

Enclosures

145.

- 911

Prepared by _____ Date _____

WATER RESOURCES SURVEY

(45)

1. Park Organ Pipe Cactus
2. Area within park where water is required Southwestern, within five miles of Quitobaquito.
3. First year in which water is needed 1975 (estimated) 7500
4. Types of uses to which it is to be put (i.e., domestic, irrigation, etc.)
Domestic
5. Was there a previous investigation at this site for water resources yes
By whom USGS When 1963
6. (a) Is water presently available yes. (b) In use? yes
(c) From what source Springs and well
7. (a) Will this be new or supplemental water for new development new
(b) Will this supplement or replace an existing supply replace
Why? inadequate and unsafe
8. What new or existing (state which) facilities will be served: (a) Campground
(no. of sites) 200 (estimated). (b) Picnic area (no. of sites) none
none. (c) Concessioner none
(d) Comfort stations 6 estimated. (e) Residences one
(f) Other
9. What percentage of the water do you estimate will be seasonal use 75%
10. Estimate of total requirement on day of greatest use in gallons 10,000
Estimate of capacity of the present source if it is now in use (gallons per day or gallons per minute) 1-10 GPM. Do you think this source would be adequate for 20 years following its initial use yes
11. What likely effect would result if new water were not developed Development will be impracticable

Prepared by Date

WATER RESOURCES SURVEY

645

1. Park Organ Pipe Cactus
2. Area within park where water is required Alamo Canyon ⁷¹²
3. First year in which water is needed 1970 FY (Estimated) ³⁷²¹
4. Types of uses to which it is to be put (i.e., domestic, irrigation, etc.)
Domestic
5. Was there a previous investigation at this site for water resources yes
By whom A.V. Dunn, Chief Water Res.Br. NPS When 1950
6. (a) Is water presently available yes. (b) In use? yes
(c) From what source hand dug well with jack pump
7. (a) Will this be new or supplemental water for new development supplemental
(b) Will this supplement or replace an existing supply Replace
Why? Existing well and pump inadequate and unsafe; source to be the same.
8. What new or existing (state which) facilities will be served: (a) Campground
(no. of sites) 25 - 50. (b) Picnic area (no. of sites) none
(c) Concessioner none
(d) Comfort stations one. (e) Residences none
(f) Other _____
9. What percentage of the water do you estimate will be seasonal use 100%
10. Estimate of total requirement on day of greatest use in gallons 2500
Estimate of capacity of the present source if it is now in use (gallons per day or gallons per minute) 5 GPM. Do you think this source would be adequate for 20 years following its initial use yes, but cannot expand
11. What likely effect would result if new water were not developed _____
Unable to establish water for "threshold" campground.

Prepared by _____ Date _____

Organ Pipe Cactus National Monument
P.O. Box 38, Ajo, Arizona 85321

154-0

July 11, 1968

Memorandum

To: Regional Director
From: Superintendent
Subject: Water Resources Survey

Attached is the subject inventory for this area. We have reduced the number of sites to be surveyed to one, due to a lack of development knowledge compounded by uncertain grazing and mining problems.

We are of the opinion that the Bates Well area is the next logical site for modest development. It is a good water source and is well located when considering wilderness designation (it would not disrupt any pristine area). Bates Well is also located near Ajo almost on the Monument's north boundary, and at least a Ranger patrol cabin is needed now to provide adequate protection for this section of the Monument.

(Signed) FOY L. YOUNG

Foy L. Young

Attachment

L54

Organ Pipe Cactus National Monument
P.O. Box 38 Ajo, Arizona 85321

September 10, 1970

Memorandum

To: Director, Southwest Region
From: Superintendent, ORPI
Subject: Water Resources Survey

This is a negative report for these reasons.

Two years ago the number of sites requested to be surveyed was reduced to one, (Bates Well) due to the uncertainty caused by grazing and mining uses. At that time, development of a ranger station complex and a 200 site campground was proposed in the five year development schedule. Of course the grazing and mining situations are still with us, but the picture has changed otherwise to cause deletion of development plans from the five year schedule.

To begin with, the burgeoning development of good quality, reasonably priced commercial campsites at Lukeville has been heartening. I believe we can count on the developers keeping pace with demand for many years to come. Also, the B.L.M. is planning a campground near the month boundary of the monument. With all of this going on, I can see no need for us to provide additional type A campsites in the foreseeable future. So why request a water resources survey of Bates Well now?

If a ranger should be stationed at Bates Well, existing water supplies and/or knowledge of the aquifer should be adequate.

Matt H. Ryan

MHR/pa 9-10-70

Organ Pipe Cactus National Monument
P.O. Box 38 Ajo, Arizona 85321

124

September 30, 1970

Memorandum

To: Director, Southwest Region

From: Superintendent, ORP

Subject: Water Resources Survey

This is a negative report for these reasons.

