recreational purposes. A detailed cost estimate for the recreation facilities phase of the project is included with this proposal.

In summary, the project phases, their costs and allocations

are as follows:

<u>PROJECT PARTICIPANTS</u>	<u>LAND</u>	<u>DAM</u>	<u>FACILITIES</u>	<u>POWER LINE RELOCATION</u>	<u>TOTAL</u>
Rush River WMD	\$ --	\$17,100	\$ 18,900	\$ 3,375	\$ 39,375
State G & F Dept.	73,680*	--	--	--	73,680
SWC	--	39,000	--	--	39,000
SORA	--	--	5,000	--	5,000
BOR	<u>13,300</u>	<u>56,100</u>	<u>18,900</u>	<u>3,375</u>	<u>96,675</u>
TOTALS	<u>\$86,980</u>	<u>\$112,200</u>	<u>\$47,800</u>	<u>\$ 6,750</u>	<u>\$253,730</u>

* Includes \$60,380 PR-DJ Funds.

D. Organizations and Coordination

During the project formulation process numerous conferences were held among the participating agencies, landowners, and interested citizens. Coordination of each project phase will be continued among all interested entities as acquisition and development activities proceed.

Primary agencies and their responsibilities include:

1. Project Sponsor - Rush River Water Management District
2. Grant Administration - State Outdoor Recreation Agency
3. Land Acquisition - State Game & Fish Department
4. Dam Construction - North Dakota State Water Commission
with contract forces
5. Recreation Facilities - Rush River Water Management
District and State Water
Commission

6. Financing - Bureau of Outdoor Recreation, Rush River Water Management District, State Game & Fish Department, State Outdoor Recreation Agency, and State Water Commission
(State Game & Fish Department to utilize PR-DJ funds for acquiring 682 acres of land for the project)

E. Economic Feasibility

The project will serve a 40 mile radius area with an estimated 120,000 population. Anticipated annual visitations are 40,000 with an assumed economic value of \$1.50 per visitation. Annual operation and maintenance costs are estimated at \$2,500 and depreciation (including land) at \$6,343 for total annual costs of \$8,843. Average annual net economic benefits are estimated at \$51,157.

Assuming the \$253,730 total costs allocated to outdoor recreation were invested and compounded at 4% for 40 years, the estimated project life, we would have a product of \$1,218,163. With net annual benefits of \$51,157 over the project's 40 year life, we would receive \$2,046,280 in economic benefits indicating a benefit-cost ratio of 1.7 to 1.

A project economic feasibility report is included with this proposal (SORA Form 28).

F. Operation and Maintenance

The Rush River Water Management District will operate and maintain the 213 acre project area with technical assistance from the North Dakota State Game and Fish Department and State Water Commission. The area will be open to the public at all times.

Operation and maintenance funds are obtained from ad valorem taxes levied by the Rush River Water Management District and Cass County Park Board which is cooperating with the District in developing this project.

A-D:660-2. MAPS AND CHARTS

A. Included with this project proposal are the following maps and supporting data:

1. State map showing project #9-29 location
2. Design and Hydrology Report
3. Soils Investigation Report
4. Water Permit #1530 and SWC Form 110 -
"Permit for Construction of Dam"
5. SWC Map #6946-1471-3)
#6949-1471-4) "Topography"
#6956-1471-5)
#6957-1471-6)
6. SWC Map #7003-1471-11 "Taking and Ownership"

A-D:660-3. AGREEMENTS

A. The following are included with this proposal:

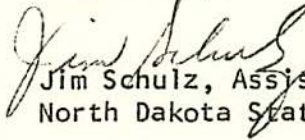
1. Rush River Board of Commissioners' Approval
2. Rush River Water Management District Project Assurances and Civil Rights Act Assurances
3. Cost Participation Agreement among Rush River Water Management District, State Game and Fish Department, State Outdoor Recreation Agency, and State Water Commission

A-D:660-4. PLANS

A. Construction plans for the project are included as follows:

1. SWC Map #6947-1471-4B "Recreation Facilities"
2. SWC Map #6988-1471-7 "Cross Section and Details"
3. SWC Map #6989-1471-8 "Box Outlet and Details"
4. SWC Map #6990-1471-9 "Box Inlet and Details"
5. SWC Map #6991-1471-10 "Log of Test Borings"

Prepared by:



Jim Schulz, Assistant Secretary
North Dakota State Water Commission

JS:ka

Dist.
SORA (7)
Rush River WMD
Comm. Jungroth
Game & Fish Dept.
SWC (10)

NORTH DAKOTA STATE WATER COMMISSION

OFFICE MEMO

MEMO TO: Milo W. Hoisveen, Chief Engineer
FROM: Delton D. Schulz, Office Engineer and
Dale H. Glover, Hydrologist
SUBJECT: Erie Dam, SWC Project #1471, Design, Hydrology and Dam
Construction Cost Estimate Report
DATE: February 28, 1968

H Y D R O L O G Y

Erie Dam is proposed to be located in Section 20, Township 142 North, Range 53 West in Cass County. The drainage area above the dam site is 11.15 square miles. Indications are that the average annual yield of the drainage area would provide reservoir inflow of approximately 500 acre-feet per year which should provide a net gain of approximately 400 acre-feet per year.

The length of the river channel from its head waters to the dam site approximates 6.8 miles. The total fall within this distance is 130 feet.

