



WATER-RIGHT DOCKET

Lake Roosevelt National Recreation Area

Docket No: 8

PORCUPINE BAY CAMPGROUND WELL SUPPLY.

Preliminary Docket Information

00-00-0000: water docket information

WATER DOCKET INFORMATION

A R E A COULEE DAM N.R.A.

DOCKET NO. 8

APPLICATION NO. 7144

PERMIT NO. 6862

CERTIFICATE NO. 5052-A

TITLE OF DOCKET PORCUPINE BAY CAMPGROUND

PRIORITY March 3, 1964

REMARKS: Well Supply 100 g.p.m.

Coulee Dam National Recreation Area
Water Right #8
Outline of Assembly - Correspondence

1. Memorandum to Regional Director from Superintendent, September 28, 1960
2. Memorandum to Regional Director from Superintendent, December 27, 1960
3. Memorandum to Regional Director from Superintendent, January 3, 1961
4. Memorandum to Superintendent from Regional Chief of Operations, January 17, 1961
5. Memorandum to Superintendent from Regional Chief of Land and Water Rights, February 18, 1964
6. Memorandum to Superintendent from Regional Chief, Division of Land and Water Rights, May 19, 1964
7. Memorandum to Regional Director from Superintendent, May 22, 1964
8. Memorandum to Regional Director from Superintendent, June 15, 1964
9. Memorandum to Director from Acting Assistant Regional Director, Operations, June 23, 1964
10. Memorandum to Regional Director from Chief, Branch of Water Resources, July 14, 1964
11. Memorandum to Director from Assistant Regional Director, Operations, August 12, 1964
12. Letter to Hydraulic Engineer from Geologist, Department of Conservation, November 19, 1964
13. Memorandum to Regional Director from Superintendent, November 30, 1964
14. Letter to Geologist, Division of Water Resources from Acting Regional Chief, Division of Land and Water Rights, December 1, 1964
15. Memorandum to Superintendent from Assistant Regional Director, Operations, December 3, 1964
16. Memorandum to Regional Director from Superintendent, December 7, 1964
17. Memorandum to Superintendent from Hydraulic Engineer, December 15, 1964
18. Letter to Superintendent from Supervisor, Department of Conservation, January 1, 1965

19. Letter to Department of Conservation from Acting Superintendent,
January 8, 1965
20. Letter to Superintendent from Supervisor, Department of Conservation,
January 11, 1965
21. Letter to Department of Conservation from Superintendent,
January 27, 1965
22. Memorandum to Superintendent from Acting Regional Chief,
Division of Land and Water Rights, February 11, 1965
23. Memorandum to Regional Director from Superintendent, February 12, 1965
24. Memorandum to Director from Assistant Regional Director,
Operations, February 16, 1965

Ground Water Permit No. 682

**CERTIFICATE OF GROUND
WATER RIGHT**

Recorded in the office of the State Super-
visor of Water Resources, Olympia, Wash-
ington, in Book No. 11 of Ground
Water Right Certificates, on page 5052-A,
on the 2nd day of February
19 65.

STATE OF WASHINGTON,

County of _____

} ss.

I certify that the within was received and
duly recorded by me in Volume _____
of Book of Water Right Certificates, at
page _____, on the _____ day of _____

19

WITNESSED BY ME, the State Supervisor of Water Resources, at _____

*Don Paul Services
National Park Administration
Huntsville, Ala.
Don Paul Services*

S. F. No. 7361-1-54-3M, 83280.

305389

COLLATERAL

CERTIFICATE RECORD No. 11

PAGE No. 5052-A

PAGE 371

STATE OF WASHINGTON, COUNTY OF Lincoln

Certificate of Ground Water Right

Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the State Supervisor of Water Resources thereunder.

THIS IS TO CERTIFY That NATIONAL PARK SERVICE, COULEE DAM NATIONAL RECREATION AREA
U.S. DEPARTMENT OF THE INTERIOR
of Coulee Dam, Washington, has made proof
to the satisfaction of the State Supervisor of Water Resources of Washington, of a right to the use of
the ground waters of a well
located within NE 1/4 SW 1/4
Sec. 29, Twp. 28 N., R. 37 E. W.M.,
for the purpose of domestic supply and irrigation
under and subject to provisions contained in Ground Water Permit No. 6862 issued by the State
Supervisor of Water Resources and that said right to the use of said ground waters has been perfected
in accordance with the laws of Washington, and is hereby confirmed by the State Supervisor of Water
Resources of Washington and entered of record in Volume 11 at page 5052-A;
that the right hereby confirmed dates from March 3, 1964; that the quantity of ground
water under the right hereby confirmed for the purposes aforesaid, is limited to an amount actually
beneficially used for said purposes, and shall not exceed 50 gallons per minute; 7.6 acre-feet
per year for domestic supply and the irrigation of 1 acre for public campground.

Special provisions required by the Supervisor of Water Resources:

A description of the lands to which such ground water right is appurtenant:

Porcupine Bay Campground, in Sec. 29, T. 28 N., R. 37 E. W.M.

FILED FOR RECORD	Feb 4
12.5.65	12.5.65
request of	Dept. of Conservation
RECEIVED	Lincoln County
By	M. L. Williams, Deputy

FILED
INDEXED
COMPARED
PAGED

The right to the use of the ground water aforesaid hereby confirmed is restricted to the lands or
place of use hereof described, except as provided in Sections 6 and 7, Chapter 122, Laws of 1929.

Witness the seal and signature of the State Supervisor of Water Resources affixed this
day of February, 1965.

State Supervisor of Water Resources.

Revised—Jan—Feb. 1967, O.S.

Proof of Appropriation of Water

Application No. 7144

Permit No. 6862

1. Name of Permittee Coulee Dam National Recreation Area
2. Postoffice address Box 37, Coulee Dam, Washington 99116
3. Source of appropriation Well
4. Name or number of works (if any) None
5. For what purpose or purposes is water used? Domestic supply (campground) and irrigation.
6. Give date of beginning of construction August 3, 1960
7. Give date of completion of construction work, including water distribution system September 15, 1960
8. Give date when water was completely applied to proposed use September 15, 1960
9. If used for irrigation:

Give number of acres described in permit 0.70

Give number of acres actually irrigated --
10. If used for power: HP actually developed None
11. LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED:

SW 1/4 of Sec. 29., T. 28 N., R. 37 E., W.M.