Two years ago the number of sites requested to be surveyed was reduced to one, (Bates Well) due to the uncertainty caused by grazing and mining uses. At that time, development of a ranger station complex and a 200 acre campground was proposed in the five year development schedule. Of course the grazing and mining situations are still with us, but the picture has changed otherwise to cause deletion of development plans from the five year schedule.

To begin with, the burgeoning development of good quality, reasonably priced commercial campsites at Lakeville has been heartening. I believe we can count on the developer keeping pace with demand for many years to come. Also, the B.L.M. is planning a campground near the north boundary of the monument. With all of this going on, I can see no need for us to provide additional type A campsites in the foreseeable future. So why request a water resources survey of Bates Well now?

If a ranger should be stationed at Bates Well, existing water supplies and/or knowledge of the aquifer should be adequate.

Matt H. Ryan

W.H.R. / 9-30-70

WATER RESOURCES SURVEY

1. Park Organ Pipe Cactus
2. Area within park where water is required Dates Well
3. First year in which water is needed 1972 FY (or later)
4. Types of uses to which it is to be put (i.e., domestic, irrigation, etc.)
Domestic
5. Was there a previous investigation at this site for water resources yes
By whom USGS When 1963
6. (a) Is water presently available yes. (b) In use? yes
(c) From what source Hand dug and drilled wells
7. (a) Will this be new or supplemental water for new development supplemental
(b) Will this supplement or replace an existing supply supplement
Why? Existing wells are either windmill or jack pump driven with
limited delivery capacity.
8. What new or existing (state which) facilities will be served: (a) Campground
(no. of sites) 200. (b) Picnic area (no. of sites) none
none. (c) Concessioner none
(d) Comfort stations six. (e) Residences one
(f) Other Contact station/utility building
9. What percentage of the water do you estimate will be seasonal use 75%
10. Estimate of total requirement on day of greatest use in gallons 15,000
Estimate of capacity of the present source if it is now in use (gallons per
day or gallons per minute) 100 GPM. Do you think this source would be
adequate for 20 years following its initial use yes, probably best source
in the monument
11. What likely effect would result if new water were not developed would rely
on existing wells which have limited delivery capacity

INTRODUCTION

This water source survey is intended to locate and describe the known water sources of the Monument, including a few sources outside, but near the Monument boundary.

While most water sources have been listed, others, because they are unknown to us, have probably been omitted. Some of the remote reaches of the mountains probably contain unrecorded tinajas. One undated map notes ~~a~~ several anonymous, long abandoned wells as simply "well (dry)." Birdie Miller reports that her husband, Bill, dug 17 wells in this area of which only three are known to us.

This handbook will, except for special legal and historical involvements, be the focal point for our water sources. For more detailed references see: (1) Administrative files L--Lands and Recreational Planning; (2) Historical research of the Monument--notes in 3X5 cardfile; compiled by Bill Hoy. (3) A Documentation of the Arizona Papagueria with special reference to the Organ Pipe Cactus National Monument. by Charles A. Cook, ORPI library. (4) Geology of Ground Water in Organ Pipe Cactus National Monument. (5) The Papago Country Arizona by Kirk Bryan.

GLOSSARY

The varieties of water sources in the Sonoran region are often delineated by Spanish nouns. For this reason a basic glossary of these terms is included in the report.

Aguaje A stream, well, spring, or any other place for obtaining water.

Charco A shallow natural water hole or "mudhole" in clay, adobe, or rock where water collects and cannot run out. This standing, stagnant water may remain from several days to several months after a rain.

Playa A flat area occasionally covered with water which stands and evaporates. When dry, the bed may be covered with deep mud cracks. The edge is often lined with scrubby mesquite trees. The best playas in this area occur in the Pinacate Volcanic Range and the Cabeza Prieta Game Range (Las Playas).

poseadero see Spanish glossary.

Pozo A well.

Represo Literally a dam or reservoir. Locally, an earthen dam that impounds flood water. Often built on adobe flats of alluvial plains where a concrete dam would not work, hence the earthen dam. May be from a few inches to several feet deep and hold water for months after a rain.

Tinaja A natural water hole in rocks or ravines which periodically fills with flood or rain water. Some tinajas may hold water the year around. The name is derived from an unglazed earthen water jar that has been burned to allow water to ooze through and evaporate, thus keeping the water cool. When a tinaja becomes filled with sand it is called a "sand tank" or tinaja de arena. Here, water may often be found by digging in the sand. Geologist Kirk Bryan has classified tinajas into five types: (1) joint block irregularities, (2) scour depressions, (3) riffle hollows, (4) normal pot holes and (5) plunge pools.

Venero A spring.

