Big Bend National Park

Docket No: 1

RIO GRANDE- WEDIN DITCH.

Preliminary Docket Information

00-00-0000: bibe water docket no. 1 rio grande - - wedin ditch

BIG BEND NATIONAL PARK

WATER DOCKET NO. 1

RIO GRANDE --- WEDIN DITCH

On September 28, 1925, J. O. Wedin applied for appropriation of water from the Rio Grande River. On November 4, 1927, the Texas Board of Water Engineers by Permit No. 927 granted Mr. Wedin the right to appropriate 780 acre-feet of water per year from that source. This water right was appurtenant to land conveyed to the State of Texas for park purposes by Mollie E. and Joe M. Graham on June 6, 1942. Finally, that land was part of a larger tract conveyed to the U. S. for the Big Bend National Park by the State of Texas on August 26, 1943.

The water is conveyed to the park by the Wedin Ditch and used for irrigation of trees and vegetation in the Rio Grande Village area. Water is pumped from the Rio Grande River by two 1200 GPM pumps and flows by gravity through a concrete pipe for approximately 650 feet to a settling basin. From there it flows by gravity through lateral ditches throughout the Rio Grande Village area.

The right provides for the diversion of seven cubic feet of water per second, not to exceed 780 acre-feet of water annually, to be used for the irrigation of 312 acres of land. While the quantity appropriated cannot be increased because there is no more unappropriated water in the Rio Grande, there is no limit on the irrigation season, nor is there any requirement that the land be irrigated evenly.

Texas law requires an appropriator of surface water to file water use reports for surface water taken for municipal or irrigation uses. In Winters v. United States, 207 U.S. 564 (1908), it was held that Federal Reservations shall be entitled to a water supply sufficient for their present and future needs even if the Government in that instance does not comply with State water laws concerning the recordation of appropriated water. It may be that the doctrine of that case is not controlling in this situation because of the fact that there the water right appropriation was implied in the agreement establishing the reservation, and here the water right was established prior to the creation of the National Park and then purchased by the Government. In any event, the Superintendent of Big Bend has so far filed all necessary water use reports.

William L. Mekeel

Area: Big Bend National Park Docket #1
Title of Docket: Rio Grande - Wedin Ditch

I. SOURCE DESCRIPTION

1. Topographic Base Map--Big Bend National Park; NP-BB/2102.

2. J. O. Wedin Irrigation Project Map; 8-1-BWF-978.

3. J. O. Wedin Irrigation Project Map; NP-BB/6951.

4. J. O. Wedin Irrigation Project Map 3--Daniels and Graham Ranch Area; NP-BB/6951-A.

II. APPROPRIATION DATA

1. Application 978 for a Permit to Appropriate and Divert Waters, dated Sept. 28, 1925.
2. Permit 927 to Appropriate Public Waters, dated Nov. 4, 1927.
3. Notice of Hearing in the Matter of Forfeiting, Revoking and Cancelling of Permit No. 927, dated Dec. 6, 1943.
4. NPS Form L-1, Land Ownership Record of Water Right Application 978, Permit 927 - Deed No. 2, dated July 5, 1944.
5. Water Service Reports for the Years 1944 through 1955.
   a. For the Year Ending December 31, 1944.
   b. For the Year Ending December 31, 1945.
   c. For the Year Ending December 31, 1946.
   d. For the Year Ending December 31, 1947.
   e. For the Year Ending December 31, 1948.
   f. For the Year Ending December 31, 1949.
   g. For the Year Ending December 31, 1950.
   h. For the Year Ending December 31, 1951.
   i. For the Year Ending December 31, 1952.
   j. For the Year Ending December 31, 1953.
   k. For the Year Ending December 31, 1954.
   l. For the Year Ending December 31, 1955.
6. Report of Water Use for the Years 1955 through 1960.
   a. For the Year Ending December 31, 1955.
   b. For the Year Ending December 31, 1956.

c. For the Year Ending December 31, 1957.

d. For the Year Ending December 31, 1958.

e. For the Year Ending December 31, 1959.

f. For the Year Ending December 31, 1960.

7. Report of Surface Water Use for the Years 1961 through 1965.

a. For the Year Ending December 31, 1961.

b. For the Year Ending December 31, 1962.

c. For the Year Ending December 31, 1963.

d. For the Year Ending December 31, 1964.

e. For the Year Ending December 31, 1965.

8. Contract I-lp - 18179, between the U. S. A. and the National Park Concessions, Inc., dated Apr. 1, 1942.

9. Special Use Permit, No. I-5 ap - 99, Granted to the National Park Concessions, Inc., dated Sept. 4, 1950.

10. Agreement to Prepare Lands for Forage Crops and to Irrigate Such Crops, between the National Park Concessions, Inc. and B. F. Becket, dated Oct. 7, 1950.

11. Report of Surface Water Used for the Years 1966 through 1971.

11a. Permit to Appropriate State Water granted 6/19/72.

12. Report of Surface Water Used for the Year Ending on December 31, 1972

III. WATER QUALITY REPORTS

1. Analytical Statement, dated June 15, 1964.

2. Request for Chemical Analysis from Texas State Dept. of Health Laboratories to Superintendent, Big Bend Nat'l Park on Santa Elena Windmill.

01-16-1996: fax cover sheet jan. 16, 1996

JAN-16-96 TUE 17:15 BIG BEND S&RM DIVISION FAX NO. 9154772251153 P. 01

FAX COVER SHEET

FACSIMILE TRANSMISSION FROM
BIG BEND NATIONAL PARK

Fax number (915) 477-2357 Verify receipt at (915) 477-2251 xt. _____

TO: WATER RIGHTS BRANCH FAX NUMBER: 970 - 225 - 9965

ATTENTION: ALICE JOHNS

FROM: BIG BEND NATIONAL PARK

PHIL KOEPP

DATE: 1-16-96

NUMBER OF PAGES (Including cover sheet): 6

MESSAGE:

TEXAS WATER COMMISSION

B. J. Wynne, III, Chairman
Paul Hopkins, Commissioner
John O. Houchins, Commissioner

Allen Beinke, Executive Director
Michael E. Field, General Counsel
Brenda W. Foster, Chief Clerk

SUPERINTENDENT	Action	Initial	Date
Mgmt. Asst.			
Admin Officer			
Ch. Ranger			
Ch. Maint.			
Ch. Nat.			
Res. Mgmt.			
Safety			
Library File			

July 5, 1989

CERTIFIED MAIL

Honorable Shirley A. Scholl
Brewster County Clerk
P.O. Box 119
Alpine, TX 79831

Re: Amendment to Certificate of Adjudication No. 23-987, National Park Service U. S. Department of Interior, (Certificate No. 23-987A)

Dear Ms. Scholl:

Enclosed is an amendment to Certificate of Adjudication No. 23-987 issued by the Texas Water Commission on July 5, 1989.

This amendment to Certificate of Adjudication No. 23-987 is sent to you by direction of Section 11.136, Texas Water Code, which directs that upon receipt of the recording fee from the applicant, you shall file and record this permit in a well-bound book. After recording, we would appreciate your mailing it to Mr. James W. Carrico, Superintendent, Big Bend National Park, Big Bend, TX 79834.

By copy of this letter, we are advising the permittee that the permit is being sent to you, and are asking that satisfactory arrangements be made with you for payment of the recording fee.

After recording, we would appreciate your completing the information requested on the enclosed card and returning it to this office.

RECEIVED
JUL 7
BIG BEND NATIONAL PARK

Very truly yours,

TEXAS WATER COMMISSION

By Brenda W. Foster
Brenda W. Foster
Chief Clerk

BWF:pm
Enclosure
cc/with enclosure:
Mr. James W. Carrico, Superintendent, Big Bend National Park, Big Bend, TX 79834
TWC Watermaster, Eagle Pass Office



AMENDMENT TO
CERTIFICATE OF ADJUDICATION

CERTIFICATE NO. 23-987A 035938 TYPE: AMENDMENT

Name:	National Park Service U.S. Department of Interior	Address:	Superintendent Big Bend National Park Big Bend, Texas 79834
Filed:	March 23, 1989	Granted:	June 5, 1989
Purposes:	Irrigation and Municipal	County:	Brewster
Watercourse:	Rio Grande	Watershed:	Rio Grande Basin

WHEREAS, Certificate of Adjudication No. 23-987 was issued to The National Park Service, U.S. Department of Interior on August 18, 1977, and authorized the certificate owner to divert and use not to exceed 1530 acre-feet of water per annum at a maximum diversion rate of 12.0 cfs (5400 gpm) from the Rio Grande for municipal purposes in the Castolon and Rio Grande Village areas of Big Bend National Park in Brewster County, Texas; and

WHEREAS, the time priority of the owners right is November 17, 1915, as to 750 acre-feet of water per annum and October 5, 1925, as to 780 acre-feet of water per annum; and

WHEREAS, The National Park Service, U.S. Department of Interior has requested an amendment to Certificate No. 23-987 to authorize a change in the use of 1000 acre-feet of water per annum from municipal to irrigation purposes; and

WHEREAS, the Texas Water Commission finds that jurisdiction over the application is established; and

WHEREAS, no person protested the granting of this application; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Water Commission in issuing this amendment.

NOW, THEREFORE, this amendment to Paragraphs 1. and 3. of Certificate No. 23-987 is issued to The National Park Service, U.S. Department of Interior as follows:

1. USE

In lieu of the previous authorization stated in Paragraph 1., USE, of Certificate No. 23-987, certificate owner is authorized:

(a) To divert and use not to exceed 530 acre-feet of water per annum from the Rio Grande for municipal purposes in the Castolon and Rio Grande Village areas of Big Bend National Park in Brewster County, Texas.

(b) To divert and use not to exceed 1000 acre-feet of water per annum from the Rio Grande to irrigate 227 acres of land within the Castolon and Rio Grande Village areas of the Big Bend National Park (campgrounds and peripheral areas) owned and operated by the National Park Services in Brewster County, approximately 100 miles south of Alpine, Texas.

2. TIME PRIORITY

The time priority of the owner's right is November 17, 1915 for the first 750 acre-feet out of the 1000 acre-feet of irrigation water per annum. The time priority of the owner's right for the next 250 acre-feet out of the 1000 acre-feet of irrigation water rights and the 530 acre-feet of municipal priority water right per annum is October 5, 1925.

This amendment is issued subject to all terms, conditions and provisions contained in Certificate No. 23-987, except as specifically amended herein.

This amendment is issued subject to all superior and senior water rights in the Rio Grande Basin.

Certificate owner agrees to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this amendment.

All other matters requested in the application which are not specifically granted by this amendment are denied.

This amendment is issued subject to the Rules of the Texas Water Commission and to the right of continuing supervision of State water resources exercised by the Commission.

TEXAS WATER COMMISSION

B. J. Wynne, III, Chairman

DATE ISSUED: July 5, 1989

ATTEST:

Brenda W. Foster, Chief Clerk

07-10-1989: state of texas, county of brewster; july 10, 1989

FILED

at 11:30 o'clock A M.

JUL 7 1989

BETTY PETERS

County and District Clerk, Brewster County, Tex.

By _____ Deputy

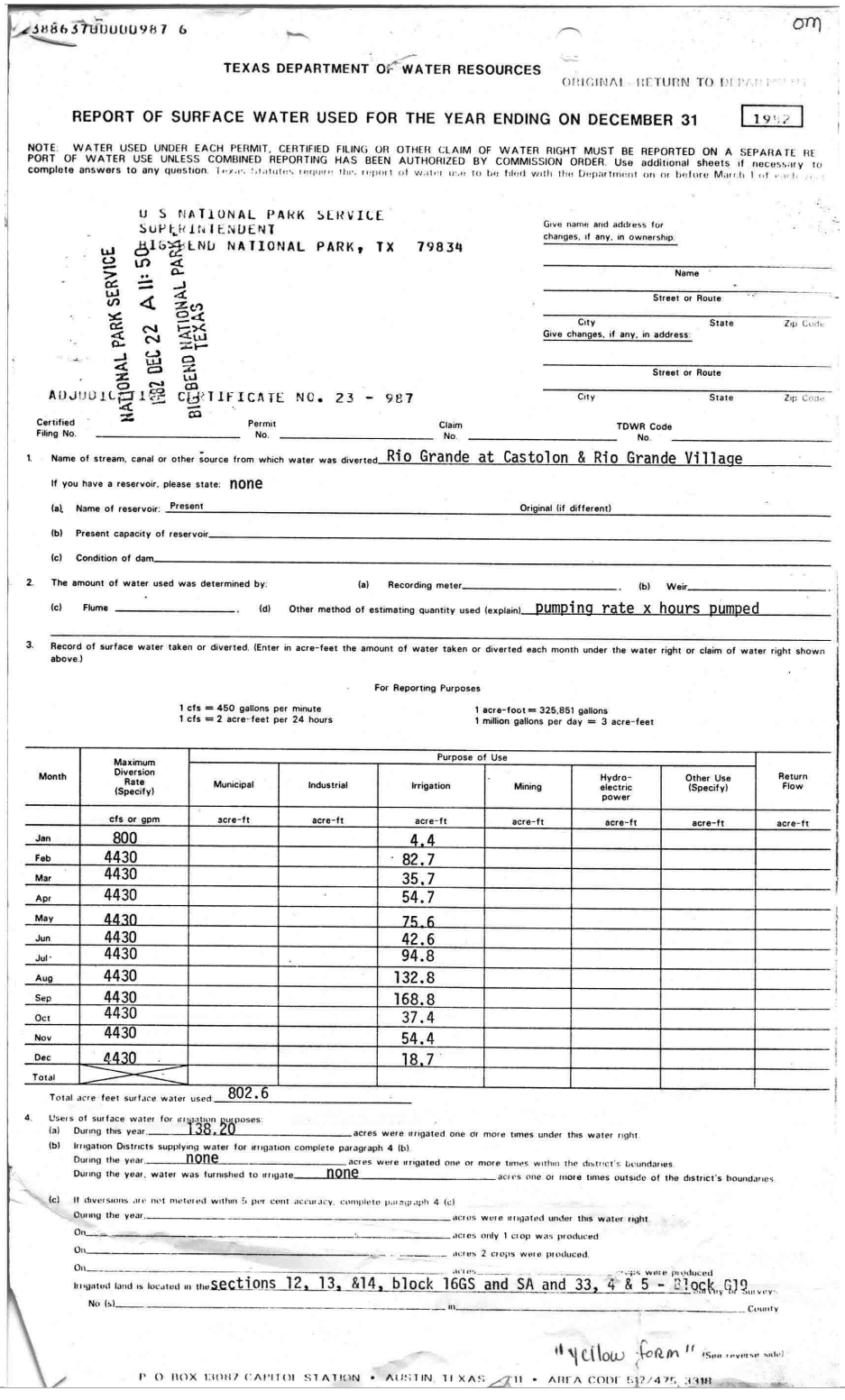
THE STATE OF TEXAS)
COUNTY OF BREWSTER)

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED ON THE DATE AND TIME STAMPED HEREON BY ME AND WAS DULY RECORDED ON THE 10 DAY OF July A.D., 19 89 IN VOL. 11 PAGE 724 OF THE OFFICIAL PUBLIC RECORDS OF BREWSTER COUNTY, TEXAS

BETTY PETERS, COUNTY CLERK
BREWSTER COUNTY, TEXAS

BY Berta A. Martinez
DEPUTY

12-31-1982: report of surface water used for the year ending on december 31, 1982



238637000000987 6

om

TEXAS DEPARTMENT OF WATER RESOURCES

ORIGINAL—RETURN TO DEPARTMENT

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1982

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question. Texas Statutes require the report of water use to be filed with the Department on or before March 1 of each year.

U S NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TX 79834

NATIONAL PARK SERVICE
1982 DEC 22 A 11:50
BIG BEND NATIONAL PARK
TEXAS

Give name and address for changes, if any, in ownership.

Name

Street or Route

City State Zip Code

Give changes, if any, in address:

Street or Route

City State Zip Code

ADJUDICATION CERTIFICATE NO. 23 - 987

Certified Filing No. Permit No. Claim No. TDWR Code No.

1. Name of stream, canal or other source from which water was diverted Rio Grande at Castolon & Rio Grande Village

If you have a reservoir, please state: none

(a) Name of reservoir: Present Original (if different)

(b) Present capacity of reservoir

(c) Condition of dam

2. The amount of water used was determined by: (a) Recording meter, (b) Weir,

(c) Flume, (d) Other method of estimating quantity used (explain) pumping rate x hours pumped

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours
1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use						Return Flow
		Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	800			4.4				
Feb	4430			82.7				
Mar	4430			35.7				
Apr	4430			54.7				
May	4430			75.6				
Jun	4430			42.6				
Jul	4430			94.8				
Aug	4430			132.8				
Sep	4430			168.8				
Oct	4430			37.4				
Nov	4430			54.4				
Dec	4430			18.7				
Total	XXXX							

Total acre-feet surface water used 802.6

4. Users of surface water for irrigation purposes:
(a) During this year 138.20 acres were irrigated one or more times under this water right.
(b) Irrigation Districts supplying water for irrigation complete paragraph 4 (b).
During the year none acres were irrigated one or more times within the district's boundaries.
During the year, water was furnished to irrigate none acres one or more times outside of the district's boundaries.
(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4 (c).
During the year, acres were irrigated under this water right.
On acres only 1 crop was produced
On acres 2 crops were produced
On acres crops were produced
Irrigated land is located in the sections 12, 13, &14, block 16GS and SA and 33, 4 & 5 - Block G19 Survey
No (s) in County

"yellow form" (See reverse side)

P O BOX 13087 CAPITOL STATION • AUSTIN, TEXAS 78711 • AREA CODE 512/475-3318

12-31-1982: report of surface water used for the year ending on december 31, 1982, cont.

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1 grass and shade trees	138.20	1 per 3-4 weks.	4-6 weeks
2			
3			
4			
5			
6			

5. If you diverted surface water to others under this water right, complete the following:

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year
none		

Was this water reported in Section 3?_____

6. If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year
none		

Was this water reported in Section 3?_____

7. Municipal Users Only:

The amount of sewage effluent used for irrigation, industrial, or other purposes was_____ acre-feet. Estimated population served at the end of the year was:_____

8. Industrial Users Only:

Type of Industry:_____

Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was_____ acre-feet or_____ %.

9. Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However, the Department is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:

none acre-feet of well water was used for_____ purposes.

10. Additional Information:

ALL USERS MUST EXECUTE THE FOLLOWING

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend National Park, Texas, this the 16th day of February 19 83

H. Gilbert Lusk
(Signature)

H. Gilbert Lusk, Superintendent

12-31-1981: report of surface water used for the year ending on december 31, 1981

TEXAS DEPARTMENT OF WATER RESOURCES
O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711

DUPLICATE—RETAIN FOR YOUR FILE

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1981

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question. Texas Statutes require this report of water use to be filed with the Department on or before March 1 of each year.

U S NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TX 79834

Give name and address for changes, if any, in ownership.
Name
Street or Route
City State Zip Code

Give changes, if any, in address:
Street or Route
City State Zip Code

ADJUDICATION CERTIFICATE NO. 23 - 987

Certified Filing No. ____ Permit No. ____ Claim No. ____ TDWR Code No. ____

1. Name of stream, canal or other source from which water was diverted RioGrande River at Castolon & Rio Grande Village

If you have a reservoir, please state: none

(a) Name of reservoir: Present ____ Original (if different) ____

(b) Present capacity of reservoir ____

(c) Condition of dam ____

2. The amount of water used was determined by: (a) Recording meter ____, (b) Weir ____, (c) Flume ____, (d) Other method of estimating quantity used (explain) pumping rate x hours pumped

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours

1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use: Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	Return Flow
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	~~800gpm~~			~~15.02~~				
Feb	4430			104.30				
Mar	~~4430~~			~~70.34~~				
Apr	~~4430~~			~~10.31~~				
May	4430			~~75.64~~				
Jun	~~4430~~			36.77				
Jul	~~4430~~			~~188.42~~				
Aug	4430			~~80.74~~				
Sep	~~4430~~			~~181.63~~				
Oct	~~800~~			~~8.25~~				
Nov	800			21.21				
Dec	4430			134.20				
Total								

Total acre-feet surface water used: ~~926.84~~

4. Users of surface water for irrigation purposes:

(a) During this year, ~~133.20~~ none acres were irrigated one or more times under this water right.

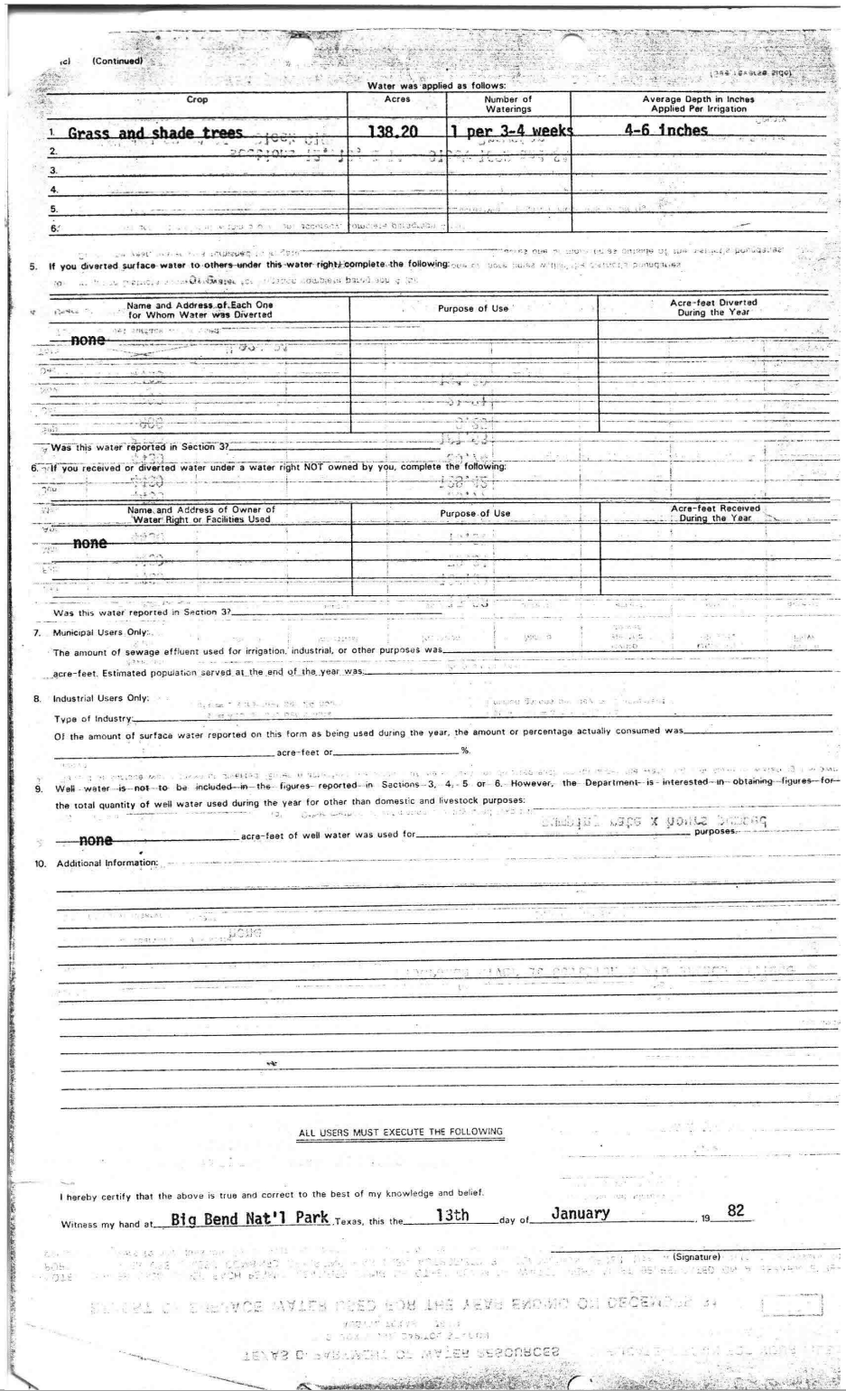
(b) Irrigation Districts supplying water for irrigation complete paragraph 4 (b):
During the year, ~~none~~ acres were irrigated one or more times within the district's boundaries.
During the year, water was furnished to irrigate ____ acres one or more times outside of the district's boundaries.

(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4 (c):
During the year, ____ acres were irrigated under this water right.
On ____ acres only 1 crop was produced.
On ____ acres 2 crops were produced.
On ____ acres ~~16GS and SA~~ crops were produced.

Irrigated land located in the ~~sections 12, 13, & 14 - Block~~ XXX and 33, 4 ~~&5 - Block G19~~ Brewster Survey or Surveys No (s). ____ in ____ County.

(See reverse side)

12-31-1981: report of surface water used for the year ending on december 31, 1981, cont.



(c) (Continued)

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Grass and shade trees	138.20	1 per 3-4 weeks	4-6 inches
2.			
3.			
4.			
5.			
6.			

5. If you diverted surface water to others under this water right, complete the following:

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year
none		

Was this water reported in Section 3?

6. If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year
none		

Was this water reported in Section 3?

7. Municipal Users Only:

The amount of sewage effluent used for irrigation, industrial, or other purposes was _____ acre-feet. Estimated population served at the end of the year was _____

8. Industrial Users Only:

Type of Industry: _____

Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was _____ acre-feet or _____ %.

9. Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However, the Department is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:

none acre-feet of well water was used for _____ purposes.

10. Additional Information:

ALL USERS MUST EXECUTE THE FOLLOWING

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend Nat'l Park, Texas, this the 13th day of January, 19 82

(Signature)

12-31-1980: report of surface water used for the year ending on december 31, 1980

TEXAS DEPARTMENT OF WATER RESOURCES
P. O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711

ORIGINAL RETURN TO DEPARTMENT

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1980

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question. Texas Statutes require this report of water use to be filed with the Department on or before March 1 of each year.

RECEIVED
BIG BEND NATIONAL PARK
TEXAS

U S NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TX 79834

Give name and address for changes, if any, in ownership.

Name
Street or Route
City State Zip Code

Give changes, if any, in address.

Street or Route
City State Zip Code

ADJUDICATION CERTIFICATE NO. 23 - 987

Certified Filing No. _____ Permit No. _____ Claim No. _____ TDWR Code No. _____

1. Name of stream, canal or other source from which water was diverted Rio Grande River at Castolon & Rio Grande Village

If you have a reservoir, please state:

(a) Name of reservoir: Present none Original (if different) _____

(b) Present capacity of reservoir _____

(c) Condition of dam _____

2. The amount of water used was determined by: (a) Recording meter _____, (b) Weir _____, (c) Flume _____, (d) Other method of estimating quantity used (explain) Pumping rate x hours pumped

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours
1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use: Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	Return Flow
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	4430 gpm			101.10				
Feb	4430			59.09				
Mar	800			7.80				
Apr	4430			95.60				
May	4430			144.06				
Jun	4430			146.17				
Jul	4430			217.35				
Aug	4430			39.69				
Sep	4430			188.75				
Oct	4430			158.94				
Nov	3630			65.81				
Dec	800			14.73				
Total				1,239.09				

Total acre-feet surface water used 1,239.09

4. Users of surface water for irrigation purposes.

(a) During this year, 138.20 acres were irrigated one or more times under this water right.

(b) Irrigation Districts supplying water for irrigation complete paragraph 4 (b):
During the year, none acres were irrigated one or more times within the district's boundaries.
During the year, water was furnished to irrigate none acres one or more times outside of the district's boundaries

(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4 (c)
During the year _____ acres were irrigated under this water right
On _____ acres only 1 crop was produced.
On _____ acres 2 crops were produced.
On _____ acres _____ crops were produced.