A rainfall of 50 year frequency on the area would approximate 3.1 inches falling in a 2.8 hours period. The computed design inflow hydrograph has a peak of 1,647 cubic feet per second and a total volume of 318 acre-feet which is equal to a runoff depth of 0.54 inches from the contributing drainage area of 11.15 square miles.

Computations developed for the maximum design flows as well as a graphical presentation of the inflow-outflow hydrograph are attached.

D E S I G N

A compacted earthfill embankment with 3:1 upstream slope, 2:1 downstream slope and 12 foot wide top is proposed. The embankment will also incorporate a core trench at the base to limit seepage. Also included will be a toe drain. The upstream face of the embankment is to be faced with rock riprap extending from elevation 1148.0 to elevation 1128.0. The crest of the embankment is to be set at elevation 1152.0. The extent of rock riprap proposed was believed

necessary in view of hydrology computations indicating that average annual inflow into the reservoir the first year after construction would only fill the reservoir to elevation 1130.0. This hopefully will preclude erosion of the embankment during early filling of the reservoir.

The service spillway proposed consists of a 4.0' x 4.0' x 6.0' reinforced concrete box drop inlet, a 24" reinforced concrete pipe running laterally through the embankment and a 4.5' x 10.0' reinforced concrete outlet structure.

The box drop inlet control elevation is to be established at 1144.0. This is the maximum water surface elevation which could be maintained within the reservoir area due to a railroad grade and other public facilities. The base of the outlet structure is to be established at elevation 1108.0 which is approximately 2 feet below the natural ground line and should effectively control erosion.

Also incorporated in the embankment is a 10" drawdown pipe with gate valve for the purpose of reservoir renovation and conceivably may be utilized for drawdown of reservoir waters for any repairs which may be needed on the structure in the future. The inlet elevation of the drawdown pipe is to be established at elevation 1117.0 and the outlet at elevation 1108.0.

An emergency spillway with a 100' wide bottom width and 4:1 side slopes is to be incorporated in this project as an added safety feature. The emergency spillway is to be vegetated. The crest of the spillway will be set at mean sea level elevation 1146.0.

Computations of storm routing through the reservoir indicates that the maximum water surface attained with a 50 year rainfall storm frequency would be 1146.0. The substantiating data indicates that the factors of safety regarding the proposed structure are more than adequate.

Following are physical features of the dam.

- A. Maximum height of dam embankment - 41.0 feet.
- B. Maximum depth of reservoir at control elevation 1144.0 - 33.0 feet.
- C. Reservoir water surface area at control elevation 1144.0 - 128.0 acres.
- D. Reservoir capacity at control elevation 1144.0 - 1,675 acre-feet.
- E. Drainage area above the dam - 11.15 square miles.


An area capacity curve for the reservoir is attached.

C O S T E S T I M A T E
F O R
D A M C O N S T R U C T I O N

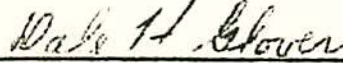
Based on costs for construction of previous projects by the State Water Commission, it is estimated that costs for the construction of the dam solely are as follows:

1. Stripping	7,000 cy @ 30 cents	\$2,100.00
2. Core Excavation	8,540 cy @ 80 cents	6,832.00
3. Embankment (in place yardage)	78,932 cy @ 40 cents	31,572.80
4. 130'-24" RCP including cable ties, anti-seep, etc.	@ \$20.00	2,600.00
5. Concrete	20 cy @\$150.00	3,000.00
6. Steel rebar	1,567.42# @ 20 cents	314.00
7. Gravel base	1,050 tons @\$3.00	3,150.00
8. Rock Riprap	3,210 Tons @\$6.00	19,260.00
9. Seeding	7 acres @\$100.00	700.00

10.	Guard Rail	Lump Sum	\$ 250.00
11.	Drawdown Pipe, 210', 10" Helically corrugated 10 gage (complete with gate valve and valve box, anti- seep collars and track rack)	Lump Sum	3,500.00
12.	Gravel for toe drain	4,000 tons @\$3.00	12,000.00
13.	Inlet vent pipe	Lump Sum	<u>150.00</u>
	Total Contract Costs		<u>\$ 85,428.80</u>
	Contingencies		\$ 8,571.20
	Engineering		<u>8,000.00</u>
	Sub-Total		\$102,000.00
	10% Indirect Costs		<u>10,200.00</u>
	Total		<u>\$112,200.00</u>



Delton D. Schulz
Office Engineer



Dale H. Glover
Hydrologist

DDS:DHG:jd

Dist.
MWH
A I G
DDS
JS
Sponsors

Erie Reservoir

Dam in 20-142-53 on Trib. to Rush R.

$$D. A. = 11.15 \text{ sq.mi.}$$

$$\text{Length} = 6.8 \text{ mi.}$$

$$\text{Fall} = 1245 \text{ ft.} - 1115 \text{ ft.} = 130' = H$$

$$T_c = \frac{2.47L^{1.15}}{H^{0.385}} = \frac{2.47 \times 6.8^{1.15}}{130^{0.385}} = \frac{2.47 \times 9.1}{6.5} = 3.5 \text{ Hours}$$

$$\text{Runoff Factor} = \frac{0.25}{T_c^{0.284}} = \frac{0.25}{1.43} = 0.175 = C$$

$$P/T_c = P/3.5 = 0.20 \text{ (=20\%)}, \text{ Use 20\% Model}$$

$$P = 3.5 \times .20 = 0.70 =$$

$$\text{Use 4 periods; Duration} = 4 \times .70 = 2.80 \text{ Hrs.}$$

$$50\text{-yr, } 2.8 \text{ hr. rainfall} = 3.1 \text{ inches}$$

$$R.O. = 0.175 \times 3.1 = 0.54 \text{ in.}$$

$$M = \frac{DA}{T_c} = \frac{11.15}{3.5} = 3.19$$

$$D = M \times R.O. = 3.19 \times 0.54 = 1.72$$

Period	1st	2nd	3rd	4th	Total
Distribution	36	36	19	9	100%
D(each period)	0.62	0.62	0.33	0.15	1.72

50-year Frequency Inflow: 1647 cfs, 318 Ac.Ft.