For further information on local water sources see:

Bryan, Kirk

1925. The Papago Country, Arizona. Government Printing Office, Washington. SWAC library.

Hoy, Wilton

1967. A Short Glossary of Spanish and Physiographic Terms as Used on the Sonoran Desert. Unpublished manuscript, ORPI.

LIST OF WATER SOURCES

Organ Pipe Cactus

Wells

1. Acuna Well	Kino Peak Quadrangle
2. Alamo Well	Mt. Ajo "
3. Armenta Wells	Kino Peak "
4. Bates Well	Kino Peak "
5. Blankenship Well	Diaz Peak "
6. Bonito Well	Kino Peak "
7. Cherioni Well	Kino Peak "
8. Cipriano Well	Agua Dulce "
9. Corner (Needmore) Well (CPGR)	Quitobaquito "
10. Daniels Well	Kino Peak "
11. Dowling Well	Lukeville "
12. Dripping Springs Well	Kino Peak "
13. Estes Well	Mt. Ajo "
14. Gachado Well	Lukeville "
15. Hay No Mas Well (?)	Kino Peak "
16. Headquarters Well	Kino Peak "
17. Hocker (Jack's) Well	Quitobaquito "
18. Jenkins Well	Quitobaquito "
19. Jose Juan (Juan's, Pozo Nuevo) Well	Agua Dulce "
20. Levy's Well	Lukeville "
21. Lukeville Wells	Lukeville "
22. Miller Well (PIR)	Mt. Ajo "

Wells (cont'd)

23. Montgomery Well	Quitobaquito Quadrangle	
24. NPS Wells	Lukeville	"
25. Papago Wells (CPGR)	O'Neill Hills	"
26. Pozo de Abra (?)	Agua Dulce (?)	"
27. Powers' Well	Agua Dulce	"
28. Red Tanks Well	Lukeville	"
29. Salt (Pozo Salado) Well	Lukeville	"
30. Tule Well (CPGR)	Sierra Arrida	"
31. Wall's Well (PIR)	Mt. Ajo	"

Springs

1. Aguajita(o) Spring	Quitobaquito	"
2. Agua Dulce Spring (PGR) (?)	Agua Dulce	"
3. Burro Spring	Quitobaquito	"
4. Dripping Springs	Kino Peak	"
5. Quitobaquito Springs	Quitobaquito	"
6. ~~Rincon~~ (Williams) Springs	Quitobaquito	"

Tinajas

1. ~~So.~~ Alamo Tanks	Mt. Ajo	"
2. Ali Wua (Gusano) Tinajas (?)	Diaz Peak	"
3. Bull Pasture	Mt. Ajo	"
4. Cement Tank	Diaz Peak	"
5. Death Trap (?)	Mt. Ajo	"
6. Diablo Tanks	Mt. Ajo	"
7. Diaz Peak Tinaja	Diaz Peak	"
8. Estufa Tinajas	Kino Peak	"

9. Puerto Blanco Water Hole	Kino Peak	Quadrangle
10. Red Tail (Red) Tanks	Lukeville	"
11. Rustler Canyon Tinajas	Mt. Ajo	"
12. Snake Pit	Mt. Ajo	"
13. Kino Valley Tinaja	Kino Peak	"
14. Tinaja Pinkley	Lukeville	"
15. Wild Horse (Horse) Tanks	Mt. Ajo	"
16. Acuna Tinaja	Kino Peak	
17. Bates Pass Tinaja	Kino Peak	
18. Jackson's Hole	Kino Peak	
19. Javalina Tinaja	Mt. Ajo	
20. Water-falls Tinajas	Mt. Ajo	

The following wells are no longer usable:

No. 1, 3, 5, 7, 8, 10, 12, 13, 14, 15, ¹⁷18, 19, 20, 23, 25, 26, 27, 28, 30
(Trap)

All springs have been fenced as of 1978 in an effort to control the Burros

M.L.
04/05/78

(Max Logan)
Res. Mgt. VIP

STOCK TANKS - LOCATION 6/25/71

Location	Quadrant Maintainer
1. Gravel pit just north of north entrance to Puerto Blanco Drive.	Lukeville Orpi
2. East off Highway 85, 1 mile south of V.C. entrance.	Lukeville Orpi
3. South end of campground.	Lukeville Orpi
4. Gachado (defunct windmill) Well	Lukeville B. Gray
5. North off Ajo Mt. Dr., 1 mile up old highway.	Lukeville B. Gray
6. Alamo Canyon Rd., 1½ miles east of 85.	Kino Peak J. Gray
7. Road west just south of Alamo Bridge, in ½ mile.	Kino Peak J. Gray
8. Bates Well Rd., 1 mile west of Bates Well.	Kino Peak H. Gray
9. Palo Verde Camp Rd., 1.3 miles north of fork.	Agua Dulce H. Gray
10. Cipriano Hills Rd., 3 miles south of Bates Well Rd.	Agua Dulce H. Gray
11. Cipriano Hills Rd., 6.4 miles south of Bates Well Rd.	Agua Dulce H. Gray

Orpi tanks are fixed around the campground to keep cattle away. Gray's tanks are movable and subject to relocation - their only method of "range management".

Revised List 04/05/78

The following stock tanks were terminated in 1976. Water was no longer kept in them - 2, 3, 5, 6, 7, 8, 9, 10, 11

No. 11 stock tank was known as **Three Tanks**

No. 1 is located @ Tiger Cage water is maintained here

No. 4 water maintained here

M.L.
04/05/78