Irrigated land is located in the Sections 12, 13, & 14 - Block 16GS and SA Survey or Surveys
and S 3, 4, & 5 - Block G19 in Brewster County

(See reverse side)

12-31-1980: report of surface water used for the year ending on december 31, 1980, cont.

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Grass and shade trees	138.20	1 per 3-4 weeks	4-6 inches
2.			
3.			
4.			
5.			
6.			

5. If you diverted surface water to others under this water right, complete the following:

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year
none		

Was this water reported in Section 3?

6. If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year
none		

Was this water reported in Section 3?

7. Municipal Users Only:

The amount of sewage effluent used for irrigation, industrial, or other purposes was

acre-feet. Estimated population served at the end of the year was:

8. Industrial Users Only:

Type of Industry:

Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was

acre-feet or %.

9. Well water is not to be included in the figures reported in Sections 3, 4, [redacted]. However, the Department is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:

none acre-feet of well water was used for purposes.

10. Additional Information:

ALL USERS MUST EXECUTE THE FOLLOWING

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend National Park, Texas, this the 12th day of January 81

(Signature)

Russell W. Berry, Jr.
Acting Superintendent
Big Bend National Park, Texas
79834

12-31-1979: report of surface water used for the year ending on december 31, 1979

2358637500C0987 6

TEXAS DEPARTMENT OF WATER RESOURCES DUPLICATE—RETAIN FOR YOUR FILE

P. O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1979

NOTE WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question. Texas Statutes require this report of water use to be filed with the Department on or before March 1 of each year

U S NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TX 79834

Give name and address for changes, if any, in ownership

Name

Street or Route

City State Zip Code

Give changes, if any, in address

Street or Route

City State Zip Code

ADJUDICATION CERTIFICATE NO. 23 - 987

Certified Filing No. Permit No. Claim No. TDWR Code No.

1 Name of stream, canal or other source from which water was diverted Rio Grande River at Castolon & Rio Grande Village

If you have a reservoir, please state:

(a) Name of reservoir: Present none Original (if different)

(b) Present capacity of reservoir

(c) Condition of dam

2 The amount of water used was determined by: (a) Recording meter, (b) Weir, (c) Flume, (d) Other method of estimating quantity used (explain) Pumping rate x hours pumped

3 Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours
1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use						Return Flow
		Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	4430 GPM			113.80				
Feb	4430			162.47				
Mar	3450			74.75				
Apr	3450			61.92				
May	2650			88.84				
Jun	4430			215.00				
Jul	4430			326.39				
Aug	4430			119.24				
Sep	4430			183.68				
Oct	4430			165.11				
Nov	2650			55.81				
Dec	800			4.19				
Total				1571.20				

Total acre-feet surface water used: 1571.20

01-03-1980: adjudication certificate no. 23 - 987; january 03, 1980

City State Zip Code

Give changes, if any, in address:

Street or Route

City State Zip Code

ADJUDICATION CERTIFICATE NO. 23 - 987

Certified Filing No. Permit No. Claim No. TDWR Code No.

1. Name of stream, canal or other source from which water was diverted Rio Grande River at Castolon & Rio Grande Village

If you have a reservoir, please state:

(a) Name of reservoir: Present none Original (if different)

(b) Present capacity of reservoir

(c) Condition of dam

2. The amount of water used was determined by: (a) Recording meter , (b) Weir .

(c) Flume , (d) Other method of estimating quantity used (explain) Pumping rate x hours pumped

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
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1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use						Return Flow
		Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	4430 GPM			113.80				
Feb	4430			162.47				
Mar	3450			74.75				
Apr	3450			61.92				
May	2650			88.84				
Jun	4430			215.00				
Jul	4430			326.39				
Aug	4430			119.24				
Sep	4430			183.68				
Oct	4430			165.11				
Nov	2650			55.81				
Dec	800			4.19				
Total				1571.20				

Total acre-feet surface water used 1571.20

4. Users of surface water for irrigation purposes:

(a) During this year, 138.20 acres were irrigated one or more times under this water right.

(b) Irrigation Districts supplying water for irrigation complete paragraph 4 (b):

During the year, none acres were irrigated one or more times within the district's boundaries.

During the year, water was furnished to irrigate none acres one or more times outside of the district's boundaries.

(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4 (c):

During the year, acres were irrigated under this water right.

On acres only 1 crop was produced.

On acres 2 crops were produced.

On acres crops were produced.

Irrigated land is located in the Sections 12, 13, & 14 - Block 16GS and SA Survey or Surveys

No. 13, XXX and S 3, 4, & 5 - Block G19 in Brewster County

(See reverse side)

4 (c) (Continued)

Water was applied as follows

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1 Grass and shade trees	138.20	1 per 3-4 weeks	4-6 inches
2			
3			
4			
5			
6			

5 If you diverted surface water to others under this water right, complete the following

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year
none		

Was this water reported in Section 3?

6 If you received or diverted water under a water right NOT owned by you, complete the following

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year
none		

Was this water reported in Section 3?

7 Municipal Users Only:

The amount of sewage effluent used for irrigation, industrial, or other purposes was

acre-feet. Estimated population served at the end of the year was:

8 Industrial Users Only:

Type of industry:

Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was

acre-feet or %.

9 Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However, the Department is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:

none acre-feet of well water was used for purposes.

10. Additional Information:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year
none		

Was this water reported in Section 3?

6. If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year
none		

Was this water reported in Section 3?

7. Municipal Users Only:

The amount of sewage effluent used for irrigation, industrial, or other purposes was_____ acre-feet. Estimated population served at the end of the year was:_____

8. Industrial Users Only:

Type of Industry:_____

Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was_____ acre-feet or_____ %.

9. Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However the Department is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:

none acre-feet of well water was used for_____ purposes.

10. Additional information:

ALL USERS MUST EXECUTE THE FOLLOWING

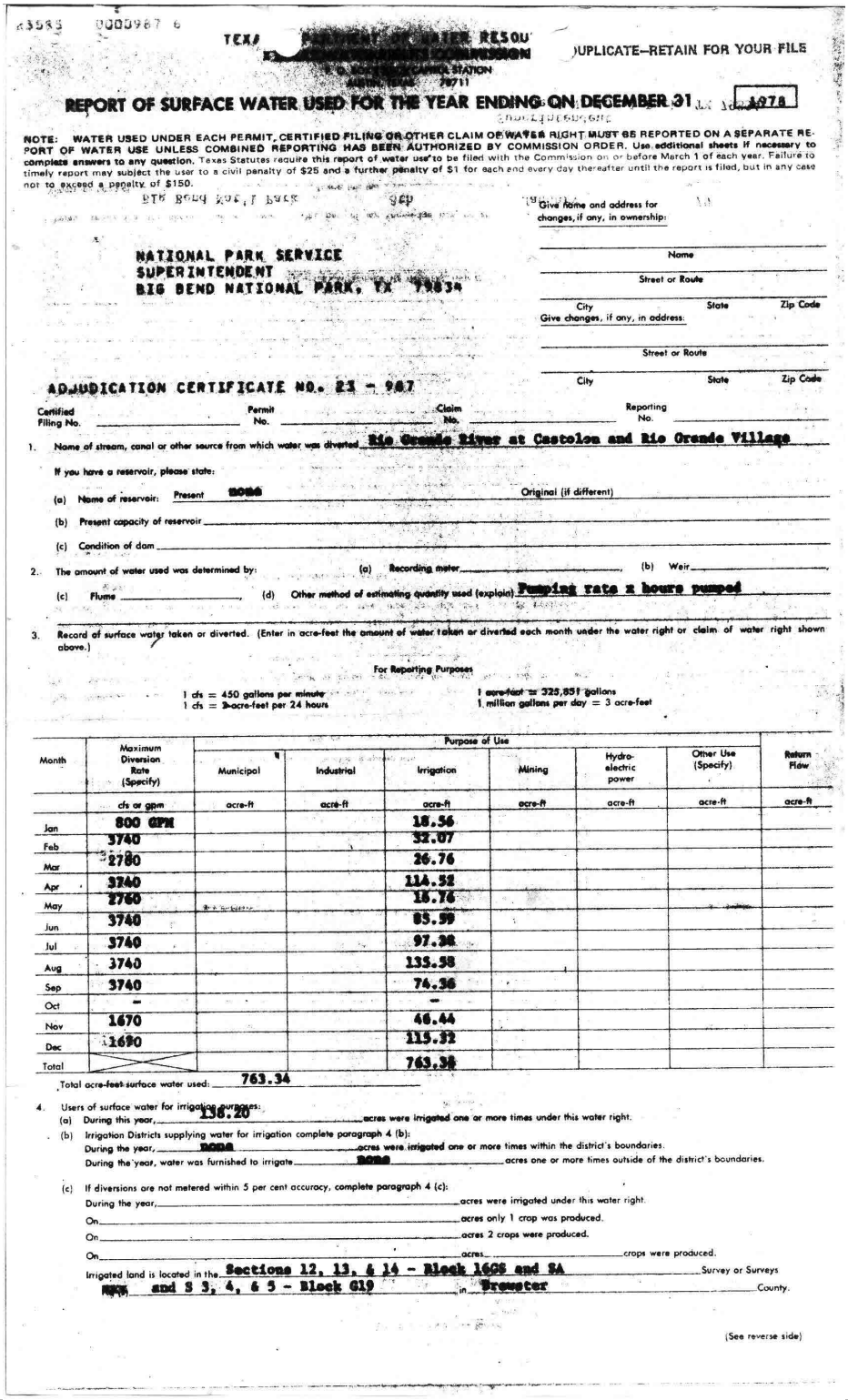
I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend Nat'l Park, Texas, this the 3rd day of January, 19 80

(Signature)

Robert C. Haraden
Superintendent
Big Bend National Park, TX 79834

12-31-1978: report of surface water used for the year ending on december 31, 1978.



TEXAS [redacted] RESOU[redacted] COMMISSION

[redacted] STATION
[redacted] 78711

DUPLICATE—RETAIN FOR YOUR FILE

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31, 1978

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question. Texas Statutes require this report of water use to be filed with the Commission on or before March 1 of each year. Failure to timely report may subject the user to a civil penalty of $25 and a further penalty of $1 for each and every day thereafter until the report is filed, but in any case not to exceed a penalty of $150.

NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TX 79834

Give name and address for changes, if any, in ownership:

Name
Street or Route
City State Zip Code

Give changes, if any, in address:

Street or Route
City State Zip Code

ADJUDICATION CERTIFICATE NO. 23 - 987

Certified Filing No. _____ Permit No. _____ Claim No. _____ Reporting No. _____

1. Name of stream, canal or other source from which water was diverted Rio Grande River at Castolon and Rio Grande Village

If you have a reservoir, please state:

(a) Name of reservoir: Present none Original (if different) _____

(b) Present capacity of reservoir _____

(c) Condition of dam _____

2. The amount of water used was determined by: (a) Recording meter _____, (b) Weir _____,

(c) Flume _____, (d) Other method of estimating quantity used (explain) Pumping rate x hours pumped

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours
1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use: Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	Return Flow
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	800 GPM			18.56				
Feb	3740			32.07				
Mar	2780			26.76				
Apr	3240			114.52				
May	2760			18.76				
Jun	3740			85.99				
Jul	3740			97.38				
Aug	3740			135.58				
Sep	3740			74.36				
Oct	-			-				
Nov	1670			46.44				
Dec	1690			115.32				
Total				763.34				

Total acre-feet surface water used: 763.34

4. Users of surface water for irrigation purposes:

(a) During this year, 136.20 acres were irrigated one or more times under this water right.

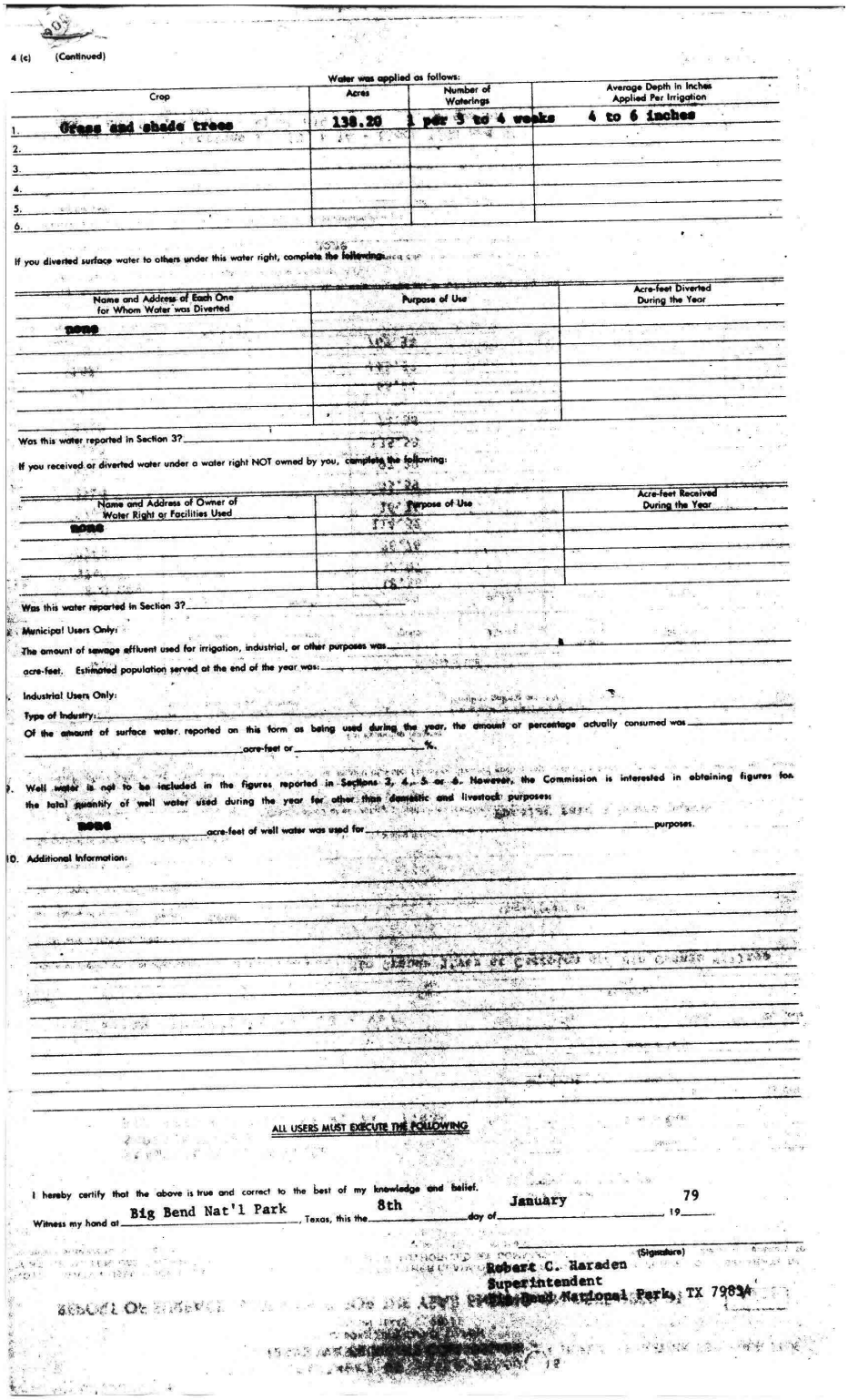
(b) Irrigation Districts supplying water for irrigation complete paragraph 4 (b):
During the year, none acres were irrigated one or more times within the district's boundaries.
During the year, water was furnished to irrigate none acres one or more times outside of the district's boundaries.

(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4 (c):
During the year, _____ acres were irrigated under this water right.
On _____ acres only 1 crop was produced.
On _____ acres 2 crops were produced.
On _____ acres _____ crops were produced.

Irrigated land is located in the Sections 12, 13, & 14 - Block 1606 and SA Survey or Surveys
NW and S 3, 4, & 5 - Block G19 in Brewster County.

(See reverse side)

12-31-1978: report of surface water used for the year ending on december 31, 1978, cont.



4 (c) (Continued)

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Grass and shade trees	138.20	1 per 3 to 4 weeks	4 to 6 inches
2.			
3.			
4.			
5.			
6.			

If you diverted surface water to others under this water right, complete the following:

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year
none		

Was this water reported in Section 3? _____

If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year
none		

Was this water reported in Section 3? _____

Municipal Users Only:

The amount of sewage effluent used for irrigation, industrial, or other purposes was _____ acre-feet. Estimated population served at the end of the year was: _____

Industrial Users Only:

Type of Industry: _____

Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was _____ acre-feet or _____ %.

9. Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However, the Commission is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:

none acre-feet of well water was used for _____ purposes.

10. Additional Information:

ALL USERS MUST EXECUTE THE FOLLOWING

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend Nat'l Park, Texas, this the 8th day of January 19 79

(Signature)

Robert C. Haraden
Superintendent
Big Bend National Park, TX 79834

12-00-0000: letter re: concerning final decree in reference to the adjudication of water rights in bibe

October 17, 1977

L54

Gayle Manges
U.S. Field Solicitor
U.S. Court House FB/CP
Santa Fe, NM 87501

Dear Gayle:

Enclosed is a copy of the final decree in reference to the adjudication of water rights in Big Bend National Park.

This certificate has been duly filed in the Office of the County Clerk, Brewster County, Texas.

Sincerely,

J. F. Carithers
Superintendent

Encl.

cc: Regional Director,
Southwest Region w/encl.

Field Assistant to the Reg.Dir.
Southwest Region w/encl.

cc: Files
Reading Files
CARITHERS:jth 10/17/77

08-26-1977: fee for certificate of adjudication no. 23 - 987; august 26, 1977

ALPINE, TEXAS August 26, 19 77

ELEN CRONE
'.O. Drawer 119
lpine, Texas 79830

TO: National Park Service
c/o Superintendent
Big Bend Natl. Park, Texas

STATEMENT To: Helen Crone, County and District Clerk STATEMENT

ate	Kind of Instrument	From whom	To Whom	Rec. Fee	
'77	Cert. of Adjud. No. 23-987-Texas Water Rights Comm:,- Natl.			$ 1	50
			Park Serv.,		
	Pd	10/13/77			
			Total Due		

COUNTY BREWSTER Nº 15599
P.O. BOX 119
ALPINE, TEXAS 79830

DATE 10-13-77

RECEIVED OF Natl. Park Service
Rec'd Cert. of
Adjud.

☐ CHECK
☑ CURRENCY

ACCOUNT

AMOUNT PAID $ 1.50 BY H.C.—

IMPORTANT: RETAIN THIS RECEIPT

8444 CERTIFICATE OF ADJUDICATION

CERTIFICATE OF ADJUDICATION NO: 23-987

OWNER: NATIONAL PARK SERVICE, U.S. DEPT. OF INTERIOR

COUNTY: Brewster

PRIORITY DATES: November 17, 1915, and October 5, 1925

WATERCOURSE: Rio Grande

BASIN: Rio Grande

WHEREAS, by final decree of the 201st District Court of Travis County, Texas, in Cause No. 245,154, In Re: The Adjudication of Water Rights in the Upper Rio Grande and Tributaries of the Rio Grande Basin, dated August 13, 1976, a right was recognized under Permit Nos. 125 and 927 authorizing National Park Service to appropriate waters of the State of Texas as set forth below;

NOW, THEREFORE, this certificate of adjudication to appropriate waters of the State of Texas in the Rio Grande Basin is issued to National Park Service, U. S. Department of Interic subject to the following terms and conditions:

1. USE

Owner is authorized to divert and use not to exceed 1530 acre-feet of water per annum from the Rio Grande for municipal use in the Castolon and Rio Grande Village areas of Big Bend National Park in Brewster County, Texas.

2. DIVERSION

(a) Point of Diversion: At a point on the Rio Grande located northwesterly, 995 ft. more or less from the SW corner of Patricio Marquez Survey 12, Block 16, Abstract No. 6225 in the Castolon area.

(b) Point of Diversion: At a point in the Castolon area to be selected by the National Park Service.

(c) Point of Diversion: At a point on the Rio Grande located westerly, 1030 ft. more or less from the SE corner of G. C. & S. F. R. R. Co. Survey 3, Block G-19, Abstract No. 2221, in the Rio Grande Village area.

(d) Maximum Diversion Rate: 12.0 cfs (5,400 gpm).

3. PRIORITY

The time priority of owner's right is November 17, 1915, as to 750 acre-feet per annum and October 5, 1925, as to 780 acre-feet per annum.

The locations of pertinent features related to this certificate are shown on Page No. 14 of the Upper Rio Grande Certificates of Adjudication Maps, copies of which are located in the offices of the Texas Water Rights Commission and the office of the County Clerk.

This certificate of adjudication is issued subject to all terms, conditions and provisions provided for in the final decree of the 201st District Court of Travis County, Texas, dated August 13, 1976, in Cause No. 245,154, In Re: The Adjudication of Water Rights in the Upper Rio Grande and Tributaries in the Rio Grande Basin and supersedes all rights of the owner asserted in that cause.

This certificate of adjudication is issued subject to the Rules of the Texas Water Rights Commission and its continuing right of supervision of State water resources consistent with the public policy of the State set forth in Water Code §1.003.

TEXAS WATER RIGHTS COMMISSION

Joe D. Carter

Joe D. Carter, Chairman

DATE ISSUED:

AUG 18 1977

ATTEST:

Mary Ann Hefner

Mary Ann Hefner, Secretary

08-18-1977: state of texas, county of brewster; august 18, 1977

THE STATE OF TEXAS
COUNTY OF BREWSTER

I, HELEN CRONE, Clerk of the County Court in and for said County, do hereby certify that the foregoing Instrument of Writing dated the 18 day of August 1977 with its certificate of authentication, was filed for Record in my office, the 25 day of August 1977, at 11:55 o'clock A. M., and duly Recorded the 26 day of August 1977, at 3:00 o'clock P. M., in Irrigation Record of said County, in Vol. 1, Page 69.

WITNESS my hand and the seal of the County Court of said County, at office in Alpine, Texas, the day and year last above written.

Helen Crone
Clerk County Court, Brewster County, Texas

By Deloris Keith Deputy.

FILED
at 11:55 o'clock A M.
AUG 25 1977
HELEN CRONE
County and District Clerk, Brewster County, Tex
By Deputy

08-23-1977: letter re: concerning certificates of adjudication; august 23, 1977

TEXAS WATER RIGHTS COMMISSION

STEPHEN F. AUSTIN STATE OFFICE BUILDING

COMMISSIONERS
JOE D. CARTER, CHAIRMAN
475-2451
[illegible] B. HARDEMAN
475-4325
JOE R. CARROLL
475-2451

R. E. (BOB) SCHNEIDER
EXECUTIVE DIRECTOR
475-2452.
MARY ANN HEFNER
SECRETARY
475-4514

		Action Taken	Date
✓	SUPERINTENDENT		
	Admn. Officer		
	CH. Ranger		
	CH. Maint.		
	CH. Nat.		
✓	Library File		

CERTIFIED MAIL

August 23, 1977

Honorable Helen Crone
County Clerk
Brewster County
County Courthouse
Alpine, Texas 79830

Dear Ms. Crone:

Enclosed are Certificates of Adjudication issued by the Texas Water Rights Commission to the holders named in the attached list.

These certificates are sent to you by direction of Section 5.324, Texas Water Code, which directs that upon receipt of the recording fee, you shall file and record the certificates in a well-bound book. After recording, we would appreciate your mailing it to the holders at the address on the enclosed list.

By copy of this letter, we are advising each certificate holder that the certificate is being sent to you and asking that satisfactory arrangements be made with you for payment of the recording fee. Further, please advise this office of the recording date, the record book and the volume and page numbers by executing and returning the enclosed cards (postage pre-paid envelope enclosed for returning recorded information).

Also enclosed with this packet are maps showing the location of pertinent features of each certificate of adjudication in this county.

Should you have any questions, please let us know.

Very truly yours,

TEXAS WATER RIGHTS COMMISSION

By Mary Ann Hefner
(Mrs.) Mary Ann Hefner

/mah
Enclosures: 1) Adjudication Certificates; 2) List of Certificate Holders;
3) Maps; and 4) Recording Cards and Postage Paid Envelope

cc: Certificate Holders

AN EQUAL OPPORTUNITY EMPLOYER

Brewster County:	Certificate of Adjudication No.
1. Arrow Investment Company, Inc. c/o Bill Wells P. O. Box 6767 Houston, Texas 77005	23-986
2. Mrs. Ulice J. Adams P. O. Box 426 Marathon, Texas 79842	23-988 and 23-989
3. E. A. Basse, Jr. 2 Lazy Lane San Antonio, Texas 78209	23-991
4. David S. Combs 302 Travis Building San Antonio, Texas 78206	23-990
5. National Park Service c/o Superintendent Big Bend National Park, Texas 79834	23-987

12-31-1974: report of surface water used for the year ending on december 31, 1974

GM

TEXAS WATER RIGHTS COMMISSION
P. O. BOX 13207, CAPITOL STATION
AUSTIN, TEXAS 78711

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1974

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question.

NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TEXAS 79834

RECEIVED JAN 1975 BIG BEND NATIONAL PARK TEXAS

Give name and address for changes, if any, in ownership:

Name
Street or Route
City State Zip Code

Give changes, if any, in address:

Street or Route
City State Zip Code

Certified Filing No. _____ Permit No. (Same as Claim No. 1913) Claim No. 927A Reporting No. _____

1. Name of stream, canal or other source from which water was diverted Rio Grande River at Rio Grande Village

If you have a reservoir, please state:

(a) Name of reservoir: Present None Original (if different)

(b) Present capacity of reservoir

(c) Condition of dam

2. The amount of water used was determined by: (a) Recording meter _____, (b) Weir _____

(c) Flume _____, (d) Other method of estimating quantity used (explain) Pumping rate X hours pumped

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours

1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use						Return Flow
		Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	1960 gpm			37.35				
Feb	"			8.01				
Mar	"			41.83				
Apr	"			28.66				
May	"			31.40				
Jun	"			19.13				
Jul	"			41.14				
Aug	"			13.53				
Sep	"			None				
Oct	"			None				
Nov	"			27.61				
Dec	"			11.55				
Total				260.21				

Total acre-feet surface water used: 260.21

4. Users of surface water for irrigation purposes:

(a) During this year, 128.20 acres were irrigated one or more times under this water right.

(b) Irrigation Districts supplying water for irrigation complete paragraph 4 (b):
During the year, None acres were irrigated one or more times within the district's boundaries.
During the year, water was furnished to irrigate None acres one or more times outside of the district's boundaries.

(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4 (c):
During the year, _____ acres were irrigated under this water right.
On _____ acres only 1 crop was produced.
On _____ acres 2 crops were produced.
On _____ acres _____ crops were produced.

Irrigated land is located in the S - 3, 4, & 5 Survey or Surveys
No (s) Block G19 in Brewster County.

(See reverse side)

12-31-1974: report of surface water used for the year ending on december 31, 1974, cont.

4 (c) (Continued)

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Grass and shade trees	128.20	Every 3 - 4 wks.	4 inches
2.			
3.			
4.			
5.			
6.			

5. If you diverted surface water to others under this water right, complete the following:

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year
None		

Was this water reported in Section 3?_____

6. If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year
None		

Was this water reported in Section 3?_____

7. Municipal Users Only:

The amount of sewage effluent used for irrigation, industrial, or other purposes was_____ acre-feet. Estimated population served at the end of the year was:_____

8. Industrial Users Only:

Type of Industry:_____

Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was_____ acre-feet or _____%.

9. Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However, the Commission is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:

None acre-feet of well water was used for_____ purposes.

