



WATER-RIGHT DOCKET

Yosemite National Park

Docket No: 10

EL PORTAL WELL #2

Preliminary Docket Information

06-26-1996: notes to the file: primary water supply

NOTES TO THE FILE

YOSE 010: El Portal Well #2
YOSE 012: El Portal Well #1
YOSE 018: El Portal Well #3
YOSE 019: El Portal Well #4
YOSE 020: El Portal Well #5
YOSE 021: El Portal Well #6
YOSE 022: El Portal Well #7

June 26, 1996

The primary water supply for El Portal is from wells 2 through 7. Well 1 is no longer in use. All 7 wells are thought to tap the underflow of the Merced River. For information pertaining to land status and riparian rights common to all the above dockets, please refer to YOSE 012: El Portal Well #1.

A handwritten signature in cursive script, appearing to read "Alice Johns".

Alice Johns
Hydrologist
Water Rights Branch
Water Resources Division

DOCKET (FILE) TITLE _____		DATE: May 31, 1979
REGION	Western	AREA Yosemite National Park
SITE	El Portal Well	
STATE	California	COUNTY Mariposa DOCKET NO. WR #10
LOCATION SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 17 T3S R20E		
REGIONAL BASIN	LOCAL BASIN	
ACQUIRED BY		
APPLICATION	PERMIT	CERTIFICATE
ACTION DUE	PRIORITY	RESERVATION
QUANTITY	USE	
STATUS	SOURCE Well	
REMARKS Hydrologic Unit #18040004		
NARRATIVE:		
Prior to 1970 the town of El Portal was supplied with water from Moss and Crane Creeks, as well as the Merced River. In 1970 a study was done to determine the best source for the area. In response to this study a prospective well site was examined and several test wells dug. Four holes did not yield sufficient water to warrant further development; one hole drilled about a half mile downstream from El Portal produced about 75 gpm. In 1973 a test of the well showed the source to be adequate for the needs of the area, producing 70 gpm. It was recommended that the well be constructed and that the water level in both the production and observation wells be checked periodically to note draw-down. It is believed the influence of the Merced River causes the stabilization of the well water level. The test well is located on property transferred to the Park Service from the El Portal Mining Company after the area was authorized for inclusion in the park in 1958. No state filings have been made on the site. It is unknown if the proposed well was finally constructed here and put into use. <i>January 29, 1981, Bill Mattison of VOSE informed Bill Reed of Water Resources that this well, El Portal #2, is pumped at 50 gpm due to complaints of users that at higher rates there is too much air in the lines.</i> <i>WBR 2/25/81</i>		
Compiled by T. Kern		
Approved by		

Supporting Hydro Data

. . . R E P O R T O F T E L E P H O N E C O N V E R S A T I O N

DATE: June 26, 1996 TIME: 11:30 a.m.
PROJECT: YOSE - El Portal

NPS PERSON ON CALL: Alice E. Johns

[] I RECEIVED A CALL FROM [x] I CALLED

PERSON: Ed Walls
ORGANIZATION: Chief of Maintenance
ADDRESS: YOSE

TELEPHONE: 209-379-1077

DISCUSSION: I called for clarification on the current water system at El Portal. Ed said that the water system consists of 6 wells--numbers 2-7. Well number 1 is no longer in use. Number 7 has just gone on line.

He also asked about water right issues associated with Tuolumne Meadows. I told him that Steve Stone of DSC had requested a water right analysis, and that it would be next after El Portal and Biledo. If there was a need for it to be placed at a higher priority, I suggested that Ed talk to Mark Butler.

Ed said that he would call back with current information on well production. He called back and said that the current system is capable of producing 307 gpm. In 95, 42 million gallons were withdrawn. Averaged over the year, that is about 80 gpm. Withdrawals are about 100,000 gpd in winter, more 200,000 gpd in summer.

ACTION TO BE TAKEN:

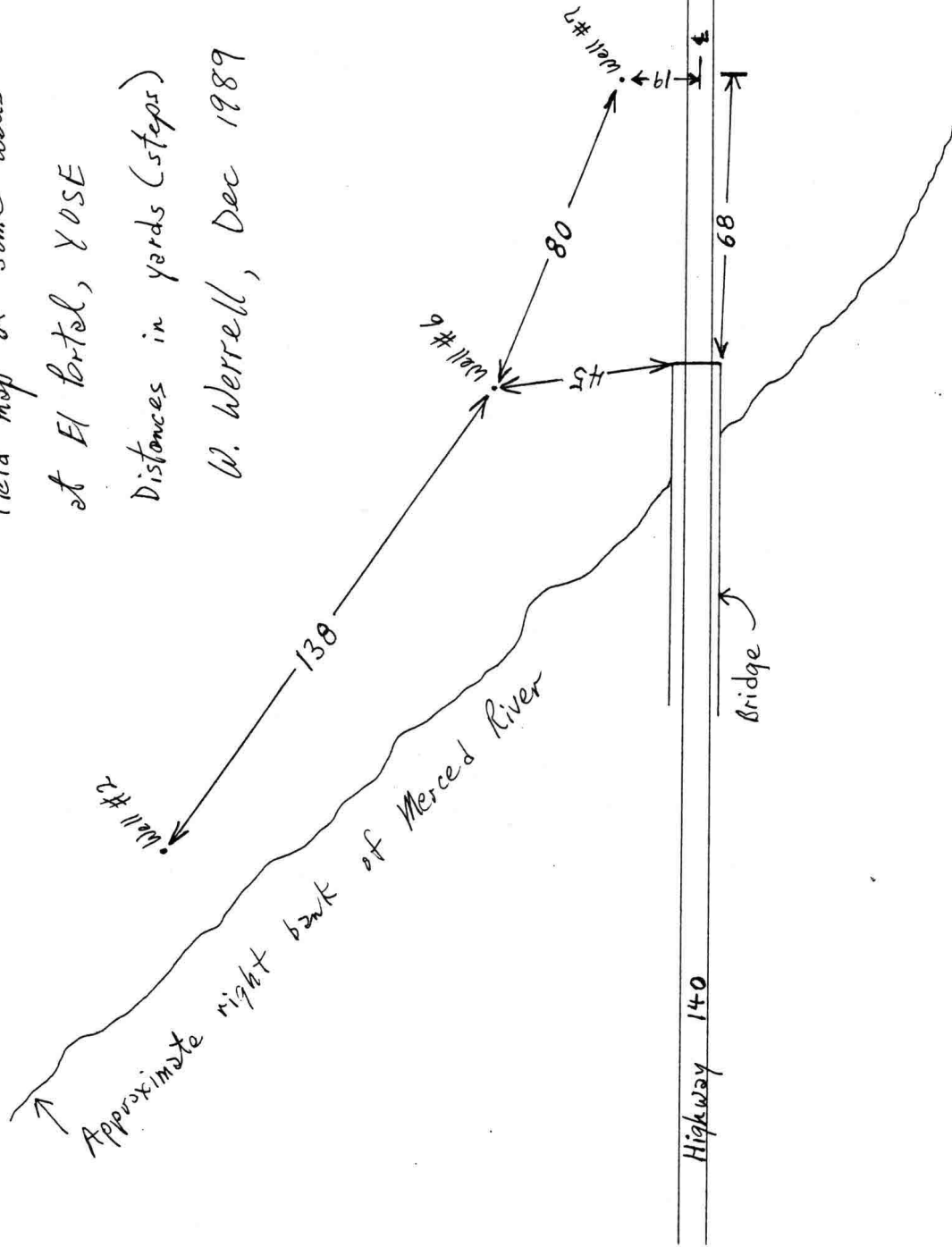
COPIES TO:

Field map of some wells

at El Portal, YOSE

Distances in yards (steps)

W. Werrell, Dec 1989



PACO

PUMPS

memo to:

DICK R

OCT 1 1984

from *Bill M*

subject: *Dick - Here's a copy of the data from El Portal.*

It's not good to run a well more than 16 hrs/day, but as you can see we did all summer. In early July the storage level began to drop, so we wrote a letter to all residents (July 13) asking for voluntary reduction. It worked this time. Even so, we pumped over 20 hrs/day avg for the month. If anything had gone wrong we would have had to impose harsh restrictions to limp by with 3 wells. I maintain we need more wells before adding more people!

Bill

WELLS VERG. HE ER DAY		GALS. PER MONTH PER WELL. 1984				
HR. ↓	WELL #	# 2	# 3	# 4	# 5	TOTAL
JAN.	9.5	761,490	off	527,100	1,326,100	2,614,690
FEB.	11	900,200	~~604,800~~ off	~~604,800~~ 604,800	1,532,000	3,042,300
MAR.	9.6	830,060	off	431,800	1,181,600	2,443,460
APR.	10.3	906,190	off	539,300	1,179,760	2,625,250
MAY	18.9	1,651,400	907,200	1,110,300	2,812,320	6,481,220
JUNE	17.4	1,425,740	2,140,800	992,000	2,674,100	7,232,640
July	20.3	1,938,180	3,010,640	1,321,530	3,075,000	9,255,350
AUG.	18.3	1,613,780	2,723,040	817,590	2,785,400	7,939,810

100,000 gal
TANK # 1
JAN. 19½ - 23' Full
FEB. 17¾ - 23'
MAR. 18 - 23'
APR. 18 - 23'
MAY. 12½ - 23'
JUNE 17 - 23'
July 12 - 23'
AUG. 17 - 23'

500,000 gal
TANK # 3
JAN. 27½ - 30' Full
FEB. 27 - 30'
MAR. 27 - 30'
APR. 26 - 30'
MAY. 23½ - 30'
JUNE 23½ - 30'
July 21 - 30'
AUG. 25 - 30'

CONTROL TANK # 3
OPERATING RANGE
27' to 30'

WELL # 3 ON LINE
TANK # 1 DRAINED FOR REPAIRS
CHECK VALVE BROKE AT TANK # 2
TANK # 1 DRAINED FOR REPAIRS

field notes of RBP, assistant
 1/23/81 El Portal #2
 distance between El Portal #6 and #2
 approx 500 ft
 visual observations of El Portal #2
 made three windows:
 well is equipped with turbine pump
 casing for well 10", top of casing
 sits approx 0.15 feet below top of
 cement floor of pump house, top
 of casing likely @ LSD
 visited El Portal office and per conversation
 with Fox was informed that our book
 has been mailed to Watson within week

Witucki

Wallis

Kilgore

LS4(WR)ASW
YOSE/GENERAL
YOSE/WR #10

May 16, 1973

Memorandum

To: Superintendent, Yosemite National Park
From: Chief, Division of Water Resources, Office of the
Regional Chief Scientist, Western Region
Subject: El Portal Well--Drilled FY-1973

Hydrologist William L. Werrall's trip report regarding the pump test of subject well is enclosed for your files and information. The observation wells referenced will be particularly useful in the event more wells are required in this area. Drawdown curves based on the data obtained are being plotted and will be available from this office. As the well is completed, final as-built drawings will be placed in our record.