How Acres Port of the above described?

N/A

12. During what months is water used? April through October
13. Does map filed with your application show correctly the location of well or point of diversion for withdrawal of water, and area of land where water is used? Yes
14. If the dimensions, location or type of structure do not correspond to those described in your permit, state what changes have been made, giving dimensions, etc. N/A
15. Actual measured discharge or diversion of permanent system: 100 (gpm or cfs)

(Sign certification on reverse side)

STATE OF WASHINGTON,

County of Okanagan } ss.

I, Harmer W. Robinson, being first duly sworn, depose and say that I have read the above and foregoing proof of appropriation; that I know the contents thereof; and that the facts therein stated are true.

IN WITNESS WHEREOF, I have hereunto set my hand this 26th day of January, 1965

Harmer W. Robinson

Subscribed and sworn to before me this 26 day of Jan, 1965

Velma M. Hargrave
Notary Public.



STATE OF WASHINGTON
Department of Conservation

EARL COE, DIRECTOR
335 GENERAL ADMINISTRATION BUILDING
OLYMPIA

January 11, 1965

DIVISIONS:
RECLAMATION
FLOOD CONTROL
WATER RESOURCES
MINES AND GEOLOGY
COLUMBIA BASIN PROJECT
POWER RESOURCES
WEATHER MODIFICATION

U.S. Department of the Interior
National Park Service
Coulee Dam National Recreation Area
Coulee Dam,
Washington

Gentlemen:

Porcupine Bay Campground
Re: G. W. Permit No. 6862

We acknowledge receipt of Notice of Completion of Construction under the above numbered permit wherein you state the work is completed.

If you will file the enclosed form as soon as the water has been put to the full use, a final water right certificate may be issued to you. Please enclose the statutory filing and recording fees of \$3.00 payable to the Department of Conservation and \$ 2.00 made out to the Lincoln County Auditor.

Please send two separate checks or money orders.

Very truly yours,

DEPARTMENT OF CONSERVATION

EARL COE, DIRECTOR

MGW: yw
Enc.

M. G. Walker
M. G. WALKER, Supervisor
Division of Water Resources

L 54

Coulee Dam National Recreation Area
Coulee Dam, Washington 99116

January 8, 1965

RECEIVED		
NPS Western Regional Office		
JAN 11 '65		
	Surname	Date
Reg. Div.		
Asst. R.D. (AD)		
Asst. R.D. (OP)		
Asst. R.D. (CA)		
Asst. to R.D. (PA)		
Sp. Asst. (Gen)		
Sp. Asst. to R.D.		
R. S. Addison		

Morris

State of Washington
Department of Conservation
335 General Administration Building
Olympia, Washington

Gentlemen:

Enclosed are Notice of Completion of Construction forms
for the following permits:

Public Water Permit No. 13673
Public Ground Water Permit No. 6861
" " " " 6862 ✓

Very truly yours,

Charles P. Woodbury
Acting Superintendent

Enclosures-3

cc:
Western Region w/copies Notice of Completion of Construction,
Dept. of Cons. letter 12/28/64
Instructions
Permits



ALBERT D. ROSELLINI
GOVERNOR

STATE OF WASHINGTON

Department of Conservation

ROY MUNDY, DIRECTOR

335 GENERAL ADMINISTRATION BUILDING
OLYMPIA

January 1, 1965

DIVISIONS:
RECLAMATION
FLOOD CONTROL
WATER RESOURCES
MINES AND GEOLOGY
COLUMBIA BASIN PROJECT
POWER RESOURCES
WEATHER MODIFICATION

RECEIVED
JAN 3 1965
C.E.R.A.

National Park Service
Cpulee Dam National Recreation Area
Porcupine Bay Campground
Coulee Dam, Washington

Gentlemen:

Enclosed is Permit No. 6862 issued to you under
Application No. 7144. As the examination report
of our inspector indicates that you have already begun
construction on your project, we are enclosing a
Notice of Completion of Construction. Please file this
notice when you have finished the work.

Please read carefully the instruction sheet as well as both
sides of your copy of the permit.

Very truly yours,

DEPARTMENT OF CONSERVATION

ROY MUNDY, DIRECTOR

MGW: YW
Enc.

M. G. Walker
M. G. WALKER, Supervisor
Division of Water Resources

STATE OF WASHINGTON
DEPARTMENT OF CONSERVATION
DIVISION OF WATER RESOURCES

Permit to Appropriate Public Ground Waters of the State of Washington

Book No. 14 of Ground Water Permits, on page 6862 under Application No. 7144
U.S. DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE, COULEE DAM NATIONAL RECREATION AREA
of Coulee Dam, Washington

is hereby granted a permit to appropriate the following described public ground waters of the State of Washington, subject to existing rights, and to the limitations and provisions set out herein.

Priority date of this permit is March 3, 1964

Source of the proposed ground water appropriation is a well
within _____ area, _____ sub-area
_____ zone. Name or number of works is _____

Quantity of water appropriated shall be limited to the amount which can be beneficially applied and not to exceed 50 gallons per minute; 7.6 acre-feet per year, to be used for the following purposes: domestic supply and irrigation for public campground
as more definitely set out below.

Location of the well tunnel or infiltration trench is 1700 feet north and 125 feet east
from south quarter section of Sec. 29
being within NE 1/4, Sec. 29, T. 22 N., R. 17 E., N.M.
county of Lincoln

Use, or uses to which water is to be applied:

For municipal supply _____ gallons per minute; _____ acre-feet per year,
to supply _____

For irrigation _____ gallons per minute; _____ acre-feet per year,
for the irrigation of _____ acres

For miscellaneous uses _____ gallons per minute; _____ acre-feet per year,
for _____

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

Forouline 1/4, Sec. 29, T. 22 N., R. 17 E., N.M.