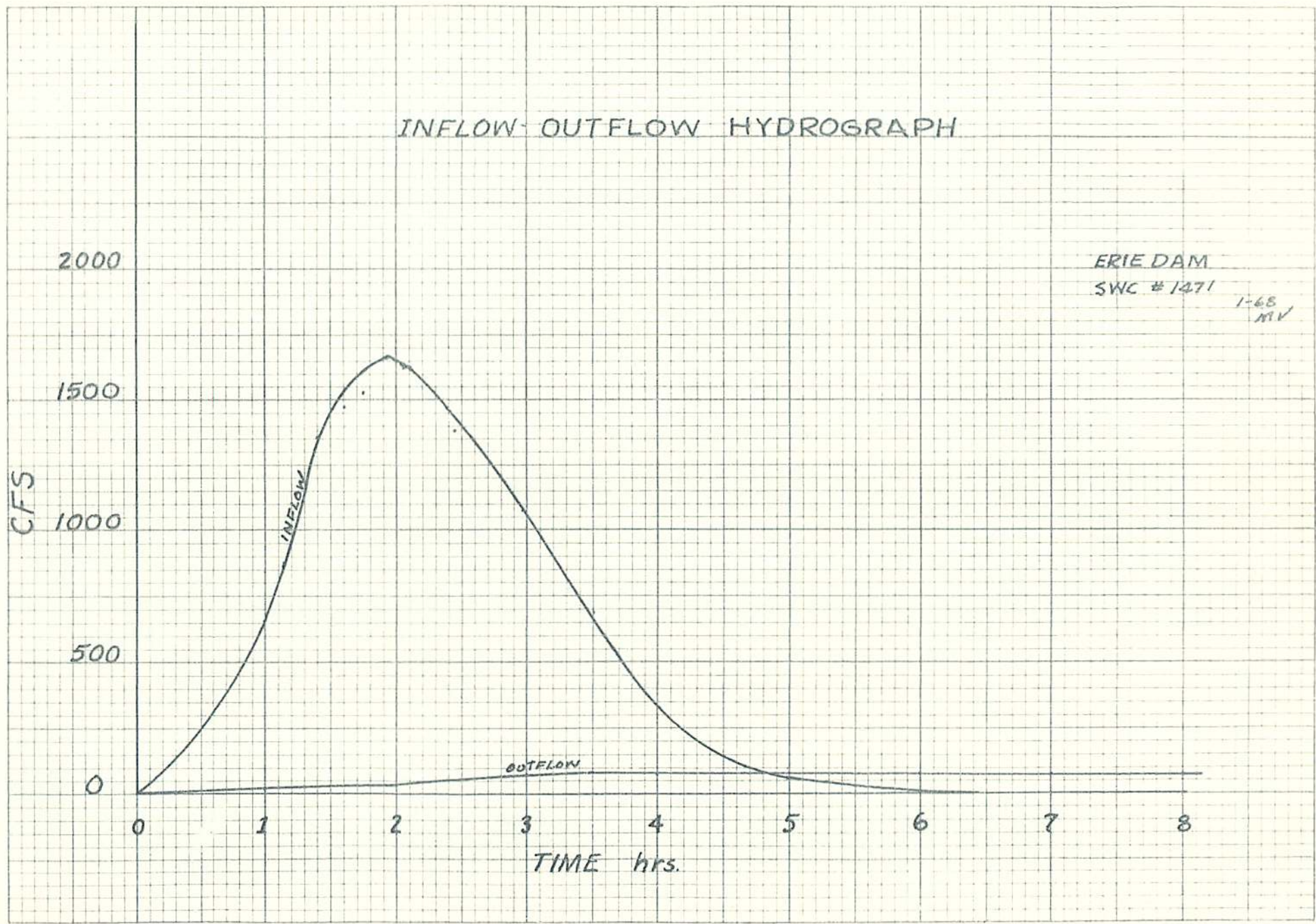
Erie Dam #1461

Time, % T _c	1st Per. D = .62	2nd Per. D = .62	3rd Per. D = .33	4th Per. D = .15	Total c.f.s.
0	0	(0=20%)	(0=40%)	(0=60%)	0
5	17				17
10	62				62
15	157				157
20	372	0			372
25	645	17			662
30	860	62			922
35	985	157			1142
40	960	372	0		1332
45	828	645	9		1482
50	635	860	33		1528
55	578	985	84		1647*
60	465	960	197	0	1622
65	363	828	344	4	1539
70	272	635	458	15	1380
75	200	578	525	38	1341
80	150	465	510	90	1215
85	116	363	440	156	1075
90	95	272	338	208	913
95	76	200	308	238	822
100	54	150	248	232	684
105	32	116	193	201	542
110	15	95	145	154	409
115	4	76	106	140	326
120	0	54	80	112	246
125		32	62	88	182
130		15	51	66	132
135		4	40	48	92
140		0	29	36	65
145			17	28	45
150			8	23	31
155			2	18	20
160			0	13	13
165				8	8
170				4	4
175				1	1
180				0	0
			Total		22,030