6
(SGD) GERARD S. WITUCKI

Gerard S. Witucki

Enclosure

cc:
WASO(FN) w/encl
(WR)FC w/o encl

(WR)ASW:GSWitucki:mpm 5/16/73



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

WESTERN REGION

450 GOLDEN GATE AVENUE, BOX 36063
SAN FRANCISCO, CALIFORNIA 94102

L54 (WR)ASW
YOSE/GENERAL
YOSE/WR #10

May 9, 1973

Memorandum

To: Chief, Division of Water Resources, Western Region

From: Hydrologist, Water Resources Division

Subject: Aquifer Test (Pump Test) on new well at El Portal,
Yosemite National Park, California, March 28-30, 1973,
Contract No. CX-8000-3-0003. Well No. 3S/20E - 17E*

Purpose of the trip: To supervise and assist in aquifer test and to make preliminary evaluations of the hydrologic data. To present these data findings to the Park staff as appropriate.

Itinerary: Departed San Francisco in NPS car on March 28. Arrived at well site on morning of March 29. Assisted in and supervised aquifer test on site March 29 and 30. Returned to San Francisco on March 30, 1973.

Companions: None

Accomplishments and/or observations: Met with contractor, Mr. William Belknap of Reedley, California who had commenced the test the previous evening. The aquifer test consisted of two pumping periods each of which was at a different but constant discharge. No pumping of the well had been done since the end of well development several days prior. During the test Mr. Robert Fleming, visited the site several times and assisted in analyzing the data.

Hydrologic Data: The well is located in SE-1/4, SW-1/4, SW-1/4, NW-1/4, Sec. 17, T 3 S, R 20 E, 64 feet from the right bank of the Merced River. The static water level was 10.3 feet below land surface datum. Pumping started on March 28 at 20:50 and continued until March 29 at 17:20 (elapsed time was 1230 min, maximum drawdown was 34.4 ft.). The well was allowed to recover until March 30 at 07:45 (elapsed time was 865 min.). Pumping was resumed again and continued until 15:45 of the same day (elapsed time was 480 min., maximum drawdown was 38.3 ft.). Recovery was taken until 17:50 of the same day (elapsed time was 125 min.).

* Well numbering system as used by California District,
U.S. Geological Survey.

Partial summary of aquifer test data:

Step one, Discharge at 68 gpm

<u>Drawdown</u>	<u>Recovery</u>
30 min = 19.0 ft.	32 min = 9.0 ft.
94 min = 31.4 ft.	100 min = 2.5 ft.
140 min = 32.6 ft.	152 min = 0.9 ft.
210 min = 33.2 ft.	220 min = 0.5 ft.
530 min = 34.1 ft.	400 min = 0.4 ft.
1230 min = 34.1 ft.	865 min = 0.4 ft.

Step two, Discharge at 77 gpm

42 Min = 27.3 ft.	36 min = 9.0 ft.
101 min = 36.1 ft.	110 min = 1.8 ft.
121 min = 36.7 ft.	120 min = 1.4 ft.
175 min = 38.3 ft.	
200 min = 38.3 ft.	

During the test the well was equipped with an 18-inch stand pipe which along with a flow meter was used to maintain a constant discharge during each of the pumping periods. Prior to the test the following three observation wells had been drilled.

<u>Observation Well #</u>	<u>Distance from Pumped Well, Ft.</u>
1	14.8
2	39.1
3	64.2

These wells were situated upstream of the pumped well in a straight line, each being about the same distance as the pumped well from the river. The width of the flowing river was estimated at 50 feet.

The driller's log of the well is as follows:

<u>Depth</u>	<u>Description</u>
0-15	Top soil and boulders
15-42	Cobbles, sand and gravel, some decomposed granite and silt
42-43	Decomposed granite and clay
43-48	Gravel, sand and cobbles
48-49	Soft - sand or decomposed granite
49-55	Sand and gravel or loose decomposed granite
55-106	Granite

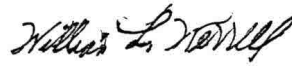
Conclusion: Drawdowns within the wells stabilizes after a few hours of pumpage. This is believed due to the influence of the Merced River on the well.

The aquifer is very heterogeneous glacial fill material and so aquifer characteristics are singularly unique for any well. Thus, any values of transmissivity, etc., would be of questionable value in predicting the yield of a well drilled in the area, therefore, no further analysis of the test data will be made.

It would appear that a reasonable pumping rate for this well would be about 70 gpm.

Proposal: Construction of the well i.e., placement of the well screen, pump, etc., should be completed and the well placed in service.

Periodically, water levels in both the production well and the observation wells should be checked after noting the length of time since the pump started or stopped.



William L. Werrell

Concur:



Gerard S. Witucki Date
Chief, Division of Water Resources

1195-100 Well No. -
Do Not Fill In

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

N^o 76399
State Well No. _____
Other Well No. _____

TRIPlicate
Retain this copy

El Portal

(1) OWNER: U. S. Dept. of Interior
National Park Service
Name Water Resources Section
Address 450 Golden Gate Ave. - Box 36025
San Francisco, Calif. 94102

(11) WELL LOG:
Total depth 106 ft. Depth of completed well 55 ft.
Formation: Describe by color, character, size of material, and structure
0 15 Top soil and boulders
15 42 Gravel, sand, cobbles, some D.G.
and silt
42 43 Decomposed granite and clay
43 48 Gravel, sand, cobbles
48 49 Soft - sand or decomposed granite
49 55 Sand and gravel or loose D. G.
55 106 Granite with soft layers at 60',
85' and 92'

(2) LOCATION OF WELL:
County Merced Owner's number, if any El Portal
Township, Range, and Section Twp. 35, Rg. 20E, Sec. 17
Distance from cities, roads, railroads, etc. About 40' east of Merced
River at a point about 200 yds. downstream from
El Portal Bridge on
Highway 140

(3) TYPE OF WORK (check): El Portal Bridge on
New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic ☐ Industrial ☐ Municipal ☐ Rotary ☐
Irrigation ☐ Test Well ☐ Other ☒ Cable ☐
Other ☐

(5) EQUIPMENT:
Rotary ☐
Cable ☐
Other ☐

(6) CASING INSTALLED:
STEEL: ☐ OTHER: ☐ If gravel packed

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
Up 3'	55'	10"	Sch. 40	16"	0	55
Up 3'	7'	24"	#6			
Up 3'	29'	16"	#6			

Size of shoe or well ring 16"x12"x1 3/8" Size of gravel: Monterey #8

Describe joint: Butt welded

(7) PERFORATIONS OR SCREEN:
Type of perforation or name of screen Johnson Screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
45	55			<u>Johnson Stainless Steel</u> <u>Screen -- .045 slot</u>

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes ☒ No ☐ To what depth 10' ft.
Were any struts used against pollution? Yes ☐ No ☒ If yes, note depth of struts
From ft. to ft. ft.
From ft. to ft. ft.
Method of sealing Cement

(9) WATER LEVELS:
Depth at which water was first found, if known 10' ft.
Standing level before perforating, if known ft.
Standing level after perforating and developing ft.

(10) WELL TESTS:
Was pump test made? Yes ☒ No ☐ If yes, by whom? Belknap
Rate: 76 gal./min. with 37 ft. drawdown after 10 hrs.
Temperature of water _____ Was a chemical analysis made? Yes ☐ No ☒
Was electric log made of well? Yes ☐ No ☒ If yes, attach copy

Work started 11/7/72 Completed 7/10/73

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Bill Belknap JA
(Person, firm, or corporation) (Typed or printed)

Address P. O. Box 846
Reedley, California 93654

[SIGNED] Bill Belknap th
(Well Driller)

License No. 106833 Dated 7/31/73 19__

SKETCH LOCATION OF WELL ON REVERSE SIDE

WR 188 (REV. 9-68) USGS Well # 3 S/20 E - 17 E 1 28179-850 9-68 50M TRIP Δ 0.5"

Other Supporting Information

. . . R E P O R T O F T E L E P H O N E C O N V E R S A T I O N

DATE: June 26, 1996 TIME: 11:10 a.m.
PROJECT: YOSE - El Portal

NPS PERSON ON CALL: Alice E. Johns

[] I RECEIVED A CALL FROM [x] I CALLED

PERSON: William Werrell
ORGANIZATION: DEVA
ADDRESS:

TELEPHONE: 619-786-3255

DISCUSSION: Bill's previous position was hydrologist with the Water Operations Branch of the Water Resources Division. In that capacity, Bill had provided technical assistance to Yosemite National Park, to find well locations, develop specs for drilling, conducting aquifer tests, and organizing information for wells. I asked Bill if he concurred with the conclusion that all the wells numbered 1-7 at El Portal tapped the underflow of the river. He said yes he did and that I could reference this telephone conversation in the water rights report. He said there is the possibility of a pretty good sized crevice that would bring in something in from the side. Its pretty subjective as to what it would produce relative to the Merced, but it is probably small relative to the Merced. The Merced is so large with a large supply of water, it is the dominant supply. Glacial four has been sealing up the permeabilities, and there are problems drilling wells. Bill has recommended to DSC that the dig a deep ditch, fill it with sand, breach it, put well screen in and some casing, then get filtration from the river, and its permeable enough to let water in.

ACTION TO BE TAKEN:

COPIES TO:



United States Department of the Interior

NATIONAL PARK SERVICE
P.O. BOX 577
YOSEMITE NATIONAL PARK, CALIFORNIA 95389

IN REPLY REFER TO:
L54 (WR-RNW)

OCT 31 1984

RECEIVED Western Regional Office	
NOV 01 '84	
Regional Director	
Operations	
Reg. Mgmt. Plan	
_____ion	
_____ns Eval.	
Affairs	
BUDGET	
Action taken	

Memorandum

To: Regional Director, Western Region

From: Superintendent, Yosemite

Subject: Information and Recommendations on El Portal Water Systems

The El Portal Administrative Site (Site) was purchased by the Government in 1958. Today 650 people live there and 40 employees work there as well. The GMP calls for El Portal to become the administrative headquarters of the park and the primary residence area for park and concession employees working in Yosemite Valley. Accordingly, the area is now being developed, and by the year 1990 should house between 1200 to 1500 people. In addition, approximately 150 permanent employees are expected to work there at that time. Projections indicate that water demand for domestic irrigation, fire and maintenance uses might be increased from 46 to 57 percent by that time.

Prior to 1958 Mr. William Brantley, who owned the El Portal store, hotel and motel had a well immediately adjacent to the Merced River. That well became contaminated and thereafter he pumped water directly out of the river to meet his needs. Mr. Brantley had two 10,000 gallon water storage tanks and his holdings were bought by the Government in or around 1958.

The National Lead Mining Company is believed to have had water rights on Crane Creek within what is today the El Portal Administrative Site. Crane Creek's flows invariably got so low in summer and fall that the company was forced to draw the water it needed directly from the Merced River. National Lead sold out and the El Portal Water Company appears to have bought National Lead's rights to Crane Creek. When the Government bought the Site in 1958 it apparently acquired these rights.

Due to its low flow and upstream contamination, Crane Creek has not been used since the park purchased the property in 1958. In 1962, shortly after the Government acquisition, Moss Creek was developed and connected to the El Portal system. It then became the primary water source until wells were developed in 1980 and 1981. Since that time, the park has tried to retire Moss Creek, a surface source subject to contamination. However, the well system is barely able to keep up with current demand when Wells No. 2, 3, 4 and 5 are functioning properly. Several times in the past three years mechanical or other problems in that system have required the park to reactivate the Moss Creek source. In the future, should Moss Creek be dry at such times--a common occurrence in

late summer and fall--the only practical recourse would be to turn again to the Merced River source.