10. Additional Information:

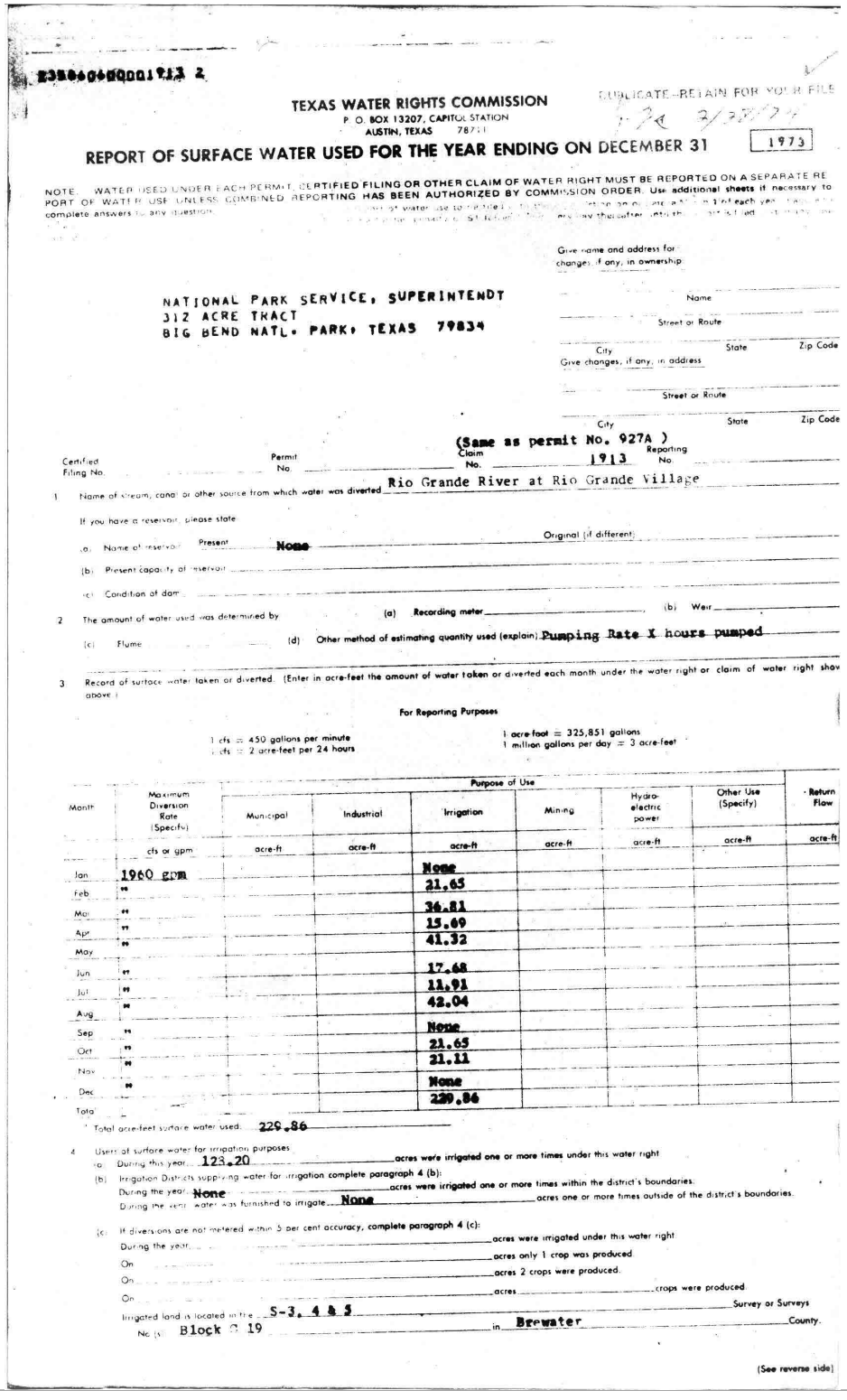
ALL USERS MUST EXECUTE THE FOLLOWING

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at_____, Texas, this the_____ day of_____, 19____.

_____
(Signature)

12-31-1973: report of surface water used for the year ending on december 31, 1973



TEXAS WATER RIGHTS COMMISSION
P. O. BOX 13207, CAPITOL STATION
AUSTIN, TEXAS 78711

DUPLICATE—RETAIN FOR YOUR FILE

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1973

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question.

NATIONAL PARK SERVICE, SUPERINTENDT
312 ACRE TRACT
BIG BEND NATL. PARK, TEXAS 79834

Give name and address for changes, if any, in ownership

Name
Street or Route
City State Zip Code

Give changes, if any, in address

Street or Route
City State Zip Code

Certified Filing No. Permit No. (Same as permit No. 927A) Claim No. 1913 Reporting No.

1 Name of stream, canal or other source from which water was diverted Rio Grande River at Rio Grande Village

If you have a reservoir, please state:

(a) Name of reservoir: Present None Original (if different)

(b) Present capacity of reservoir

(c) Condition of dam

2 The amount of water used was determined by (a) Recording meter, (b) Weir, (c) Flume, (d) Other method of estimating quantity used (explain) Pumping Rate X hours pumped

3 Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours
1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use: Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	Return Flow
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	1960 gpm			None				
Feb	"			21.65				
Mar	"			36.81				
Apr	"			15.69				
May	"			41.32				
Jun	"			17.68				
Jul	"			11.91				
Aug	"			42.04				
Sep	"			None				
Oct	"			21.65				
Nov	"			21.11				
Dec	"			None				
Total				229.86				

Total acre-feet surface water used: 229.86

4 Users of surface water for irrigation purposes
(a) During this year, 123.20 acres were irrigated one or more times under this water right.
(b) Irrigation Districts supplying water for irrigation complete paragraph 4 (b):
During the year, None acres were irrigated one or more times within the district's boundaries.
During the year, water was furnished to irrigate None acres one or more times outside of the district's boundaries.

(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4 (c):
During the year, acres were irrigated under this water right.
On acres only 1 crop was produced.
On acres 2 crops were produced.
On acres crops were produced.
Irrigated land is located in the S-3, 4 & 5 Survey or Surveys
No. (s) Block G 19 in Brewster County.

(See reverse side)

12-31-1972: report of surface water used for the year ending on december 31, 1972

35860600001913 2

Water Rights Docket #1
D-185

TEXAS WATER RIGHTS COMMISSION
P. O. BOX 13207, CAPITOL STATION
AUSTIN, TEXAS 78711

ORIGINAL - RETURN TO COMMISSION

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1972

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question. Texas Statutes require this report of water use to be filed with the Commission on or before March 1 of each year. Failure to timely report may subject the user to a civil penalty of $25 and a further penalty of $1 for each and every day thereafter until the report is filed, but in any case not to exceed a penalty of $150.

NATIONAL PARK SERVICE, SUPERINTENDT
312 ACRE TRACT
BIG BEND NATL. PARK, TEXAS 79834

Give name and address for changes, if any, in ownership:

Name

Street or Route

City State Zip Cod

Give changes, if any, in address:

Street or Route

City State Zip Cod

(Reference Permit #927A)

Certified Filing No. Permit No. Claim No. 1913 Reporting No.

1. Name of stream, canal or other source from which water was diverted Rio Grande River at Rio Grande Village

If you have a reservoir, please state: NA

(a) Name of reservoir: Present Original (if different)

(b) Present capacity of reservoir

(c) Condition of dam

2. The amount of water used was determined by: (a) Recording meter , (b) Weir

(c) Flume , (d) Other method of estimating quantity used (explain) Pumping rate x hrs. pump

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours
1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use						Return Flow
		Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	1960 gpm	15.52						
Feb	" "	54.68						
Mar	" "	14.07						
Apr	" "	47.00						
May	" "	22.37						
Jun	" "	38.25						
Jul	" "	38.25						
Aug	" "	39.52						
Sep	" "	18.77						
Oct	" "	9.74						
Nov	" "	24.18						
Dec	" "	0.00						
Total		322.35						

Total acre-feet surface water used: 322.35

4. Users of surface water for irrigation purposes:
(a) During this year, acres were irrigated one or more times under this water right.
(b) Irrigation Districts supplying water for irrigation complete paragraph 4(b):
During the year, acres were irrigated one or more times within the district's boundaries
During the year, water was furnished to irrigate acres one or more times outside of the district's boundaries.
(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4(c):
During the year, acres were irrigated under this water right.
On acres only 1 crop was produced.
On acres 2 crops were produced.
On acres crops were produced.
Irrigated land is located in the Survey or Surveys
No(s) in County.

(See reverse side)

12-31-1972: report of surface water used for the year ending on december 31, 1972, cont.

4(c) (Continued)

Water was applied as follows:

	Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1.				
2.				
3.				
4.				
5.				
6.				

5. If you diverted surface water to others under this water right, complete the following:

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year

Was this water reported in Section 3? _____

6. If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year

Was this water reported in Section 3? _____

7. Municipal Users Only:

The amount of sewage effluent used for irrigation, industrial, or other purposes was None. acre-feet. Estimated population served at the end of the year was: Estimated average of 180/day.

8. Industrial Users Only:

Type of Industry: _____

Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was _____ acre-feet or _____ %.

9. Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However, the Commission is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and live stock purposes:

NA acre-feet of well water was used for _____ purposes.

0. Additional Information:

NA

ALL USERS MUST EXECUTE THE FOLLOWING

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend N.P., Texas, this the 22 day of January, 1973.

(Signature)

06-30-1972: letter re: concerning permit issued by texas water rights commission to bibe; june 30, 1972

TEXAS WATER RIGHTS COMMISSION

SAM HOUSTON STATE OFFICE BUILDING

WR# 1

COMMISSIONERS
OTHA F. DENT, CHAIRMAN
475-2451
JOE D. CARTER
475-2453
DORSEY B. HARDEMAN
475-4325

LOUIS L. McDANIELS
EXECUTIVE DIRECTOR
475-2452
AUDREY STRANDTMAN
SECRETARY
475-4514

June 30, 1972

CERTIFIED MAIL

Mrs. Sara Pugh
Brewster County Clerk
County Courthouse
Alpine, Texas 79831

Re: Permit No. 927-A

Dear Mrs. Pugh:

Enclosed is a permit issued by the Texas Water Rights Commission to BIG BEND NATIONAL PARK, NATIONAL PARK SERVICE, U. S. DEPARTMENT OF THE INTERIOR pursuant to Application No. 978-A.

This permit is sent to you by direction of Sections 5.134 and 5.135(a), Texas Water Code, which direct that upon receipt of the recording fee from the applicant, you shall file and record this permit in a well-bound book. After recording, we would appreciate your mailing it to Mr. J. F. Carithers, Superintendent, Big Bend National Park, Big Bend National Park, Texas 79834.

By copy of this letter, we are advising the permittee that the permit is being sent to you, and are asking that satisfactory arrangements be made with you for payment of the recording fee.

After recording, we would appreciate your completing the information requested on the enclosed card and return it to this office.

Very truly yours,

TEXAS WATER RIGHTS COMMISSION

By Audrey Strandtman
(Mrs.) Audrey Strandtman

AS:po
Enclosure
cc: Mr. J. F. Carithers

PERMIT TO
APPROPRIATE STATE WATER

APPLICATION NO. 978-A PERMIT NO. 927-A TYPE: Amendment

Permittee	: Big Bend National Park, National Park Service, U. S. Department of the Interior	Address	: Big Bend National Park, Texas 79834
Received	: May 15, 1972	Filed	: June 19, 1972
Granted	: June 19, 1972	County	: Brewster
Watercourse	: Rio Grande	Watershed	: Rio Grande

WHEREAS, the Texas Water Rights Commission has considered the application to amend Permit No. 927 filed pursuant to Commission Rule 605 and finds that the application does not contemplate an additional use of water or increased rate of diversion and, if granted, would harm no other existing water right;

NOW, THEREFORE, this Amendment to Permit No. 927 is hereby issued to Big Bend National Park, National Park Service, Department of the Interior, subject to the following terms and conditions:

1. USE

Permittee is authorized to change the use of 780 acre-feet of water per annum from the Rio Grande, originally authorized by Permit No. 927 to be diverted and used for the irrigation of 312 acres of land, to municipal purposes in connection with the operation of a recreational park site known as Rio Grande Village Campground near Boquillas Canyon in Big Bend National Park, Brewster County, Texas.

2. TIME LIMITATIONS

Construction or installation of all works necessary for the optimum development of the municipal uses herein authorized shall be completed by permittee within 10 years from the date of issuance of this amendment. However, this limitation may be extended by the Commission upon a showing of factual and economic justification by permittee.

This amendment is issued subject to all the conditions and provisions contained in Permit No. 927, except as herein amended.

Permittee agrees to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this permit.

All other matters requested in the application which are not specifically granted by this permit are denied.

This permit is issued subject to the rules and regulations of the Texas Water Rights Commission and to its right of continual supervision.

TEXAS WATER RIGHTS COMMISSION

O. F. Dent, Chairman

Joe D. Carter, Commissioner

Dorsey B. Hardeman, Commissioner

Date Issued:

June 28, 1972

Attest:

Audrey Strandtman, Secretary

THE STATE OF TEXAS
COUNTY OF BREWSTER

I, HELEN CRONE, Clerk of the County Court in and for said County, do hereby certify that the foregoing Instrument of Writing dated the 28th day of JUNE 1972, with its certificate of authentication, was filed for Record in my office, the 3rd day of JULY 1972, at 8:45 o'clock A. M., and duly Recorded the 3rd day of JULY 1972, at 2:00 o'clock P. M., in IRRIGATION Record of said County, in Vol. 1, Page 43.

WITNESS my hand and the seal of the County Court of said County, at office in Alpine, Texas, the day and year last above written.

HELEN CRONE
Clerk County Court, Brewster County, Texas

By Laura Goen Deputy.
Laura Goen

PERMIT TO APPROPRIATE STATE WATER

APPLICATION NO. 978-A PERMIT NO. 927-A TYPE: Amendment

Permittee	: Big Bend National Park, National Park Service, U. S. Department of the Interior	Address	: Big Bend National Park, Texas 79834
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Granted	: June 19, 1972	County	: Brewster
Watercourse	: Rio Grande	Watershed	: Rio Grande

WHEREAS, the Texas Water Rights Commission has considered the application to amend Permit No. 927 filed pursuant to Commission Rule 605 and finds that the application does not contemplate an additional use of water or increased rate of diversion and, if granted, would harm no other existing water right;

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Permittee agrees to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this permit.

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O. F. Dent, Chairman

Joe D. Carter, Commissioner

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June 28, 1972

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WITNESS my hand and the seal of the County Court of said County, at office in Alpine, Texas, the day and year last above written.

HELEN CRONE
Clerk County Court, Brewster County, Texas

By Laura Goen Deputy.
Laura Goen

09-12-1972: notice of hearing to appropriate state water of the state of texas; september 12, 1972

This notice being mailed to comply with t requirements of law

(Copy of)

9/12/72
X Dick Simmons



NOTICE OF HEARING
TO
APPROPRIATE STATE WATER
OF THE
STATE OF TEXAS

No. 3071

Notice is given that PARADISE ISLE, INCORPORATED
c/o Robert L. Kenny, Vice-President
Box 868
Pharr, Texas 78577,
applicant, requests the Texas Water Rights Commission to acknowledge and establish a river stage at the Brownsville gauging station above which "no charge" pumping would be allowed downstream of the gauge. The applicant seeks a regular permit for the right to divert 140 acre-feet per annum directly from the Rio Grande River during the no-charge pumping periods, and the right to store the diverted waters in an existing 45 acre-foot reservoir (Reservoir No. 1) and a proposed 96 acre-foot channel (Reservoir No. 2).

The aforesaid amount of water will be used for flushing the reservoir and supplying the partial needs of a planned community of 1500 persons to be located in the Jose Ygnacio de Trevino Survey, Abstract No. 6, Cameron County, seventeen (17) miles northeast of Brownsville, Texas. The water impounded in Reservoir No. 1 will be used for municipal purposes and the water impounded in Reservoir No. 2 will be used for recreational purposes.

Station 0+00 on the centerline of Reservoir No. 1 is N 70° 25' E, 51,850 feet from the SW corner of the aforementioned survey. Station 0+00 on the centerline of Reservoir No. 2 is N 69° 39' E, 52,900 feet from the aforementioned survey corner.

The water will be diverted from a point on the north bank of the Rio Grande which is N 70° 25' E, 51,850 feet from the aforementioned survey corner into the two reservoirs by means of two stationary pumps at a maximum combined rate of 4100 gpm (9.1 cfs).

Application No. 3071 was accepted for filing by the Texas Water Rights Commission on September 11, 1972, and a hearing thereon will be held by the Commission in the Sam Houston State Office Buildin at Austin, Texas, on October 12, 1972, at 2:00 p.m. Those opposing the granting of said application should file written protests with the Commission and the applicant at least five days prior to hearing date, giving their reasons therefor and such other information as is required by Commission Rule 305.2.

(SEAL)

/s/ O. F. Dent
O. F. Dent, Chairman
TEXAS WATER RIGHTS COMMISSION

Date: September 12, 1972

This notice is being mailed to comply with the requirements of law

(Copy of)



NOTICE OF HEARING
TO
APPROPRIATE STATE WATER
OF THE
STATE OF TEXAS

No. 3071

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c/o Robert L. Kenny, Vice-President
Box 868
Pharr, Texas 78577,
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(SEAL)

/s/ O. F. Dent
O. F. Dent, Chairman
TEXAS WATER RIGHTS COMMISSION

tember 12, 1972

TEXAS WATER RIGHTS COMMISSION

NOTICE of the preliminary determination by the Texas Water Rights Commission of all claims to water rights from that segment of the Rio Grande and contributing Texas tributaries between Falcon Dam upstream to Amistad Dam.

Notice is given in accordance with §5.312 of the Texas Water Code that on August 30, 1972, the Texas Water Rights Commission made a preliminary determination of all claims to water rights under adjudication from that segment of the Rio Grande and contributing Texas tributaries between Falcon Dam in Starr County, Texas, upstream to Amistad Dam in Val Verde County, Texas, inclusive, and including all or portions of Zapata, Jim Hogg, Webb, Maverick, Dimmit, Kinney, Edwards and Val Verde Counties, Texas, said area known as the "Middle Rio Grande." Evidentiary hearings having been completed, this preliminary determination of the claims to water rights in the "Middle Rio Grande" was authorized by §5.309, Texas Water Code.

The preliminary determination of August 30, 1972, and all evidence presented or considered by the Commission will be open for public inspection at the offices of the Texas Water Rights Commission in the Sam Houston State Office Building in Austin, Texas. The period of time for public inspection of the preliminary determination and evidence shall expire on December 1, 1972, at 5:00 p.m., which is a period of time not less than 60 days from the date of this notice and order, all in accordance with §5.310, Texas Water Code. The times and hours for public inspection will be from 8:00 a.m. until 5:00 p.m. of each working day.

One copy of the Commission's preliminary determination of August 30, 1972, is furnished without charge to each person who filed a claim of water right in the "Middle Rio Grande" in accordance with §5.307, Texas Water Code. Additional copies of the preliminary determination are available for public inspection at convenient locations throughout the Rio Grande Basin, which places are designated by the Texas Water Rights Commission as being the offices of the County Clerks of the following counties:

Andrews	Edwards	Maverick	Terrell
Brewster	El Paso	Pecos	Upton
Cameron	Hidalgo	Presidio	Val Verde
Crane	Hudspeth	Reagan	Ward
Crockett	Jeff Davis	Reeves	Webb
Culberson	Jim Hogg	Schleicher	Winkler
Dimmit	Kinney	Starr	Zapata
Ector	Loving	Sutton	

Copies of the preliminary determination are available to interested persons at the offices of the Texas Water Rights Commission. Any party desiring to order a copy of the preliminary determination may do so by writing to Mrs. Audrey Strandtman, Secretary, Texas Water Rights Commission, Box 13207, Capitol Station, Austin, Texas 78711. Each letter must be accompanied by a check or money order in the amount of $1.00.

As provided by §5.313 of the Texas Water Code, any water right claimant affected by the preliminary determination, including any claimant to water rights within the Rio Grande Basin but outside the area herein described, who disputes the preliminary determination, may file a contest with the Commission, stating with reasonable certainty the grounds of his contest, on or before January 7, 1973, at 5:00 p.m. The statement filed to contest the preliminary determination of August 30, 1972, must be verified by an affidavit of the contestant, his agent, or his attorney. If the contest is directed against the preliminary determination of the water rights of other claimants in the "Middle Rio Grande," a copy of the statement shall be served on each of these claimants or his attorney by certified mail, and proof of this service shall be filed with the Commission on or before January 7, 1973, at 5:00 p.m.

This notice and the provisions contained herein are ordered and entered this 11th day of September, 1972.

TEXAS WATER RIGHTS COMMISSION

/s/ O. F. Dent
O. F. Dent, Chairman

/s/ Joe D. Carter
Joe D. Carter, Commissioner

/s/ Dorsey B. Hardeman
Dorsey B. Hardeman, Commissioner

ATTEST:

/s/ Audrey Strandtman
Audrey Strandtman, Secretary

RECEIVED
NPS SOUTHWEST REGIONAL OFFICE
MAY 15 1972

Big Bend National Park, Texas 79834

May 12, 1972

L54

AIRMAIL - CERTIFIED
RETURN RECEIPT REQUESTED

Mr. O. F. Dent
Texas Water Rights Commission
Sam Houston State Office Building
Austin, Texas 78701

Dear Mr. Dent:

On May 2, 1972 Mr. Gayle Manges, our Field Solicitor, and I appeared at a hearing before the Texas Water Rights Commission and presented evidence of the past, present and projected uses of the water subject to Permit No. 125 (Castolon area) at Big Bend National Park.

At that time we stated that the uses of this water by the United States are actually for municipal rather than irrigation uses. This applies also to Permit No. 927. In subsequent discussions with the Commission staff we were advised to submit an application to so amend these two permits. The two applications, along with the required fees, are attached herewith.

If the Commission requires additional information regarding these requested amendments, please let me know.

Sincerely yours,

J. F. Carithers
Superintendent

Enclosures

cc:
Director, Southwest Region w/encl.
Field Solicitor, Southwest Region w/encl.

L54
Bibe

05-12-1972: application for amendment to a water right not requiring public hearing; may 12, 1972

TEXAS WATER RIGHTS COMMISSION

APPLICATION FOR AMENDMENT TO A WATER RIGHT
NOT REQUIRING PUBLIC HEARING

This form is to be used only for amendments which do not contemplate additional use or increased rate of diversion, pursuant to Paragraph 605. Rules, Regulations and Modes of Procedure (1964).

Application No. _____ Date Received _____
Hearing Date _____ Disposition _____

(Do not write above this line - for TWRC use only)

1. Name Big Bend National Park, Department of the Interior

Address _____

Big Bend National Park, Texas 79834
(City) (State) (Zip Code)

2. Permit/Certified Filing No. 927 County Brewster

Stream Rio Grande Watershed Same

Reservoir (present size and condition if one exists) _____

None

Original purposes authorized: Irrigation

3. Proposed uses: Municipal use in lieu of irrigation use. The conversion of the irrigation use to municipal use will reflect the actual and proposed uses being made of the water.

Other changes: (1) The change will not increase the consumptive use and will not harm any other existing water rights. (2) There will be no increase in the rate of diversion. (3) The applicant requests that the permit, if granted, contain a provision granting a period of 10 years in which to provide for the optimum development of the water system.

(attach additional statement if necessary)

4. I understand that the Commission may require additional information in regard to the requested amendment before considering my application.

5. I have submitted the required fees herewith (Par.605.2 - $26.50).

Witness my hand at Big Bend National Park, Texas, this the 12th day of May, 19 72.

J. F. Carithers, Superintendent
Big Bend National Park, Texas

Subscribed and sworn to as being true and correct before me the 12th day of May, 1972.

Charles E. Shannon, U.S. Magistrate
Notary Public in and for
Brewster County, Texas.

12-31-1971: report of surface water used for the year ending december 31, 1971

TEXAS WATER RIGHTS COMMISSION
P. O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711

ORIGINAL - RETURN TO COMMISSION

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1971

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT FOR WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question. Texas Statutes require this report of water use to be filed with the Commission on or before March 1 of each year. Failure to timely report may subject the user to a civil penalty of $25 and a further penalty of $1 for each and every day thereafter until the report is filed, but in no case shall it exceed a penalty of $150.

NATIONAL PARK SERVICE, SUPERINTENDT
918 ACRE TRACT
BIG BEND NATL. PARK, TEXAS 79834

Give name and address for changes, if any, in ownership:

Name
Street or Route
City State Zip Code

Give changes, if any, in address:

Street or Route
City State Zip Code

(SAME AS PERMIT NO. 927)

Certified Filing No. ____ Permit No. ____ Claim No. 1913 Reporting No. ____

1. Name of stream, canal or other source from which water was diverted Rio Grande at Rio Grande Village.

If you have a reservoir, please state:

(a) Name of reservoir: Present None Original (if different) ____

(b) Present capacity of reservoir ____

(c) Condition of dam ____

2. The amount of water used was determined by: (a) Recording meter ____, (b) Weir ____, (c) Flume ____, (d) Other method of estimating quantity used (explain) Pumping rate x hrs. pumped.

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours
1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

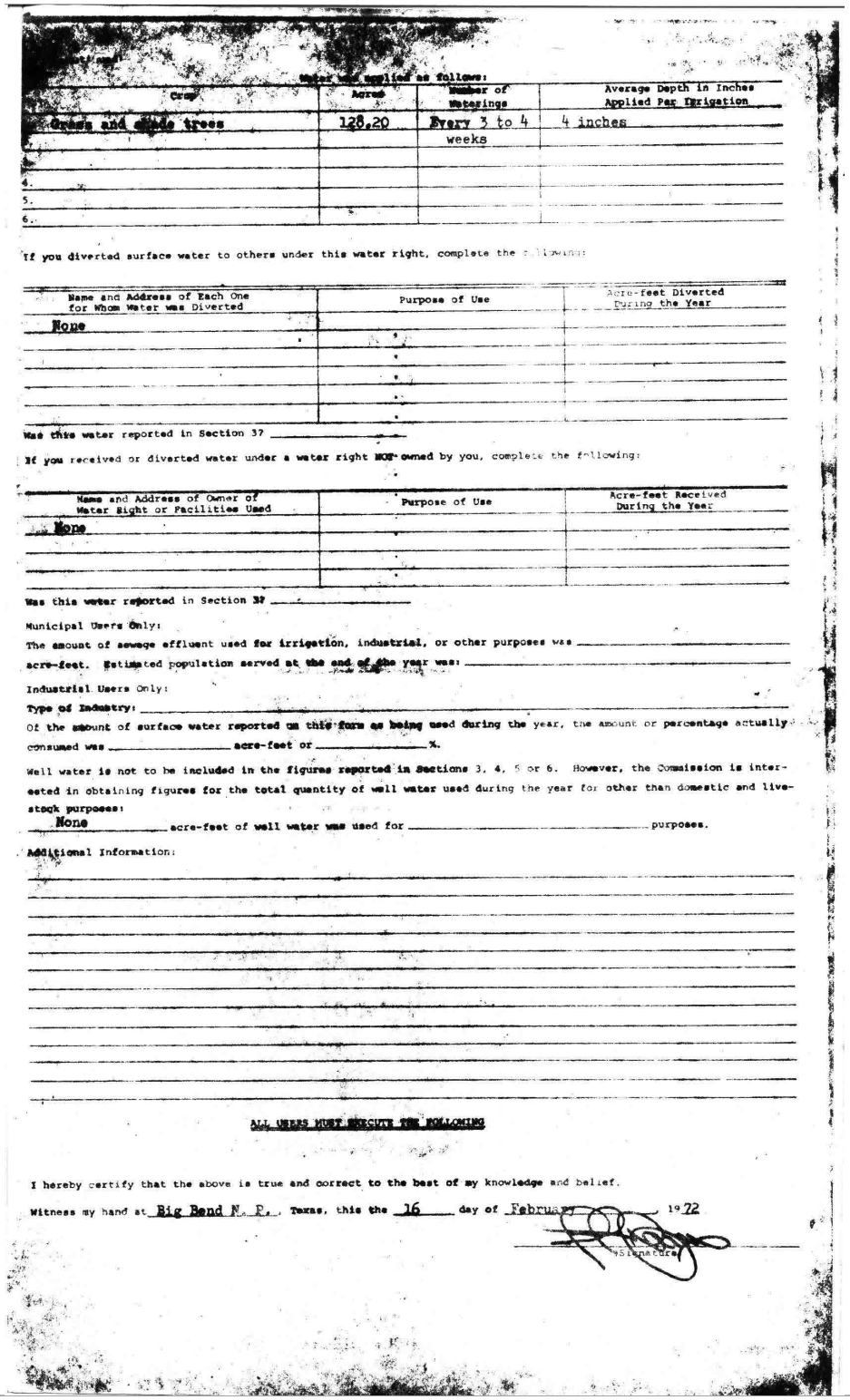
Month	Maximum Diversion Rate (Specify)	Purpose of Use: Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	Return Flow
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	1960 gpm			16.06				
Feb	" "			65.86				
Mar	" "			38.89				
Apr	" "			66.04				
May	" "			71.82				
Jun	" "			0.00				
Jul	" "			84.27				
Aug	" "			13.35				
Sep	" "			25.10				
Oct	" "			25.10				
Nov	" "			39.21				
Dec	" "			32.12				
Total				473.82				

Total acre-feet surface water used: 473.82

4. Users of surface water for irrigation purposes:
(a) During this year, 128.20 acres were irrigated one or more times under this water right.
(b) Irrigation Districts supplying water for irrigation complete paragraph 4(b):
During the year, None acres were irrigated one or more times within the district's boundaries.
During the year, water was furnished to irrigate None acres one or more times outside of the district's boundaries.
(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4(c).
During the year, ____ acres were irrigated under this water right.
On ____ acres only 1 crop was produced.
On ____ acres 2 crops were produced.
On ____ acres ____ crops were produced.
Irrigated land is located in the S-3, 4, & 5 Survey or Surveys
No(s) Block G 19 in Brewster County.