* Max. disch. = 1647 c.f.s. = 148 c.f.s./sq.mi.
 Time Intervals = .05 T_c = .05 x 3.5 = .175 hr.
 .175 x 22030 = 3855 Hr.Sec.Ft. = 318 AF
 0.54 in. R.O. x 11.15 sq.mi. x 53.33 AF = 321 AF (Ok)

INFLOW-OUTFLOW HYDROGRAPH

ERIE DAM
SWC # 1471
1-68
MV



NORTH DAKOTA STATE WATER COMMISSION

PRELIMINARY COST ESTIMATE
 ERIE FISH DAM AND RECREATION AREA

SWC Project #1471

August 27, 1968

<u>Item</u>	<u>Number</u>	<u>Estimated Unit Cost</u>	<u>Estimated Total Cost</u>
1. Picnic Area			
a. Table	40	\$ 50	\$ 2,000
b. Shelter	3	1,500	4,500
c. Community Shelter	1	3,000	3,000
d. Fireplace	20	60	1,200
e. Trash Receptacle	20	20	400
f. Comfort Station (double)	4	1,800	8,200
g. Well and Hand Pump	1	1,000	1,000
2. Play Ground			
a. Swing Set	1	250	250
b. Slide	1	400	400
c. See Saw	1	150	150
d. Sand Box	1	20	20
3. Boating Area			
a. Dock	1	600	600
b. Launch Ramp	1	1,000	1,000
4. Beach Area (Wading Only)			
a. Sand Blanket	1500 CY	1	1,500
b. Bathhouse & Restroom (Combination)	1	3,000	3,000
c. Float Line	1	100	100

<u>Item</u>	<u>Number</u>	<u>Estimated Unit Cost</u>	<u>Estimated Total Cost</u>
5. Access Road and Parking Areas			
a. Excavation	5,000 CY	\$.50	\$ 2,500
b. 18" X 40' C.M.P.	4	4.00	640
c. Motor Patrol	24 hrs.	15.00	360
d. Road Gravel	500 CY	1.50	750
e. Barriers	100	4.00	400
6. General Area Development			
a. Trees, Shrubs & Landscaping		LUMP SUM	1,000
b. Fencing	5 mi.	1,000	5,000
c. Signs		LUMP SUM	<u>1,530</u>
	SUBTOTAL		\$39,500
	Engineering		3,950
	Indirect Costs		<u>4,350</u>
	TOTAL		<u><u>\$47,800</u></u>

KS:ps

DIST:
MWH
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NORTH DAKOTA STATE OUTDOOR RECREATION AGENCY
 Project Economic Feasibility Report
 Benefit-Cost Ratio

PROJECT NAME Erie Dam and Recreation Complex
 LOCATION-COUNTY Cass SORA # 9-29

I. BASIC DATA

A. Radius of Anticipated Use 40 miles
 B. Population Within Use Area 120,000
 C. Anticipated Annual Visitations 40,000
 D. Investment (include land) \$ 253,730 *
 *includes \$60,380 PR-DJ Funds
 E. Estimated Life of Facilities 40 years

II. ANNUAL COSTS

F. Operation and Maintenance \$ 2,500
 G. Depreciation ($D \div E$) \$ 6,343
 H. Total Annual Costs (F + G) \$ 8,843

III. ANNUAL BENEFITS

J. Assumed Value Per Visitation \$ 1.50
 K. Estimated Annual Benefits (J x C) \$ 60,000
 L. Average Net Benefits (K - H) \$ 51,157

IV. BENEFIT-COST RATIO

M. Factor for value of 1 compounded
 at 40 years @ 4 % = (factor) 4.80102063
 (Standard factor for 30 years @ 4%
 = 3.24339751)
 N. Product of Investment (D x M factor) \$ 1,218,163
 P. Total Benefits (L x E) \$ 2,046,280
 Q. Benefit-Cost Ratio (P ÷ N) 1.7:1

To support D-660-1E Economic Feasibility

NORTH DAKOTA STATE WATER COMMISSION

OFFICE MEMO

MEMO TO: Milo W. Hoisveen, Chief Engineer
FROM: Arland C. Grunseth, Investigation Engineer
SUBJECT: Soils Investigation, Erie Dam, SWC Project #1471
DATE: September 19, 1967

A subsurface foundation and borrow area investigation was completed at proposed subject dam during the week of September 4-8. A total of eight test borings were drilled and tested by Lake Agassiz Testing. The test borings were drilled on or about the proposed centerline of the dam as shown on the site topog. In addition to the foundation borings, test holes were also drilled adjacent to the dam site for purposes of embankment exploration.

Four test borings drilled on the coulee floor indicate near uniform soil conditions, consisting of thin beds of clay and silt in the upper portion, alluvium in the middle portion, and glacial till in the lower portion. Clay and silt probably constitute more than 70 to 75 percent of the till so that it is very compact and relatively impermeable. Therefore, this lower zone will provide an ideal soil foundation for the core trench bottom.

The zone that may give us considerable trouble in the excavation of the core trench is the middle portion of the soil foundation. This stratum consists of brown to gray non-plastic sands in a loose state. It consists essentially of water impregnated and saturated very fine sands. It averages eight feet in thickness and extends across the entire floor of the valley.