In all, six wells have been developed by the Park in the Site. Well No. 1, a very shallow, hand-dug well was developed in the 1960's or before. In 1974 this well was contaminated during construction of the El Portal Wastewater Treatment Plant. Following decontamination it was again put into service where it remained until the present well system was developed. At that time it was taken out of service because it was too shallow--22 feet deep--to meet public health standards. Well No. 2 was developed in 1972 and Wells 3, 4 and 5 were developed in 1980 and 1981 and collectively comprise the main water source for the El Portal system today. Well No. 6 was drilled during the latter period but because of its very low yield has not been connected to the system.

Mr. John Banias, Park plumbing foreman, has worked in the El Portal area since 1953. He recalls one or two occasions in the 1960's when water sources in El Portal got so depleted that the Park was forced to draw water directly from the Merced River. On these occasions water was pumped 24 hours per day for several months to meet demands.

In 1974 during construction of the El Portal Wastewater Treatment Plant, Well No. 1, one of two operational wells in the Site, was contaminated and temporarily taken out of use. Demand soon exceeded the supply from Moss Creek, then the Site's main water source, and the park was forced to pump from the Merced River for approximately four months. Again, during the two year drought of 1976 and 1977 the park found it necessary to pump out of the river for four full months. Mr. Banias remembers that the Park plumbing branch pumped water out of the Merced River and into the water system at a rate of 70 GPM for 24 hours each day from July 1 through October 31 on both years. Demand still exceeded supply and the Park had to ration water to residents during this period. Please see enclosed record of such use in 1977 labeled Exhibit No. 1.

Currently, summer and fall water demand at El Portal exceeds 200,000 gallons per day (GPD). This year, 1984, demand ranged from an average low of 78,821 GPD or 2,443,460 gallons per month in March to an average high of 298,000 GPD or 9,255,350 gallons per month in July. Please see attached table for monthly use during 1984.

In view of the historic difficulty of meeting water demands at El Portal and the greatly increased demand that will accompany planned development of the Administrative Site, we feel that the Service should attempt to perfect a water right on the Merced River without delay. Ideally, this action should be completed before FERC can come to a decision on Mr. Joseph M. Keating's Application 27981, which involves the affected reach of the river.



Enclosures



United States Department of the Interior

NATIONAL PARK SERVICE

P.O. BOX 577

YOSEMITE NATIONAL PARK, CALIFORNIA 95389

IN REPLY REFER TO: DC039

FEB 21 1979

Mr. Gunter A. Redlin
Supervising Sanitary Engineer
Sanitary Engineering Section
Department of Health Services
3545 East Shields Avenue
Fresno, CA 93727

Dear Mr. Redlin:

Enclosed are copies of the four well logs which you requested in your letter of October 18, 1978. A log of Yosemite Valley Well No. 2 was delivered to you on January 30 by Bill Matteson, but the copy enclosed has been updated with the USGS well number.

The "Water Well Report" for El Portal No. 1 was fabricated by drawing upon the memories of those who were involved in digging this well. Unfortunately, it is the best we can do as no written records were made at the time.

Sincerely yours,

(Sgd.) Leslie P. Arnberger

Leslie P. Arnberger
Superintendent

Enclosures 4.

bcc:

(WR)RW - Division of Water Resources, w/c enc.

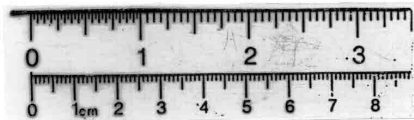
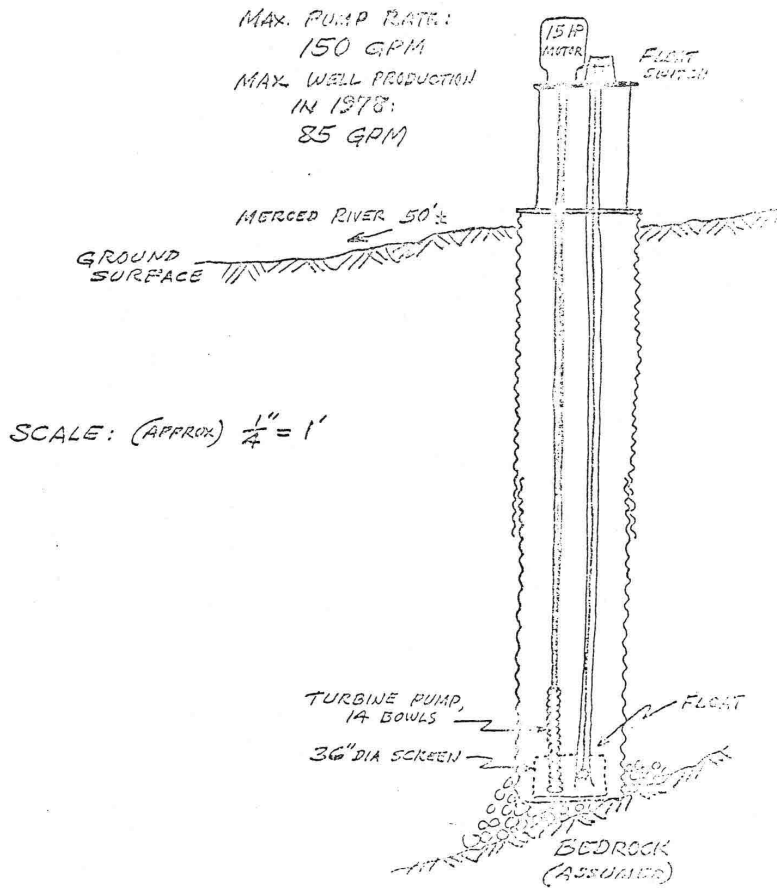
RECEIVED	
Western Regional Office	
FEB 21 1979	
Regional Director	
Asst. Regional Dir.	
Administration	
Operations	
Res. Mgmt. Plan	
EEO	
Public Affairs	
Actual F. L.	

WATER WELL REPORT

EL PORTAL #1

- | | |
|--|--|
| <p>1. Owner:</p> <p>U.S. Dept of Interior
National Park Service
Yosemite National Park
Yosemite National Park, CA 95389</p> | <p>8. Construction:</p> <p>Sanitary Seal?
Strata Sealed? </p> |
| <p>2. Location of Well:</p> <p>El Portal, Mariposa County;
Twp. 3S, Rng. 20E, Sec. 18;
About 50 ft. north of Merced
River at east end of Rancheria
Flat.</p> | <p>9. Water Level:</p> <p>5 ft. below surface
(Static)</p> |
| <p>3. Type of Work:</p> <p>New well</p> | <p>10. Well Tests:</p> <p>With drawdown to bottom
of well, 180 gpm could
be pumped indefinitely.</p> |
| <p>4. Use:</p> <p>Municipal</p> | <p>11. Well Log:</p> <p>Depth: 20 ft.</p> <p>All material removed
consisted of topsoil,
river sand and gravel
and cobbles.</p> |
| <p>5. Equipment:</p> <p>Hand tools</p> | <p>Work started and
completed: 1960
by National Park Service</p> |
| <p>6. Casing:</p> <p>Corrugated Metal Pipe,
Galvanized
Diameter: 4 ft. from
0' to 10', 3'-8" from
10' to 20'</p> | <p>*Note: In recent years
the surrounding strata
have become sanded in,
reducing the sustained
yield to 85 gpm (1978).</p> |
| <p>7. Perforations or Screen:</p> <p>None. Water enters well
at bottom and between
casing sections.</p> | |

EL PORTAL WATER WELL #1



TRIPLICATE
Retain this copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

No. 703

State Well No.

Other Well No.

E1 Port 21 #2

(1) OWNER: U. S. Dept. of Interior
National Park Service
Name: Water Resources Division
Address: 450 Golden Gate Ave. - Box 38029
San Francisco, Calif. 94102

(11) WELL LOG:

Total depth 105 ft. Depth of completed well 105 ft.
Formations: Describe by color, character, size of material, and structure.
0 25 Sand and gravel
25 42 Gravel, sand, and silt
42 43 Sand and gravel
43 49 Sand and gravel
49 55 Sand and gravel
55 105 Gravel with sand and silt

(2) LOCATION OF WELL:

County: Merced Owner's number, if any: E1 Port 21
Township, Range, and Section: Twp. 36S, R. 12E, Sec. 17
Distance from cities, roads, railroads, etc.: About 40' east of thread

River at a point about 200 yds. downstream from

(3) TYPE OF WORK (check):
New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☐
Cable ☒
Other ☐

(6) CASING INSTALLED:

STEEL:

OTHER:

If gravel packed

From ft.	To ft.	Diam. of Bore	or Wall	From ft.	To ft.
Up 3'	55'	10"	sch. 40	0	55
Up 3'	7'	24"	sch. 40		
Up 3'	29'	16"	sch. 40		

Size of shoe or well rim: 10" x 12" x 1/2" Size of gravel: Monterey 48

Describe joint: Buttwelded

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen:

Johnson Screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
45	55	Johnson	Stainless Steel	Screen - .045 slot

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☒ No ☐ To what depth: 10' ft.

Were any struts sealed against pollution? Yes ☐ No ☒ If yes, note depth of struts

From ft. to ft.

From ft. to ft.

Method of sealing: Cement

(9) WATER LEVELS:

Depth at which water was first found, if known: 10' ft.

Standing level before perforating, if known: ft.

Standing level after perforating and developing: ft.

(10) WELL TESTS:

Was pump test made? Yes ☒ No ☐ If yes, by whom: Bellman

Yield: 76 gal/min with 37 ft. drawdown after 10 hrs.

Temperature of water: Was a chemical analysis made? Yes ☒ No ☐

Was electric log made of well? Yes ☐ No ☒ If yes, attach copy

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME: Bill Bellman

(Firm, firm, or corporation) (If separate person)

Address: P. O. Box 516

Redwood, California 94571

(SIGNATURE)

(Well Driller)

License No.: 106623 Dated: 7/21/70

SKETCH LOCATION OF WELL ON REVERSE SIDE

TRIPPLICATE
Retain this copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do Not Print

No. 871

State Well No.

Other Well No.

(1) OWNER: U. S. Dept. of Interior
Name National Park Service
Address 450 Golden Gate Ave., Box 25025
San Francisco, Calif. 94112

(2) LOCATION OF WELL: Yosemite Park
County Mariposa
Owner's number, if any: West Hole #2
Distance from entry, road, railroad, etc.: About 200' SW of entrance
pumping plant

(3) TYPE OF WORK (check):
New Well ☐ Deepening ☐ Reconditioning ☐ Destroying ☐
If destruction, describe material and procedure in item 11.