DESCRIPTION WORKS FROM WHICH WATER TO BE WITHDRAWN

The well will be drilled and have a diameter of 8 inches, and depth of 185 feet.
(Dug or drilled)

Description of tunnel or infiltration trench:

(Please read carefully provisions below)

Particular specifications required by the Supervisor of Water Resources for the purpose of preventing waste of public waters:

Construction work shall begin on or before Started
and shall thereafter be prosecuted with reasonable diligence and completed on or before January 1, 1966
and complete application of water to proposed use shall be made on or before January 1, 1967

Given under my hand and the seal of this office at Olympia, Washington, this 1st day of January, 1965.

M. Walker
State Supervisor of Water Resources

Report of Examination on Ground Water

Received date March 3, 1964 Date of exam. August 12, 1964 Appli. No. 7114
 National Park Service Area
 Name Coulee Dam National Recreation Area Address Coulee Dam, Washington
 Type of works a well (Project started) Dimensions 8" x 185'
 Progress of works Well drilled - in partial use for two comfort stations and 34 campsites
 Quantity applied for 100 g.p.m. _____ acre-feet per year
 Legal sub. NE 1/4 SW 1/4 Sec. 29 Twp. 28 N. Rge. 37 E.W.M. County Lincoln
 Use Domestic supply and irrigation for public campground
 Irrigation-acreage: Present 0 Planned 1 Feasible 1
 Municipal: Population 350 as of 1970
 Industrial _____
 Time pump will be operated continuously for domestic supply and during irrigation season for irrigation.
 Other water rights appurtenant to this land None known
 Proximity to existing works, springs, wells, or streams Well is 8 feet above and 180 feet distant from the Spokane River Arm of Franklin D. Roosevelt Lake.
 Area _____ Sub-area _____ Zone _____

RECOMMENDATIONS

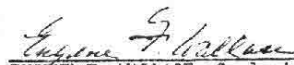
Approved for 50 g.p.m. 7.6 acre-feet per year, subject to existing water rights. (1 acre-foot 325,850 gallons.)

The installation of an access port to well as described in attached Ground Water Bulletin No. 1 is recommended.

On the date of examination the pump house was locked so the equipment presently on the well was not inspected. However, the application states the capacity of the present pump is about 35 gallons per minute. Mr. Homer W. Robinson advised the writer on August 13, 1964 that they intend to put a 50 gallon per minute pump on subject well so the recommended instantaneous withdrawal has been reduced accordingly.

The acre-feet allowance has been based on an average estimated use of 25 gallons per day per person over a 1 1/2 month camping period for a total of 3.6 acre-feet per year for a projected campground population of 350 persons. An allowance of 4 acre-feet annually for the irrigation of 1 acre has been recommended.

Signed at Olympia, Washington
on this 21st day of August, 1964.


 EUGENE F. WALLACE, Geologist
 Division of Water Resources

**NOTICE OF GROUND WATER
RIGHT APPLICATION NO. 7144**
State of Washington Office of
Supervisor of Water Resources
Department of Conservation
Olympia

TAKE NOTICE: that NATIONAL
PARK SERVICE, COULEE DAM
NATIONAL RECREATION AREA
(Porcupine Bay Campground) of
Coulee Dam, Washington, on
March 3, 1964, filed application
for permit to withdraw public
ground waters through a well
situated within NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Sec-
tion 29, Township 28 N., Range
37 E.W.M., in Lincoln County, in
the amount of 100 gallons per
minute, subject to existing rights
continuously, each year for the
purpose of community domestic
supply and during irrigation ses-
son for irrigation.

Any objections must be accom-
panied by a two dollar (\$2.00)
recording fee and filed with the
State Supervisor of Water Re-
sources within thirty (30) days
from June 4, 1964.

Witness my hand and official
seal this 20th day of May, 1964.

(SEAL)
M. G. WALKER
State Supervisor of Water
Resources

(May 28-June 4)

Affidavit of Publication

STATE OF WASHINGTON
COUNTY OF LINCOLN

ss.

Dorothy L. Randall, being first duly sworn on oath deposes and says
that she is the Principal clerk of the Davenport Times
a weekly newspaper. That said newspaper is a legal newspaper and has been
approved as a legal newspaper by order of the superior court in the county in
which it is published and it is now and has been for more than six months prior
to the date of the publication hereinafter referred to, published in the English

language continually as a weekly newspaper at Davenport
Lincoln Co., Washington, and is now and during all of
said time was printed in an office maintained at the aforesaid place of publication
of said newspaper. That the annexed is a true copy of

Notice of Ground Water Right Application No. 7144

as it was published in regular issues (and not in supplement form) of said
newspaper once a week for a period of two consecutive weeks,
commencing on the 28th day of May, 1964,
and ending on the 4th day of June, 1964,
both dates inclusive and that such newspaper was regularly distributed to its
subscribers during all of said period. That the full amount of the fee charged
for the foregoing publication is the sum of \$ 6.30, which amount has
been paid in full, at the rate of \$2.40 a hundred words for the first insertion
and \$1.80 a hundred words for each subsequent insertion.

Dorothy L. Randall
Subscribed and sworn to before me this 4th day
of June, 1964

(SEAL)

W. H. Hall
Notary Public in and for the State of Washington,
Residing at Davenport, Washington.

STATE OF WASHINGTON
DEPARTMENT OF CONSERVATION
Division of Water Resources

Application No. G. W. 7144

(Name of applicant)

(Complete post office address)

(Well, tunnel infiltration trench)

(Give approximate distance and direction from nearest city or town)

(Leave blank)

Sub-area.

(Leave blank)

(Leave blank)

Porcupine Bay Campground

gallons per minute; 175 acre feet per year.

Domestic and irrigation

(Domestic supply, irrigation, municipal, manufacturing, industrial use, etc.)

All Year

Lincoln

(Give distance and bearing from nearest corner of section or legal subdivision)

(Give smallest legal subdivision)

(E. or W.

(b) If within limits of recorded platted property, town or city: Lot....., Block.....

(Give name of play or addition)

(If within town or city, give name)

(c) Show this location on accompanying section plat. Other adequate maps or drawings will be acceptable.