It appears that the pore water within this stratum may be under pressure. While drilling through this zone a fine sand suspension continued to flow, resulting in a "quicksand" condition. This saturated fine sand under pressure caused a continuous flow or caving action within the entire depth of the sand stratum. Upon completion of each boring, the water level and depth to cave-in were measured. Upon review of the above data, all final water levels and depth to cave-ins were recorded within the saturated fine sand zone.

The question then arises; "is this condition very small in areal extent where a core trench would pose no problem, or is it of such magnitude that a dewatering system in conjunction with the core trench would be required?"

I discussed the above with Milton Lindvig, and although we did not arrive on any specific answer or conclusion to the above problem, we did agree that a trench excavation might warrant some consideration. A trench excavation near one or two of the more critical test borings would provide some valuable information providing the slopes remained stable and very little flow action occurred. However, if the walls started caving and an upward flow of water developed in the bottom of the excavation, then the core trench would be entirely useless.

In the event the dam is constructed during a dry year the saturated sand condition may not pose too much of a problem. If the slopes remain stable and no major upward flow of water occurs, the contractor may be able to muck out the trench and fill as he goes. However, in a wet year without a well point system, rapid seepage through the side slopes could result in sloughing and general instability, plus a major upward flow of water in the bottom of the core trench excavation.

As previously mentioned, test holes were drilled adjacent to the dam site for possible embankment material. The proposed borrow area and location of test holes will be shown on the reservoir topog.

The soil encountered in the borrow area is predominantly an inorganic clay (glacial till) of low to medium plasticity within the CL soil group. Of the fine grained soils, the CL soil group is best adapted for embankment construction. Therefore, it appears that the borrow material should offer good to excellent workability as construction material. Proctor densities will probably range from 105 to 115 lbs. cu. ft. and optimum moistures from 15 to 18 percent.

Dist.
SWC Proj. No. 1471
SWC Acct.

SWC Proj. No. 1471

AGREEMENT CONSTRUCTION OF WORKS

1 ea. Proj. Participant
G&F, Rush River WMD, &
SORA

THIS AGREEMENT is entered into by and between:

(1) The North Dakota State Water Commission, hereinafter referred to as the Commission, acting by and through, Milo W. Hoisveen, Secretary and Chief Engineer;

(2) The State Game & Fish Department, hereinafter referred to as the Department, acting by and through Russell Stuart, Commissioner;

(3) The State Outdoor Recreation Agency, hereinafter referred to as the Agency, acting by and through Milo W. Hoisveen, Executive Officer;

(4) The Rush River Water Management/District, hereinafter referred to as the District, acting by and through Ken McIntyre, Chairman.

I. PROJECT, LOCATION AND PURPOSE

WHEREAS, the parties to this Agreement propose to construct the following:

Erie Dam and Recreation Complex, SORA Project #9-29

hereinafter referred to as the Project, located in Section 20, Township 142 North, Range 53 West, Cass County, North Dakota, the purpose of which is to provide a water-based outdoor recreation area and facilities

NOW, THEREFORE, IT IS AGREED:

II. DRAWINGS AND SPECIFICATIONS

That the Project will be constructed in accordance with drawings and specifications of the Commission, approved by Department, Agency, and District

with drawings and specifications, detailed maps and plans of dam and recreation area referred to as SWC Project #1471

are by this reference made a part of this Agreement to the same force and effect as if they were incorporated into the body of this Agreement.

III. COSTS AND ALLOCATIONS

That the estimated cost of the various Project elements and their allocation to the Project participants shall be as follows:

A. Preliminary Engineering and Investigations - - - - - Total Estimate \$

1. North Dakota State Water Commission	- - - - -	\$	_____	or	_____	%
2. _____		\$	_____	or	_____	%
3. _____		\$	_____	or	_____	%
4. _____		\$	_____	or	_____	%
5. _____		\$	_____	or	_____	%
B. Land and/or Easement Acquisition				- Total Estimate	\$	<u>86,980</u>
1. North Dakota State Water Commission	- - - - -	\$	--	or	_____	%
2. Department (\$13,300 State - \$60,380 PR&DJ)		\$	73,680	or	_____	%
3. Agency		\$	--	or	_____	%
4. District		\$	--	or	_____	%
5. Bureau of Outdoor Recreation		\$	13,300	or	_____	%
C. Construction of Main Works				- Total Estimate	\$	<u>112,200</u>
1. North Dakota State Water Commission	- - - - -	\$	39,000	or	_____	%
2. Department		\$	--	or	_____	%
3. Agency		\$	--	or	_____	%
4. District		\$	17,100	or	_____	%
5. Bureau of Outdoor Recreation		\$	56,100	or	_____	%
D. Construction of Appurtenant Works Recreation Facilities				- Total Estimate	\$	<u>47,800</u>
1. North Dakota State Water Commission	- - - - -	\$	--	or	_____	%
2. Department		\$	--	or	_____	%
3. Agency		\$	5,000	or	_____	%
4. District		\$	18,900	or	_____	%
5. Bureau of Outdoor Recreation		\$	23,900	or	_____	%
E. Other Items Power Line Relocation				- Total Estimate	\$	<u>6,750</u>
1. North Dakota State Water Commission	- - - - -	\$	--	or	_____	%
2. Department		\$	--	or	_____	%
3. Agency		\$	--	or	_____	%
4. District		\$	3,375	or	_____	%
5. Bureau of Outdoor Recreation		\$	3,375	or	_____	%
F. Total Project Costs and Allocations					\$	<u>253,730</u>
1. North Dakota State Water Commission	- - - - -	\$	39,000	or	_____	%

2. Department \$ 73,680 or _____ %
3. Agency \$ 5,000 or _____ %
4. District \$ 39,375 or _____ %
5. Bureau of Outdoor Recreation \$ 96,675 or _____ %

That all parties shall provide the others with cost statements within 30 days after the Project's completion and settlements shall be made within 30 days of receipt of said statements.