(See reverse side)

12-31-1971: report of surface water used for the year ending december 31, 1971, cont.



Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
Grass and citrus trees	128.20	Every 3 to 4 weeks	4 inches
2.			
3.			
4.			
5.			
6.			

If you diverted surface water to others under this water right, complete the following:

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year
None		

Was this water reported in Section 3? _____

If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year
None		

Was this water reported in Section 3? _____

Municipal Users Only:

The amount of sewage effluent used for irrigation, industrial, or other purposes was _____ acre-feet. Estimated population served at the end of the year was: _____

Industrial Users Only:

Type of Industry: _____

Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was _____ acre-feet or _____ %.

Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However, the Commission is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:

None acre-feet of well water was used for _____ purposes.

Additional Information:

ALL USERS MUST EXECUTE THE FOLLOWING

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend N. P., Texas, this the 16 day of February, 1972

(Signature)

04-23-1971: additional sworn statement for claimants desiring recognition of a right; april 23, 1971

TEXAS WATER RIGHTS COMMISSION

Sam Houston State Office Building
Area Code 512 475-4666 or 475-2711
P. O. Box 13207
Austin, Texas 78711

ADDITIONAL SWORN STATEMENT FOR RIPARIAN CLAIMANTS DESIRING RECOGNITION OF A RIGHT BASED ON USE FROM 1968 TO 1970, INCLUSIVE, AS REQUIRED BY THE WATER RIGHTS ADJUDICATION ACT OF 1967 [SECTION 4(B) AND (C), ARTICLE 7542A, VERNON'S CIVIL STATUTES]. THIS FORM SHALL BE TYPEWRITTEN OR PRINTED LEGIBLY WITH INK. MAIL THE ORIGINAL TO THE TEXAS WATER RIGHTS COMMISSION IN THE ENCLOSED SELF-ADDRESSED ENVELOPE ON OR BEFORE JULY 1, 1971.

1. Name and address of claimant exactly as shown on original claim:

Superintendant
Big Bend National Park, Texas 79834

DO NOT WRITE IN THIS SPACE

Claim No.....:
County.....:
River or Coastal Basin.:
Purpose of Use:
Date Filed....:
Date Recorded.:
Volume_____, P._____, Water Rights Adjudication Act Claims Record.

2. Claim No. 927 (as assigned to claimant by Texas Water Rights Commission).

3. Name and address of present claimants if different from paragraph 1, above. If change of ownership occurred and the Commission has not been advised, attach with this statement a legal instrument evidencing proof of ownership in the present claimants:

4. General Location:

a. County Brewster, Original Survey(s) or Grant(s) with Abstract No(s).

Survey No. 5, Block G-19, GC & SF RR Co. Grant

b. Rio Grande (Stream or Watercourse), a tributary to _____ (River)

in Rio Grande River Basin.

5. Describe diversion and distribution facilities that were existing December 31, 1970, locating same on aerial photo as requested in paragraph 7. below. Indicate any differences between the existing facilities and those previously described in the original claim. (Use extra sheets as needed.)

Water is pumped from the Rio Grande by two 1,200 G.P.M. pumps and flows by gravity through a concrete pipe for approximately 650 feet to a settling basin. From there it flows by gravity through lateral ditches throughout the Rio Grande Village area. In February, 1968, a Parshall Flume was installed. Water measurement through this flume shows that water is pumped at a rate of 980 gpm per pump instead of 1200 gpm.

Size of Intake - 5" with 10" suction line.

Size of Outlet - 10" discharge; Rated capacity - 1200 gpm.

Static Lift - 50' - Kind of Power - 220/440v, 3 phase.

Description of Power plant - power obtained from REA - Pump operated by a 20 H.P. Fairbanks Morse motor.

6. Historical use during the following period:

Year	Surface Waters Diverted (Acre-feet/annum)	Rated Pump Capacity In Gallons Per Minute or if not pump, diversion capacity in Cubic Feet Per Second	Irrigators tabulate acres actually irrigated each year with Surface Waters
1968	325.63	1960	120
1969	465.99	1960	"
1970	420.59	1960	"

7. The existing pertinent features of this claim shall be located on the most recent U.S. Department of Agriculture, Agricultural Stabilization and Conservation Service aerial photograph (xerox or other type duplicating machine copy not acceptable) available and attached to and made a part of this sworn statement. The pertinent features include but are not limited to the following, if applicable:

a. Dams and reservoirs,
b. Actual irrigated areas,
c. Pipelines and/or canals,
d. Pumping plants and/or headgates,
e. Original surveys with abstract numbers,
f. Property boundaries,
g. Where dual systems of surface water and ground water are used on the same irrigated tracts show how system is integrated.

If aerial photographs are not available, show accurately the requested information on a map.

THE STATE OF TEXAS

COUNTY OF Brewster

Before me, the undersigned authority in and for said County and State on this day personally appeared Luther T. Peterson, Jr. who being by me duly sworn on oath stated that the statements in the foregoing instrument are true and correct to the best of his knowledge and belief.

Luther T. Peterson Jr.
Claimant

Subscribed and sworn to before me this 23rd day of April 19 71

(SEAL)

Charley T. Thomas (As Magistrate)
Brewster
Notary Public
County, Texas

12-31-1970: report of surface water used for the year ending on december 31, 1970

3860600 23

DUPLICATE - RETAIN FOR YOUR FILE

TEXAS WATER RIGHTS COMMISSION

P. O. BOX 13207, CAPITOL STATION
AUSTIN, TEXAS 78711

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1970

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question. Texas Statutes require this report of water use to be filed with the Commission on or before March 1 of each year. Failure to timely report may subject the user to a civil penalty of $[illegible] and a further penalty of $1 for each and every day thereafte, until the report is filed, but in no case not to exceed a total of $150.

NATIONAL PARK SERVICE, SUPERINTENDT
312 ACRE TRACT
BIG BEND NATL. PARK, TEXAS 79834

Give name and address for changes, if any, in ownership:

Name

Street or Route

City State Zip Code

Give changes, if any, in address:

Street or Route

City State Zip Code

Certified Filing No. Permit No. Same as Permit No. 927 Claim No. 1913 Reporting No.

1. Name of stream, canal or other source from which water was diverted Rio Grande at Rio Grande Village

If you have a reservoir, please state:

(a) Name of reservoir: Present Original (if different)

(b) Present capacity of reservoir

(c) Condition of dam

2. The amount of water used was determined by: (a) Recording meter, (b) Weir,

(c) Flume, (d) Other method of estimating quantity used (explain)

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours
1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use						Return Flow
		Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	1960 gpm			6.50				
Feb				21.80				
Mar				38.97				
Apr				58.65				
May				50.60				
Jun				42.40				
Jul				21.80				
Aug				79.40				
Sep				39.30				
Oct				45.11				
Nov				16.06				
Dec				--				
Total								

Total acre-feet surface water used: 420.59

4. Users of surface water for irrigation purposes:
(a) During this year, 128.20 acres were irrigated one or more times under this water right.
(b) Irrigation districts supplying water for irrigation complete paragraph 4(b):
During the year, acres were irrigated one or more times within the district's boundaries.
During the year, water was furnished to irrigate acres one or more times outside of the district's boundaries.
(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4(c):
During the year, acres were irrigated under this water right.
On acres only 1 crop was produced.
On acres 2 crops were produced.
On acres crops were produced.
Irrigated land is located in the Section 3, 4 & 5 Survey or Surveys
No(s) Block G 19 in Brewster County.

(See reverse side)

12-31-1970: report of surface water used for the year ending on december 31, 1970, cont.

4(c) (Continued)

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Grass - trees	128.20	Every 3 to 4 weeks	4 inches
2.			
3.			
4.			
5.			
6.			

5. If you diverted surface water to others under this water right, complete the following:

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year

Was this water reported in Section 3? _____

6. If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year

Was this water reported in Section 3? _____

7. Municipal Users Only:
The amount of sewage effluent used for irrigation, industrial, or other purposes was _____ acre-feet. Estimated population served at the end of the year was: _____

8. Industrial Users Only:
Type of Industry: _____
Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was _____ acre-feet or _____ %.

9. Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However, the Commission is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:
_____ acre-feet of well water was used for _____ purposes.

10. Additional Information:

ALL USERS MUST EXECUTE THE FOLLOWING

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend NP, Texas, this the _____ day of February, 1971.

[redacted] PETERSON JR.
(Signature)

12-31-1969: report of surface water used for the year ending on december 31, 1969

TEXAS WATER RIGHTS COMMISSION

P. O. BOX 12396, CAPITOL STATION
AUSTIN, TEXAS 78711

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1969

DUPLICATE — RETAIN FOR YOUR FILES

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question. Texas Statutes require this report of water use to be filed with the Commission on or before March 1 of each year. Failure to timely report may subject the user to a civil penalty of $25 and a further penalty of $1 for each and every day thereafter until the report is filed, but in any case not to exceed a penalty of $150.

NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TEXAS 79834

Give name and address for changes, if any, in ownership:

Name

Street or Route I5

City State Zip Code

Give changes, if any, in address:

Street or Route

City State Zip Code

Certified Filing No. ____ Permit No. 927 Same as Claim No. 1913. Claim No. ____ Reporting No. ____

1. Name of stream, canal or other source from which water was diverted Rio Grande River at Rio Grande Village

If you have a reservoir, please state:

(a) Name of reservoir: Present ____ Original (if different) ____

(b) Present capacity of reservoir ____

(c) Condition of dam ____

2. The amount of water used was determined by: (a) Recording meter ____, (b) Weir ____, (c) Flume ____, (d) Other method of estimating quantity used (explain) ____

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours
1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

Month	Maximum Diversion Rate (Specify)	Purpose of Use: Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	Return Flow
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	1960 gpm			16.42				
Feb				17.68				
Mar				22.90				
Apr				27.81				
May				30.86				
Jun				41.32				
Jul				58.80				
Aug				86.60				
Sep				47.60				
Oct				58.50				
Nov				37.50				
Dec								
Total								

Total acre-feet surface water used: 465.99

4. Users of surface water for irrigation purposes:
(a) During this year, 128.20 acres were irrigated one or more times under this water right.
(b) Irrigation Districts supplying water for irrigation complete paragraph 4(b):
During the year, ____ acres were irrigated one or more times within the district's boundaries.
During the year, water was furnished to irrigate ____ acres one or more times outside of the district's boundaries.
(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4(c):
During the year, ____ acres were irrigated under this water right.
On ____ acres only 1 crop was produced.
On ____ acres 2 crops were produced.
On ____ acres ____ crops were produced.
Irrigated land is located in the Section 3, 4 & 5 Survey or Surveys
No(s) Block G19 in Brewster County.

(See reverse side)

12-31-1969: report of surface water used for the year ending on december 31, 1969, cont.

4(c) (Continued)

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Grass -trees	128.20	Every 3 to 4 weeks	4 inches
2.			
3.			
4.			
5.			
6.			

5. If you diverted surface water to others under this water right, complete the following:

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year

Was this water reported in Section 3? _____

6. If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year

Was this water reported in Section 3? _____

7. Municipal Users Only:
The amount of sewage effluent used for irrigation, industrial, or other purposes was _____ acre-feet. Estimated population served at the end of the year was: _____

8. Industrial Users Only:
Type of Industry: _____
Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was _____ acre-feet or _____%.

9. Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However, the Commission is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:
_____ acre-feet of well water was used for _____ purposes.

10. Additional Information:

ALL USERS MUST EXECUTE THE FOLLOWING AFFIDAVIT

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend NP, Texas, this the 12th day of February, 1970.

(Sgd.) LUTHER T. PETERSON, JR.
(Signature)

Subscribed and sworn to before me, the undersigned authority, on this the 12th day of February, 1970.

Notary Public in and for Brewster County, Texas.

(SEAL)

08-29-1969: form for recordation of certain water claims ; august 29, 1969

WR #1

TEXAS WATER RIGHTS COMMISSION

Sam Houston State Office Building
Area Code 512 475-2913
P. O. Box 12396 Capitol Station
AUSTIN, TEXAS 78711

FORM FOR RECORDATION OF CERTAIN WATER CLAIMS AS REQUIRED BY THE WATER RIGHTS ADJUDICATION ACT OF 1967 (SECTION 4, ARTICLE 7542A, VERNON'S CIVIL STATUTES). THIS FORM SHALL BE TYPEWRITTEN OR PRINTED LEGIBLY WITH INK. MAIL THE ORIGINAL TO THE TEXAS WATER RIGHTS COMMISSION IN THE ENCLOSED SELF ADDRESSED ENVELOPE.

1. Name and address of claimant:

Superintendent

Big Bend National Park, Texas 79834

DO NOT WRITE IN THIS SPACE

Claim No. .....:

County .....:

River or Coastal Basin ..:

Purpose of Use:

Date Filed .....:

Date Recorded..:

Volume_____, p._____, Water Rights Adjudication Act Claims Record.

2. Nature of Claim:

a. Type of claim Permit No. 927

b. Purpose of use Irrigation
(Irrigation, Municipal, Mining, Industrial, etc.)

c. Date of construction of diversion and/or distribution facilities September 28, 1925.

d. Date of first beneficial use of water September 28, 1925

3. General Location:

a. County Brewster, Original Survey or Grant Survey No. 5, Block G-19 GC & SF RR Co. Grant

b. Rio Grande River (Stream or Watercourse), ~~XXXXXXXXX~~ (River)

in Rio Grande River Basin.

c. Location from a nearby town: 90 miles in a southerly

direction from Marathon, Texas.

4. Diversion Works:

a. Location of point of diversion 2662 vares, N 61° 15' W feet (distance and direction) from the SE corner of Section 5, Block G-19 Original Survey No. 5, Abstract No.

in Brewster County, Texas.

b. The diversion is: (Check appropriate box)

(1) Directly from the stream [X]; (2) From an on-channel reservoir [ ]; (3) From a stream to an off-channel reservoir [ ]; (4) Other method (explain fully) [ ]

(Attach additional sheets as necessary)

c. Describe diversion and distribution facilities. Water is pumped from the Rio Grande River by two 1,200 G.P.M. pumps and flows by gravity through a concrete pipe for approximately 650 feet to a settling basin. From there it flows by gravity through lateral ditches throughout the Rio Grande Village Area.
Type of Pump - Centrifugal trash; Make - Fairbanks Morse.
Size of Intake - 5" with 10" suction line.
Size of Outlet - 10" discharge; Rated capacity - 1200 gpm
Static Lift - 50' Kind of Power - 220/440v, 3 phase.
Description of Powerplant - power obtained from REA; Pump operated by a 20 H.P. Fairbanks Morse motor.

(Attach additional sheets as necessary)

5. Dam and Reservoir Information:

a. Location of dam is approximately _____ feet in a _____ direction from the _____ corner of _____ Original Survey No. _____, Abstract No. _____ in _____ County, Texas.

b. Acre-feet of water impounded by structure at normal maximum operating level. _____

c. Surface area, in acres, of reservoir at normal maximum operating level. _____

6. Lands to be Irrigated: (If applicable)

a. Total number of acres capable of irrigation with existing system. 312 (128.6 Ac of land are now being irrigated. However future development will require an additional 183.4 Ac.)

b. Total number of acres to be irrigated in any one year. 312

c. Legal description of the tracts of land in which irrigation is claimed. On federal owned land in Big Bend National Park, Texas, beginning at the S.E. Corner of Survey No. 5, Block G-19, Grantee G C and S.F. Ry. Co., from where a hot spg. at base of cliff brs N. 3 deg. W. 50 vrs. another spg. brs. N. 17 deg. W. 550 vrs; thence N. along E line Section 5, Block G-19 aforesaid, 1363 vrs. a rk md; thence W. 561 vrs to the beginning point of this Survey; thence N 11 deg. 30' W 860 vrs to rk md, thence S 83 deg. 15' West 550 vrs. to rk md, thence S. 21 deg. W 550 vrs. to rk md. thence S 32 deg. 15' W. 50 vrs. at pump; thence S 68 deg. E 2300 vrs on N bank of Rio Grande River to rk md, being the S.E. corner of this Sur. thence N 151 vrs to rk md, thence N 60 deg. W. 450 vrs to rk md; thence N 553 vrs to the place of beginning, of this survey, containing 312 acres.

Proof of ownership to be furnished upon request.

(Also refer to Plan S-1-B.W.E.-978)

(& Plan NP-BB 3030)

(Attach additional sheets as necessary)

7. Historical Use during the following period:

Year	Public Waters Diverted (Acre-feet/annum)	Rated Pump Capacity In Gallons Per Minute or if not pump, diversion capacity in Cubic Feet Per Second	Irrigators tabulate Acres actually irrigated each year with Public Waters.
1963		2 pumps @ 1,200 g.p.m. = 2,400 g.p.m.	
1964	653.6	" " "	128.2
1965	589.6	" " "	128.2
1966	491.8	" " "	128.2
1967	704.9	" " "	128.2
	452.7	" " "	128.2

8. Have you commenced or completed construction of facilities that will allow beneficial use of a greater quantity of water than was reported under Paragraph 7 above? Yes ☐ No ☐ X

If answer is yes, describe facilities for increasing use. _____

(Attach additional sheets as necessary)

9. The dam, reservoir, irrigated areas, pipelines, canals, original surveys with abstract numbers are shown on the aerial photograph or a map accompanying this claim.

Refer to Plan 8-1-B.W.E.-978

10. a. Does the tract for which you claim an irrigation right border Plan BP-BB-3030 from which you claim to have the right to divert? Yes ☐ X No ☐

b. Do you have a ditch or pipeline easement or license to cross the intervening land or facility? Yes ☐ No ☐ X

c. Does surface water falling on your land drain naturally into the stream mentioned in 10. a.? Yes ☐ X No ☐

THE STATE OF TEXAS

COUNTY OF Brewster

Before me, the undersigned authority in and for said County and State on this day personally appeared Luther T. Peterson, Jr. who being by me duly sworn on oath stated that the statements in the foregoing instrument are true and correct to the best of his knowledge and belief.

Luther T. Peterson, Jr. Superintendent
Claimant

Subscribed and sworn to before me this 29th day of August 1969

(SEAL)

Notary Public Charley T. Lemmon
County, Texas. Brewster United States Commissioner

12-31-1968: report of surface water used for the year ending on december 31, 1968

TEXAS WATER RIGHTS COMMISSION

P. O. BOX 12396, CAPITOL STATION
AUSTIN, TEXAS 78711

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1968

DUPLICATE — RETAIN FOR YOUR FILES

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER CLAIM OF WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE UNLESS COMBINED REPORTING HAS BEEN AUTHORIZED BY COMMISSION ORDER. Use additional sheets if necessary to complete answers to any question. Texas Statutes require this report of water use to be filed with the Commission on or before March 1 of each year. Failure to timely report may subject the user to a civil penalty of $25 and a further penalty of $1 for each and every day thereafter until the report is filed, but in any case not to exceed a penalty of $150.

NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TEXAS 79834

Give name and address for changes, if any, in ownership:

Name

Street or Route

City State Zip Code

Give changes, if any, in address:

Street or Route

City State Zip Code

Certified Filing No. _____ Permit No. 927 Claim No. _____ Reporting No. _____

1. Name of stream, canal or other source from which water was diverted Rio Grande River at Rio Grande Village

If you have a reservoir, please state:

(a) Name of reservoir: Present None Original (if different) _____

(b) Present capacity of reservoir _____

(c) Condition of dam _____

2. The amount of water used was determined by: (a) Recording meter _____, (b) Weir _____, (c) Flume _____, (d) Other method of estimating quantity used (explain) Pumping rate x hrs. pumped None.

3. Record of surface water taken or diverted. (Enter in acre-feet the amount of water taken or diverted each month under the water right or claim of water right shown above.)

For Reporting Purposes

1 cfs = 450 gallons per minute
1 cfs = 2 acre-feet per 24 hours
1 acre-foot = 325,851 gallons
1 million gallons per day = 3 acre-feet

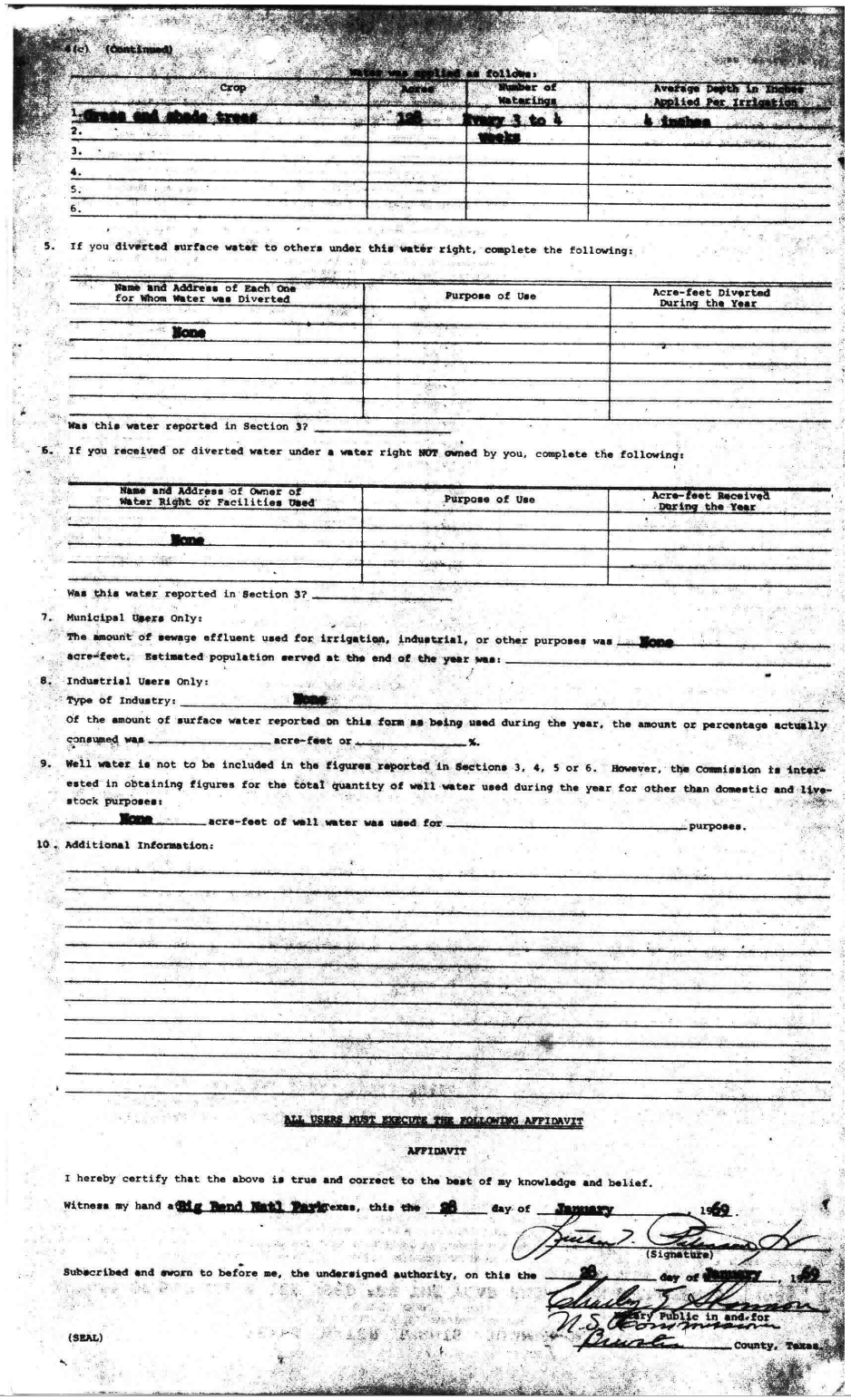
Month	Maximum Diversion Rate (Specify)	Purpose of Use						Return Flow
		Municipal	Industrial	Irrigation	Mining	Hydro-electric power	Other Use (Specify)	
	cfs or gpm	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Jan	1960 gpm			12.59				
Feb	" "			21.50				
Mar	" "			16.24				
Apr	" "			17.14				
May	" "			65.07				
Jun	" "			55.40				
Jul	" "			38.40				
Aug	" "			46.90				
Sep	" "			11.37				
Oct	" "			21.29				
Nov	" "			0.00				
Dec	" "			22.73				
Total				325.63				

Total acre-feet surface water used: 325.63

4. Users of surface water for irrigation purposes:
(a) During this year, 126 acres were irrigated one or more times under this water right.
(b) Irrigation Districts supplying water for irrigation complete paragraph 4(b):
During the year, None acres were irrigated one or more times within the district's boundaries.
During the year, water was furnished to irrigate None acres one or more times outside of the district's boundaries.
(c) If diversions are not metered within 5 per cent accuracy, complete paragraph 4(c):
During the year, _____ acres were irrigated under this water right.
On _____ acres only 1 crop was produced.
On _____ acres 2 crops were produced.
On _____ acres _____ crops were produced.
Irrigated land is located in the B-3, 4 and 5 0.19 Survey or Surveys No(s) _____ in Brewster County.

(See reverse side)

12-31-1968: report of surface water used for the year ending on december 31, 1968, cont.



4(c) (Continued)

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Grass and shade trees	198	Every 3 to 4 weeks	4 inches
2.			
3.			
4.			
5.			
6.			

5. If you diverted surface water to others under this water right, complete the following:

Name and Address of Each One for Whom Water was Diverted	Purpose of Use	Acre-feet Diverted During the Year
None		

Was this water reported in Section 3? _____

6. If you received or diverted water under a water right NOT owned by you, complete the following:

Name and Address of Owner of Water Right or Facilities Used	Purpose of Use	Acre-feet Received During the Year
None		

Was this water reported in Section 3? _____

7. Municipal Users Only:
The amount of sewage effluent used for irrigation, industrial, or other purposes was None acre-feet. Estimated population served at the end of the year was: _____

8. Industrial Users Only:
Type of Industry: None
Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was _____ acre-feet or _____%.