6. DESCRIPTION OF WORKS:

(a) Well will be filled and have a diameter of _____ inches and an estimated depth of 185 feet.
(Bog or drilled)

(b) Tunnels or trenches to be described: (Attach additional sheets if needed for full description.)

(c) Distribution system to be described: 745 feet of 4-inch, and 920 feet of 1-inch lines from pump thru public campground.

(d) If pumps are to be used, give size and type: deep well jet pump, 35 G.P.M. @70-80 P.S.I. operating pressure.

(e) Give capacity and type of motor or engine to be used: electric motor, 3 H.P., single phase, 230 volts, 3480 RPM.

(f) If the location of the well, tunnel, or other works is less than one-fourth mile from a natural stream or stream channel, give the distance to the nearest point on each of such channels and the difference in elevation between the stream bed and the ground surface at the source of development: Well is 8 feet above and 180 feet distant from the Spokane River Arm of Franklin D. Roosevelt Lake.

(g) Ownership of each existing well or other works from which ground water is withdrawn within a radius of one-quarter mile and the distance and direction from well or other works being reported herein:

None within one-quarter mile.

(Name)

(Direction)

(Distance)

(Name)

(Direction)

(Distance)

(Name)

(Direction)

(Distance)

SUPPLY THE FOLLOWING INFORMATION ACCORDING TO USE PROPOSED:

7. For Municipal Supply: To supply the city, town, or public campground ~~community~~ 250-300 in the county of Lincoln, having a present population of 250-300, and an estimated population of 350, in 1970.

8. For Irrigation: Number of acres to be irrigated 1.0 acres.

9. Legal Description of Property on which water is to be used for all purposes other than municipal supply:

(Copy legal description from deed)
(If more space is required, attach separate sheet)

One acre of grass located in the NE 1/4 of Section 29, T. 28 N., R. 37 E., W.M.

(On accompanying plat show location of the existing wells or works)

10. What interest do you have in the above described property?

Administrator

(Owner, lessee, contract buyer, etc.)

11. Do you have any other water rights appurtenant to the above described property? No.

If so, from what source?

12. Construction work will begin on or before June, 1960

13. Construction work will be completed on or before October, 1960

14. Water will be put to complete beneficial use on or before May, 1961

Homer W. Robinson, Superintendent

(Signature of applicant)

15. Name and address of owner of land on which well or works are located:

U. S. Government
Administered by National Park Service

(Name)

(Address)

(Signature of legal landowner)

Signed in the presence of us as witnesses:

(Name)

(Name)

(Name)

(Address of witness)

(Address of witness)

STATE OF WASHINGTON, } ss.
COUNTY OF THURSTON.

This application does not constitute waiver of other rights the United States may have to the same water.

This is to certify that I have examined the foregoing application, together with the accompanying maps and data, and return the same for correction or completion as follows:

In order to retain its priority, this application must be returned to the State Supervisor of Water Resources, with corrections, on or before 19

WITNESS my hand this day of 19

State Supervisor of Water Resources

LWX
USGS Report #969Porcupine BayCODA
Docket #8

Porcupine Bay campground is on the southwest shore of the Spokane River arm, about 10½ miles upstream from the mouth of the Spokane River (fig. 1). The campground is on a terrace remnant which is protected by granitic bedrock to the southeast (fig. 13).

The development of a water supply at Porcupine Bay began about 1956 when a well (not shown on map) was jetted by the National Park Service to a depth of about 25 or 30 feet. Production from this well was considered very good for the hand pump that served the campground area until 1960. At that time the campground was improved and an 8-inch well was drilled to a depth of 190 feet. The log for this well (table 9) indicates that a gravel aquifer underlies 185 feet of generally fine-grained sediments that represent glacial-lake deposition. The well was finished with open-end casing at 189 feet below land surface. It yields 28 gpm, which is adequate for the present needs of the area (1968). At the time the well was drilled, it was test pumped and yielded 60 gpm and had 12 feet of drawdown. Doubtless the aquifer is adequate to meet the future needs of the campground.

A water sample collected in October 1967 (table 2), indicated that the chemical quality of the water was good and the water was only moderately hard.

Pitney Point

Pitney Point picnic area is on the southwest shore of the Spokane River arm of the lake (fig. 14). The area is about 12 miles upstream from the mouth of the Spokane River (fig. 1) and is accessible only by boat.

No water supply exists at Pitney Point at present (1968). The likelihood of a well being productive is about the same anywhere in the campground. Very silty, sandy gravel is exposed at the surface and is probably underlain by silty glacial-lake deposits similar to those at Porcupine Bay and at Fort Spokane. The lake deposits at both Fort Spokane and at Porcupine Bay are underlain by water-bearing gravel. The gravel may also underlie Pitney Point, but present information is inadequate to determine its extent if present.