IV. TITLE TO LANDS AND/OR EASEMENTS

That title to all lands and/or easements for the Project shall be purchased in the name of Department
by the Department
and recorded in the County Register of Deeds office wherein the Project is situated.

V. OPERATION AND MAINTENANCE

That the District and Department shall operate and maintain the Project
in accordance with rules and regulations prescribed by the Department, Agency and Commission.

VI. INDEMNIFICATION

That the District does hereby accept responsibility for,
and holds the Commission and the Agency and Department
harmless from, all claims and damages to public or private properties, rights, or persons arising out of the construction,
operation, and maintenance of the Project. In the event a suit is initiated or judgment entered against the Commission or
Agency and Department the District
shall indemnify them for any settlement arrived at or judgment satisfied.

VII. CHANGES IN RESPONSIBILITIES

That changes in any responsibilities of the parties hereto or conditions herein stated will not be effective or binding
unless such changes or conditions are made in writing, signed by the parties concerned and attached hereto.

VIII. OTHER STIPULATIONS

1. 682 acres of land are to be acquired by the Department of DJ-PR funds.
2. Bureau of Outdoor Recreation cost participation is contingent upon approval by that Agency.
3. The District will obtain a lease from the Department for operation and maintenance of the 2/3 acre tract planned for intensive use.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement the day and year indicated below.

<p>WITNESS:</p> <p><u>Jim Schultz</u></p> <p><u>Karen Anderson</u></p> <p><u>Jim Schultz</u></p> <p><u>Richard Hahn</u></p>	<p>DATE:</p> <p><u>12/19/68</u></p> <p><u>12-24-68</u></p>	<p>NORTH DAKOTA STATE WATER COMMISSION</p> <p>By: <u>Milo W. Hoisveen</u> Secretary and Chief Engineer</p> <p>STATE GAME AND FISH DEPARTMENT</p> <p>By: <u>Russell W. Stewart</u> Commissioner</p> <p>STATE OUTDOOR RECREATION AGENCY</p> <p>By: <u>Milo W. Hoisveen</u> Executive Officer</p> <p>RUSH RIVER WATER MANAGEMENT DISTRICT</p> <p>By: <u>Jim W. Dwyer</u> Chairman</p>
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NORTH DAKOTA STATE OUTDOOR RECREATION AGENCY
1301 STATE CAPITOL
BISMARCK, NORTH DAKOTA

()
() SORA PROJECT NO. _____
() DATE RECEIVED _____
() PRIORITY _____
()

APPLICANT Rush River Water Management District AGENCY Dist.
c/o Ken McIntyre, Chairman SORA SWC #1471
Harwood, North Dakota 58042 ADDRESS Rush R.WMD
PROJECT IS LOCATED IN Cass COUNTY

PROJECT IDENTIFICATION: TITLE Erie Dam & Recreation Complex SORA NO. 9-29
LEGAL DESCRIPTION: _____ SEC. 20 TWP 142 RGE 53

SCOPE OF PROJECT: Acquire 213 acres of land in fee; construct a dam creating a 1675 acre-foot reservoir with a 128 acre surface area and 33 feet maximum depth; and install facilities for fishing, swimming, boating, picnicking and playing outdoor games.
TO BE STARTED 4-1 19 69 TO BE COMPLETED 12-31 1970

IN SUBMITTING THIS PROJECT PROPOSAL Rush River Water Management District
(Name of Applying Agency)

HEREBY CERTIFIES THAT:

- A. No financial assistance has been given or promised under any other Federal program or activity with regard to this proposed project.
- B. The Applicant responsible for the proposed project has the ability and the intention to finance its share of the project.
- C. The Applicant accepts the obligation to comply with applicable laws, rules and regulations in effect at the time of the award and to the further terms and conditions of the Bureau of Outdoor Recreation Manual in effect at the time of the award.
- D. Property acquired under this program will be placed in use as an outdoor recreation facility and will be retained for such use in perpetuity or otherwise as provided and agreed to in the project agreement. Prior approval of the North Dakota State Outdoor Recreation Agency will be obtained before any other disposal is made of such property.
- E. The Applicant has the intent and ability to finance the operation and maintenance of the facility being developed for so long as is required.
- F. No foreign uses of such property, other than those described in the proposal will be permitted unless approved in advance by the North Dakota State Outdoor Recreation Agency. In the event foreign use is made of such project the Applicant shall, within one year of such foreign use, reimburse the North Dakota State Outdoor Recreation Agency the cost of the project, less the amount of such cost paid by the Applicant.
- G. If for any reason it shall become necessary for any department or agency of the State of North Dakota to expend State funds in order to fulfill any obligations which the Applicant has agreed to perform in the construction and maintenance of this project, the Applicant shall, within a one year period, reimburse the State department or agency the amount of funds expended for such maintenance or operation.
- H. The Applicant understands that qualification of this project proposal by the North Dakota State Outdoor Recreation Agency does not in itself constitute an obligation or award of requested funds and does not guarantee that funds will necessarily be made available for the project.
- I. The Applicant will supply development specifications and detailed plans to the North Dakota State Outdoor Recreation Agency as requested to do so by the Executive Officer of the Agency.
- J. The Applicant shall, within thirty days after completion of the project, submit to the North Dakota State Outdoor Recreation Agency a certified and itemized statement of its expenditures made in connection with the project, and shall, upon request, make all financial records available to the North Dakota State Outdoor Recreation Agency at any time.