9. Well water is not to be included in the figures reported in Sections 3, 4, 5 or 6. However, the Commission is interested in obtaining figures for the total quantity of well water used during the year for other than domestic and livestock purposes:
None acre-feet of well water was used for _____ purposes.

10. Additional Information:

ALL USERS MUST EXECUTE THE FOLLOWING AFFIDAVIT

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend Natl Park, Texas, this the 28 day of January, 1969.

(Signature)

Subscribed and sworn to before me, the undersigned authority, on this the 28 day of January, 1969

Notary Public in and for
Brewster County, Texas.

(SEAL)

12-31-1967: report of surface water used for the year ending december 31, 1967.

TEXAS WATER RIGHTS COMMISSION
P.O. BOX 12967, CAPITOL STATION
AUSTIN, TEXAS 78711

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1967

DUPLICATE — RETAIN FOR YOUR FILES

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING, OR OTHER WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE. The Statutes of Texas* require all users of public waters to keep records of and to file annual reports with the Texas Water Rights Commission showing such use. Please use additional sheets if necessary to complete answers to any questions.

Change, if any, in ownership:

19

NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TEXAS 79834

Changes, if any, in address:

Street or Route

City State

Certified Filing No. _____ Permit No. 927 Reporting No. _____

1. Name of stream or canal from which water was diverted Rio Grande
If you have a reservoir, please state:
(a) Name of reservoir: Present Original
(b) Present capacity of reservoir
(c) Condition of dam

2. The amount of water used was determined by: (a) Recording meter _____, (b) Weir _____
(c) Flume _____, (d) Other method of estimating quantity used (explain) Pump rating X hours of operation X efficiency factor. (Efficiency factor determined by weir measurements)

3. Detail of amount of surface water used: (ALL USERS)
In the appropriate column or columns below, show by months the amounts of water used for each purpose covered by this report. If your record is by gallons, convert to acre-feet. (325,851 gal. = 1 ac-ft)

Mo.	Municipal & Domestic Use	Industrial Use	Irrigation Use	Mining Use	Hydro-electric Use	Recreation Use	Other Uses	Maximum Diversion Rate** CFS	Maximum Diversion Rate** GPM
Jan			0.0						
Feb			18.9						2400
Mar			57.7						
Apr			45.5						
May			67.3						
Jun			27.8						
Jul			72.3						
Aug			55.0						
Sep			7.9						
Oct			61.5						
Nov			39.8						
Dec			0.0						
TOTAL			452.7						

Total acre-feet surface water used: 452.7

**Indicate gal. per minute or cubic feet per second.

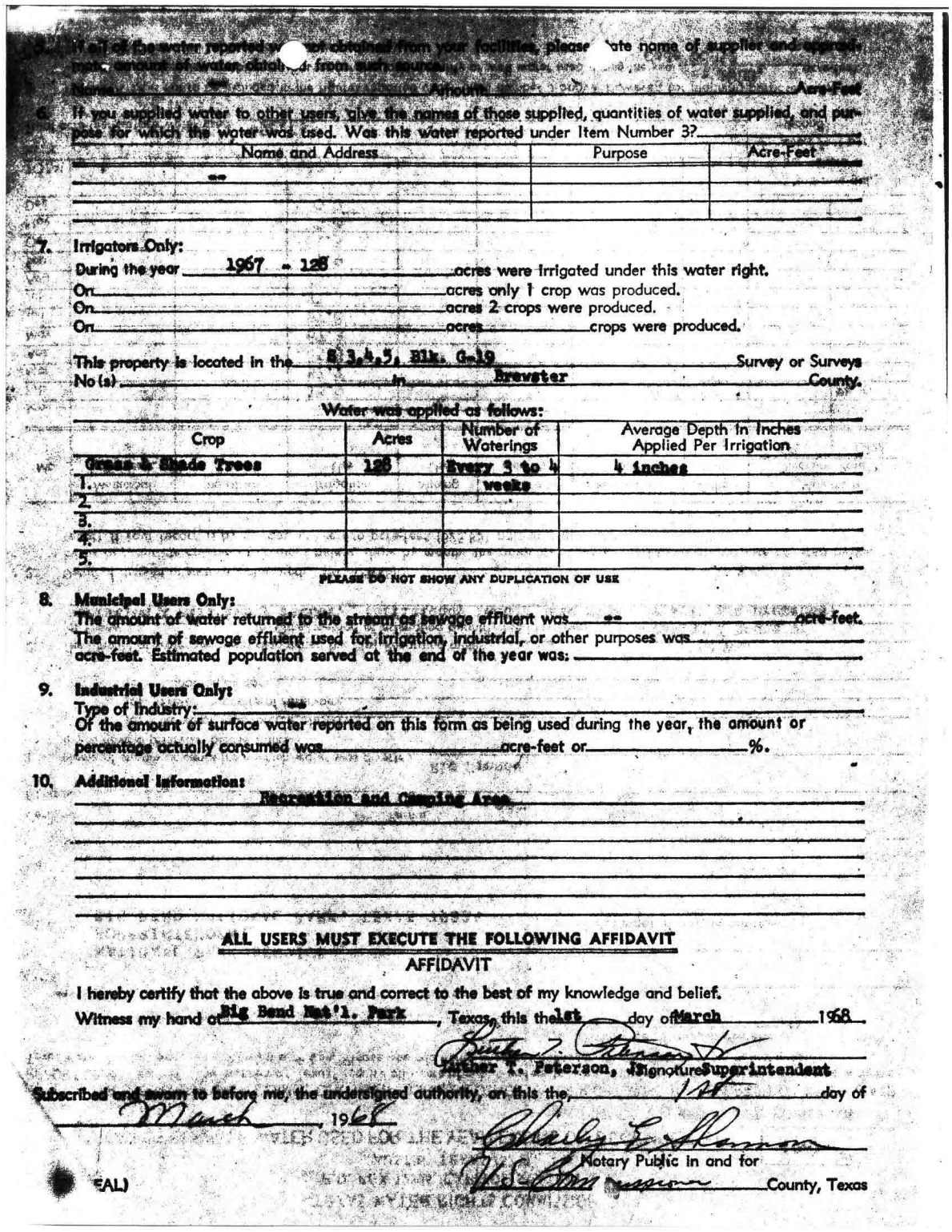
4. WELL WATER is not to be included in the figures reported under item number 3 above. However, for planning purposes only, the Commission is interested in obtaining figures for the total quantity of well water used during the year: See TWDB, Code 88952 acre-feet.

*Articles 7611, 7612, and 7612a, Revised Civil Statutes of Texas

C-36 (62-2)

(See reverse side)

12-31-1967: report of surface water used for the year ending december 31, 1967,cont.



5. If all of the water reported was not obtained from your facilities, please state name of supplier and approximate amount of water obtained from each source.

Name: -- Amount: -- Acre-Feet

6. If you supplied water to other users, give the names of those supplied, quantities of water supplied, and purpose for which the water was used. Was this water reported under Item Number 3? --

Name and Address	Purpose	Acre-Feet
--		

7. Irrigators Only:

During the year 1967 - 128 acres were irrigated under this water right.
On ____ acres only 1 crop was produced.
On ____ acres 2 crops were produced.
On ____ acres ____ crops were produced.

This property is located in the S 3, 4, 5, Blk. G-19 Survey or Surveys
No(s) ____ in Brewster County.

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
Grass & Shade Trees	128	Every 3 to 4 weeks	4 inches
1.			
2.			
3.			
4.			
5.			

PLEASE DO NOT SHOW ANY DUPLICATION OF USE

8. Municipal Users Only:

The amount of water returned to the stream as sewage effluent was -- acre-feet.
The amount of sewage effluent used for irrigation, industrial, or other purposes was ____ acre-feet. Estimated population served at the end of the year was: ____

9. Industrial Users Only:

Type of Industry: --
Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was ____ acre-feet or ____ %.

10. Additional Information:

Recreation and Camping Area

ALL USERS MUST EXECUTE THE FOLLOWING AFFIDAVIT

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend Nat'l. Park, Texas, this the 1st day of March 1968

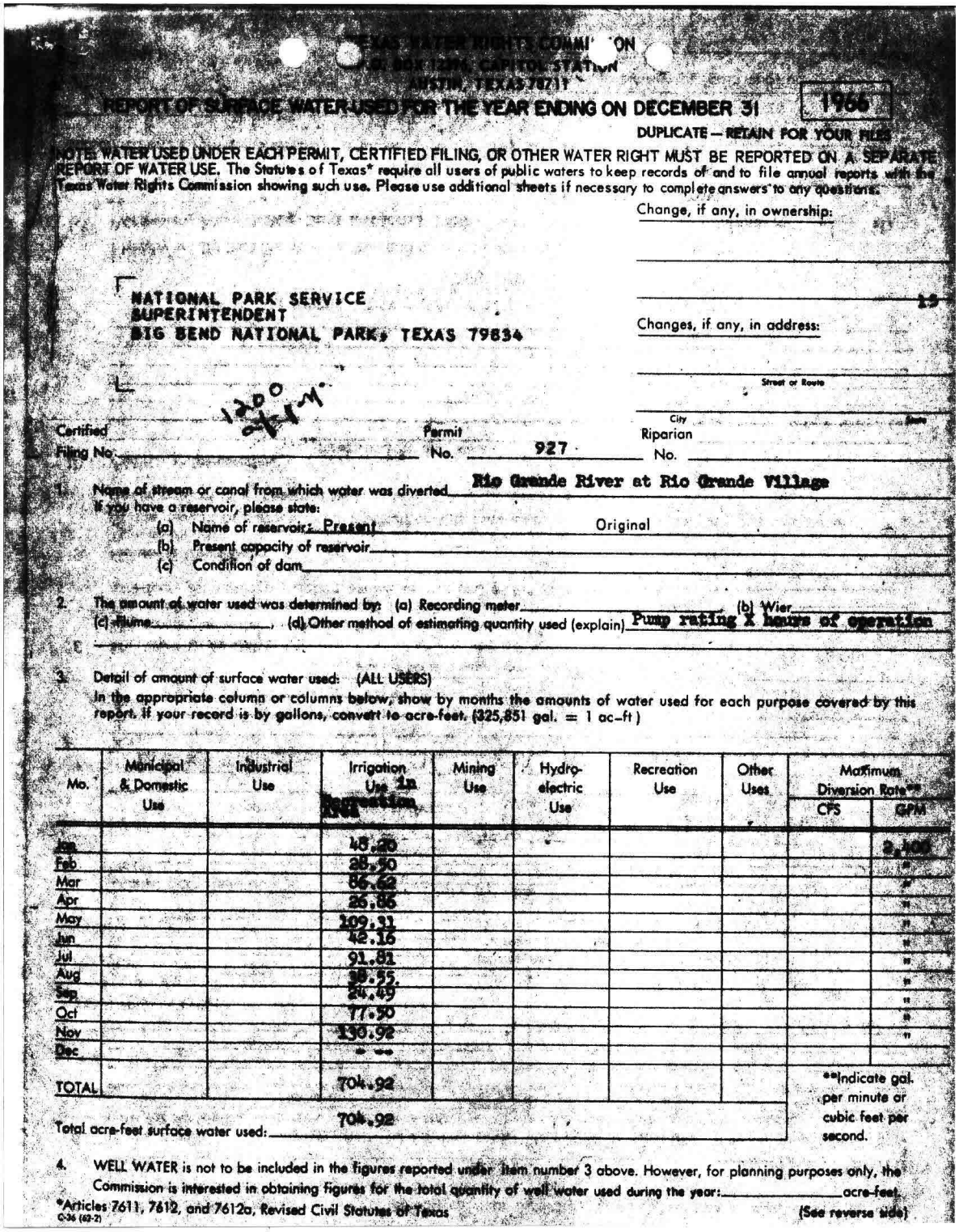
Luther T. Peterson, Jr. Signature Superintendent

Subscribed and sworn to before me, the undersigned authority, on this the, 1st day of March, 1968

Notary Public in and for

(SEAL) County, Texas

12-31-1966: report of surface water used for the year ending on december 31, 1966



TEXAS WATER RIGHTS COMMISSION
P. O. BOX 12967, CAPITOL STATION
AUSTIN, TEXAS 78711

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING ON DECEMBER 31 1966

DUPLICATE — RETAIN FOR YOUR FILES

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING, OR OTHER WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE. The Statutes of Texas* require all users of public waters to keep records of and to file annual reports with the Texas Water Rights Commission showing such use. Please use additional sheets if necessary to complete answers to any questions.

Change, if any, in ownership:

NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TEXAS 79834

Changes, if any, in address:

Street or Route

City

Certified Filing No. 1200 ac-ft M

Permit No. 927

Riparian No.

1. Name of stream or canal from which water was diverted Rio Grande River at Rio Grande Village
   If you have a reservoir, please state:
   (a) Name of reservoir: Present Original
   (b) Present capacity of reservoir
   (c) Condition of dam

2. The amount of water used was determined by: (a) Recording meter (b) Weir (c) Flume (d) Other method of estimating quantity used (explain) Pump rating X hours of operation

3. Detail of amount of surface water used: (ALL USERS)
   In the appropriate column or columns below, show by months the amounts of water used for each purpose covered by this report. If your record is by gallons, convert to acre-feet. (325,851 gal. = 1 ac-ft)

Mo.	Municipal & Domestic Use	Industrial Use	Irrigation Use in connection with	Mining Use	Hydro-electric Use	Recreation Use	Other Uses	Maximum Diversion Rate** CFS	Maximum Diversion Rate** GPM
Jan			48.20						2,100
Feb			28.50						"
Mar			86.62						"
Apr			26.86						"
May			109.31						"
Jun			42.16						"
Jul			91.81						"
Aug			38.55						"
Sep			24.49						"
Oct			77.50						"
Nov			130.92						"
Dec			- -						
TOTAL			704.92						

Total acre-feet surface water used: 704.92

**Indicate gal. per minute or cubic feet per second.

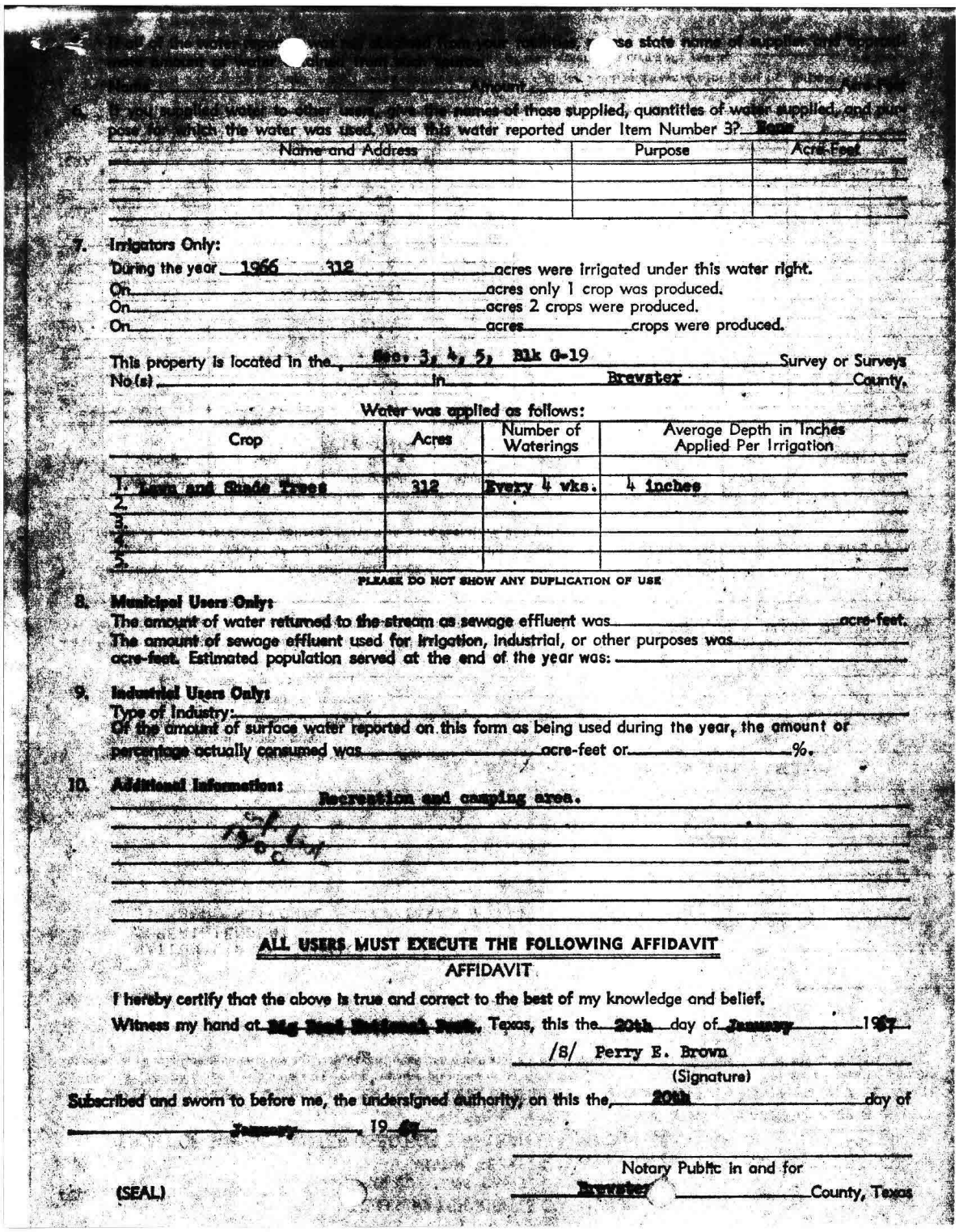
4. WELL WATER is not to be included in the figures reported under item number 3 above. However, for planning purposes only, the Commission is interested in obtaining figures for the total quantity of well water used during the year: acre-feet.

*Articles 7611, 7612, and 7612a, Revised Civil Statutes of Texas

C-36 (62-2)

(See reverse side)

12-31-1966: report of surface water used for the year ending on december 31, 1966, cont.



6. If water supplied water to others, give the names of those supplied, quantities of water supplied, and purpose for which the water was used. Was this water reported under Item Number 3? None

Name and Address	Purpose	Acre-Feet

7. Irrigators Only:

During the year 1966 312 acres were irrigated under this water right.
On _____ acres only 1 crop was produced.
On _____ acres 2 crops were produced.
On _____ acres _____ crops were produced.

This property is located in the Sec. 3, 4, 5, Blk G-19 Survey or Surveys No.(s) _____ in Brewster County.

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Lawn and Shade Trees	312	Every 4 wks.	4 inches
2.			
3.			
4.			
5.			

PLEASE DO NOT SHOW ANY DUPLICATION OF USE

8. Municipal Users Only:

The amount of water returned to the stream as sewage effluent was _____ acre-feet.
The amount of sewage effluent used for irrigation, industrial, or other purposes was _____ acre-feet. Estimated population served at the end of the year was: _____

9. Industrial Users Only:

Type of industry: _____
Of the amount of surface water reported on this form as being used during the year, the amount or percentage actually consumed was _____ acre-feet or _____ %.

10. Additional Information: Recreation and camping area.

ALL USERS MUST EXECUTE THE FOLLOWING AFFIDAVIT

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend National Park, Texas, this the 20th day of January 1967.

/s/ Perry E. Brown
(Signature)

Subscribed and sworn to before me, the undersigned authority, on this the 20th day of January 19 67.

(SEAL)

Notary Public in and for Brewster County, Texas

12-31-1965: report of surface water used for the year ending december 31, 1965

TEXAS WATER RIGHTS COMMISSION
P.O BOX 12396, CAPITOL STATION
AUSTIN, TEXAS 78711

Docket #1 ①

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING DECEMBER 31, 1965

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING, OR OTHER WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE. The Statutes of Texas* require all users of public waters to keep records of and to file annual reports with the Texas Water Rights Commission showing such use. Please use additional sheets if necessary to complete answers to any questions.

Change, if any, in ownership:

15

NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TEXAS 79834

Changes, if any, in address:

Street or Route

City State

Certified Filing No. ____ Permit No. 927 Riparian No. ____

1. Name of stream or canal from which water was diverted Rio Grande
If you have a reservoir, please state:
(a) Name of reservoir: Present ____ Original ____
(b) Present capacity of reservoir ____
(c) Condition of dam ____

2. The amount of water used was determined by: (a) Recording meter ____, (b) Weir ____
(c) Flume ____ (d) Other method of estimating quantity used (explain) Pump rating X hours of operation

3. Detail of amount of surface water used (ALL USERS)
In the appropriate column or columns below, show by months the amounts of water used for each purpose covered by this report. If your record is by gallons, convert to acre feet (325.851 gal. = 1 ac. ft.)

Mo.	Municipal & Domestic Use	Industrial Use	Irrigation Use in Recreation Area	Mining Use	Hydro-electric Use	Recreation Use	Other Uses	Maximum Diversion Rate** CFS	Maximum Diversion Rate** GPM
Jan			18.56						2,400
Feb			44.41						"
Mar			80.21						"
Apr			6.63						"
May			41.76						"
Jun			81.89						"
Jul			48.39						"
Aug			51.48						"
Sep			36.90						"
Oct			48.83						"
Nov			26.07						"
Dec			6.63						"
TOTAL			491.76						

**Indicate gal. per minute or cubic feet per second.

Total acre-feet surface water used: 491.76

4. WELL WATER is not to be included in the figures reported under item number 3 above. However, for planning purposes only, the Commission is interested in obtaining figures for the total quantity of well water used in 1965: --- acre feet.

*Articles 7611, 7612, and 7612a, Revised Civil Statutes of Texas

See T.W.D.B. Code No. 88952

(See reverse side)

12-31-1965: report of surface water used for the year ending december 31, 1965, cont.

5. If all of the water reported was not obtained from your facilities, please state name of supplier and approximate amount of water obtained from such source.

Name -- Amount -- Acre-Feet

6. If you supplied water to other users, give the names of those supplied, quantities of water supplied, and purpose for which the water was used. Was this water reported under Item Number 3? NONE

Name and Address	Purpose	Acre-Feet

7. Irrigators Only:

In 1965 312 acres were irrigated under this water right.
On ____ acres only 1 crop was produced.
On ____ acres 2 crops were produced.
On ____ acres ____ crops were produced.

This property is located in the Sec. 3, 4, & 5, BLK G-19 Survey or Surveys No(s). ____ in Brewster County.

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Lawn and Shade Trees	312	Every 2 wks	4 inches
2.			
3.			
4.			
5.			

PLEASE DO NOT SHOW ANY DUPLICATION OF USE

8. **Municipal Users Only:**

The amount of water returned to the stream as sewage effluent was ____ acre-feet.
The amount of sewage effluent used for irrigation, industrial, or other purposes was ____ acre-feet. Estimated population served at the end 1965 was: ____

9. **Industrial Users Only:**

Type of Industry: ____
Of the amount of surface water reported on this form as being used during 1965, the amount or percentage actually consumed was ____ acre-feet or ____ %.

10. **Additional Information:**

Recreation and camping area.

ALL USERS MUST EXECUTE THE FOLLOWING AFFIDAVIT

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend National Park, Texas, this the 21 day of February 1966.

/s/ Perry E. Brown
(Signature)

Subscribed and sworn to before me, the undersigned authority, on this the, Twenty-first day of February, 1966.

/s/ Charley E. Shannon
Notary Public in and for
United States Commissioner Brewster County, Texas

(SEAL)

12-31-1964: report of surface water used for the year ending december 31, 1964

TEXAS WATER COMMISSION
P. O. BOX 12311, CAPITOL STATI
AUSTIN, TEXAS 78711

BB 1

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING DECEMBER 31, 1964

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING, OR OTHER WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE. The Statutes of Texas* require all users of public waters to keep records of and to file annual reports with the Texas Water Commission showing such use. Please use additional sheets if necessary to complete answers to any questions.

NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TEXAS 79834

Change, if any, in ownership:

NONE

19

Changes, if any, in address:

NONE
Street or Route

City State

Certified Filing No. _____ Permit No. 927 Riparian No. _____

1. Name of stream or canal from which water was diverted Rio Grande
If you have a reservoir, please state:
(a) Name of reservoir _____
(b) Present capacity of reservoir _____
(c) Condition of dam _____

2. The amount of water used was determined by: (a) Recording meter _____, (b) Weir _____
(c) Flume _____, (d) Other method of estimating quantity used (explain) Pump rating X hours of operation

3. Detail of amount of surface water used: (ALL USERS)
In the appropriate column or columns below, show by months the amounts of water used for each purpose covered by this report. If your record is by gallons, convert to acre-feet. (325,851 gal. = 1 ac. ft.)

Mo.	Municipal & Domestic Use	Industrial Use	Irrigation Use in Recreation Area	Mining Use	Hydro-electric Use	Recreation Use	Other Uses	Maximum Diversion Rate** CFS	Maximum Diversion Rate** GPM
Jan			47,727						2400
Feb			28,073						"
Mar			65,183						"
Apr			37,330						"
May			91,700						"
Jun			42,650						"
Jul			101,190						"
Aug			85,290						"
Sep			10,380						"
Oct			81,980						"
Nov			000						"
Dec			,130						"
TOTAL			589,633						

**Indicate gal. per minute or cubic feet per second.

Total acre-feet surface water used: 589,633

4. WELL WATER is not to be included in the figures reported under item number 3 above. However, for planning purposes only, the Commission is interested in obtaining figures for the total quantity of well water used in 1964: 26,47 acre feet.

12-31-1964: report of surface water used for the year ending december 31, 1964, cont.

5. If all of the water reported was not obtained from your facilities, please state name of supplier and approximate amount of water obtained from such so
Name_____ Amount_____ Acre-Feet

6. If you supplied water to other users, give the names of those supplied, quantities of water supplied, and purpose for which the water was used. Was this water reported under Item Number 3?_____

Name and Address	Purpose	Acre-Feet
None		

7. Irrigators Only:

In 1964 312 acres were irrigated under this water right.
On_____ acres only 1 crop was produced.
On_____ acres 2 crops were produced.
On_____ acres_____ crops were produced.

This property is located in the Sec. 3, 4, & 5, Blk G-19 Survey or Surveys No(s)._____ in Brewster County.

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Lawn & Shade-Trees	312	Every 2 Weeks	6
2.			
3.			
4.			
5.			

PLEASE DO NOT SHOW ANY DUPLICATION OF USE

8. Municipal Users Only:
The amount of water returned to the stream as sewage effluent was_____ acre-feet.
The amount of sewage effluent used for irrigation, industrial, or other purposes was_____ acre-feet. Estimated population served at the end of 1964 was:_____

9. Industrial Users Only:
Type of Industry:_____
Of the amount of surface water reported on this form as being used during 1964, the amount or percentage actually consumed was_____ acre-feet or_____ %.

10. Additional Information:
Recreation and Camping Area

ALL USERS MUST EXECUTE THE FOLLOWING AFFIDAVIT

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend National Park, Texas, this the 22nd day of January 1965.

Perry E. Brown
(Signature) Superintendent

Subscribed and sworn to before me, the undersigned authority, on this the_____ day of _____, 196_____

Notary Public in and for

12-31-1963: report of surface water used for the year ending december 31, 1963

TEXAS WATER COMMISSION

P. O. BOX 2311, CAPITOL STATION
AUSTIN 11, TEXAS

Docket No. 1
J. O. Wedin Ditch

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING DECEMBER 31, 1963

DUPLICATE - RETAIN FOR YOUR FILES

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING, OR OTHER WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE. The Statutes of Texas° require all users of public waters to keep records of and to file annual reports with the Texas Water Commission showing such use. Please use additional sheets if necessary to complete answers to any questions.