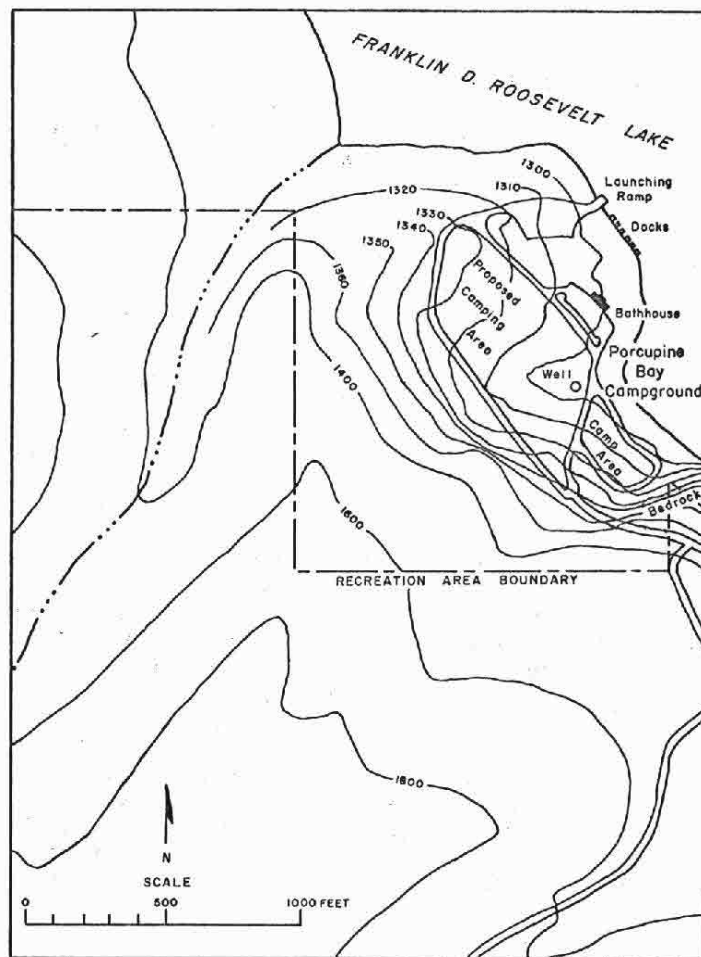


FIGURE 13.--Porcupine Bay campground (No. 12 on fig. 1). Base from USGS quadrangle and NPS developed area plan.

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Director

Lithologic Log of Well Drilled at Porcupine Bay on Lake RooseveltDate Drilled: Aug. - Sept. 1960description by Riley Nichols, Park Ranger

Entire sequence apparently represents glacial deposits of Pleistocene age as indicated by unconsolidated nature of sediments, presence of varves in one of the clays, poor sorting and grain angularity of several of the sands, and generally heterogenous mixture of contained minerals. The clays are probably of glacio-lacustrine origin; the well sorted sands and silts of glacio-fluvial origin. The aquifer and the poorly sorted sands appear to be morainal or outwash deposits. The following log was compiled from well samples taken at 5' intervals.

<u>Bed Nr</u>	<u>Depth below surface</u>	<u>Lithologic Description</u>
1	5'	Brown, fine to medium-grained, poorly sorted, unconsolidated quartz sand with moderately well-rounded grains of quartz (60%), feldspar, and mica flakes. Some grains up to 4mm.
2	10' - 25'	Gray to brown, fine-grained, poorly sorted, unconsolidated quartz sand with moderately well-rounded grains of quartz (70%), glauconite, and feldspar. Some grains up to 8mm.
3	30' - 55'	Gray to tan, very fine-grained, pure, well-sorted, unconsolidated quartz sand with well-rounded grains of quartz (80%), olivene, feldspar and abundant flakes of muscovite mica.
4	60' - 70'	Gray, fine-grained, argillaceous, unconsolidated silt with clay 40% by volume, silt 60%. Silt grains mostly quartz and ferro-magnesian minerals.

<u>Bed Nr</u>	<u>Depth below surface</u>	<u>Lithologic Description</u>
5	75' - 100'	Gray, very fine-grained, banded clay with scattered flakes of megascopic muscovite and silt-sized grains of quartz and feldspar. Bands appear to be glacial varves showing much plastic deformation. Varves 2-10 mm thick with summer and winter layers about equal. Shows high degree of plasticity.
6	105' - 115'	Gray, very fine-grained, silty clay with 25% - 35% silt-sized grains of quartz, ferro-magnesian minerals, mica flakes, and some pyrite. Plasticity very low.
7	120' - 135'	Light gray, unconsolidated, moderately well sorted, argillaceous silt with well-rounded grains of quartz, ferro-magnesian minerals, pyrite, and mica flakes. Clay content approximately 30%. Contains isolated grains up to 4mm in size.
8	140' - 170'	Light gray, argillaceous, fine to medium-grained, moderately well-sorted sand with well-rounded grains of quartz (80%), ferro-magnesian minerals and abundant mica flakes.
9	175' - 180'	Light gray, impermeable, very fine-grained, pure clay containing very small amount of silt-sized quartz grains. Plasticity moderate.
10	185'	Variegated, medium to coarse-grained, poorly sorted, unconsolidated, impure sand with heterogenous mixture of subangular grains of quartz, ferro-magnesian minerals, glauconite, and mica flakes. Grain size ranges from .1 mm to 5 mm.
11	190'	Variegated, unsorted, unconsolidated, heterogenous till or gravel containing angular grains of quartz, ferro-magnesian minerals, glauconite, and feldspar ranging in size from silt to coarse-grained sand with numerous pebbles of quartz and mixed rock up to 2 cm in size. Porosity and permeability high. Should be an excellent aquifer.

Other Supporting Information

Don't let it

Coulee Dam National Recreation Area
Coulee Dam, Washington 99116

January 27, 1965

RECEIVED		
NPS Western Regional Office		
FEB 1 - '65		
	Surname	Date
Reg. Dir.		
Asst. R.D. (AD)		
Asst. R.D. (OP)		
Asst. R.D. (CA)		
Asst. to R.D. (PA)		
Sp. Asst. (Dev)		
Sp. Asst. to R.D.		
R. S. Advisor		

R. Morris

State of Washington
Department of Conservation
335 General Administration Building
Olympia, Washington

Gentlemen:

Enclosed are Proofs of Appropriation of Water for the following applications:

Application No. 18484,	Permit No. 13673
" " 7143	" " 6861
" " 7144	" " 6862

We are enclosing a money order for \$9.00 to cover the statutory filing fees for the above applications.

We are also enclosing money orders for \$6.00 to the Lincoln County Auditor, \$4.00 to the Stevens County Auditor, and \$2.00 to the Ferry County Auditor, to cover the recording fees for the above permits and Nos. 13672, 13674 and 13675.

Sincerely yours,

Homer W. Robinson
Superintendent

Enclosures-7

cc:
WR w/copies of Proofs of Appropriations
and Dept. of Cons. letters of instruction



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

December 7, 1964

IN REPLY REFER TO:

LS4

Memorandum

To: Regional Director, Western Region
From: Superintendent, Coulee Dam
Subject: Water Rights Applications, Coulee Dam

Reference is made to Mr. Hamilton's memorandum of December 3 regarding Water Rights Applications 7144, 18484 and 18486.

The state has recommended lesser quantities of water for these three applications than were originally requested. After talking with us by telephone, Mr. Morris requested restoration to the full amount on Application 18484.