SUBMITTED BY Rush River Water Management District APPLICANT
(Name of Applying Agency)

Ken McIntyre TITLE Chairman DATE 12/19/68
(Authorized Representative)
Debra E. Fisher TITLE Secretary DATE 12/19/68
(Authorized Representative)

(Authorized Representative) TITLE _____ DATE _____

U.S. DEPARTMENT OF THE INTERIOR
ASSURANCE OF COMPLIANCE
(TITLE VI, CIVIL RIGHTS ACT OF 1964)

Rush River Water Management District (hereinafter called "Applicant-Recipient")
(Name of Applicant-Recipient)

HEREBY AGREES THAT IT will comply with Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and all requirements imposed by or pursuant to the Department of the Interior Regulation (43 CFR 17) issued pursuant to that title, to the end that, in accordance with Title VI of that Act and the Regulation, no person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Applicant-Recipient receives financial assistance from Bureau of Outdoor Recreation and

Bureau or Office

Hereby Gives Assurance That It will immediately take any measures to effectuate this agreement.

If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the Applicant-Recipient by Bureau of Outdoor Recreation, This assurance obligates the

Bureau or Office

Applicant-Recipient, or in the case of any transfer of such property, any transferee for the period during which the real property or structure is used for a purpose involving the provision of similar services or benefits. If any personal property is so provided, this assurance obligates the Applicant-Recipient for the period during which it retains ownership or possession of the property. In all other cases, this assurance obligates the Applicant-Recipient for the period during which the Federal financial assistance is extended to it by—
Bureau of Outdoor Recreation

Bureau or Office

THIS ASSURANCE is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property discounts or other Federal financial assistance extended after the date hereof to the Applicant-Recipient by the bureau or office, including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The Applicant-Recipient recognizes and agrees that such Federal financial assistance will be extended in reliance on the representations and agreements made in this assurance, and that the United States shall reserve the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant-Recipient, its successors, transferees, and assignees, and the person or persons whose signature appear below are authorized to sign this assurance on behalf of the Applicant-Recipient.

12-19-68
DATED

RUSH RIVER WATER MANAGEMENT DISTRICT
APPLICANT-RECIPIENT

Erie Dam & Recreation Complex

By *X*

Ken McIntyre
(President, Chairman of Board or Comparable
authorized Official)

Ken McIntyre, Chairman
Rush River Water Management District
Harwood, North Dakota 58942
APPLICANT-RECIPIENT'S MAILING ADDRESS

DO NOT COMPLETE THIS SIDE OF FORM — THIS SIDE FOR USE OF STATE ENGINEER

CONDITIONAL PERMIT

This is to certify that I have examined the foregoing application and hereby approve the same subject to prior water rights. The acre-feet is subject to modification by the State Engineer. ~~Failure to comply with any order of the State Engineer may result in forfeiture of water right.~~ (If denied state reason, if approved state condition, if any, to approval)

The amount of water to be appropriated shall be limited to the amount that can be used beneficially, not to exceed 1660 acre feet each year for storage plus 390 acre-feet annually

1. Date of priority March 14, 1968
2. Date of hearing on application April 8, 1968
3. Date of approval by State Water Conservation Commission May 14, 1968
4. Construction to be initiated on or before -
5. Construction to be completed on or before -
6. Water shall be beneficially used on or before December 31, 1972

WITNESS my hand and seal this 20th day of May, 19 68.

Milord H. Hansen
State Engineer
Secretary, State Water Conservation Commission

W.R. 530
SWC # 1471

Permit No. _____

APPLICATION FOR PERMIT TO CONSTRUCT OR ENLARGE A DAM OR RESERVOIR

TO: Chief Engineer
North Dakota State Water Commission
Bismarck, North Dakota

River Water Management District

I, LEE M. JARRE, Chairman, Rush, the undersigned, do hereby apply for a permit to construct or enlarge a dam as indicated below and according to specifications shown on this and attached sheets:

1. Location: County Cass ERIE EXIST DAM
Legal description to nearest forty acre tract: SE 1/4 Sec. 20 Twp. 142 N., Rge. 53 W.
2. Purpose: Recreation
3. Data
Drainage Area Above Dam 11.2 Square Miles
Type of Dam Rolled Earth
Type and Size of Spillway Glory Hole 4' x 4' Box 24" RCP Conduit
Type and Size of Emergency Spillway Cut Earth 100' wide
Type and Size of Gate Reservoir Control Structure _____
Invert Height above Stream Bed of Control Structure _____
Height of Spillway above Stream Bed 32 feet
Surface Area of Reservoir at Spillway Crest 130 acres
Computed Reservoir Capacity at Spillway Crest Elevation 1660 acre feet

4. Water course on which dam is to be located is a tributary to: Red River of the North

5. Will flows presently available to downstream riparian land owners be depleted? No If so, to what extent?
Drawdown pipe available at Elevation 1115

6. Downstream landowners who might be deprived of use of water by construction of the dam are _____

7. Is the dam and impounded water on the owners land? _____
(If the answer is no, proof of easement from other owner must be filed with application.)