(4) PROPOSED USE (check):
Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:
Rotary ☒
Cable ☐
Other ☐

(6) CASING INSTALLED:
STEEL: ☐ OTHER: ☐
SINGLE ☒ DOUBLE ☐
If gravel packed

From ft.	To ft.	Dia. in.	Gage or Well No.	Diameter of Pore	From ft.	To ft.
Up 3'	417'	8"	10	7/8"	425'	1015'
417'	417'8"	8"	10	7/8"	425'	1015'
417'8"	519'	6"	10	7/8"	425'	1015'

Size of shoe or well ring: Flat plate
Describe joint: Bittencourt
Size of gravel: 1/8 Monterey
Sand Co.

(7) PERFORATIONS OR SCREENS:
Type of perforation or name of screen: Johnson stainless steel
screen, size 5159 .020

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
429	459	6"	Johnson, slot size .020	
459	509	6"	Johnson, slot size .020	
459	509	6"	stainless steel screen	

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes ☒ No ☐ To what depth 420 ft.
Were any struts sealed against pollution? Yes ☐ No ☒ If yes, note depth of struts
From ft. to ft.
From ft. to ft.
Method of sealing

(9) WATER LEVELS: 100 gpa artesian flow
Depth at which water was first found, if known: approx. 10' per square
Standing level before perforation, if known: inch head ft.
Standing level after perforation and development: ft.

(10) WELL TESTS:
Flow test made? Yes ☒ No ☐ If yes, by whom? Ballmap
Flow: 800 gal/min with 80 ft drawdown after 12 hrs.
Type of water: Was a chemical analysis made? Yes ☒ No ☐
Was a core log made of well? Yes ☐ No ☒ If yes, attach copy

(11) WELL LOG:
Total Depth 1015 ft. Depth of completed well 1015 ft.

Formation: Describe by color, character, size of material, and texture	Depth (ft.)
0 6 Soil and clay	6
6 43 Sand, white, fine	43
43 43 Fine white sand	43
43 65 Fine to coarse sand	65
65 65 Coarse brown sand	65
65 90 Fine white sand	90
90 423 Fine white sand	423
423 431 Hard layer and gravel	431
431 679 Medium fine sand	679
679 680 Boulder at base of sand	680
680 690 Medium sand	690
690 691 Hard layer	691
691 730 Medium sand	730
730 730 2" hard layer	730
730 833 Medium sand	833
833 833 Hard layer	833
833 893 Medium sand	893
893 893 Hard layer	893
893 899 Medium sand	899
899 905 Large rocks and sand	905
905 930 Medium sand	930
930 930 Hard layer - 2"	930
930 934 Medium sand	934
934 935 Hard rock	935
935 974 Medium sand	974
974 980 Hard rock	980
980 987 Loose rock and sand	987
987 991 Hard rock	991
991 995 Loose rock and sand	995
995 1002 Sand	1002
1002 1015 Loose rock and sand	1015

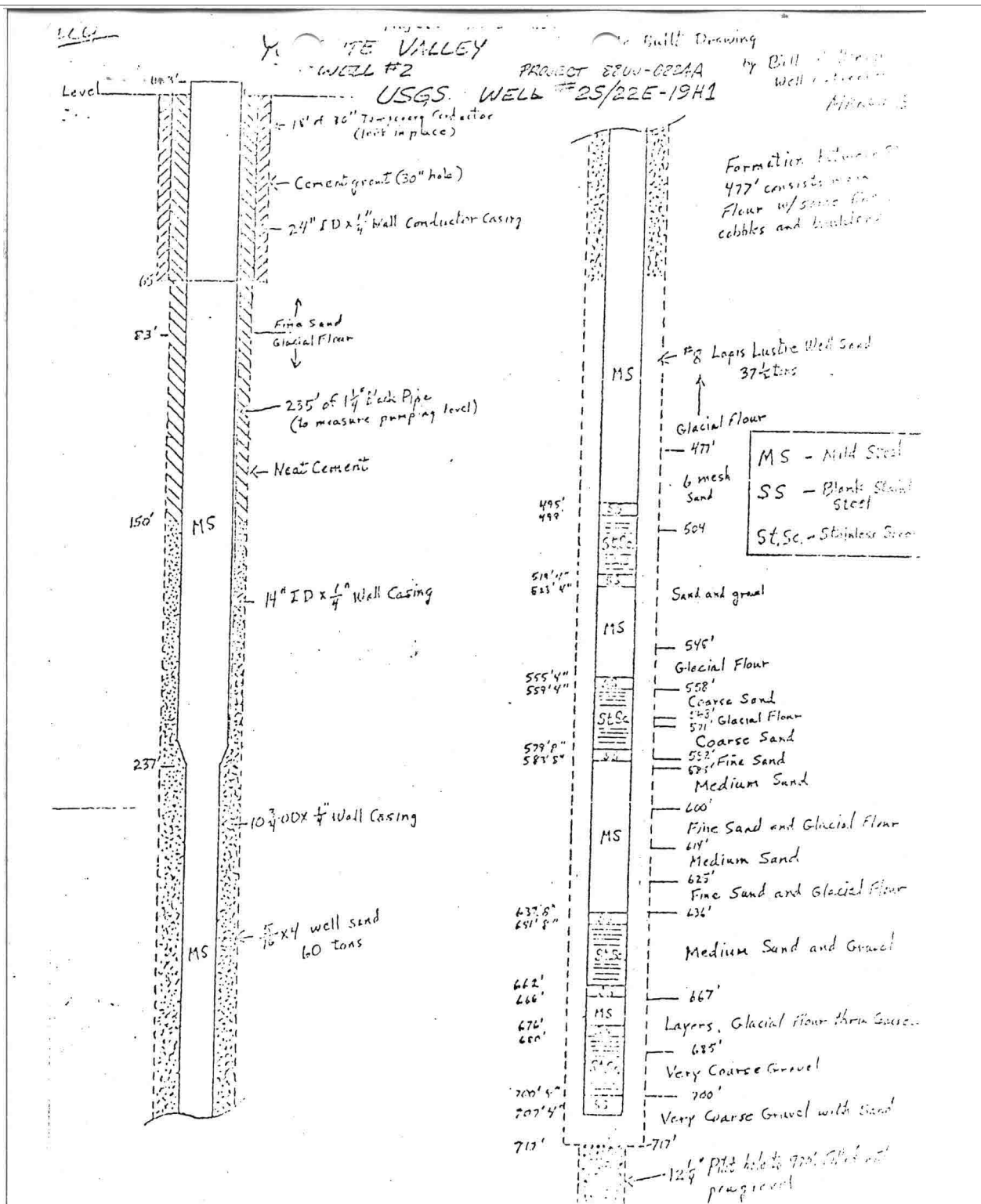
Work started 3/9/71, 19 Completed 6/15/71

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Bill Ballmap (Person, firm, or corporation) (Print or type name)
Address P. O. Box 246
Hoodport, California 95026
(SIGNED) Bill Ballmap (Well Driller)
License No. 106933 Dated July 23, 1971

SKETCH LOCATION OF WELL ON REVERSE SIDE

1000 1000 1000 1000 1000



D5039-DSC-TWE

May 15, 1980

Memorandum

To: Assistant Manager, Western Pacific Northwest/Western Team,
Denver Service Center

From: Don Ziemann, Electrical Engineer, Pacific Northwest/Western
Team, Denver Service Center

Reference: Yosemite, Package 223, Develop Well Water System, El Portal,
Construction Drawings and Specifications

Subject: Trip Report - May 4-6, 1980

PURPOSE

Field determine the power and telephone control system and sources for the referenced project above which is currently in the design stage.

Met with the following personnel on May 5, 1980:

Marlon Nachtigal, Pacific Telephone Company (PTC)
Walt Koehn, Pacific Gas and Electric Co. (PG&E)
Bill Madison, Park Utilities Foreman
Larry Millard, Park Electrical Engineer
Dan Schrantz, Project Supervisor

FINDINGS

Contract No. CX-8000-0-9002 for digging three new well sites is currently being implemented with new well site No. 2 being dug first. One, two, and three correspond to well site Nos. 4, 3, and 5 respectively in the referenced project. Existing well site No. 1 is to be abandoned and existing well site No. two is to remain in service with both existing wells retaining their original numbers. Therefore this report will refer

2.

to well number, one through five as in the referenced project. Dan Schrantz is the Project Supervisor.

The referenced project involves controlling four well pumps from the water level in the 500,000 gallon tank. The existing booster pump that fills the 500,000 gallon reservoir is to be abandoned. All well pumps would pump into existing and partially new pipe line to the 500,000 gallon tank. The southern 100,000 gallon tank would also be filled directly from this same pipe line, but it will be controlled by its own level, which would operate a solenoid valve to open and close the supply line.

An adjustable pressure sustaining valve is proposed to be installed at the end of the Rancheria residential service line. This would allow the northern 100,000 gallon reservoir to provide normal service. The existing booster pump for filling the northern 100,000 gallon tank is to remain in service. In the event of peak usage such as fire fighting, the valve would open and allow the 500,000 gallon tank, the well pumps if running, and the southern 100,000 gallon tank if the solenoid valve is open, to provide additional pressure.

Electrical Service

All of the existing primary and secondary electrical lines and existing telephone lines are aerial in the areas around all of the well sites. Undergrounding or trenching would be very costly due to the rocky soil conditions. There are also archeological sites at well sites two and three. PG&E would also have construction costs for any new underground services, whereas aerial services have no cost for under 175 feet per horsepower.

The master plan includes the removal of the trailer village sometime in the near future. However, the existing primary power in the trailer area will have to remain to provide electrical service for the wells. PG&E will not serve new well sites where existing government aerial primary lines are available.

Existing well site No. 2 is currently served by the government's primary line with three phase, 240 volt service. This aerial primary line comes from the trailer park area on the opposite side of this river. The existing chlorination booster pump at existing well site No. 2 has a 3/4 horsepower motor which Mr. Espinoza states will have a large enough capacity for the proposed new well system. Well site No. three is approximately 1000 feet from well site No. 2. PG&E's line is approximately 800 feet across the asphalt road, north of Highway 140 and up the hill. PG&E would provide aerial service at no charge at 175 feet per horsepower, if there was no other service available. An aerial electrical primary service for well site No. 3 from existing well site No. 2 would involve no road crossings and require no trenching in archeological sites.

Electrical service for well site No. 4 would best be served from the

3.

government's aerial primary line which is adjacent to the site. A new primary pole in line with the existing line would be required since both adjacent poles are cluttered, full of hardware, and would not allow safe climbing and proper clearances.

Electrical service for well site No. 5 would be served by PG&E's aerial primary line which is adjacent to the site. PG&E would provide an aerial drop at no cost to a secondary service mast above the roof. PG&E requires the meter to be mounted on the exterior of the building. An optional site for well site No. 5 is being considered in the vicinity of the old sewage treatment plant. PG&E also has aerial primary lines at this site and the service would be the same.

Electrical service is currently available at both the 500,000 gallon reservoir located at the residential area and southern 100,000 gallon reservoir located at the Rancheria residential area.

Telephone Service

The telephone company will provide service to a telephone cabinet in each new or existing building or facility where service is required. The government would have to furnish the aerial service mast and riser for entrance into the building or facility to the telephone cabinet. There would be no installation costs involved except for the monthly billing for use of the lines which would be handled locally by the park.

There are existing aerial telephone lines at existing well site No. 2. The telephone company would use power poles to service well site No. 3 from either well site No. 2 or from their aerial line along the highway, which is approximately 200 feet north from well site No. 3. There are aerial telephone lines at both well site No. 5 and the alternate site.