Applications 7144 and 18486 requested 100 gpm and 0.25 cfs respectively. Upon making field examinations of these two water systems the state recommended reductions to the approximate capacities of the existing systems. Application 7144 is for Porcupine Bay where the state has recommended 50 gpm and the existing pump has a capacity of 35 gpm.

Application 18486 is for the Evans Campground where the state recommendation is for 0.11 cfs or 50 gpm. The system at this campground has a capacity of 50 gpm.

The recommended quantities of water for both applications 7144 Porcupine Bay, and 18486 Evans Campground, are adequate for our present needs.


Homer W. Robinson
Superintendent

RECEIVED
NPS WESTERN REGIONAL
OFFICE

DEC 9 '64

Mr. Tolson	
Mr. DeLoach	
Mr. Mohr	
Mr. Bishop	
Mr. Casper	
Mr. Callahan	
Mr. Conrad	
Mr. Felt	
Mr. Gale	
Mr. Rosen	
Mr. Sullivan	
Mr. Tavel	
Mr. Trotter	
Tele. Room	
Mr. Holmes	
Miss Gandy	

December 3, 1964

L-54
Dockets 7,8,9,10
11,12

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Memorandum

To: Superintendent, Coulee Dam

From: Assistant Regional Director, Operations, Western Region

Subject: Water Rights Applications, Coulee Dam

Your copies of the Reports of Examination transmitted by memorandum of November 30, 1964 should be placed in the dockets as follows: (Application No. / Docket No.) 7143/11, 7144/8, 18483/9, 18484/10, 18485/7, and 18486/12.

On comparison of the reports with the applications, it is noted that the State has recommended lesser quantities than were requested. Application 7144 is reduced from 100 gpm to 50 gpm; application 18484 from 0.50 cfs to 0.18 cfs, although by letter the State changed this to 0.21 cfs; and application 18486, from 0.25 cfs to 0.11 cfs. Mr. Morris' letter to the State, with copy to you, dated December 1 requested the restoration to the full amount on application 18484, but being unaware of the other cuts, no comments on the other applications were made. Please therefore review your needs in these two other applications, and if you feel the revised quantities are inadequate, communicate with the State as quickly as possible, requesting the amounts be corrected. If this cannot be done now, then at some future date, new applications can be filed for the additional water but they will carry newer priority dates also.

The earlier receipt of these reports would have enabled us to comment on them in time, and given us the opportunity to offer our assistance in effecting possible changes. It will be very much appreciated, if reports, and miscellaneous correspondence on water rights matter are brought to our attention as soon as possible.

(Sgd.) Warren F. Hamilton

Warren F. Hamilton

cc:
Director w/c of reports
Chief, WODC (2) w/c of reports

Western Region
450 Golden Gate Avenue, Box 36063
San Francisco, California 94102

L-54

December 1, 1964

Mr. Eugene F. Wallace, Geologist
Division of Water Resources
335 General Administration Building
Olympia, Washington 98502

Dear Mr. Wallace:

This will acknowledge your letter of November 19 concerning our water right applications at Coulee Dam National Recreation Area. These are ground water applications, 7143 and 7144, and surface water applications, 18483 to 18486 inclusive.

We appreciate your calling to our attention the correctness of the quantities requested under applications 18484 and 18485. I have checked our records with Superintendent Robinson of Coulee Dam, and in application 18484, we cannot find where the indicated quantity was 0.18 cfs. The application as filed requested 0.50 cfs (225 gpm). The presently installed pump is operating at 200 gpm, and delivers the water to a storage tank from which it is repumped to the campgrounds at 100 gpm. This is a temporary measure, and proposed construction will enable the entire 225 gpm to be put to full use. Therefore we request that you restore the indicated quantity to 0.50 cfs as originally shown in our application. Accordingly, pending restoration to this amount in application 18484, we are requesting our Finance Division to submit a warrant for \$100 covering the five remaining applications.

On application 18485, Superintendent Robinson says that 0.05 cfs (22.5 gpm) is correct. Although the system at San Poil Bay campground has an apparent capacity greater than 22.5 gpm, the spring source is at this time not capable of additional yield without considerable development work. The needs at the present time can be met from the available 22.5 gpm.

We appreciate your interest in our applications and your concern is most gratifying. Copies of our exchange of letters are being sent to Superintendent Robinson.

Sincerely yours,

Samuel Morris
Acting Regional Chief, Division
of Land and Water Rights

Enclosures

cc:
Superintendent, Coulee Dam
Director - SLW
Chief, WODC (2)

P. S. - The enclosures are in sufficient quantities to permit filings in the individual dockets. Also enclosed is Affidavit of Publication, the republication of Application 7143. Filing is as follows: (Application No./ Docket No.)
7143/11, 7144/8, 18483/9, 18483/10, 18485/7, 18486/12.



ALBERT D. ROSELLINI
GOVERNOR

154 *Caulle Dam*

STATE OF WASHINGTON
Department of Conservation

335 GENERAL ADMINISTRATION BUILDING
OLYMPIA

November 19, 1964

DIVISIONS:

RECLAMATION
FLOOD CONTROL
WATER RESOURCES
MINES AND GEOLOGY
COLUMBIA BASIN PROJECT
POWER RESOURCES
WEATHER MODIFICATION
SOIL & WATER CONSERVATION
COMMITTEE

United States Department of the Interior
National Park Service
Western Region
450 Golden Gate Avenue
Box 36063
San Francisco, California 94102

ATTENTION: Manuel Morris, Hydraulic Engineer

Gentlemen:

Re: Ground Water Applications No. 7143 and 7144;
Surface Water Applications No. 18483, 18484, 18485
and 18486 (Your number L 54)

Enclosed please find signed voucher, payable to the Department of Conservation, in the amount of \$120.00 to cover statutory permit fees relative to the above-mentioned applications.

In checking the various files, we have found two points in question that you should be advised of. First, in reference to the Report of Examination for Surface Water Application No. 18484, the total quantity recommended was erroneous. The indicated quantity of 0.18 c.f.s. should have been 0.21 c.f.s. We have made the necessary correction and permit will issue for the larger amount.