Change, if any, in ownership:

NONE

NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK, TEXAS

Changes, if any, in address:

None
Street or Route

City State

Certified Filing No. _____ Permit No. 927 Riparian No. 25

1. Name of stream or canal from which water was diverted Rio Grande
If you have a reservoir, please state:
(a) Name of reservoir _____
(b) Present capacity of reservoir _____
(c) Condition of dam _____

2. The amount of water used was determined by: (a) Recording meter _____, (b) Weir _____
(c) Flume _____, (d) Other method of estimating quantity used (explain) Pump Rating x hours of operation

3. Detail of amount of surface water used: (ALL USERS)
In the appropriate column or columns below, show by months the amounts of water used for each purpose covered by this report. If your record is by gallons, convert to acre-feet. (325,851 gal. = 1 ac. ft.)

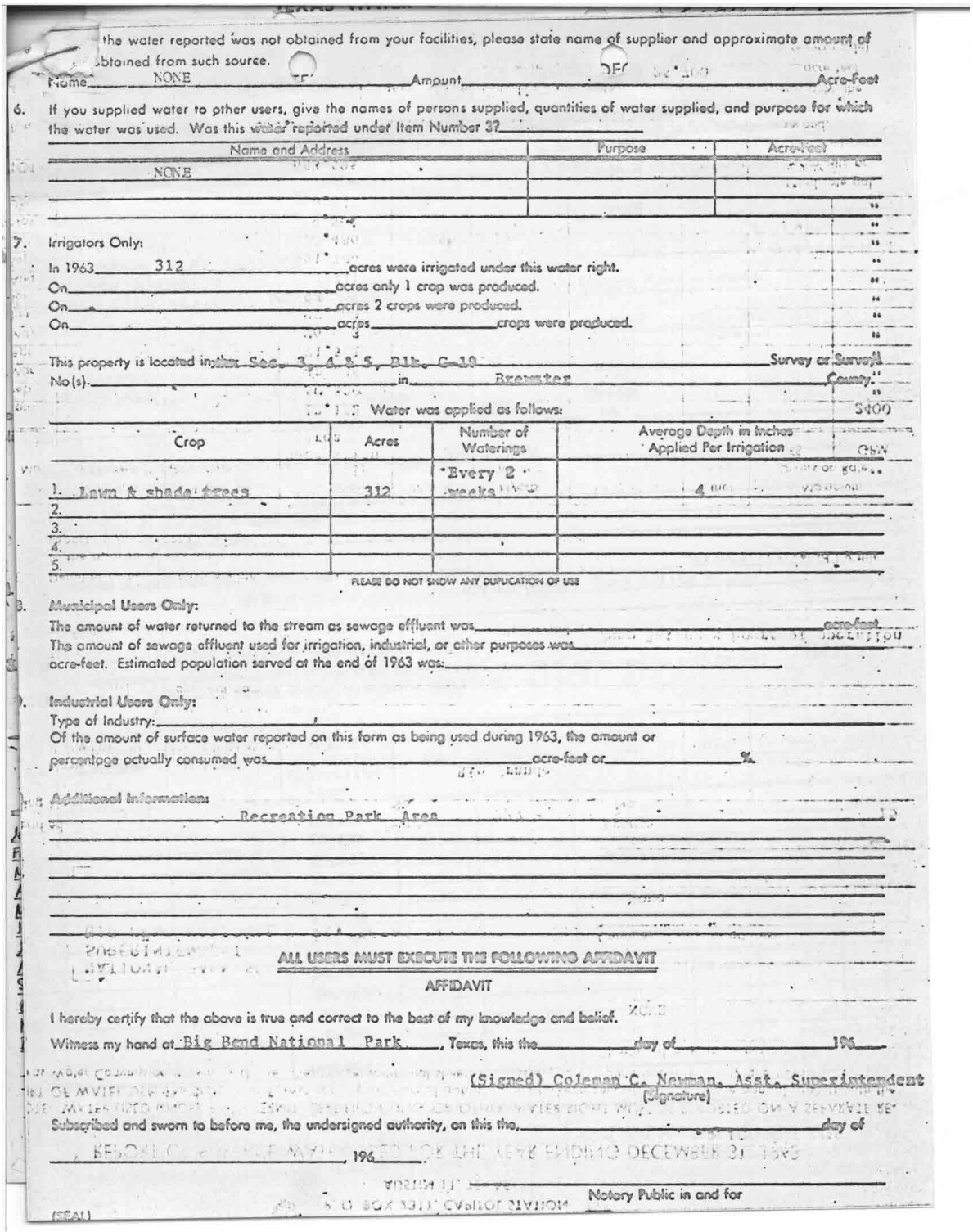
Mo.	Municipal & Domestic Use	Industrial Use	Irrigation Use in Recreation Area	Mining Use	Hydro-electric Use	Recreation Use	Other Uses	Maximum Diversion Rate°° CFS	Maximum Diversion Rate°° GPM
Jan			12.152						2400
Feb			50.820						"
Mar			42.645						"
Apr			71.591						"
May			76.673						"
Jun			97.664						"
Jul			98.769						"
Aug			64.741						"
Sep			51.704						"
Oct			70.486						"
Nov			9.501						"
Dec			6.849						"
TOTAL			653.595						

°°Indicate gal. per minute or cubic feet per second.

Total acre-feet surface water used: 653.595

4. WELL WATER is not to be included in the figures reported under item number 3 above. However, for planning purposes only, the Commission is interested in obtaining figures for the total quantity of well water used in 1963. 25,700 acre feet.

12-31-1963: report of surface water used for the year ending december 31, 1963, cont.



the water reported was not obtained from your facilities, please state name of supplier and approximate amount of obtained from such source.

Name NONE Amount Acre-Feet

6. If you supplied water to other users, give the names of persons supplied, quantities of water supplied, and purpose for which the water was used. Was this water reported under Item Number 3?

Name and Address	Purpose	Acre-Feet
NONE		

7. Irrigators Only:

In 1963 312 acres were irrigated under this water right.
On acres only 1 crop was produced.
On acres 2 crops were produced.
On acres crops were produced.

This property is located in the Sec. 3, A & S, Blk. G-10 Survey or Survey's No(s). in Brewster County.

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth in Inches Applied Per Irrigation
1. Lawn & shade trees	312	Every 2 weeks	4
2.			
3.			
4.			
5.			

PLEASE DO NOT SHOW ANY DUPLICATION OF USE

8. Municipal Users Only:

The amount of water returned to the stream as sewage effluent was acre-feet.
The amount of sewage effluent used for irrigation, industrial, or other purposes was acre-feet. Estimated population served at the end of 1963 was:

9. Industrial Users Only:

Type of Industry:
Of the amount of surface water reported on this form as being used during 1963, the amount or percentage actually consumed was acre-feet or %.

10. Additional Information:

Recreation Park Area

ALL USERS MUST EXECUTE THE FOLLOWING AFFIDAVIT

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend National Park, Texas, this the day of 196

(Signed) Coleman C. Newman, Asst. Superintendent
(Signature)

Subscribed and sworn to before me, the undersigned authority, on this the, day of

, 196

Notary Public in and for

(SEAL)

12-31-1962: report of surface water used for the year ending december 31, 1962

TEXAS WATER COMMISSION

P. O. BOX 2311, CAPITOL STATION
AUSTIN 11, TEXAS

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING DECEMBER 31, 1962

DUPLICATE - RETAIN FOR YOUR FILES

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING, OR OTHER WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE. The Statutes of Texas* require all users of public waters to keep records of and to file annual reports with the Texas Water Commission showing such use. Please use additional sheets if necessary to complete answers to any questions.

Change, if any, in ownership:

A certified copy of instrument conveying water rights to the new owner:

☐ is attached ☐ will be sent 15

National Park Service
Superintendent
Big Bend National Park Texas

Changes, if any, in address:

Street or Route

City State

Certified Filing No. _____ Permit (Rio Grande Village) No. 927 Riparian No. _____

1. Name of stream or canal from which water was diverted Rio Grande
   If you have a reservoir, please state:
   (a) Name of reservoir _____
   (b) Present capacity of reservoir _____
   (c) Condition of dam _____

2. The amount of water used was determined by: (a) Recording meter _____, (b) Wier _____
   (c) Flume _____, (d) Other method of estimating quantity used (explain) Pump rating multiplied by recorded hours of operation

3. Detail of amount of surface water used: (ALL USERS)
   In the appropriate column or columns below, show by months the amounts of water used for each purpose covered by this report. If your record is by gallons, convert to acre-feet. (325,851 gal. = 1 ac. ft.)

Mo.	Municipal & Domestic Use	Industrial Use	Irrigation Use (Recreation Park)	Mining Use	Hydro-electric Use	Recreation Use	Other Uses	Maximum Diversion Rate** CFS	Maximum Diversion Rate** GPM
Jan			3,977						1200
Feb			51,489						2400
Mar			59,217						2400
Apr			85,732						2400
May			88,825						2400
Jun			79,103						2400
Jul			79,103						2400
Aug			155,997						2400
Sep			61,868						2400
Oct			53,693						2400
Nov			57,670						2400
Dec			25,631						1200
TOTAL			802,299						

**Indicate gal. per minute or cubic feet per second.

Total acre-feet surface water used: 802.299 (River Diversion)

4. WELL WATER is not to be included in the figures reported under item number 3 above. However, for planning purposes only, the Commission is interested in obtaining figures for the total quantity of well water used in 1962: 24 acre feet.

*Articles 7611, 7612, and 7612a, Revised Civil Statutes of Texas

C-36 (62-2)

(See reverse side)

If all of the water reported was not obtained from your facilities, please state name of supplier and approximate amount of water obtained from such source.

Name_____ Amount_____ Acre-Feet

6. If you supplied water to other users, give the names of persons supplied, quantities of water supplied, and purpose for which the water was used. Was this water reported under Item Number 3?

Name and Address	Purpose	Acre-Feet

7. Irrigators Only:

In 1962 312 acres were irrigated under this water right.
On 312 acres only 1 crop was produced.
On _____ acres 2 crops were produced.
On _____ acres _____ crops were produced.

This property is located in the Section 3,4,5; Block G-19 Survey or Surveys No(s). _____ in Brewster County.

Water was applied as follows:

Crop	Acres	Number of Waterings	Average Depth of Water in Inches	Acre-feet Used
1. Shade Trees, Lawn, & scenic				
2. ponds	312	every 2 weeks	4	[illegible]
3.				
4.				
5.				

PLEASE DO NOT SHOW ANY DUPLICATION OF USE

8. **Municipal Users Only:**

The amount of water returned to the stream as sewage effluent was _____ acre-feet.
The amount of sewage effluent used for irrigation, industrial, or other purposes was _____ acre-feet. Estimated population served at the end of 1962 was: _____.

9. **Industrial Users Only:**

Type of Industry: _____
Of the amount of surface water reported on this form as being used during 1962, the amount or percentage actually consumed was _____ acre-feet or _____ %.

10. **Additional Information:**

This is a scenic recreation park area consisting of lawn, shade trees, and scenic ponds.

A large but indeterminate volume of water is returned to the [illegible] from scenic ponds, ditches, and the settling pond.

ALL USERS MUST EXECUTE THE FOLLOWING AFFIDAVIT

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at _____, Texas, this the _____ day of _____ 196____.

_____
(Signature)

Subscribed and sworn to before me, the undersigned authority, on this the, _____ day of _____, 196_____.

_____
Notary Public in and for

(SEAL) _____ County, Texas

COPY

TEXAS BOARD OF WATER ENGINEERS

P. O. BOX 2311, CAPITOL STATION
AUSTIN, TEXAS

1

REPORT OF SURFACE WATER USED FOR THE YEAR ENDING DECEMBER 31, 1961

~~ORIGINAL - RETURN TO BOARD~~ COPY

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING, OR OTHER WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE. The Statutes of Texas* require all users of public waters to keep records of and to file annual reports with the Board of Water Engineers showing such use. Please use additional sheets if necessary to complete answers to any questions.

Change, if any, in ownership: _____

National Park Service
Superintendent
Big Bend National Park, Texas

Change, if any, in address: _____

(Rio Grande Village)

Certified Filing No. _____ Permit No. 927 Riparian No. _____

1. Name of stream or canal from which water was diverted Rio Grande River
   If you have a reservoir, please state:
   (a) Name of reservoir _____
   (b) Present capacity of reservoir _____
   (c) Condition of dam _____

2. The amount of water used was determined by: (a) Recording meter _____, (b) Wier _____ (c) Flume _____, (d) Pump rating multiplied by hours of operation X, (e) Other method of estimating quantity used (explain) _____

3. Detail of amount of surface water used: (ALL USERS)
   In the appropriate column or columns below, show by months the amounts of water used for each purpose covered by this report. If your record is by gallons, convert to acre-feet. (325,851 gal. = 1 ac. ft.)

Mo.	Municipal & Domestic Use	Industrial Use	Irrigation Use (Recreation Park)	Mining Use	Hydro-electric Use	Recreation Use	Other Uses	Maximum Diversion Rate** CFS	Maximum Diversion Rate** GPM
Jan			26.515						2400
Feb			22.971						2400
Mar			54.577						2400
Apr			49.495						2400
May			78.440						2400
Jun			100.978						2400
Jul			80.429						2400
Aug			89.046						2400
Sep			114.015						2400
Oct			82.197						2400
Nov			22.537						2400
Dec			11.489						2400
TOTAL									

**Indicate gal. per minute or cubic feet per second.

Total acre-feet surface water used: 732.689 (River Diversion)

4. WELL WATER is not to be included in the figures reported under item number 3 above. However for planning purposes only the Board is interested in obtaining figures for the total quantity of well water used in 1961: 15.3 acre feet.

*Articles 7611, 7612, and 7612a, Revised Civil Statutes of Texas

(See reverse side)

5. If all of the water reported was not obtained from your facilities, please state name of supplier and approximate amount of water obtained from such source.
Name _____ Amount _____ Acre-Feet

6. If you supplied water to other users, give the names of persons supplied, quantities of water supplied, and purpose for which the water was used.

Name and Address	Purpose	Acre-Feet

7. **Irrigators Only:**
During the year 1961, 312 acres were irrigated to produce only one crop, and _____ acres were irrigated to produce more than one crop. This property is located in the Sec. 3,4,5; Blk G-19 Survey or Surveys No.(s) _____ in Brewster County. Following is a breakdown of irrigation with respect to crops.

Crop	Number of Acres Irrigated	Number of Irrigations	Average Depth in Inches Applied Per Irrigation
Lawn and Shade Trees	312	Every two weeks	4

8. **Municipal Users Only:**
The amount of water returned to the stream as sewage effluent was _____ acre-feet.
The amount of sewage effluent used for irrigation, industrial, or other purposes was _____ acre-feet. Estimated population served at the end of 1961 was: _____.

9. **Industrial Users Only:**
Type of Industry: _____
Of the amount of surface water reported on this form as being used during 1961, the amount or percentage actually consumed was _____ acre-feet or _____ %.

10. **Additional Information:** Recreation Park area

ALL USERS MUST EXECUTE THE FOLLOWING AFFIDAVIT

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at _____, Texas, this the _____ day of _____ 19____.

(sgd) Coleman C. Newman
Acting Supt. (Signature)

Subscribed and sworn to before me, the undersigned authority, on this the _____ day of _____, 19____.

_____
Notary Public in and for

(SEAL) _____ County, Texas

TEXAS BOARD OF WATER ENGINEERS
. O. BOX 2311 CAPITOL STATION
AUSTIN, TEXAS

REPORT OF WATER USE - 1960

NOTE: WATER USED UNDER EACH PERMIT, CERTIFIED FILING OR OTHER WATER RIGHT MUST BE REPORTED ON A SEPARATE REPORT OF WATER USE. The Statutes of Texas* require all users of public waters to keep records of and to file annual reports with the Board of Water Engineers showing such use. Please use the reverse hereof if necessary to complete answers to any questions.

Docket #1

927 Permit _____ Certified Filing

NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NATIONAL PARK TEXAS

Riparian _____
This report shall be used only for reporting water used under the above designation. Forms for reporting uses under other than the above designation will be provided upon request.

Watershed: RIO GRANDE

Please indicate any change in ownership and address from that shown above.

Present Ownership Same

Present Address Same

1. Name of stream or canal from which water was diverted: Rio Grande

In you have a reservoir please state:
(a) Name of reservoir _____
(b) Present capacity of reservoir _____
(c) Condition of dam _____

2. The amount of water used was determined by: (a) Recording meter _____ (b) Wier _____ (c) Flume _____ (d) Pump rating multiplied by Hours of operation _____ (e) Other method of estimating quantity used (explain) _____

3. Detail of Amount of Water Used: (ALL USERS)
In the appropriate column or columns below, show by months the amount of water used for each purpose covered by this report. If your record is by gallons, convert to acre-feet. (325,851 gal. = 1 ac. ft.)

ALL USERS ARE REQUIRED BY LAW TO EXECUTE AFFIDAVIT AT END OF THIS REPORT

Quantity Used in Acre-Feet (450 gallons per minute = 2 acre-feet per 24 hour day; 450 GPM = 1 CFS)

MO.	Municipal & Domestic Use	Industrial Use	Irrigation Use	Mining Use	Hydro-electric Use	Recreation Use	Other Uses	Maximum Diversion Rate** CFS	GPM
Jan			58,167						2400
Feb			51,227						"
Mar			66,545						"
Apr			60,543						"
May			93,466						"
Jun			105,839						"
Jul			42,645						"
Aug			61,868						"
Sep			130,587						"
Oct			35,795						"
Nov			17,676						"
Dec			55,019						"
TOTAL			779,377						

Total Acre-Feet Surface Water Used: 779,377

**Indicate gal. per minute or cubic feet per second

*Articles 7611,7612 and 7612a Revised Civil Statutes of Texas

COPY

4. If all of the water reported here was not obtained from your own facilities, please state name of supplier and approximate amount of water obtained.
Name _____ Amount _____ Acre-feet

5. If you supplied water to other users, give the names of persons supplied, quantities of water supplied, and purpose for which the water was used.

Name and Address	Purpose	No. of Ac. Ft.

6. Irrigators Only:
Please state the number of acres of land in your irrigation program: 312 acres.
Of this amount, please state the number of acres irrigated during 1960: 312 acres.
Of the acres irrigated during 1960, how many acres were irrigated to produce only one crop: 312 acres. How many acres were irrigated during 1960 to produce more than one crop: _____ acres. State the name of the survey or surveys in which the lands in your irrigation program are located: Sec. 5 & 6 Block G 19
Survey Ms. G.C. & S.F. Ry. Co., Abstract No. _____, Brewster County, Texas.

7. Municipal Users Only: Not applicable
Indicate the amount of water returned to stream as sewage effluent: _____ Ac. Ft.
Indicate the amount of sewage effluent used for irrigation, industrial, or other purposes: _____ Ac. Ft. What was the estimated population connected to your system at the end of 1959 _____; 1960 _____?

8. Industrial Users Only:
Type of industry: Not applicable.
Of the amount of surface water you have reported on this form as being used during 1960, estimate the quantity or percentage actually consumed: _____ Ac. Ft. or _____ %.

9. WELL WATER is not to be included in the figures reported under item number 3, however for planning purposes only the Board is interested in obtaining figures for the total quantity of well water used in 1960: _____ acre feet.

10. Other Comments:

This water used to irrigate shade trees in the campground, Picnic areas and road sides in the Rio Grande Development Area.

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend Nat'l Park, Texas, this the 28 day of February, 19 61

/s/ STANLEY C. JOSEPH
Stanley C. Joseph Superintendent
(Signature)

Subscribed and sworn to before me, the undersigned authority, on this the 28 day of February, 19 61 .

(SIGNED)
Charles H. Shannon
U.S. Commissioner
Big Bend Nat'l Park, Texas

(SEAL)

COPY

00-00-0000: report of water use 1959

Docket #1
Wedin Ditch

REPORT OF WATER USED FOR THE YEAR ENDING DECEMBER 31, 1959

Article 7612, Vernon's Annotated Civil Statutes, Texas, provides for the filing of an annual report to the Board of Water Engineers by all appropriators of public waters. The report is intended to show the amount of water used and the distribution of use. Each Permit or Certified Filing must be reported separately.

978 NATIONAL PARK SERVICE
927 U S DEPT OF INTERIOR
WASHINGTON 25 D C

Change, if any, in ownership: _____.

Change, if any, in address: Superintendent, Big Bend National Park, Texas. 15

Check the appropriate square or squares to indicate the use or uses for which your Permit was granted:
Municipal ☐; Industrial ☐;
Irrigation ☒; Mining ☐;
Hydroelectric ☐; Recreation ☐.

Source of Water:
(1) Reservoir ☐. Name of reservoir _____.
(2) Stream ☒. Name of stream Rio Grande.
(3) Well ☐. (While your Permit covers only the use of surface water, information concerning the use of ground water is of value to this Board in compiling data.)

Method of Determining Amount of Water Used:
(1) Recording meter ☐; (2) Wier ☐; (3) Flume ☐; (4) Pump rating multiplied by hours of operation ☒; (5) Other method of estimating quantity used ☐. Explain other method.

Capacity of pump or pumps: 1300 gal. per minute; 1300 gal. per minute; _____ gal. per minute; _____ gal. per minute

Miscellaneous Information:
(1) Was all of the water reported on this form obtained from your own facilities? Yes. If not, state here the name of your supplier and the approximate amount of water obtained.
Name of Supplier _____; no. of ac. ft. _____.
Name of Supplier _____; no. of ac. ft. _____.
(2) Did you supply water to other users? No. If so, give the names of persons supplied, quantities supplied, and purpose for which use was made:

Name	Purpose	No. of Ac. Ft.

(3) Was your supply of water adequate in 1959? Yes. What plans, if any, do you have for increasing your supply? Additional trees will be planted.

Detail of Amount of Water Used: (ALL USERS)
In the appropriate column or columns below, show by months the amounts of water used for each purpose covered by this Permit or Certified Filing. While your Permit covers only the use of surface water (from reservoir or stream), information concerning the use of well water is also of value to this Board in compiling data. Please indicate such use by drawing a circle around the number of acre feet used from wells. If both sources were used during a given month (for example, 20 acre feet from a reservoir and 10 acre feet from a well), show the amount used in this manner: 20 (10). If your record is by gallons, convert to acre feet. (325,851 gal. = 1 ac. ft.)

Mo.	Quantity Used in Acre Feet (1 Acre Foot = 325,851 Gallons)						Maximum Diversion Rate	
	Municipal & Domestic Use	Industrial Use	Irrigation Use	Mining Use	Hydro-electric Use	Recreation Use	Gal. per Minute	Cu. Ft. per Second
Jan			15.798				2600	
Feb			32.076				"	
Mar			58.646				"	
Apr			76.838				"	
May			84.977				"	
Jun			89.046				"	
Jul			66.306				"	
Aug			80.668				"	
Sep			65.827				"	
Oct			59.603				"	
Nov			14.601				"	
Dec			13.883				"	
TOTAL			658.269					

Total Acre Feet Surface Water Used: 658.269 Total Acre Feet Ground Water Used: None

ALL USERS ARE REQUIRED BY LAW TO EXECUTE AFFIDAVIT AT END OF THIS REPORT

(See Other Side of This Sheet)

Detail of Amount of Water Used: (Irrigators Only)

In the spaces below, list by months the number of acres irrigated and the depth of irrigation in inches for each crop that received water during 1959. In case well water was used for any of these irrigations, draw a circle around the number of inches so irrigated.

CROP	JAN		FEB		MAR		APR		MAY		JUN	
	Acres	In.	Acres	In.	Acres	In.	Acres	In.	Acres	In.	Acres	In.
Cotton												
Grain Sorghum												
Field Corn												
Sweet Corn												
Wheat												
Oats or Barley												
Rice												
Forage Sorghum												
Pasture												
Alfalfa												
Peanuts												
Orchard												
Sweet Potatoes												
Irish Potatoes												
Vegetable Crop												
Other Crop or Use	312	0.61	312	1.23	312	2.26	312	2.96	312	3.27	312	3.43

CROP	JUL		AUG		SEP		OCT		NOV		DEC	
	Acres	In.	Acres	In.	Acres	In.	Acres	In.	Acres	In.	Acres	In.
Cotton												
Grain Sorghum												
Field Corn												
Sweet Corn												
Wheat												
Oats or Barley												
Rice												
Forage Sorghum												
Pasture												
Alfalfa												
Peanuts												
Orchard												
Sweet Potatoes												
Irish Potatoes												
Vegetable Crop												
Other Crop or Use	312	2.55	312	3.10	312	2.53	312	2.29	312	0.56	312	0.53

TOTAL ACRES 312 TOTAL INCHES 25.32 TOTAL ACRE FEET 658. *

* Multiply total acres by total inches and then divide by 12 to get total acre feet.

Irrigators Only:

Of the number of irrigated acres reported above, how many of these acres were used to produce more than one crop during 1959? None. How many acres do you farm which are subject to irrigation but were not irrigated during 1959? None. How many acres are contained in the property on which you irrigate? Not App. Do you own this property? Yes. If not, give the name of the owner: _____;
address of owner: _____.
State the name of the survey in which this property is located: _____;
survey number: _____; abstract number: _____; name of county: _____.

Municipal Users Only:

Indicate the amount of water returned to stream as sewage effluent: _____ Ac. Ft.
Indicate the amount of sewage effluent used for irrigation, industrial, or other purposes: _____ Ac. Ft.
What was your estimated population at the end of 1958? _____; 1959? _____.

Industrial Users Only:

Type of industry: _____.
Of the amount of surface water you have reported on this form as being used during 1959, estimate the quantity or percentage actually consumed: _____ Ac. Ft. or _____ %.

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at Big Bend Natl.Park, Texas, this the 23rd day of March, 19 60.

(SGD) STANLEY C. JOSEPH

Stanley C. Joseph (Signature) Superintendent

Subscribed and sworn to before me, the undersigned authority, on this the 23rd day of March, 19 60.

SIGNED

Notary Public in and for

(SEAL) Big Bend National Park, Texas County, Texas

00-00-0000: report of water use 1958

Pocket 1

REPORT OF WATER USED FOR THE YEAR ENDING DECEMBER 31, 1958 Wedum Ditch

Please complete all applicable items on both sides of this form. The Affidavit on the reverse side must be executed by all users. IF YOU OWN MORE THAN ONE PERMIT OR CERTIFIED FILING, FILL OUT A SEPARATE REPORT FOR EACH. IF GROUND WATER WAS USED TO SUPPLEMENT THE SURFACE WATER SUPPLY, FILL OUT ITEM 6.

Certified Filing No. 978
Permit No. 927

978 NATIONAL PARK SERVICE
927 U S DEPT OF INTERIOR
WASHINGTON 25 D C

Do Not Write In This Space
_____ A.F. 15
_____ A.F.
_____ A.F.
_____ Acres Irrigated
Remarks _____

Change, if any, in ownership or address NO CHANGE

1. Source of Water.
   Water was taken from Rio Grande (reservoir)(stream)
   The capacity of the reservoir is Inapplicable ac. ft.

2. The amount of water used was determined by: (1) recording meter ☐ ; (2) wier ☐ ; (3) flume ☐ ; (4) pump rating multiplied by hours of operation ☒ ; (5) Explain any other method of estimating quantity used. _____

3. In the space below show the total monthly amount, preferably in acre-feet*, of surface water pumped or diverted from streams or reservoirs. Use a separate line for each purpose for which water was used, as Irrigation (Irr); Municipal (Mun); Industrial (Ind); Mining (Min); Hydroelectric (Hydro); or Recreation (Rec.)

	Purpose	Quantity	Max. Diversion Rate in Gallons Per Minute		Purpose	Quantity	Max. Diversion Rate in Gallons Per Minute
Jan	Irr.	24.74	2400	Jul	Irr.	67.18	2400
Feb	Irr.	29.83	2400	Aug	Irr.	63.20	2400
Mar	Irr.	24.52	2400	Sep	Irr.	31.60	2400
Apr	Irr.	56.35	2400	Oct	Irr.	20.78	2400
May	Irr.	46.18	2400	Nov	Irr.	9.20	2400
Jun	Irr.	70.49	2400	Dec	Irr.	12.81	2400
				Totals:	Irr.	456.96	Acre-feet

*Note: One acre-foot equals 325,829 gallons.