RECOMMENDATIONS

Electrical Service

Recommend a new 480 volt aerial service replace the existing service at well site No. 2. Recommend a new control panel and telephone cabinet be installed at existing well site No. 2. Recommend the referenced project include an extension of the government aerial primary line from existing well site No. 2 to well site No. 3 for approximately 1000 feet. Recommend the referenced project include a new primary transformer pole in line with the existing government line adjacent to well site No. 4 and a corresponding aerial secondary service drop for the new pump house. Recommend PG&E provide a new aerial secondary service drop to the new pump house at well site No. 5 or at its alternate site. PG&E would not require any cost for the new service.

4.

Recommend existing well pump No. 2 and all new well pumps numbers three, four, and five be served with 480 three phase power. Since the well depth is unknown at this time but could be up to 70 feet deep, a 480 volt service would require a smaller cord from the well pump to the pump control panel. There would be less voltage drop and slightly less operating cost involved.

Telephone Service

Recommend the PTC provide new aerial telephone service at each site since there are existing aerial telephone lines at all sites.

CONCLUSIONS

Existing well site No. 2 and new well sites Nos. 3 and 4 will have service by the government and well site no. 5 by PG&E. All electrical services will be aerial, 480 volt and three phase. All telephone service will be aerial. There will be no construction costs from either PG&E or Pacific Telephone Company.

Don Ziemann

Don Ziemann

Approved for distribution:

~~CONFIDENTIAL~~

MAY 29 1980

Assistant Manager, PNW/W, Team, DSC

Date

cc:

(Reg. Dir., Western Region

Supt., Yosemite

Pacific Gas and Electric Company, Attn: Walt Koehn, Post Office Box 719

Merced, California 95340

Pacific Telephone Company, Attn: Marlin Nachtigal, 750 Loughborough Drive,
Merced, California 95340

DS039-PSC-TWE

March 10, 1980

Memorandum:

To: Assistant Manager, Pacific Northwest/Western Team, PSC
From: Henry Espinoza, Civil Engineer, Bob Schiller, Ecologist
Reference: Yosemite National Park, Develop Well Water System, El Portal,
Package 223
Subject: Trip Report, February 25-29, 1980

PURPOSE

Make an on site investigation of proposed project, complete an environmental impact analysis of the proposed project site, and review project with Park Staff and Caltrans.

CONCLUSION

Proceed with construction design drawings incorporating comments made during meetings with members of Park Staff and State Highway Officials. Proceed with environmental analysis and preparation of a memo to files for the Superintendent's signature.

DISCUSSION

Met with the following members of the Park Staff and Caltran Officials:

John Byrne	Assistant Park Superintendent
Bill Matteson	Park Engineer
Steve Danziger	Park Archaeologist
John Banias	Plumbing Foreman
Don Fox	Park Landscape Architect
J.W. Cameron	Caltrans
Carl Carpenter	Caltrans

The major items of discussion were:

1. Explore all possible routings of the pipelines in regards to cost, design, visual and archaeological impacts.
2. That all chlorination building sites be selected by Landscape Architect Andrea Chaitin.
3. That Steve Danziger would study all possible routings of the pipe lines so that no line would be constructed over any significant archaeological site. Steve would initiate project clearance documentation and forward material to the Western Archaeological Center.
4. That the new and existing well pumps be automated to the greatest extent.
5. That the existing Dug Well No. One, and the Moss Creek Intake and Pipe Line be abandoned.
6. That the chlorination buildings be designed for possible exposure to the public. That thought be given to constructing a rain shelter as part of the chlorination building.
7. Emphasized fact that these three new wells are for replacement of the Moss Creek and Well No. One water supplies and that no additional water supply would be gained from this project.
8. Wherever possible, have project design with future expansion of water service in mind.
9. Provide same make of chlorination equipment as now in service.
10. That Caltrans permits, would be required by both the Park Service and Contractor.
11. Minimum of three feet of cover would be required in state right of way.
12. No suspension of pipelines would be allowed on any state bridge.

FINDINGS

1. Several reservoirs and pumps are controlled by floats.
2. Most well sites afford three or more alternate pipe line routes.
3. Archaeological sites are abundant in the El Portal Area.
4. Electrical power is available at all three well sites.

RECOMMENDATIONS

1. All pipe line routes be analyzed for best possible routing.
2. All chlorination buildings be architecturally designed.
3. New and existing well and reservoir system be automated to fullest extent.
4. Incorporate proposal, alternatives and impacts in a brief environmental analysis.

Signed

Bob Shiller

Signed

Henry Espinoza

Approved For Distribution:

(Sgd) Henry Espinoza

MAR 1 1980

Assistant Manager Pacific Northwest/Western Team

Date

Enclosure

cc:

Supt., Yosemite NP w/c enc.

Reg. Dir. Western Region, w/c enc.



IN REPLY REFER TO:

~~DIS~~ L-7617
(WR)OM

United States Department of the Interior SEP 13 '79

NATIONAL PARK SERVICE
P.O. BOX 377
YOSEMITE NATIONAL PARK, CALIFORNIA 95389

SEP 12 1979

REC
RECEIVED
Western Regional Office

Regional Director	
Dep. Regional Dir.	
Operations Eval.	
Administration	
Operations	
Maintenance	
Wild. Mgmt. Plan	
Public Affairs	
Action Taken	

REQ has copy
file
yosemite
fund

Memorandum

To: Regional Director, Western Region

From: ^{ACTING} Superintendent, Yosemite

Subject: Environmental Analysis concerning design of supplemental water supply for El Portal, Package 223, Yosemite

Enclosed is the Environmental Analysis for the above subject prepared by the Denver Service Center and our addition to the Compliance section.

We have concluded that the entire project, Phase I and Phase II, is not a major federal action having a significant impact on the human environment. Provisions to minimize adverse impacts described in the assessment and its addition will become part of the project work.

William N. Burgen
William N. Burgen

Enclosure

cc: Denver Service Center, TWE, w/enc.

ADDITION TO
Supplemental Water Supply
El Portal, Yosemite National Park

Environmental summary should also consider Phase II of this work. The assessment provided by the Denver Service Center is to be augmented by this condition:

Compliance:

All areas that will be disturbed by the construction equipment or activity in Phase I or in Phase II will be inspected by an archeologist to determine the presence of any archeological evidence. The archeologist will determine measures to be taken to avoid or mitigate adverse impacts to these resources (see Clearance No. 35-79-YOSE for the wells).

A representative of the resource management division will survey all sites for the presence of rare or endangered plants. This representative will determine measures to be taken to avoid or mitigate adverse impacts to these plants.

During development phases of the well, adequate measures will be employed to prevent pollution into the Merced River. The pipe connecting the wells to the existing water system will be placed in presently impacted areas such as cross bridges or along road shoulders whenever possible.

All powerlines will be underground in the vicinity of the pump house.

Structures will be designed and located and planning will be used to minimize visual intrusion of the facilities.

In the laying of pipe and underground power conduit or cable, special effort will be made to protect roots over two inches in diameter.

SUPPLEMENTARY WATER SUPPLY
EL PORTAL, YOSEMITE NATIONAL PARK

Description of the Problem

A central water system serves the lower portion of the El Portal community, beginning at the old residential area and extending to the new wastewater treatment facility (Fig. 1). This system resulted from add-on construction. Some areas are very old and the state of repairs of various sections remain unknown due to lack of drawings.

Three water sources presently serve the system: a drilled well providing 65 gallons per minute (GPM), a dug well which provides 85 GPM but which has been contaminated, and the Moss Creek surface intake. The surface water source dries up during the summer months and demand peaks at that time. Presently, peak monthly use is estimated at 409,000 gallons per day (GPD) or an average flow of 284 GPM. Approximately 75 percent of the demand is for irrigation. Domestic use composes the remainder of the demand. Overall demand outstrips supply by approximately 193,000 GPD during critical summer months.

The drilled well, with only a 10 foot sanitary seal, does not meet current health department water standards.

Relationship to Previous Planning

The draft general management plan, which has been approved and is now on public review, calls for replacement and upgrading of the El Portal water system with efforts focused on conversion to ground water sources where feasible. The draft environmental statement comprehensively covers impacts of development in the El Portal area, including conversion to ground water sources.

Description of the Proposal

The water system will be converted from mixed surface and ground water to total reliance on ground water. The Moss Creek intake, as well as the contaminated dug well, will be abandoned. Additional wells will be drilled as needed to increase existing ground water production by 220 GPM. This production level will meet existing demand only.

The proposed project will occur in two phases. Phase I will be to drill, develop, and test the wells; Phase II will connect them to the existing system, and provide emergency stand-by power. Connection may require approximately 3,300 feet of pipe. This environmental analysis deals only with Phase I.

Well design consists of a five foot stainless steel riser pipe at the top, and a three foot stainless steel extension pipe at the bottom (beginning at the top of the bedrock). The length of the intervening telescoping unit will have a self-sealing packer.

Description of the Environment

El Portal is a 200 acre area (2000 feet elevation) adjacent to the western park boundary about 1.5 miles west of the Arch Rock Entrance Station. Situated in the Merced River gorge, this development functions primarily as an employee residential area with some community facilities. The El Portal area was designated an administrative area in 1958. The Merced River canyon in this vicinity is in the chaparral vegetation zone characterized by isolated blue and canyon live oaks (Quercus douglasii, Q. chrysolepis), digger pine (Pinus sabiniana), growing in association with chaparral dominated by rabbitbrush (Chrysothamnus spp.), ceanothus (Ceanothus spp.) and mountain mahogany (Cercocarpus spp.)

Environmental Impact

Overall El Portal development will have long-term and significant cumulative impact upon archeological resources (site and integrity). The proposed well sites lie within the El Portal Archeological District, covered in the blanket 106 statement submitted to the Western Regional Office and the California State Historical Preservation Office. Two areas of particular concern are 4-MRP-358 and 4-MRP-181.

Environmental damage will occur due to site disturbance (50'x100' per well site), but the water system development will enhance the long term environmental productivity by increasing the quality and quantity of surface water flow of Moss Creek. Although little data exists on local groundwater hydrology it appears that by using primarily underground sources, flows in the Merced, downstream of El Portal, will be moderately reduced since the wells are located in riverbed alluvium. However, this reduction should be negligible due to the offsetting addition to groundwater of tertiary treated effluent from the El Portal plant.

The wells are to be located within the floodplain of the Merced River (Fig. 1). Alluvial, loamy alluvial, or Ahwahnee soils are present at the proposed well sites; these soils are relatively stable and no significant hazards are associated with these sites. Site 1 lies within the 100-year floodplain, with a 1-10 percent slope. Sites 2 and 3 lie within the 50-year floodplain with 1-10 percent and 11-20 percent slopes, respectively.

Use of ground water sources may assist in alleviating overflow problems at the wastewater treatment facility, located down river from the El Portal community, by lowering overall ground water levels. The percolation ponds at the facility have been troubled by rising ground water levels which, during periods of high water, introduce treated wastewater directly into the Merced River.