8. For an enlargement of an existing dam, answer the following:
Why is enlargement necessary? _____

Year dam was constructed _____ By what agency _____
Total yardage in existing dam _____

9. The dam will be built under the supervision of State Water Commission and will conform to data and specifications given above and on the following attached sheets plans on file
(Name or Number of attached data sheet)

10. This dam will be operated in conformance to all state water laws and rules and regulations of the North Dakota State Water Commission.

11. Construction will begin on or before _____, 1968
and will be completed on or before _____, 1968

Date Submitted: March 13, 1968

Signed [Signature]
(Owner of land on which dam is located) Chairman

Address _____

STATE OF NORTH DAKOTA)
COUNTY OF Cass)ss

On this 29th day of February, 1968, before me a Notary Public personally appeared Ken McEntyre, known to me to be the same person who executed the foregoing application for a water right permit and acknowledged to me that he executed the same.

Notary Public, _____ County, N. D.

My Commission Expires _____

It should be recognized that the filing of this application and its approval in no way relieves the landowner from any responsibility or liability for damages from the construction, operation or failure of this structure.

AFFIDAVIT OF DESIGNING AGENCY

The dam and reservoir described in this application and on attached sheets has been designed and approved by the
North Dakota State Water Commission and, if the construction thereof is supervised by this agency, it will be built according to the specifications and data shown in this application and data sheets attached hereto.

Dated this 20th day of May, 1968

North Dakota State Water Commission
(Name of Agency)

Milton W. Anderson
(Address of Agency)

Designing Agency Signed North Dakota State Water Commission

By: _____
Title State Engineer

For use of North Dakota State Water Commission
APPROVAL AND PERMIT

This is to certify that I have examined the foregoing application and hereby approve the same subject to the rules and regulations of the North Dakota State Water Commission and the laws of the State of North Dakota subject to the following conditions:

WITNESS my hand and seal this 20th day of May, 1968

Signed: Milton W. Anderson
Chief Engineer
North Dakota State Water Commission

DISAPPROVAL

This is to certify that I have examined the foregoing application and hereby reject and disapprove the same for the following reasons:

S my hand and seal this _____ day of _____, 19_____

Signed: _____
Chief Engineer
North Dakota State Water Commission

ADJOURNED MEETING OF CASS COUNTY COMMISSIONERS

AUGUST 21, 1968

Chairman Piper called the meeting to order and upon roll call all members were present except Mr. Sutton.

Mr. McKinnon moved and Mr. Savageau seconded that the minutes be approved as corrected. Motion carried.

Several matters were discussed with Al Cousins, Cass County Engineer.

Mr. McKinnon moved and Mr. Erdman seconded that the abatement from Harold Allford, Business Manager of Northwestern College be received, filed, and mailed to the proper subdivision. Motion carried.

Mr. Savageau moved and Mr. McKinnon seconded that the July report from Golden Acres Haven be received and filed. Motion carried.

Rhoda Lee, Cass County Auditor stated that she had received a letter from Carl Rabanus, Barnes Township Chairman, stating that the Barnes Township Precinct #2 has changed from the West Fargo High School to the Main Avenue Grade School next to the West Fargo Bank.

Mr. Erdman moved and Mr. Savageau seconded that Rich Township be allowed to move their polling place from Rich Township Hall to the Page City Hall in the City of Page. Motion carried.

Mr. Erdman moved and Mr. Savageau seconded that the Auditor be authorized to attend the Auditor's Convention at Bismarck North Dakota. Motion carried.

Mr. Savageau moved and Mr. McKinnon seconded that the Short Form Abatements #657 and #658 and #663 through #675 be granted. Motion carried.

Chairman Piper turned the meeting over to Mr. Frank Erdman, Chairman of the County Park Board and the following members were present:

Mr. Savageau
Mr. McKinnon
Mr. Piper
Mr. Erdman
Mr. Joe Peltier of Arthur North Dakota
Mr. Everette Mattson of Casselton North Dakota
Mr. Kenneth Simenson from the State Water Commission
Mr. William Yuill
Mrs. Rhoda Lee

Joe Peltier moved and Mr. Mattson seconded that Cass County authorize the purchasing of land by the State Game and Fish Department for the Erie Dam Project. Motion carried.

Present plans call for \$240,000: \$112,200 for construction, \$90,000 for land acquisition and \$37,800 for a recreational area. The recreational area would include a boating area, a launching ramp and dock, a wading area with bath house, a rest room, 40 picnic tables, 3 small shelters, 1 large shelter, 20 fire places, 20 trash cans, 4 comfort stations, 1 well and a playground with swing, slide and see saw. A parking lot and access road are also proposed. Cass County's share would be about \$40,000.

Joe Peltier moved and Mr. Mattson seconded that the State Water Commission be authorized to send the plans to the Bureau of Outdoor Recreation. Motion carried.

The Board returned to the regular meeting of the County Commissioners.

Mr. Erdman moved and Mr. Savageau seconded that the Chairman and Auditor be authorized to sign the deed to sell Lot 2 Block 8, Original Townsite, City of Page to Harry Umsted. Motion carried.

Mr. McKinnon moved and Mr. Erdman seconded that the Chairman be authorized to correspond with Myril Schoeppach, Fire Chief of Page, to notify him that appropriate action will be taken in the near future concerning the condition of Lot 1 Block 8, City of Page which was declared unsafe, unhealthy, and unsightly.

The Revenue and Expenditures reports for the month of July were reviewed.

On motion by Mr. Savageau, seconded by Mr. McKinnon, the Chairman declared the meeting adjourned.

RHODA LEE
CASS COUNTY AUDITOR
FARGO, NORTH DAKOTA