4. Was all of the water reported here obtained from your own facilities? Yes . If your answer is no, please state name of supplier and approximate amount of water obtained.
   Name Inapplicable Amount _____ Ac. Ft.

5. Did you supply water to other water users? No . If so, give the names of persons supplied, quantities of water supplied, and purpose for which use was made.

6. Was part of water supply used obtained from wells? ~~Yes~~ No
   Amount of water pumped from wells _____ Ac. Ft.
   This amount of water (was) (was not) included in figures above.
   This ground water was used for irrigation ☐ ; industrial ☐ ; municipal ☐ ; combined with surface supply ☐ .

See Reverse Side

7. MUNICIPALITIES ONLY:
   (a) Total number of service connections Inapplicable
   (b) Amount of water used from your system during year _____ Ac. Ft.
   (c) Amount of water returned to stream as sewage effluent _____ Ac. Ft.
   Amount of sewage effluent used for irrigation, industrial, or other purposes _____ Ac. Ft.

8. INDUSTRIAL USERS ONLY:
   Type of industry Inapplicable
   Of the amount of water itemized on page 1 it is estimated that _____ acre-feet were used for process water, _____ acre-feet were used for cooling water, and _____ acre-feet were used for _____.

9. IRRIGATORS ONLY:
   (a) A total of 316 acres were irrigated under this report during 1958. These figures include 316 acres which were irrigated to produce one crop during the year and 0 acres which were irrigated to produce more than one crop during the year. Following is a breakdown of irrigation with respect to crops:

Kind of Crop	Number of Acres Irrigated	Number of Irrigations	Average Depth In Inches Applied Per Irrigation
Cottonwood-Willows and other shade trees	316	Inapplicable	Inapplicable

   (b) If you do not own all of the lands irrigated, please fill in the following:
   I _____ (rent, lease) _____ acres of land owned by _____ (name and address) located in the _____ (name of survey), Survey No. _____, Abstract No. _____, _____ County, which were irrigated.
   (c) If you own all or any part of the land that is irrigated, please fill in the following:
   I own all acres located in G.C.&S.F. Ry. Co. (name of survey), Survey No. 5 G19, Abstract No. State to U.S. Brewster County, which were irrigated.

10. Additional Information
   This space is provided for any remarks you may care to make with reference to your water use during the year 1958.
   Part of water from ditch is used to compensate for evaporation and seepage from pond with area of 2.9 acres.
   Wildlife also uses water from the ditches and pond.

All users must execute the following affidavit.

AFFIDAVIT

I hereby certify that the above is true and correct to the best of my knowledge and belief.

Witness my hand at CITY OF WASHINGTON DISTRICT OF COLUMBIA TEXAS, this the ___ day of March 2, 1959.

/s/ A. Vaux Dunn (Signature)
Chief, Water Resources Sec., National Park Sv

Subscribed and sworn to before me, the undersigned authority, on this the 3d day of March, 1959.

/s/ Lois A. Davis
Notary Public in and for CITY OF WASHINGTON, DISTRICT OF COLUMBIA
_____ County, TEXAS

REPORT OF WATER USED FOR THE YEAR ENDING DECEMBER 31, 1957

In compliance with Articles 7612 and 7612a of the Revised Civil Statutes of Texas, the following information is submitted regarding the diversion and use of water for the year covered by this report by the following:

978 NATIONAL PARK SERVICE
927 U S DEPT OF INTERIOR
WASHINGTON 25 D C

Do Not Write in This Space
_____ AF _____ 15
_____ AF _____
_____ AF _____
_____ Acres Irrig.
Remarks _____

If changed, give new address: No change

1. If your diversions are being made under a Permit or Certified Filing, please give the following information:
   (a) If you are not the original permittee, give the name and address of the party from whom you acquired the water right: State Parks Board Austin, Texas
   (b) Give the last year permitted water was used: 1957. State reason for non-use: Inapplicable
2. If your diversions are not being made under a Permit or Certified Filing, please give the following information:
   (a) The water was diverted from Inapplicable (river, stream or lake).
   (b) Does the land you are irrigating adjoin the stream from which diversions are being made: Inapplicable (Yes or No)
   (c) In what survey does your land lie: Inapplicable Survey, _____ County, Texas.
3. Check (X) purposes for which water was used during period covered by this report:

(X) Irrigation	( ) Industrial	(X) Recreation
( ) Domestic	( ) Municipal	( ) Game Preserve
( ) Mining (Oil field water flooding)	( ) Steam Power (Electric)	( ) Hydro-electric Power

See Note 1

4. Give the quantity and the maximum rate at which water was diverted from surface water supplies. Show separately each use checked in item 3 above.

	Purpose	Acre Ft.	Diversion Max. Rate in GPM		Purpose	Acre Ft.	Diversion Max. Rate in GPM
January	Irrigation & Recreation	2.38	1200	August	Irrigation & Recreation	47.73	1200
February	"	8.84	"	September	"	33.59	"
March	"	10.83	"	October	"	21.65	"
April	"	60.51	"	November	"	14.14	"
May	"	47.07	"	December	"	11.93	"
June	"	41.76	"	*Totals	"	347.05	"
July	"	46.62	"	See Note 1			

* It is essential that you complete this section.

5. How did you determine the reported amount of water used: Rated pump capacity under 100 ft. head times hours operated

6. (a) Was any part of the above reported water provided by a Water Control and Improvement District, River Authority, Irrigation Company, or other water supplier? No (Yes or No).

(b) If yes, by whom: Inapplicable What amount? Inapplicable acre feet.

7. How are diversions being made? Gravity flow ( ). Pumping (X).

8. If you are pumping, give the following information:

Size of Pump	Capacity in Gallons Per Minute	Horsepower of Engine or Motor	Lift in Feet
10" Fairbanks-Morse	1250	20	32
10" Fairbanks-Morse	1250	20	32
See Note 2			

9. If you have a dam and reservoir, what was the original reservoir capacity? - acre feet; surface area? - acres; construction material? - (concrete, earth). Was it constructed with governmental assistance? -; if so, which agency? Inapplicable, but see Note 1 concerning pond.

10. What is the general condition of your dam? Inapplicable Pumps? Good Engines, motors? Good Canals? Good Other equipment? Good (laterals, sprinkler system, etc.)

11. To be completed by municipal users only: Inapplicable

(a) Are you supplementing your appropriation by ground water? _____ (Yes or No)

(b) If so, what was the total amount of ground water used last year? _____. Was this figure included in the calculations on the reverse side hereof? _____.

(c) Is sewage effluent being returned to the stream? _____. If so, give the quantity returned last year. _____. If not, what disposition was made of sewage effluent? _____

12. To be completed by industrial users only:

Give the amount of water actually consumed out of amount used: Inapplicable

13. To be completed by irrigators only:

(a)

Kind of Crop	Number of Acres Irrigated	Number of Irrigations*	Average Depth in Inches Applied per Irrigation
Cottonwood-willows, sycamore, tamerisk, ash, thornless locust, Texas walnut, redbud, and other shade trees. See Note 3	312	Inapplicable	Inapplicable

*Any application of water to rice lands should be considered as a separate irrigation.

(b) How many acres of your land were irrigated during 1957: 312 acres.

(c) Give the number of acres of land that you irrigated in the Permit area: 312 acres; outside of the Permit area _____ acres.

(d) Are you supplying water to others from your system which is not accounted for above? No (Yes or No). If so, list names and amount supplied in the space provided for additional information.

ADDITIONAL INFORMATION

See Attached Notes 1, 2 and 3

Witness my hand at Washington, D. C. TEXAS, this the 20 day of February, 1958

A. van V. Dunn

(Signature)

A. van V. Dunn, Chief, Water Resources Section, NPS

Subscribed and sworn to before me, the undersigned authority, on this the 20 day of February, 1958.

Do Not Write in This Space

Lorie A. Davis

Notary Public, D. C. in and for ~~County, Texas~~

My Commission Expires December 14, 1961

NOTE 1 - The area irrigated under Permit 927 is being converted from agricultural land to a public use area which will include public campgrounds, lodge, picnic, and other facilities. Most irrigation ditch laterals have been realigned to conform with newly constructed road loops, and 312 acres have been largely planted to trees listed in 13a, which are spaced to give the desired density when full grown. An artificial pond, with surface area of about 2.9 acres, has been constructed in the proposed lodge area, and is provided with sufficient water from the irrigation ditches to compensate for seepage and evaporation. The pond was created by excavation and use of earth for adjacent grading.

NOTE 2 - The two pumps listed were put in operation on April 18, 1957. They replaced a 20 HP, 300 gal/min 4" pump.

NOTE 3 - There was continuous irrigation to the extent of diversions during nearly all week days. Some water was delivered to each tree about every 2nd or 3rd day to encourage root system development.

12-31-1956: report of surface water used for the year ending december 31, 1956.

REPORT OF WATER USED FOR THE YEAR ENDING DECEMBER 31, 1956

In compliance with Articles 7612 and 7612a of the Revised Civil Statutes of Texas, as set forth verbatim in the instruction sheet forwarded to the undersigned with this form, the following information is submitted regarding the diversion and use of water for the year covered by this report by the following:

978 NATIONAL PARK SERVICE
927 U S DEPT OF INTERIOR
WASHINGTON 25 D C

If changed, give new address: No change 15

1. If your diversions are being made under a permit or certified filing, please give the following information:

   (a) If you are not the original permittee, give the name and address of party from whom you acquired title. State Parks Board, Austin, Texas.

   (b) Give the year your system was last operated. 1956. State reason for non-operation. --

   (c) To your knowledge, is the present point of diversion the same as originally permitted: yes (yes or no). If not, state new location. --

   (d) To your knowledge, have the original plans filed with the Board been changed or have alterations or extensions been made since your original system was installed? yes. If so and these improvements have not been previously reported, please give a statement explaining the changes either on a separate sheet or in the space provided for additional information. Change in pump capacity.

2. If your diversions are not being made under a permit or certified filing, please give the following information: The water was diverted from -- (river, stream or lake). Does your land adjoin the stream from which diversions are being made: ___ (yes or no). In what survey does your land lie: -- Survey, _____ County, Texas. In applicable

3. Check (X) purposes for which water was used during period covered by this report:

(X) Irrigation	( ) Industrial	( ) Mining
( ) Domestic	( ) Municipal	( ) Game Preserve
( ) Recreation	( ) Steam Power (electric)	( ) Hydro-electric Power

4. How are diversions being made? Gravity ( ). Pumping (X).

5. If you are pumping, give the number of pumps: 1, Size 10 & 4 inch, capacity in gallons per minute 300, Horsepower of engine or motor 20, Lift 32 feet. Up to Sept. 1956 pumping system consisted of one ten inch pump capacity 2100 gpm, HP - 40, lift 32 feet was used. Rated pump capacity

6. What method do you use in computing the amount of water used? X hours operated

7. Give the quantity of water diverted from the stream per month for each particular purpose checked in item 3 above. (Before answering consult the instruction sheet for measurement of water and to convert from gallons to acre feet).

	Purpose	Acre Ft.		Purpose	Acre Ft.		Purpose	Acre Ft.
January	Irrig.	00	May	irrig.	00	September	irrig.	2,970
February	irrig.	1.472	June	irrig.	1.472	October	irrig.	3.860
March	irrig.	2.944	July	irrig.	2.582	November	irrig.	4.640
April	irrig.	1.472	August	irrig.	7.721	December	irrig.	1.272
						Total:		30.405

8. Are you supplying water to others from your system which is not accounted for above? No (yes or no). If so, complete applicable question below.

9. If you have a dam and reservoir, what was the original reservoir capacity? No acre feet; height of dam? -- ; width of dam? -- feet; surface area? -- acres; construction material? -- (concrete, earth). Was it constructed with governmental assistance? -- ; if so, which agency? Inapplicable

10. What is the general condition of your dam? -- ; Pumps? fair ; Engines, motor excellent Canals? poor ; Other equipment? --
(laterals, sprinkler system, etc.)

11. If water was used for generating hydro-electric power, give the following information: Number of days plant operated -- ; Capacity of plant (k. v. a.)? -- ; Amount of power generated for Primary? -- ; Secondary? -- ; Standby? -. Inapplicable question

12. To be completed by municipal users only: Inapplicable

(a) Are you supplementing your appropriation by ground water? -- (yes or no).

(b) If so, what was the total amount of ground water used last year? --. Was this figure included in the calculations on the reverse side hereof? --.

(c) Is sewage effluent being returned to the stream? --. If so, estimate the total quantity returned last year. --

13. To be completed by industrial users only: Inapplicable

Give the amount of water actually consumed out of amount used: --

14. To be completed by irrigators only:

(a) Kind of Crop	Number of Acres	Number of Irrigations	Average Depth in Inches applied per each irrigation
Cottonwood, willows & other shade trees	4	Inapplicable	Inapplicable

(b) Give the total number of acres of land that you irrigated: 4

(c) If supplying water from your system to others, list names and amount supplied in the space provided for additional information.

ADDITIONAL INFORMATION

This area under redevelopment to convert from agricultural to recreational use; irrigation only applied to areas where trees have been established. Water applied intermittently throughout year, as trees showed need for water. Bids for permanent, more adequate pump opened in February 1957. Water use under new development will be largely resumed during 1957.

Witness my hand at Washington, D C Texas, this the 26 day of February 1957.

A. Grant Davis
(Signature) Chief, Water Resources
Sec., National Park Service, Dept. of Interior

Subscribed and sworn to before me, the undersigned authority, on this the 26th day of February, 1957.

Lorna A. Davis
Notary Public, D. C.
Notary Public in and for
My Commission Expires December 14, 1961 County, Texas

Do Not Write in This Space

(Return to Board of Water Engineers,
1410 Lavaca Street, Austin, Texas)

WATER USE REPORT FOR THE YEAR ENDING DECEMBER 31, 1955

In compliance with Articles 7612 and 7612a of the Revised Civil Statutes of Texas, as set forth verbatim in the instruction sheet forwarded to the undersigned with this report, the following information is submitted regarding the diversion and use of water for the year covered by this report by the following:

NATIONAL PARK SERVICE
U. S. DEPARTMENT OF THE INTERIOR
WASHINGTON 25, D. C.

1. The water was diverted from spring designated as "B" on NP-BB 6951A, previously filed in connection with App. 970, Permit 927 (river, stream or lake). Into what major river or body of water does this empty? Rio Grande.

2. Does your land adjoin the water? Yes (Yes or No). In what survey does your land lie? Sec. 6, Block G-19 Survey, GC&SF Ry Co., Brewster County, Texas.

3. Under what claim of right are your diversions being made? use by former owner of Graham Ranch, and Federal acquisition of said land from State Parks Board.

4. Check (X) purpose for which water was used during period covered by this report:

(x) Irrigation ( ) Industrial ( ) Municipal (x) Recreation ( ) Mining

5. Please check (X) your method of diversion:

( ) Gravity flow from storage ( ) Pumping directly from stream
(x) Pumping from storage ( ) Gravity canal from stream

6. In what year was the project installed? 1954 (Reconditioned) First use about 1925.

7. If you have a dam, what is its reservoir capacity? 0.307 / or - acre-feet; height? unknown feet; width? unknown feet; construction material earth (concrete, earth, etc.). Was it constructed with governmental assistance? all. If so, which governmental agency? National Park Service.
See ponds and dikes on aforesaid Drawing NP-BB-6951A.

8. If you are pumping, give the number of pumps: 1, Size 3 inch, capacity in gallons per minute 50 / or -, horsepower 5, lift unknown feet.

9. What type of device do you have for measuring water? Field report not clear

10. Give the quantity of water diverted for each use. (Before answering consult the instruction sheet for measurement of water.)

Purpose	Gallons	Acre-feet
Irrigation } Recreation }	1,800,000 / or -	5.52 / or -

11. If water was used for irrigation, give the following information:

Kind of Crop	Number of Acres	Number of Irrigations	Average depth in Inches Applied Per Each Irrigation
Trees, probably cottonwood, willow & salt cedar TOTAL	not given UNKNOWN	not given	not given

Give the total number of acres irrigated. Unknown

12. Are you supplying water to anyone else? No (Yes or No). If so, for what purpose? Inapplicable and in what quantities? Inapplicable acre-feet per year

13. Do you have any upstream or downstream neighbors diverting surface water? If so, please furnish their names and addresses.

No - Area operated in part under concession

Name	Address
Name	Address
Name	Address

It would be appreciated if, on the enclosed blank sheet of paper, you would furnish a sketch of your acreage in relation to the stream, pump or dam location, canals, etc.

ADDITIONAL INFORMATION

The following final report given on 1954 reconstruction at cost of $1,500. The spring flow is between 150 and 200 gpm.

Project started in February, 1954. Cleared three reservoir sites and pipe line site of brush and trees, deepened lower and upper reservoirs, built concrete gates with 4" and 6" gate valves in lower and upper reservoirs respectively. Built 6' x 6' pump house, cleaned out springs and repaired former bathing pool. Laid 525' of 6" water line and 75' of 3" water line. Installed 3" pump in pump house with 2½" suction line and foot valve. Repaired breaks in dikes; one section on lower dike required pouring of 6" concrete core. Twenty feet of 2" pipe with gate valves were placed through core and dike at this place. Completed project on April 16, 1954.

As provided by law, the amount of water herein reported as being used shall in no way limit the right of the undersigned to use all of the water which he has a right to use.

Witness my hand at Washington, DC, Texas, this the 9th day of February, 1956.

Dean D. Ann
(Signature)
Chief Water Resources Sec.
National Park Service

Subscribed and sworn to before me, the undersigned authority, on this the 9th day of February, 1956.

Do Not write in this space

Lorine A. Davis
Notary Public in and for
Notary Public, D. C.
My Commission Expires November 14, 1956
County, Texas

(Return to Board of Water Engineers, 1410 Lavaca Street, Austin, Texas)

The following final report given on 1954 reconstruction at cost of $1,500. The spring flow is between 150 and 200 gpm.

Project started in February, 1954. Cleared three reservoir sites and pipe line site of brush and trees, deepened lower and upper reservoirs, built concrete gates with 4" and 6" gate valves in lower and upper reservoirs respectively. Built 6' x 6' pump house, cleaned out springs and repaired former bathing pool. Laid 525' of 6" water line and 75' of 3" water line. Installed 3" pump in pump house with 2½" suction line and foot valve. Repaired breaks in dikes; one section on lower dike required pouring of 6" concrete core. Twenty feet of 2" pipe with gate valves were placed through core and dike at this place. Completed project on April 16, 1954.

12-31-1955: water use report for the year ending december 31, 1955, cont.

WATER SERVICE REPORT FOR YEAR ENDING DECEMBER 31, 1955

In compliance with Articles 7612 and 7612a of the Revised Civil Statutes of Texas, as set forth verbatim in the instruction sheet forwarded to the undersigned with this report, the following information is submitted regarding the diversion and use of water for the year covered by this report by the following:

978
927
NATIONAL PARK SERVICE
U S DEPT OF INTERIOR
WASHINGTON 25 D C

15

If changed, give new address:

1. The water was diverted from Rio Grande (river, stream or lake).

2. If you are not the original permittee, give the name and address of party from whom you acquired the title. State Parks Board, Austin Texas

3. Give the year your system was last operated. 1955. State reason for non-operation. INAPPLICABLE

4. What is the estimated capacity of your reservoir? 0 acre-feet

5. Please check (X) your method of diversion:

( ) Gravity flow from storage
( ) Pumping from wells
( ) Pumping from storage
(x) Pumping directly from stream
( ) Gravity canal from stream

6. If you are pumping, give the number of pumps. 1, Size 10", capacity in gallons per minute 2100 + or - (a correction in pump capacity)

7. To your knowledge, is the present point of diversion the same as originally permitted? Yes. If not, state new location with reference to survey corner. Not applicable

8. What is the general condition of your dam? Inapplicable, Pumps? Good, Canals? Good, Other equipment? Good (laterals, ~~sprinkler system, turbines,~~ etc.)

9. Have the origianl plans filed with the Board been changed or have alterations or extensions been made since your original system was installed? Yes. If so and these improvements have not been previously reported, please give statement explaining the changes on the reverse side hereof or on a separate sheet.

10. What type of device do you have for measuring water? Not explained in field report.

11. Check (X) purpose for which water was used during period covered by this report.

( ) Domestic ( ) Public Park (x) Irrigation ( ) Hydro-Electric Power
( ) Stockraising ( ) Mining ( ) Industrial ( ) Steam Power
( ) Game Preserve ( ) Municipal (x) Recreation

12. Give the quantity of water used for each particular purpose checked above (before answering consult the instruction sheet for measurement of water).

Purpose	Gallons	Acre-feet
SEE ATTACHED IRRIGATION SCHEDULE		

13. If water was used for irrigation, give the following information:

Kind of Crop	Number of Acres	Number of irrigations	Average Depth in inches applied per each irrigation
Hegari	50		
Alfalfa	40		
Cottonwood, willow & salt cedar	4		

SEE ATTACHED COMMENTS

Give the total number of acres of land that was irrigated by your system. 94

Give the number of water users on your irrigation system. 2 (U.S. & concessioner)

What was the rate charged to users on your system? $ No charge per acre of land.

14. If water was used for generating power, give the following information:
Number of days plant operated Inapplicable Capacity of Plant (k. v. a.) Inapplicable
Amount of Power Generated for Primary? Inapp. Secondary? Inapp. Standby? Inapplicable

15. Estimate the amount of water actually consumed out of amount used. Indeterminate from 1955 records.

ADDITIONAL INFORMATION

Witness my hand at Washington, D.C., ~~Texas~~, this the 9th Day of February, 1956

O. Vaud. Lunn
Chief, Water (Signature) Resources Sec.
National Park Service

Subscribed and sworn to before me, the undersigned authority, on this the 9th day of February, 1956.

Florine A. Davis
Notary Public in and for
Notary Public, D. C.
My Commission Expires November 14, 1956
~~County, Texas~~

Do not write in this space

(Return to Board of Water Engineers, 1410 Lavaca Street, Austin, Texas)

00-00-0000: 1955 irrigation schedule

1955 IRRIGATION SCHEDULE

Month	Dates	Water Diverted at 2100 gpm	Crop	Area	Depth of Water	Remarks
Feb.	21-23	10.60 A.F.				
March	1-12	24.70 A.F.	hegari	50 Ac.	6"	Ground preparation
	16-25	21.20 A.F.	alfalfa	40 Ac.	6.4"	
	28-29	7.05 A.F.				*Includes 4 acres of trees
	Total for Month	52.95 A.F.		*94 Ac.	6.75"	
April	1-3	9.00 A.F.	hegari,			
	6-8	10.60 A.F.	alfalfa,	50 Ac.		
	12-16	17.65 A.F.	cottonwood,	40 Ac.		
	21-22	7.05 A.F.	willow and			
	25-29	18.42 A.F.	salt cedar	4 Ac.		
		62.72 A.F.		94 Ac.	8"	
May	12-13	5.88 A.F.				
	17-23	27.40 A.F.				
	26	3.92 A.F.				
		37.20 A.F.	"	94 Ac.	3.96"	
June	1, 2	7.05 A.F.				
	4	2.35 A.F.				
	6-25	59.77 A.F.	"	94 Ac.	7 "	
		69.17 A.F.	"	94 Ac.	8.9"	
July	12-15	9.39 A.F.				
	23-25	9.80 A.F.				
	29	3.92 A.F.				
		23.11 A.F.	alfalfa & trees	44 Ac.	6.3"	
Aug.	1	3.92 A.F.				
	13-16	14.11 A.F.				
	28,30,31	11.75 A.F.				
Sept.	1-3	11.75 A.F.				
Total Aug. 28-Sept. 3		23.50 A.F.	alfalfa & trees	44 Ac.	6.4"	
Sept.	17-19	6.26 A.F.				
Oct.	1	1.56 A.F.				
	5	3.92 A.F.				
	15-17	9.80 A.F.				
Nov.	?	1.56 A.F.				
YEAR'S TOTAL		315.38 A.F.		94 Ac.	40.0"	

Question 6 - Field report indicates pump diverted approximately 102,000,000 gallons of water between February 21 and October 17 with 801 hours of pumping, and that pump capacity is approximately 2000 gpm. This report based on pump deliveries of 2100 gpm.

Question 10 - It is evident that pump has not been accurately rated, and there is probably no measuring device on delivery to Wadin Ditch. A measuring weir is being prescribed.

Questions 12 and 13 - Attempts to obtain better details of 1955 irrigation indicate need for a form and specific instructions for reporting. Field reports indicate that water was used from March 1-12 to condition 50 acres of ground for hegari, and from March 16-25 to irrigate 40 acres of alfalfa. No other details given, except that:

50 acres hegari harvested twice, in July and September
40 acres alfalfa harvested 6 times between early May and late October
Spotty locations of irrigated trees make irrigation records difficult if not impractical
Acreage of hegari reduced in 1955 by elimination of areas of low 1954 yield.

The following schedule is based on conversion of pump hours, and is grouped to suggest approximate extent of major irrigations:

Wm Tim Black
Big Bend

WATER SERVICE REPORT FOR YEAR ENDING DECEMBER 31, 1954

In compliance with Articles 7612 and 7612a of the Revised Civil Statutes of Texas, as set forth verbatim in the instruction sheet forwarded to the undersigned with this report, the following information is submitted regarding the diversion and use of water for the year covered by this report by the following:

National Park Service
U. S. Department of Interior
Washington 25, D. C. RG
A-978
P-927

If changed, give new address: _____

1. The water was diverted from **Rio Grande** (river, stream or lake).

2. If you are not the original permittee, give the name and address of party from whom you acquired title. **State Parks Board, Austin, Texas**

3. Give the year your system was last operated. 19**54**. State reason for non-operation. **Inapplicable**

4. What is the estimated capacity of your reservoir? **0** acre-feet

5. Please check (X) your method of diversion:

( ) Gravity flow from storage
( ) Pumping from wells
( ) Pumping from storage
(**X**) Pumping directly from stream
( ) Gravity canal from stream

6. If you are pumping, give the number of pumps. **1**, Size **10"**, capacity in gallons per minute **3,000**

7. To your knowledge, is the present point of diversion the same as originally permitted? **Yes**. If not, state new location with reference to survey corner. **Inapplicable**

8. What is the general condition of your dam? **Inapplicable**, Pumps? **Good**, Canals? **Good**, Other equipment? **Inapplicable** (laterals, sprinkler system, turbines, etc.)

9. Have the original plans filed with the Board been changed or have alterations or extensions been made since your original system was installed? **Yes**. If so and these improvements have not been previously reported, please give statement explaining the changes on the reverse side hereof or on a separate sheet.

10. What type of device do you have for measuring water? **Known pump capacity**

WATER SERVICE REPORT FOR YEAR ENDING DECEMBER 31, 1953

In compliance with Articles 7612 and 7612a of the Revised Civil Statutes of Texas, as set forth verbatim in the instruction sheet forwarded to the undersigned with this report, the following information is submitted regarding the diversion and use of water for the year covered by this report by the following:

National Park Service
U. S. Department of Interior
Washington 25, D. C.

RG
A-978
P-927

If changed, give new address:

1. The water was diverted from Rio Grande (river, stream or lake).

2. If you are not the original permittee, give the name and address of party from whom you acquired title. State Parks Board

3. Give the year your system was last operated. 19 53. State reason for non-operation. --

4. What is the estimated capacity of your reservoir? domestic - 5,000 gallons; irrigation - none acre-feet

5. Please check (X) your method of diversion:

(x) Gravity flow from storage
(x) Pumping from wells
( ) Pumping from storage
(x) Pumping directly from stream
( ) Gravity canal from stream

6. If you are pumping, give the number of pumps. 1 - domestic ? 1 - irrigation, Size 10" , capacity in gallons per minute 3,000

7. To your knowledge, is the present point of diversion the same as originally permitted? yes, for irrigation. If not, state new location with reference to survey corner. Domestic water pumped from well which probably intercepts underground flow of Rio Grande about 400 feet east of original diversion.