The second point in question refers to Surface Water Application No. 18485 which was submitted for the appropriation of 0.05 c.f.s. from an unnamed spring for your San Poil Bay Campground. The application indicates a 3" pipeline to a 5,000 gallon storage tank with a 3" line from the tank to campground where it is reduced to a 1½" line through the campground. Our concern is that you may not have filed for enough water. If the capacity of the installed system is greater than 0.05 c.f.s. (22.5 g.p.m.), you should probably request an amendment of the application to increase the quantity to the actual capacity of your system. These comments are only submitted for your consideration because we do not know the actual capacity of the installed system.

If you feel you have adequate coverage under the application in question, you should remit the full warrant according to the enclosed voucher and

Manuel Morris
Copy to Supl
Wood
Daniel

November 19, 1964

United States Department of the Interior
National Park Service
Western Region
450 Golden Gate Avenue
Box 36063
San Francisco, California 94102

ATTENTION: Manuel Morris, Hydraulic Engineer

permits will be issued under all six applications. If, however, you do check the capacity of the system under Surface Water Application No. 18485 and decide to request an amendment you should submit a warrant for only \$100.00 to cover the five other applications.

Very truly yours,

DEPARTMENT OF CONSERVATION
ROY MUNDY, DIRECTOR


EUGENE F. WALLACE, Geologist
Division of Water Resources

EGM:yw
Encl.

February 18, 1964

Ketcham

L54

Siler

Memorandum

To: Superintendent, Coulee Dam
From: Regional Chief of Land and Water Rights, Western Region
Subject: Water Right Applications, Coulee Dam

We are returning herewith the two water right applications transmitted with your memorandum of February 13, 1964.

On the Spring Canyon Campground application we have changed the quantity intended for beneficial use to 40 g.p.m. or 32-acre feet per year for a six-months period. This is based on a campground use of 25 gallons per person per day and a one quarter inch daily rainfall on the irrigated land. These are average figures for relatively dry areas during summer seasons. The Porcupine Bay campground use has been changed to 15 g.p.m. and 12-acre feet per year on the same basis.

On both applications we have added the following statement; "This application does not constitute waiver of other rights the United States may have to the same water." This is standard language that we use in all Water Right applications as suggested by the Solicitor's Office when State filings were agreed upon.

Please send a copy of the application to this office when it has been returned and approved by the State Water Rights Board.

~~FOR JAMES M. SILER~~

James M. Siler

Enclosures 2
Water right applications

RWKetcham:lsr 2/18/64

January 17, 1961

L 54

Memorandum

To: Superintendent, Coulee Dam
From: Regional Chief of Operations, Region Four
Subject: Water Right Docket No. 8, Porcupine Bay, Coulee Dam NRA

Attached is a new water right docket, No. 8, Porcupine Bay, which we prepared for filing records of the water system in anticipation of applying to the State for water rights.

The folder contains a copy of your memorandum of September 28 and a copy of the lithologic log sent with your memorandum of January 3. The description of samples prepared by Mr. Nichols is very complete and is appreciated.

We presume that details of the well, pump and water system, as well as the driller's report which will be needed for the water right application, will be contained in the project completion report. It will be particularly useful to know the amount of the drawdown of the water level below the static level when the pump is operating. This data also should be included in the completion report.

(SGD) JOHN B. WOSKY

Regional Chief of Operations

Attachment

Copy to: Director (w/attachment)
Chief, WODC (2)(w/attachment)

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UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

January 3, 1961

IN REPLY REFER TO:

D5039

RECEIVED	
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REG. DIR.	
ASST. R.D.	
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INTERP.	
RANGER ACT	

Memorandum

To: Regional Director, Region Four

From: Superintendent, Coulee Dam

Subject: Drilling Samples, Porcupine Bay Well

With reference to your memorandum of September 30, 1960 and ours
of December 27, 1960, the subject report is attached.

Homer W. Robinson
Homer W. Robinson
Superintendent

Attachment

✓ Menting BFM
X Spaulding LSS 12/1

see memo

1/17/61

Lithologic Log of Well Drilled at Porcupine Bay on Lake RooseveltDate Drilled: Aug-Sept 1960description by Riley Nichols, Park Ranger

Entire sequence apparently represents glacial deposits of Pleistocene age as indicated by unconsolidated nature of sediments, presence of varves in one of the clays, poor sorting and grain angularity of several of the sands, and generally heterogenous mixture of contained minerals. The clays are probably of glacio-lacustrine origin; the well sorted sands and silts of glacio-fluvial origin. The aquifer and the poorly sorted sands appear to be morainal or outwash deposits. The following log was compiled from well samples taken at 5' intervals.

<u>Bed Nr</u>	<u>Depth below surface</u>	<u>Lithologic Description</u>
1	5'	Brown, fine to medium-grained, poorly sorted, unconsolidated quartz sand with moderately well-rounded grains of quartz (60%), feldspar, and mica flakes. Some grains up to 4mm.
2	10' - 25'	Gray to brown, fine-grained, poorly sorted, unconsolidated quartz sand with moderately well-rounded grains of quartz (70%), glauconite, and feldspar. Some grains up to 8mm.
3	30' - 55'	Gray to tan, very fine-grained, pure, well-sorted, unconsolidated quartz sand with well-rounded grains of quartz (80%), olivene, feldspar and abundant flakes of muscovite mica.
4	60' - 70'	Gray, fine-grained, argillaceous, unconsolidated silt with clay 40% by volume, silt 60%. Silt grains mostly quartz and ferro-magnesian minerals.