All probable archeological sites, in particular 4-MRP-358 and 4-MRP-181, must be flagged prior to work. If archeological resources are encountered or uncovered during construction, they must be protected and the Western Archeological Center or representatives thereof, are to be notified and the project halted pending further clearance.

The contractor is to protect all trees, shrubbery, etc. during construction. All debris is to be removed, and vehicular traffic and construction work must be confined to the construction sites as shown on the plans. Water pumped from the wells during testing will be disposed of in the nearest sewer manholes.

Alternatives

The "no-action" alternative would result in the use of an inadequate and sub-standard water supply, some components of which are not in compliance with California Health and Safety codes.

Use of surface waters was rejected because of the additional work associated with treatment and filtration, and the seasonal supply problems experienced in this area. However, surface water supplies may be developed should ground water supply be inadequate.

Other sites were considered and eliminated where potential impacts on cultural resources were apparent and more significant.

Compliance

Standards are provided by the state in the California Department of Water Resources Bulletin #74 (reprinted January 1971). Attention is called to Part I, Sections 6 and 7, which requires well drillers to be licensed and file reports concerning construction of water wells. Deviations from published standards are to be recommended by the appropriate agency. The State Department of Public Health has been consulted by the project design team. Permits for well drilling are not required by the Water Resources agency.

The Contracting Officer will inspect the sites 10 days after receipt of a report of major completion, and again one year after the project completion.

Archeological clearance has been granted by the Western Archeological Center (clearance no. 35-79-YOSE) conditional upon SHPO approval of the Section 106 finding of no adverse effect, and the presence of an archeologist during project implementation.

Conclusion

With the three wells proposed, present water demands would be met during critical summer months. Each site will be tested to discern the need for additional wells. Surface water flow may improve in Moss

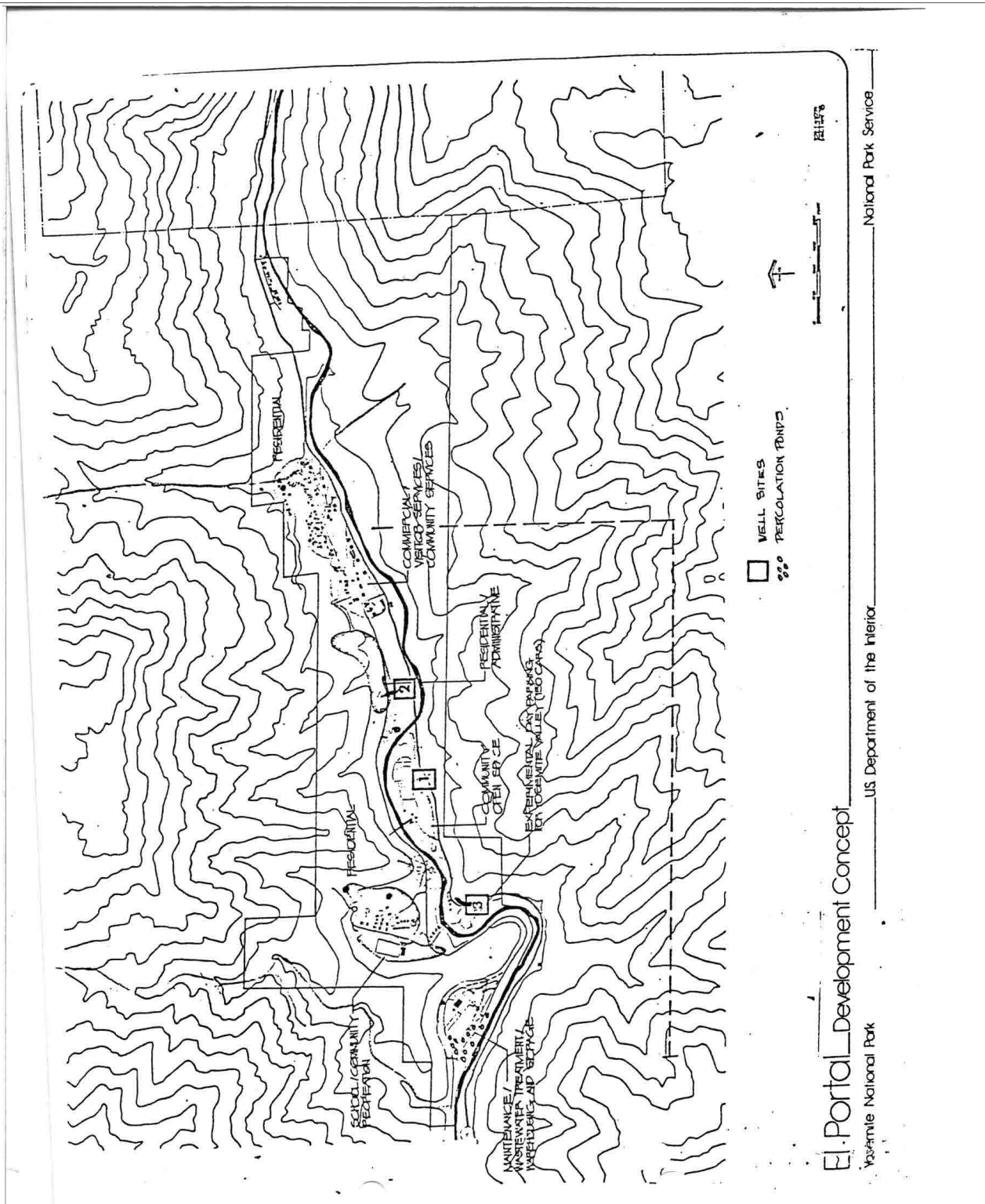
Creek while declining somewhat in the Merced River, while overflow problems at the wastewater treatment plant may be alleviated.

Assessment of natural and cultural resources do not indicate significant or irreversible impacts. It is not anticipated that rare, endangered, or threatened species will be affected.

Since this environmental summary only deals with Phase I (well drilling), discussion of Phase II impacts (e.g., configuration and placement of pumps, wellheads with regard to floodplain hazards, possible increase in electrical demand to operate the pumps) will be addressed in future environmental documents.

Recommendation

Based on the above conclusions it is suggested that the proposed project is not a major federal action affecting the quality of the human environment, and is not of sufficient controversy to warrant an environmental statement pursuant to the National Environmental Policy Act of 1969. Should further information on the above material be desired, please contact Robert Schiller or Janice Auyong concerning the discussion of environmental matters; or James Buckel concerning the engineering details of the proposal. Please notify this office of your final position on the status of this project.



C. CUNNINGHAM 7/11

PATTON (Later)

D22
(WR)APB

July 11, 1979

N. COX 7/11

JONES 7/12

WITUCKI 7/12

REG. DIR. 7/12

Memorandum

To: Manager, Denver Service Center
Attention: Assistant Manager, Pacific Northwest/Western Team

From: Regional Director, Western Region

Subject: Package 223, Task Directive, Supplemental Water Supply, El Portal, Yosemite

This is in reply to Associate Manager Steenhagen's memorandum of June 11. Enclosed is a copy of Acting Superintendent Burgen's memorandum of comments dated July 2.

The Region comments were as follows: The Service Center should submit a memorandum report indicating the alternative well sites that were considered and the reasons for selecting the final site. Items that should be considered are potential to develop a production well, feasibility to connect to existing system, relationship to future development and effect on cultural resources.

The task directive states that the Service Center will prepare an environmental summary on this project. We do not require this on drilling the wells, but we want one on phase II, tying them into the existing system.

I therefore approve the subject Task Directive this date, subject to the above comments.

Enclosure

cc: Superintendent, Yosemite

CCCunningham:btb 7/10/79

10217
M-12215 6/29/79
(MR)DMA

MM 6/19/79

Memorandum

To: Regional Director, Northern Region

From: ~~Superintendent~~ Superintendent, Yosemite

Reference: Yosemite, Package 223, Supplemental Water Supply,
El Portal, Comprehensive Design

Subject: Task Directive

The subject directive seems satisfactory and is approved with the following comment. We feel that the new well capacity should be targeted to accommodate the planned expansion, instead of just the present use. If and when the Master Plan is implemented in the El Portal area, water consumption could easily double.

WILLIAM M. BURTON

William M. Burton

FBelliott:sh 6/29/79



IN REPLY REFER TO:

D5039-DSC-TWE

United States Department of the Interior

NATIONAL PARK SERVICE

DENVER SERVICE CENTER

755 Parfet Street

P.O. Box 25287

Denver, Colorado 80225

June 11, 1979

Recd 7/11

RECEIVED	
Western Regional Office	
JUN 15 '79	
Regional Director	
Asst. Regional Dir.	
Operations Eval.	
Administration	
Operations	
Res. Mgmt. Plan	
EEO	
Public Affairs	
Action Taken	
<i>Mem 7/11/79</i>	

Memorandum

To: Regional Director, Western Region

From: Associate Manager, Denver Service Center

Reference: Yosemite, Package 223, Supplemental Water Supply,
El Portal, Comprehensive Design

Subject: Task Directive

The subject directive, which has been recommended by this office, is enclosed for your review and approval. The referenced directive is being forwarded to you and the Superintendent, Yosemite for concurrent review and approval to save time in the review process.

Since this directive is essentially an agreement between our offices for providing professional services, I urge your careful review to insure that this directive clearly and fully identifies your needs.

All other reviewing offices should send their recommendations to you for consolidation into one response. Your early reply is urged so that this project may get underway.

Robert L. Steenhagen
Robert L. Steenhagen

Enclosure

cc:

WASO-560-Mr. Holland w/c enc.

Supt., Yosemite w/c enc.



Save Energy and You Serve America!

DENVER SERVICE CENTER
TASK DIRECTIVE
FOR
DESIGN OF SUPPLEMENTAL WATER SUPPLY
EL PORTAL AREA
YOSEMITE NATIONAL PARK
June 11, 1979

RECOMMENDED:

Kenneth Faith
ASSISTANT MANAGER, DENVER SERVICE CENTER /ENW/W Team

6/12/79
DATE

CONCURRED:

Robert J. Steinlage
ASSOCIATE MANAGER, DENVER SERVICE CENTER

6-13-79
DATE

/S/ William N. Burgen, Acting
SUPERINTENDENT, Yosemite National Park

7/2/79
DATE

MANAGER, HARPERS FERRY CENTER

DATE

APPROVED:

REGIONAL DIRECTOR, Western Region

DATE

PROJECT TITLE:

Design of Supplemental Water Supply, El Portal, Yosemite National Park, Package 223

DESCRIPTION OF EXISTING CONDITIONS:

The lower portion of the El Portal community, beginning at the old residential area and extending to the new wastewater treatment facility, is served by a central water system. There are various areas in the system that are old and little is known about their state of repair. The system is a result of add-on type construction and in some areas drawings are not available. Presently three sources of supply are being used, one drilled well, one dug well and the Moss Creek surface intake. During summer months, Moss Creek supply dries up and the other two wells are unable to keep up with the demand. This shortage extends over a period of about two months. By far, the greatest demand for water is irrigation, which is at its peak during the period when Moss Creek is dry.

Actual meter readings of water use are not available however, an estimate of peak month water use is 91,000 gallons per day (GPD) domestic and 318,000 GPD irrigation, for a total use of 409,000 GPD or an average flow of 284 GPM. The present wells supply a total of 150 GPM. Moss Creek makes up the difference when flow is available.