<u>Bed Nr</u>	<u>Depth below surface</u>	<u>Lithologic Description</u>
5	75' - 100'	Gray, very fine-grained, banded clay with scattered flakes of megascopic muscovite and silt-sized grains of quartz and feldspar. Bands appear to be glacial varves showing much plastic deformation. Varves 2-10 mm thick with summer and winter layers about equal. Shows high degree of plasticity.
6	105' - 115'	Gray, very fine-grained, silty clay with 25% - 35% silt-sized grains of quartz, ferro-magnesian minerals, mica flakes, and some pyrite. Plasticity very low.
7	120' - 135'	Light gray, unconsolidated, moderately well sorted, argillaceous silt with well-rounded grains of quartz, ferro-magnesian minerals, pyrite, and mica flakes. Clay content approximately 30%. Contains isolated grains up to 4mm in size.
8	140' - 170'	Light gray, argillaceous, fine to medium-grained, moderately well-sorted sand with well-rounded grains of quartz (80%), ferro-magnesian minerals and abundant mica flakes.
9	175' - 180'	Light gray, impermeable, very fine-grained, pure clay containing very small amount of silt-sized quartz grains. Plasticity moderate.
10	185'	Variegated, medium to coarse-grained, poorly sorted, unconsolidated, impure sand with heterogenous mixture of subangular grains of quartz, ferro-magnesian minerals, glauconite, and mica flakes. Grain size ranges from .1 mm to 5 mm.
11	190'	Variegated, unsorted, unconsolidated, heterogenous till or gravel containing angular grains of quartz, ferro-magnesian minerals, glauconite, and feldspar ranging in size from silt to coarse-grained sand with numerous pebbles of quartz and mixed rock up to 2 cm in size. Porosity and permeability high. Should be an excellent aquifer.

D5039

January 3, 1961

Memorandum

To: Regional Director, Region Four
From: Superintendent, Coulee Dam
Subject: Drilling Samples, Porcupine Bay Well

With reference to your memorandum of September 30, 1960 and ours of December 27, 1960, the subject report is attached.

7s/ Homer W. Robinson

Homer W. Robinson
Superintendent

Attachment



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

September 28, 1960

IN REPLY REFER TO

W14
XB5039

COPIES made for
new WR docket #8

Memorandum

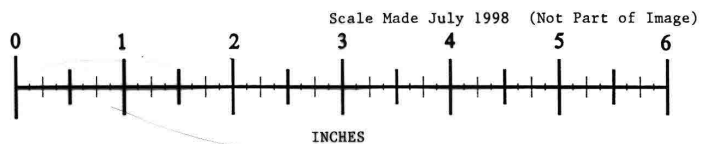
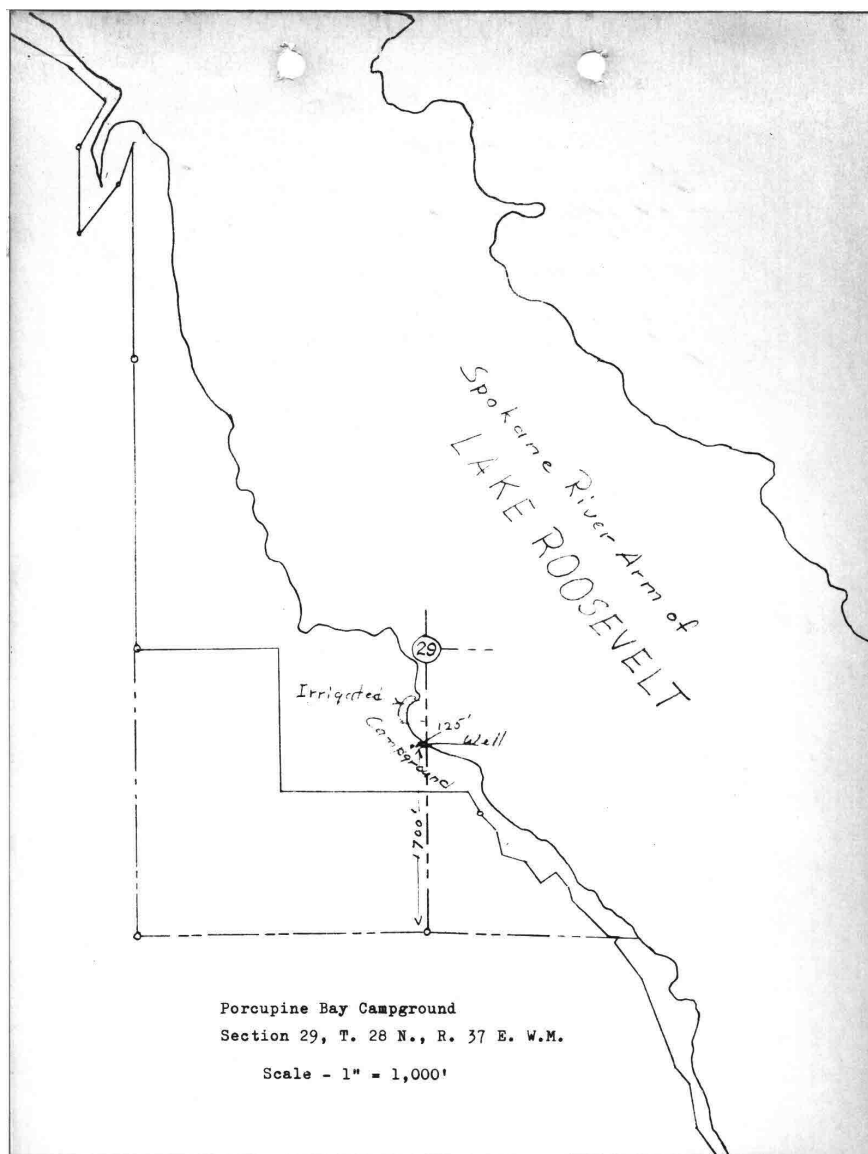
To: Regional Director, Region Four
From: Superintendent, Coulee Dam
Subject: Well--Porcupine Bay

After considerable difficulty we brought in a satisfactory well at Porcupine Bay at a depth of 189 feet. The pumping test indicates a flow of 40 to 60 gallons per minute which is more than adequate for that campground. We can give you more detailed information after we receive the driller's log and report. The driller has given us samples of material removed from the well at intervals of ten feet that might be of interest to Mr. Spaulding. These samples are quart jars of mud and water that are subject to loss by freezing and we wish to be advised if we should preserve them for Mr. Spaulding, or if the well log will give him sufficient information.

Homer W. Robinson
Homer W. Robinson
Superintendent



Maps and Miscellaneous Information



Docket Information

Number of Documents in Docket 37

Documents Dated from 9/15/1960 to 2/2/1965

Docket Compiled: 4/21/2011