The surface area around the dug well has been contaminated. This well is 20 feet deep and has no sanitary seal. A letter to Superintendent Arnberger from the Department of Health Service, State of California, dated March 1, 1979 recommends that this well be replaced. Its flow is 85 GPM.

The drilled well, 106 feet deep has a sanitary seal of 10 feet, which does not meet the safety code of the California Department of Health. This well produces 65 GPM.

PRELIMINARY REQUIREMENTS: The draft environmental statement, general management plan, has been approved by the Regional Director. The plan calls for development of a ground water supply for the El Portal Area.

Since an approved environmental statement has not been signed, an environmental summary will be prepared by the Denver Service Center.

A request for archeological clearance has been granted by the Western Archeological Center. (Attachment No. 1) (35-79-YOSE)

DATA COLLECTION: A field trip was made August 1978 by Cal Cooper and Jim Buckel at which time the proposed drilling sites were selected, and a revised cost estimate was prepared.

BASIC DATA:

1. Geological Survey Maps.
2. Denver Service Center As-Constructed Drawings

PERSONNEL:

Project Manager: Jim Buckel, Civil Engineer

Design Team: Don Zieman, Electrical Engineer; Jim McConnell, Mechanical Engineer; R.H. Braun, Architect

Consultants: M. Jensen, Public Health Service, Denver Service Center; Superintendent and staff, Yosemite National Park; Jerry Witucki, Western Regional Office; Bill Werrell, Western Regional Office; R. Schiller, Planning Team, Denver Service Center, Pacific Northwest/Western Team.

FUNDING: Package 223

PROGRAMMED:

Preliminary Design	06 Fiscal Year 1979	8,4
Construction Plans		
and specifications	07 Fiscal Year 1979	14,0
Construction	91 Fiscal Year 1980	397,0

ESTIMATED:

Task Directive -		
Environmental		
Summary	06 Fiscal Year 1979	3,6
Construction Plans		
and specifications	07 Fiscal Year 1979	16,8
Construction Phase		
I	91 Fiscal Year 1979	120,0
Construction plans		
and specifications	07 Fiscal Year 1980	59,2
Construction Phase		
II	91 Fiscal Year 1980	277,0

Phase one of this project will be constructed using available Fiscal Year 1979 project planning funds not needed for other projects.

REGULATORY REVIEW:

The Department of Health Services, State of California will be sent a set of plans and specifications for their review.

CONSTRUCTION COSTS:

PHASE I	1. Drill and develop 3 wells	120,000
PHASE II	1. Connect well to existing system	202,000
	2. Provide stand-by power	25,000
	3. Miscellaneous materials and services	50,000
	Total Construction Cost	397,000

PROJECT SCHEDULE:

Item	Completion Date
Drilling specifications	June 11, 1979
Phase I	
Review	July 2, 1979
Environmental summary	July 30, 1979
Printing	August 6, 1979
Bid period	September 3, 1979
Award	September 17, 1979
Construct Phase I	January 1, 1980
Construction plans and specifications Phase II	April 28, 1980
Review	May 19, 1980
Printing	June 23, 1980
Bid period	July 21, 1980
Award	August 4, 1980
Construct Phase II	May 1, 1981

PROPOSED WORK:

The purpose of this project is to provide an adequate water supply for the El Portal community as it presently exists.

We propose to drill additional wells to increase the ground water supply by about 220 GPM. It is estimated the present peak month demand requires a flow of 284 GPM. The drilled well produces 65 GPM. Since Moss Creek is an unreliable source and the dug well could be contaminated from the surface, these two sources will be abandoned.

Since it is impossible to design the completed connections to the existing system before the location and hydraulics of the new wells are known, this work will be done in two phases.

Phase I will be to drill and develop the wells and phase II will connect them to the existing system, and provide emergency stand-by power.

OPTIONS:

Should Phase I prove that developing a ground water supply is not feasible, then a surface source and treatment plant will be required.



United States Department of the Interior

NATIONAL PARK SERVICE
WESTERN ARCHEOLOGICAL CENTER
P.O. BOX 41058
TUCSON, ARIZONA 85717

IN REPLY REFER TO:

H4217
X-H2215 YOSE
(WR)RWA

May 4, 1979

35-79-YOSE
Clearance No.

Memorandum

To: Superintendent, Yosemite
From: Chief, Western Archeological Center
Subject: Archeological clearance

The effects of the following project on archeological resources have been assessed: drilling of three wells and emplacement of 3300 feet of pipe near the Merced River in the El Portal area, Yosemite National Park, California (Construction Package 223).

The basis for this assessment is a letter report by Western Archeological Center Circuit Rider Jim Mayberry, dated May 3, 1979. A copy is enclosed.

Since there is a likelihood that archeological resources may be encountered, the Service should exercise caution. However, clearance to proceed is hereby provided on the following conditions:

1. An alternate route for the water line from well 1 should be chosen, so as to avoid site 4-MRP-358 (see enclosed letter report). If the site cannot be avoided, consultation with the Circuit Rider and this Office is required and excavation of all or part of the site may be necessary prior to emplacement of the water line.
2. The Circuit Rider should monitor all construction activity in the vicinity of sites 4-MRP-358 and 4-MRP-181. These sites should be flagged prior to the beginning of work and they should be avoided by vehicular traffic and other construction activities during work.

This property is within the El Portal Archeological District. This project is covered in a blanket 106 statement that has been submitted to the Western Regional Office and the California State Historic Preservation Officer.

STATE OF CALIFORNIA—HEALTH AND WELFARE AGENCY

DEPARTMENT OF HEALTH SERVICES

5545 EAST SHIELDS
FRESNO, CA 93727
(209) 291-6676

*Recd
2/27*

March 1, 1979

EDMUND G. BROVIER JR., Governor
B37
XV
FAS

Mr. Leslie P. Arnberger, Park Superintendent
United States Department of the Interior
National Park Service
P. O. Box 577
Yosemite National Park, CA 95389

Dear Mr. Arnberger:

Your letter of February 20, 1979 transmitting well logs for El Portal Wells 1 and 2 and Yosemite Valley Well 1 has been received. We have reviewed these logs and offer the following comments:

1. The profile sketch of Yosemite Valley Well 2 indicates the well to be equipped with both a cemented-in-place conductor casing and a cement seal down to about 150 feet to protect the gravel envelope from surface and shallow subsurface contaminants. This well meets the California Well Construction Standards.
2. The well log for Yosemite Valley Well 1 indicates that this well is also gravel packed. This log does not show if a conductor casing was installed, nor the cement sealing technique employed, if any. Do you have additional construction information in this regard?
3. El Portal Well 2 is of cable tool construction and was only sealed to a depth of 10 feet. The minimum sealing requirements in California are 50 feet. First perforations are at a relatively shallow depth of 45 feet. Our previous request to operate this well only with continuous and reliable chlorination facilities was therefore justified to assure a bacteriologically safe water quality to consumers served by this well.
4. Hand dug El Portal Well 1 is a rather crudely constructed well. It is only 20 feet deep and cased with two overlapping lengths of corrugated metal pipes. No sanitary seal of any kind was provided. Water enters the well at the bottom (20 feet depth) and between the pipe sections (10 feet depth where the pipes overlap). The earth material around the outside of corrugated metal pipe casing is most likely coarse and alluvial material. These above described construction features are not judged satisfactory as no safeguards exist protecting this well from

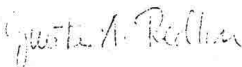
Leslie P. Arnberger

- 2 -

March 1, 1979

surface and shallow subsurface contamination hazards. We therefore recommend that this well be replaced with a properly constructed well. Until this can be accomplished it is of vital importance that this well be operated only with continuous and reliable chlorination facilities, as previously requested.

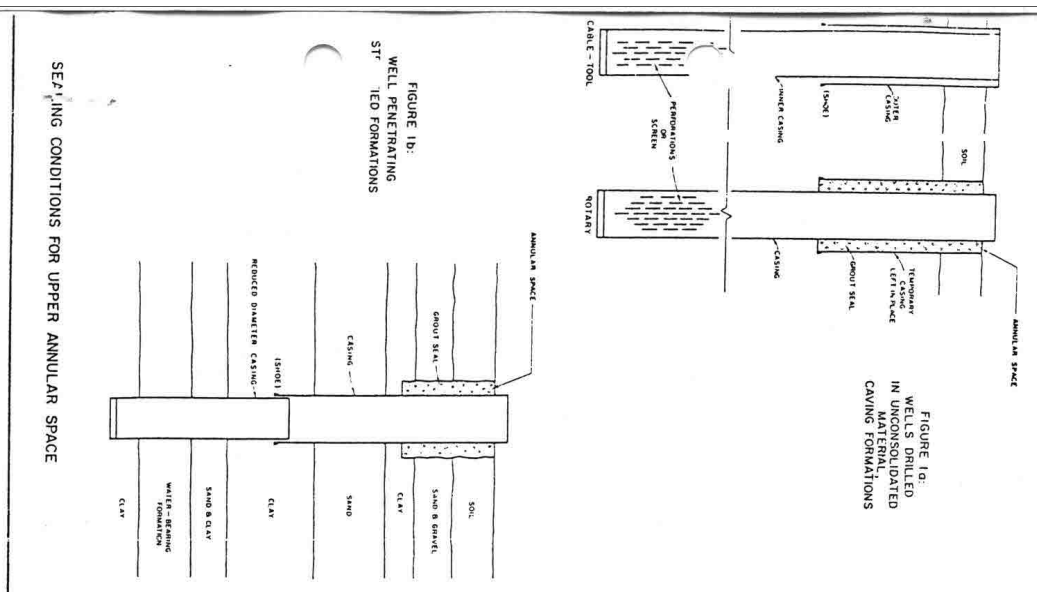
Sincerely,



Gunter A. Redlin
Supervising Sanitary Engineer
SANITARY ENGINEERING SECTION

GAR/bd

cc: Mariposa County Health Department



A. Depth of Seal. Following is the minimum depth of seal below ground surface for various uses of wells:

Type	Depth of Seal (below ground surface)
Community Water Supply Wells	50 feet $\frac{1}{2}$
Individual Domestic Wells	50 feet $\frac{1}{2}$
Industrial Wells	50 feet $\frac{1}{2}$
Agricultural Wells	None $\frac{1}{2}$
Air-Conditioning Wells	20 feet

B. Sealing Conditions $\frac{1}{2}$ Following are requirements to be observed in sealing the annular space:

1. Wells that are fully situated, or at considerable depth, in unconsolidated, caving material.
 - a. Where the cable-tool method of drilling is used, an outer casing (conductor casing), may function as the seal provided the length of the conductor casing corresponds to the depth of seal specified in Part A of this section. (See Figure 1a)
 - b. Where the rotary method of construction is used, the annular space shall be filled with sealing material to the depth specified in Part A of this section. When a temporary conductor casing is used to hold out the caving material during placement of the seal, it may be left in place or withdrawn as the sealing material is placed. (See Figure 1a)
2. Wells that penetrate stratified formations. If an impervious (consolidated) formation is encountered within 5 feet of where the bottom of the seal described in Part A of this section should terminate, the seal should be extended into the impervious formation. (See Figure 1b)

$\frac{1}{2}$ Exceptions are shallow wells where the water to be developed is at a depth less than 20 feet. In this instance, the depth of seal may be reduced but in no case less than 10 feet and special precautions shall be taken in locating the well with respect to possible sources of contamination.

$\frac{2}{2}$ This requirement is necessary only where the water is used intentionally or incidentally for domestic purposes (drinking, washing, etc.) or the water must meet strict quality requirements for its intended uses.

$\frac{3}{3}$ The annular space shall be sealed a minimum depth of 20 feet from the surface of the ground when the well is close to sources of contamination or pollution described in Section 8. Local conditions, such as the existence of shallow, subsurface waters of undesirable quality, may warrant consideration of sealing the annular space around agricultural wells.

$\frac{4}{4}$ Methods of sealing are described in Appendix F.

B. F. SISK
18TH DISTRICT, CALIFORNIA

COMMITTEE ON RULES

HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515

TONY COELHO
ADMINISTRATIVE ASSISTANT

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES
WASHINGTON, D.C. 20515

September 13, 1977

DISTRICT OFFICE:
BETTY L. CORNELIUS
FIELD REPRESENTATIVE
ROOM 2001, FEDERAL BUILDING
1130 O STREET
FRESNO, CALIFORNIA 93721
209-487-5004
ROOM 30A, FEDERAL BUILDING
1125 "I" STREET
MERCED, CALIFORNIA 95354
209-527-1914
Room 131
415 W. 18TH STREET
MERCED, CALIFORNIA 95340
209-723-9807

Mr. William Whalen, Director
National Park Service
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Whalen:

I deeply appreciate your response regarding the three water wells needed to implement the Yosemite Development Program, Yosemite National Park, and can understand the funding delays and priorities established by your predecessors.

I would trust, Mr. Whalen, that the budget proposal submitted to the Congress for fiscal year 1979 will reflect funding necessary for the wells. As you recognize, you now have a new sewer system at El Portal and that demand, as well as for other domestic needs, must be met. I feel the effort which led to voluntary conservation to approximately 145 gallons per minute should be saluted, but I feel equally strong that the total system should be built as envisioned in the Yosemite Development Plan.

Again, I trust the line item appropriation for the additional wells will be reflected in the budget proposal, and I look forward to working with you to assure that this item is retained throughout the budgeting process.

With kind regards,

Sincerely,

B. F. SISK
MEMBER OF CONGRESS

RECEIVED	
Western Regional Office	
SEP 23 1977	
☒	Regional Director
☒	Asst. Regional Dir.
☒	Administration
☒	Operations
☒	Res. Mgmt. Plan.
☒	Prog. & Econet
☒	Env.
☒	Public Affairs
☒	Mon. & Appraisal
☒	Action Taken

Folder: Yosemite NP
General Correspondence 77

File
Yosemite
General

DEP

A-3615

144-190(WBO)

SEP 8 1977

Honorable E. F. Sisk
House of Representatives
Washington, D.C.

Dear Mr. Sisk:

RECEIVED	
Western Regional Office	
SEP 12 '77	
Regional Director	
Asst. Dir.:	
Adm. Serv.	
Ext. Affairs	
Finance	
Gen. Inv.	
Ident.	
Int. Aff.	
Lab.	
Legal Coun.	
Plan. & Insp.	
Rec. Mgmt.	
Tech. Serv.	
Training	
Off. Liaison	

We are pleased to respond to your recent letter concerning the shortage of wells in the El Portal Administrative Site adjacent to Yosemite National Park. The two wells at El Portal are now pumping 214 gallons per minute which is the maximum capacity of the existing pumps. We have boosted the capacity of one well by installing a pump in the river, filtering the water, and pouring it into the well. By volunteer rationing, the demand in the El Portal area has been kept at approximately 145 gallons per minute.

copy
sent
Yps.

We have recognized the need for well drilling for several years, but there have always been other more urgently needed maintenance or protection-oriented items to compete for the limited funds available. Three wells are included in the Yosemite Development Program in the estimated amount of \$223,000. To date, we have not been able to fund this item.

The size of this project requires that it be funded as a line item development project. This project will be considered for our fiscal year 1979 budget request along with other priority needs of the Service.

In checking with several of the local drillers in Mariposa County, it is apparent that it would be impossible to have the wells drilled now at any price. Most drillers have commitments backlogged for the next 6 months to landowners who are in more dire need than the residents in the El Portal area. We will do our utmost to fulfill this obligation to the area as soon as possible.

Thank you for bringing this matter to our attention. Your interest is appreciated.

Sincerely yours,

S/William J. Whalen

Director

bcc:
Regional Director, Western Region (2) w/c of inc.

B. F. SISK

1ST DISTRICT, CALIFORNIA

COMMITTEE ON RULES

HOUSE OFFICE BUILDING
WASHINGTON, D. C. 20515

TONY COELHO
ADMINISTRATIVE ASSISTANT

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES
WASHINGTON, D.C. 20515

July 26, 1977

STATE REPRESENTATIVE
BETTY L. CORNING
FIELD REPRESENTATIVE

ROOM 2001, FEDERAL BUILDING
11300 4TH ST
FRESNO, CALIFORNIA 93721
209-487-5114

ROOM 30A, FEDERAL BUILDING
1125 11TH STREET
MODOSTO, CALIFORNIA 95354
209-527-1914

ROOM 131
415 W. 15TH STREET
MERCED, CALIFORNIA 95340
209-723-8807

Mr. William Whalen, Director
National Park Service
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Whalen:

It has been brought to my attention by concerned residents, of the El Portal area of Yosemite National Park that because the National Park Service has delayed funding the digging of a third water well in the area that a real shortage exists which could be detrimental to the health, safety and welfare of residents and visitors alike.

I have been informed that supply for the area should be in the range of 350 gallons per minute to meet municipal needs. Yet, according to information provided me, the two existing wells are only providing 225 gallons per minute.

At this time I would ask you to consider reprogramming funds to allow for the immediate issuance of bids for the third well at El Portal. To not seriously consider this option this year will, in my view, be foolhearty. Mountain residents in and around Yosemite are telling me with regularity that wells which had in past years never gone dry are now useless and need deepening or that new wells must be dug.

I trust you will concur and provide Yosemite National Park officials the necessary approval to proceed.

With kind regards.

Sincerely,

Bernie Sisk
B. F. SISK
MEMBER OF CONGRESS

We anticipate the seasonal drought to continue for another 60 days. The nearby cities of Raymond and Oakhurst, California, are now without water and there are serious shortages throughout the San Joaquin Valley. The absence of normal snowfall this past winter has contributed greatly to this situation.

The well location will be in the El Portal Administrative Site, and its installation will be considered as part of updating and maintaining the water supply system. Therefore, due to the emergency nature of this work and that its location is within an existing developed area and considered a part of the maintenance of an existing system, we request your concurrence that this activity be considered for minor environmental impact.

We are especially grateful for the quick response of Messrs. Witucki and Peppers and their assistance toward getting this work under way.

A handwritten signature in dark ink, appearing to read "John D. Thompson". The signature is fluid and cursive, with a large, stylized initial "J".



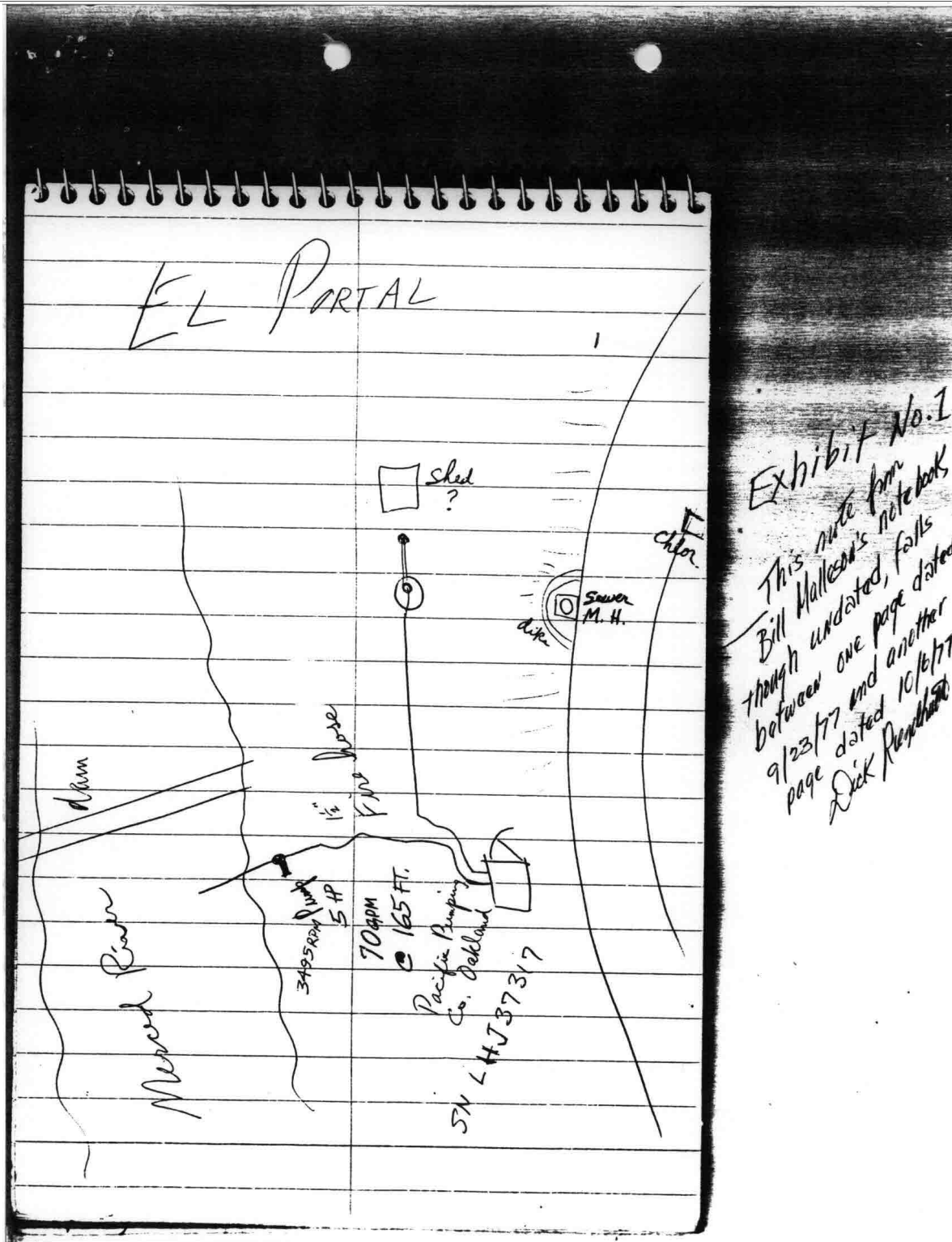


Exhibit No. 1
 This note from
 Bill Halleson's notebook
 though undated, falls
 between one page dated
 9/23/77 and another
 page dated 10/6/77
 Dick Pennington

Docket Information

Number of Documents in Docket 56

Documents Dated from 7/22/1970 to 6/26/1996

Docket Compiled: 7/29/2011