8. What is the general condition of your dam? --, Pumps? good, Canals? good, Other equipment? (laterals, sprinkler system, turbines, etc.)

9. Have the original plans filed with the Board been changed or have alterations or extensions been made since your original system was installed? yes. If so and these improvements have not been previously reported, please give statement explaining the changes on the reverse side hereof or on a separate sheet.

10. What type of device do you have for measuring water? Known pump capacity on irrigation system and measured filling of domestic reservoir.

1L

11. Check (X) purpose for which water was used during period covered by this report.
(X) Domestic (X) Public Park ( ) Irrigati ( ) Hydro-Electric Power
( ) Stockraising ( ) Mining ( ) Industrial ( ) Steam Power
( ) Game Preserve ( ) Municipal (X) Recreation

12. Give the quantity of water used for each particular purpose checked above (before answering consult the instruction sheet for measurement of water).

Purpose	Gallons	Acre-feet
Domestic use	900,000	2.75
Saddle stock	275,000	0.85
Irrigation		408.00 ±

13. If water was used for irrigation, give the following information:

Kind of Crop	Number of Acres	Number of Irrigations	Average Depth in inches applied
Alfalfa and hegari	135 ±	20	1.8
Cottonwood, willow and salt cedar for shade	2	20	1.8

Give the total number of acres in that portion of your land that was irrigated. 137

Give the number of water users on your irrigation system. 2 - (U.S. & concessioner)

What was the rate charged to users on your system? $ No charge per acre

14. If water was used for generating power, give the following information:
Number of days plant operated _____, Capacity of Plant (k. v. a.) _____
Amount of Power Generated for Primary? _____, Secondary? _____, Standby? _____

ADDITIONAL INFORMATION

Attached plan of J. O. Wedin Irrigation Project, Drawing No. MB-BB-6951-A, shows status of irrigation development as revised June 1952. Domestic water now pumped from "New Well #4." The permanent population of area shown is 38 people and 32 head of saddle and pack stock. Approximately 5,000 visitors stayed an average of 2.5 days.

Witness my hand at Washington, D. C. this the 24 day of February, 1954

A. Evan Davis
(Signature)
Chief, Water Resources Section
National Park Service

Subscribed and sworn to before me, the undersigned authority, on this the 24th day of February, 1954.

Do not write in this space

Lorin A. Davis
Notary Public in and for
Notary Public, D. C.
My Commission Expires November 14, 1956 County, Texas

(Return to Board of Water Engine
302 West 15th Street, Austin, Te)

24

To State Board of Water Engineers — Rio Grande
Austin, Texas — 302 West 15th Street

PLEASE ANSWER
ALL QUESTIONS

Certified Filing No.....
Application No. 978
Permit No. 927

WATER SERVICE REPORT FOR YEAR ENDING DECEMBER 31, 1952

In compliance with Articles 7611 and 7612 of the Revised Civil Statutes of Texas, we (I OR WE) furnish you here with information regarding our (MY OR OUR) diversion and use of water for the year ending December 31, 1952

Name: National Park Service
(GIVE NAME OF CORPORATION, MUNICIPALITY, DISTRICT, ASSOCIATION OR INDIVIDUAL APPROPRIATOR OR PERMITTEE).

Post Office Address: U. S. Dept. of Interior
(STREET AND NUMBER—R. F. D.)

Washington 25, D. C.
(CITY OR TOWN) (STATE)

Source of water supply: Rio Grande
(GIVE NAME OF STREAM, LAKE OR OTHER SOURCE)

When was system constructed: Prior to September 18, 1925

How many years has it been operated: 24 of past 28 years

Has point of diversion been changed? No If so, indicate new location: --

If system was not operated during the preceding calendar year, state reasons why:

System was in operation

If system has been discontinued, give date of such discontinuance:

Not discontinued

If system has been discontinued, have you abandoned your water right from the source of supply above named? No

If you have abandoned water right, do you authorize cancellation of water right? --

Check (X) purpose for which water was used during year. Dec. 31, 1952

(X) Domestic & livestock	( ) Mining	( ) Manufacturing-Industrial
( ) Game Preserve	( ) Municipal	( ) Hydroelectric Power
(X) Public Parks	(X) Irrigation	(X) Recreation

Quantity of water used for the purpose or purposes checked above:

PURPOSE	GALLONS	ACRE-FEET
Domestic and Stock Watering		2
Public Parks and Recreation		30
Irrigation		400

If water was used for irrigation, give the following information:

KIND OF CROP	NO. OF ACRES	NUMBER OF IRRIGATIONS	AVERAGE DEPTH IN INCHES APPLIED PER IRRIGATION
Cottonwood, willow, and salt cedar	1.00	20	1.8
Alfalfa, hegari, and oats	134.00	20	1.8

Total number of acres irrigated: 135 (Do not duplicate acres irrigated) Date of beginning irrigating season: January 1

Date of closing irrigating season: December 31

Number of water users on system: 2 Rates charged: See additional information

If water was used for generating power, give the following information:

NO. DAYS PLANT OPERATED	CAPACITY OF PLANT (k.v.a.)	AMOUNT OF POWER GENERATED (k.w.h.) PRIMARY	SECONDARY	STANDBY

Capacity of reservoir to elevation flow over spillway begins: (no gates) _____ Ac. Ft.

Capacity of reservoir to top of gates (where gates are installed) _____ Ac. Ft.

PUMPS INSTALLED

Size (g.p.m.)	Purpose
1 3000	For river diversion

ADDITIONAL INFORMATION

There is no charge for water. The cost of operation and maintenance is borne by the water users in accordance with concession contract.

Witness my (MY OR OUR) hand at Washington, D. C. (CITY OR TOWN), this the _____ day of January 26, 1953

Conrad L. Wirth
Chief, Water Resources Branch, National Park Service, Department of the Interior

Subscribed and sworn to before me, the undersigned authority, on this the 26th day of January, 1953.

Florine A. Davis
(OFFICIAL TITLE)
Notary Public, D. C.
My Commission Expires November 14, 1956

OFFICE RECORD

Received in the office of the Board of Water Engineers at ____. M. on the _____ day of _____, 19___.

SECRETARY

MEASUREMENT OF WATER

A cubic foot of water per second of time is the standard unit of measurement of flowing water for the purpose of distributing water for beneficial uses. Cubic foot per second is abbreviated second-foot, or sec. ft., or c.f.s. One c.f.s. equals 7.48 gallons per second; equals 448.80 gallons per minute; equals 646,272 gallons per day of 24 hours. Will deliver approximately two acre feet per day of 24 hours. Will deliver approximately one acre inch per hour. One acre-foot equals 43,560 cubic feet; equals approximately one-half c.f.s. flowing 24 hours; equals one acre covered 12 inches deep.

WR # 1, Big Bend

To State Board of Water Engineers
Austin, Texas 302 West 15th Street Rio Grande

PLEASE ANSWER
ALL QUESTIONS

Certified Filing No.....
Application No. 978
Permit No. 927

WATER SERVICE REPORT FOR YEAR ENDING DECEMBER 31, 19 51.

In compliance with Articles 7611 and 7612 of the Revised Civil Statutes of Texas, I (I OR WE) furnish you here with information regarding the (MY OR OUR) diversion and use of water for the year ending December 31, 19 51.

Name: National Park Service, Department of the Interior, an agency of the United States
(GIVE NAME OF CORPORATION, MUNICIPALITY, DISTRICT, ASSOCIATION OR INDIVIDUAL APPROPRIATOR OR PERMITTEE).

Post Office Address: Interior Building
(STREET AND NUMBER—R.F.D.)

Washington 25 (CITY OR TOWN) District of Columbia (STATE)

Source of water supply: Rio Grande
(GIVE NAME OF STREAM, LAKE OR OTHER SOURCE)

When was system constructed: Prior to September 18, 1925

How many years has it been operated: Approximately 23 of past 27 years

Has point of diversion been changed? No If so, indicate new location: --

If system was not operated during the preceding calendar year, state reasons why:

System was in operation

If system has been discontinued, give date of such discontinuance:

Not discontinued

If system has been discontinued, have you abandoned your water right from the source of supply above named? No

If you have abandoned water right, do you authorize cancellation of water right? --

Check (X) purpose for which water was used during year. Dec. 31, 19 51

(X) Domestic & livestock	( ) Mining	( ) Manufacturing-Industrial
( ) Game Preserve	( ) Municipal	( ) Hydroelectric Power
(X) Public Parks	(X) Irrigation	(X) Recreation

Quantity of water used for the purpose or purposes checked above:

PURPOSE	GALLONS	ACRE-FEET
Domestic and Stock Watering		2 ±
Public Parks and Recreation		30 ±
Irrigation		750 ±

If water was used for irrigation, give the following information:

KIND OF CROP	NO. OF ACRES	NUMBER OF IRRIGATIONS	AVERAGE DEPTH IN INCHES APPLIED PER IRRIGATION
Cottonwood, willow, and salt cedar	14	6 days per week	2.50
Corn, hegari, oats, and cane	250	6 days per week	2.50

Total number of acres irrigated: 264 (Do not duplicate acres irrigated) Date of beginning irrigating season: January 1

Date of closing irrigating season: December 31

Number of water users on system: 2 Rates charged: See Additional Information

If water was used for generating power, give the following information:

NO. DAYS PLANT OPERATED	CAPACITY OF PLANT (k.v.a.)	AMOUNT OF POWER GENERATED (k.w.h.) PRIMARY	SECONDARY	STANDBY

Capacity of reservoir to elevation flow over spillway begins: (no gates) _____ Ac. Ft.

Capacity of reservoir to top of gates (where gates are installed) _____ Ac. Ft.

PUMPS INSTALLED

	Size (g.p.m.)	Purpose
1	3000	For river diversion

ADDITIONAL INFORMATION

Irrigation and stock watering by National Parks Concessions under Contract I-5np-99 with National Park Service which is other water user.

Old 3" pump replaced by 10" pump early in year.

Witness my (MY OR OUR) hand at Washington, D. C. (CITY OR TOWN) this the _____ day of February, 1952

A. V. and. Dana
Chief, Water Resources Branch, National Par Service, Department of the Interior

Subscribed and sworn to before me, the undersigned authority, on this the 1st day of February, 1952.

Lorine A. Davis
(OFFICIAL TITLE)
Notary Public, D. C.
My Commission Expires Nov. 14, 1956.

OFFICE RECORD

Received in the office of the Board of Water Engineers at ____. M. on the _____ day of _____, 19___.

_____
SECRETARY

MEASUREMENT OF WATER

A cubic foot of water per second of time is the standard unit of measurement of flowing water for the purpose of distributing water for beneficial uses. Cubic foot per second is abbreviated second-foot, or sec. ft., or c.f.s. One c.f.s. equals 7.48 gallons per second; equals 448.80 gallons per minute; equals 646,272 gallons per day of 24 hours. Will deliver approximately two acre feet per day of 24 hours. Will deliver approximately one acre inch per hour. One acre-foot equals 43,560 cubic feet; equals approximately one-half c.f.s. flowing 24 hours; equals one acre covered 12 inches deep.

12-31-1950: water service report for year ending december 31, 1950

To State Board of Water Engineers — Rio Grande
Austin, Texas — 302 West 15th Street

PLEASE ANSWER
ALL QUESTIONS

Certified Filing No.....
Application No. 978
Permit No. 927

WATER SERVICE REPORT FOR YEAR ENDING DECEMBER 31, 1950.

In compliance with Articles 7611 and 7612 of the Revised Civil Statutes of Texas, I (I OR WE) furnish you here with information regarding the (MY OR OUR) diversion and use of water for the year ending December 31, 1950, at Big Bend National Park

Name: National Park Service, Department of the Interior, an agency of the United States
(GIVE NAME OF CORPORATION, MUNICIPALITY, DISTRICT, ASSOCIATION OR INDIVIDUAL APPROPRIATOR OR PERMITTEE).

Post Office Address: Interior Building
(STREET AND NUMBER—R.F.D.)
Washington 25 (CITY OR TOWN) District of Columbia (STATE)

Source of water supply: Rio Grande
(GIVE NAME OF STREAM, LAKE OR OTHER SOURCE)

When was system constructed: Prior to September 18, 1925

How many years has it been operated: Approximately 22 of past 26 years

Has point of diversion been changed? No If so, indicate new location: —

If system was not operated during the preceding calendar year, state reasons why:

System was used

If system has been discontinued, give date of such discontinuance:

Not discontinued

If system has been discontinued, have you abandoned your water right from the source of supply above named? No

If you have abandoned water right, do you authorize cancellation of water right? —

Check (X) purpose for which water was used during year. Dec. 31, 1950

(X) Domestic & livestock	( ) Mining	( ) Manufacturing-Industrial
( ) Game Preserve	( ) Municipal	( ) Hydroelectric Power
(X) Public Parks	(X) Irrigation	(X) Recreation

Quantity of water used for the purpose or purposes checked above:

PURPOSE	GALLONS	ACRE-FEET
Domestic and Stock Watering		2 ±
Public Parks and Recreation		5 ±
Irrigation		120 ±

If water was used for irrigation give the following information:

KIND OF CROP	No. OF ACRES	NUMBER OF IRRIGATIONS	AVERAGE DEPTH IN INCHES APPLIED PER IRRIGATION
Cottonwood, willow, and salt cedar	14	5 days per week	
Jay	Preparation of hayfields started		

Total number of acres irrigated: About 14 (Do not duplicate acres irrigated) Date of beginning irrigating season: January 1

Date of closing irrigating season: December 31

Number of water users on system: 2 Rates charged: See Additional Information

If water was used for generating power, give the following information:

NO. DAYS PLANT OPERATED	CAPACITY OF PLANT (k.v.a.)	AMOUNT OF POWER GENERATED (k.w.h.) PRIMARY	SECONDARY	STANDBY

Capacity of reservoir to elevation flow over spillway begins: (no gates) _____ Ac. Ft.

Capacity of reservoir to top of gates (where gates are installed) _____ Ac. Ft.

PUMPS INSTALLED

	Size (g.p.m.)	Purpose
1	450	For river diversion

ADDITIONAL INFORMATION

Contract I-5np-99 issued September 4, 1950, to authorize National Parks Concessions to operate water system and develop irrigation to provide feed for saddle horses, shade trees at small lodge, and cover and feed for wildlife.

Witness my (MY/OR OUR) hand at Washington, D.C. (CITY OR TOWN), ~~Texas~~, this the 24 day of January, 19 51

R. Grant Dunn
Chief, Water Resources Branch, National Park Service, Department of the Interior

Subscribed and sworn to before me, the undersigned authority, on this the 24th day of January, 19 51.

Lorine A. Davis
(OFFICIAL TITLE) Notary Public, for the District of Columbia

OFFICE RECORD

Received in the office of the Board of Water Engineers at ____. M. on the _____ day of _____, 19___.

_____
SECRETARY

MEASUREMENT OF WATER

A cubic foot of water per second of time is the standard unit of measurement of flowing water for the purpose of distributing water for beneficial uses. Cubic foot per second is abbreviated second-foot, or sec. ft., or c.f.s. One c.f.s. equals 7.48 gallons per second; equals 448.80 gallons per minute; equals 646,272 gallons per day of 24 hours. Will deliver approximately two acre feet per day of 24 hours. Will deliver approximately one acre inch per hour. One acre-foot equals 43,560 cubic feet; equals approximately one-half c.f.s. flowing 24 hours; equals one acre covered 12 inches deep.

To State Board of Water Engineers
Austin, Texas
302 West 15th Street

RIO GRANDE
Certified Filing No.
Application No. 278
Permit No. 227

PLEASE ANSWER ALL QUESTIONS WHERE APPLICABLE

WATER SERVICE REPORT FOR YEAR ENDING DECEMBER 31, 19 49.

In compliance with Articles 7611 and 7612 of the Revised Civil Statutes of Texas, I (I OR WE) furnish you here with information regarding the (MY OR OUR) diversion and use of water for the year ending December 31, 19 49, at Big Bend National Park.

Name: National Park Service USDI, an agency of the United States. (GIVE NAME OF CORPORATION, MUNICIPALITY, DISTRICT, ASSOCIATION OR INDIVIDUAL APPROPRIATOR OR PERMITTEE).

Post Office Address: Interior Building, (STREET AND NUMBER—R.F.D.)

Washington, 25, D. C. (CITY OR TOWN) (STATE)

Source of water supply: Rio Grande (GIVE NAME OF STREAM, LAKE OR OTHER SOURCE)

When was system constructed: Prior to September 18, 1925, records previously filed.

How many years has it been operated: Approximately 21 years.

Has diversion been changed? Yes If so how: Original pump has been replaced, using same base and point of diversion.

If system was not operated during the preceding calendar year, state reasons why: System has been in operation during 1949.

If system has been discontinued, give date of such discontinuance: System was not in operation between 1944 and 1947 because of lack of pump.

If system has been discontinued, have you abandoned your water right from the source of supply above named? No.

If you have abandonded water right, do you authorize cancellation of water right? No.

If system was operated during preceding calendar year, give the following information.

Water was used for the following purpose or purposes during the year ended December 31, 19 49:

(Check x) ( ) Domestic and livestock; ( ) Municipal; ( ) Manufacturing and industrial; (X) Irrigation; ( ) Mining and recovery of minerals; ( ) Hydroelectric power; (X) Game preserves; (X) Public Parks; (X) Recreation and Pleasure.

Quantity of water used for the purpose or purposes checked above:

PURPOSE	EXCESS	ACRE-FEET
Irrigation, Game Preserves, Public Parks, Recreation and Pleasure		120 ±

If water was used for irriga , give the following information:

KIND OF CROP	NO. OF ACRES	NUMBER OF IRRIGATIONS	AVERAGE DEPTH IN INCHES APPLIED PER IRRIGATION
Cottonwood	4±	continuous 5 days per week	
Willow	5±	" " " " "	
Salt Cedar	4±	" " " " "	

Total number of acres irrigated: About 13 Date of beginning irrigating season: January 1

Date of closing irrigating season: December 31

Number of water users on system: 1 State rates charged: owner-operated.

If water was used for generating power, give the following information:

NO. DAYS PLANT OPERATED	CAPACITY OF PLANT (k.v.a.)	AMOUNT OF POWER GENERATED (k.w.h.) PRIMARY	SECONDARY	STANDBY

Capacity of reservoir when full: (No spillway discharge)

ADDITIONAL INFORMATION

The rehabilitation of ditches was completed according to previously submitted advance print of drawing NP-BB-6951, in April 1949. Irrigation continued throughout the year. Negotiations are now in progress to arrange for the use of additional portions of the authorized area by the concessioner as irrigated hayfields and pasture for the saddle and pack stock.

Witness my (MY OR OUR) hand at Washington, D. C. (CITY OR TOWN), ~~Texas~~, this the

day of Feb 1, 19 50

A. Vaux Dunn

Chief, Water Resources Branch,
National Park Service, Department of the Interior

Subscribed and sworn to before me, the undersigned authority, on this the 1st

day of February, 1950.

Lorine A. Davis
(OFFICIAL TITLE) Notary Public

My Commission Expires 11/14/1951.

OFFICE RECORD

Received in the office of the Board of Water Engineers at ..... M. on the

day of ....., 19..... .....
Secretary

MEASUREMENT OF WATER

A cubic foot of water per second of time is the standard unit of measurement of flowing water for the purpose of distributing water for beneficial uses. Cubic foot per second is abbreviated second-foot, or sec. ft., or c.f.s. One c.f.s. equals 7.48 gallons per second; equals 448.80 gallons per minute; equals 646,272 gallons per day of 24 hours. Will deliver approximately two acre feet per day of 24 hours. Will deliver approximately one acre inch per hour. One acre-foot equals 43,560 cubic feet; equals approximately one-half c.f.s. flowing 24 hours; equals one acre covered 12 inches deep.

12-31-1948: water service report for year ending december 31, 1948

To State Board of Water Engineers

Austin, Texas

302 West 15th Street

PLEASE ANSWER ALL QUESTIONS WHERE APPLICABLE

Certified Filing No.

Application No. 978

Permit No. 927

WATER SERVICE REPORT FOR YEAR ENDING DECEMBER 31, 19 48

In compliance with Articles 7611 and 7612 of the Revised Civil Statutes of Texas, I (I OR WE) furnish you here with information regarding the (MY OR OUR) diversion and use of water for the year ending December 31, 1948, at Big Bend National ~~Park~~, by the National Park Service, Department of the Interior, an agency of the United States of America.

Name: National Park Service USDI (GIVE NAME OF CORPORATION, MUNICIPALITY, DISTRICT, ASSOCIATION OR INDIVIDUAL APPROPRIATOR OR PERMITTEE).

Post Office Address: Interior Building, (STREET AND NUMBER—R.F.D.)

Washington 25, (CITY OR TOWN) D. C. (STATE)

Source of water supply: Rio Grande (GIVE NAME OF STREAM, LAKE OR OTHER SOURCE)

When was system constructed: Prior to September 18, 1925, according to original application of J. O. Wedin.

How many years has it been operated: Approximately 20 years.

Has diversion been changed? Yes If so how: Original pump unit removed by former owner. A war surplus pump of smaller capacity was installed in 1947 for temporary use.

If system was not operated during the preceding calendar year, state reasons why: System was partially restored and operated during 1948.

If system has been discontinued, give date of such discontinuance: System not in operation from 1944-1947 because of lack of pump.

If system has been discontinued, have you abandoned your water right from the source of supply above named? No.

If you have abandonded water right, do you authorize cancellation of water right? No.

If system was operated during preceding calendar year, give the following information.

Water was used for the following purpose or purposes during the year ended December 31, 19 48.:

(Check x) ( ) Domestic and livestock; ( ) Municipal; ( ) Manufacturing and industrial; (X) Irrigation; ( ) Mining and recovery of minerals; ( ) Hydroelectric power; (X) Game preserves; (X) Public Parks; (X) Recreation and Pleasure.

Quantity of water used for the purpose or purposes checked above: 98± A.F.

PURPOSE	GALLONS OR ACRE-FEET	
Irrigation Game Preserves Public Parks Recreation and Pleasure		98± A.F.

If water was used for irrigation, give the following information:

KIND OF CROP	NO. OF ACRES	NUMBER OF IRRIGATIONS	AVERAGE DEPTH IN INCHES APPLIED PER IRRIGATION
Cottonwood	3/	--	--
Willow	3/	--	--
Salt Cedar (Tamarisk	3/	--	--

Total number of acres irrigated: 9-10 Date of beginning irrigating season: March 1

Date of closing irrigating season: Dec. 31

Number of water users on system: 1 State rates charged: owner-operated.

If water was used for generating power, give the following information:

NO. DAYS PLANT OPERATED	CAPACITY OF PLANT (k.v.a.)	AMOUNT OF POWER GENERATED (k.w.h.) PRIMARY	SECONDARY	STANDBY

Capacity of reservoir when full: (No spillway discharge)

ADDITIONAL INFORMATION

Advance print of NP-33-6951, attached, shows (1) ditch system and area irrigated by former owner; (2) portion of ditch system reconditioned by United States in 1947 and 1948; and (3) relation of development to area covered by map filed with Application No. 978. Approximately 550 new trees were planted in the first quarter of 1948, and additional trees will be added as land and ditches are reconditioned.

Witness my (MY OR OUR) hand at Washington, D. C. (CITY OR TOWN), ~~Texas~~ this the 7th day of February, 19 49.

A. Wm. Dunn

Chief, Water Resources Branch,
National Park Service, Department of the Interior

Subscribed and sworn to before me, the undersigned authority, on this the 7th day of February, 1949.

Lorine A. Davis

(OFFICIAL TITLE)
Notary Public
for the District of Columbia

OFFICE RECORD

Received in the office of the Board of Water Engineers at ..... M. on the ..... day of ....., 19..... .....
Secretary

MEASUREMENT OF WATER

A cubic foot of water per second of time is the standard unit of measurement of flowing water for the purpose of distributing water for beneficial uses. Cubic foot per second is abbreviated second-foot, or sec. ft., or c.f.s. One c.f.s. equals 7.48 gallons per second; equals 448.80 gallons per minute; equals 646,272 gallons per day of 24 hours. Will deliver approximately two acre feet per day of 24 hours. Will deliver approximately one acre inch per hour. One acre-foot equals 43,560 cubic feet; equals approximately one-half c.f.s. flowing 24 hours; equals one acre covered 12 inches deep.

To State Board of Water Engineers

Austin, Texas
302 West 15th Street

Certified Filing No.
Application No. 978
Permit No. 227

WATER SERVICE REPORT FOR YEAR ENDING DECEMBER 31, 19 47

In compliance with Articles 7611 and 7612 of the Revised Civil Statutes of Texas, we (I OR WE) furnish you here with information regarding our (MY OR OUR) diversion and use of water for the year ending December 31, 19 47

Name: National Park Service, W.S.D.I.
(GIVE NAME OF CORPORATION, MUNICIPALITY, DISTRICT, ASSOCIATION OR INDIVIDUAL APPROPRIATOR OR PERMITTEE).

Post Office Address: Interior Building
(STREET AND NUMBER—R.F.D.)

Washington Dec. 25, D.C.
(CITY OR TOWN) (STATE)

Source of water supply: Rio Grande
(GIVE NAME OF STREAM, LAKE OR OTHER SOURCE)

When was system constructed: Prior to September 18, 1925.

How many years has it been operated: Approximately 19 years.

Has diversion been changed? Yes If so how: The original pump unit was removed by last owner. New (war surplus equipment) pump unit was obtained late in 1947.

If system was not operated during the preceding calendar year, state reasons why: Appropriations were not made available in time to provide pump unit for use in 1947.

If system has been discontinued, give date of such discontinuance: System discontinued from 1944 to 1947 as reported in 1945 and 1946.

If system has been discontinued, have you abandoned your water right from the source of supply above named? No

If you have abandonded water right, do you authorize cancellation of water right? No

If system was operated during preceding calendar year, give the following information.
Water was used for the following purpose or purposes during the year ended December 31, 19 :
(Check x) ( ) Domestic and livestock; ( ) Municipal; ( ) Manufacturing and industrial; ( ) Irrigation; ( ) Mining and recovery of minerals; ( ) Hydroelectric power; ( ) Game preserves; ( ) Public Parks; ( ) Recreation and Pleasure.
Quantity of water used for the purpose or purposes checked above:

PURPOSE	GALLONS OR ACRE-FEET	

If water was used for irrigation, give the following information:

KIND OF CROP	NO. OF ACRES	NUMBER OF IRRIGATIONS	AVERAGE DEPTH IN INCHES APPLIED PER IRRIGATION

Total number of acres irrigated: ..... Date of beginning irrigating season: .....

Date of closing irrigating season: .....

Number of water users on system: 1 State rates charged: .....

If water was used for generating power, give the following information:

NO. DAYS PLANT OPERATED	CAPACITY OF PLANT (h.p.s.)	AMOUNT OF POWER GENERATED (h.p.h.) PRIMARY	SECONDARY	STANDBY

Capacity of reservoir when full: (No spillway discharge) .....

ADDITIONAL INFORMATION

An allotment of $4,992 was made on September 4 to purchase pump and gasoline engine from War Surplus. Purchase completed by December 5, 1947, but installation not available for 1947 season.

Witness my (MY OR OUR) hand at Washington, D. C. (CITY OR TOWN), Texas, this the 20th day of February, 1948.

A. Wayne Dumm
Chief, Water Resources Branch,
National Park Service

Subscribed and sworn to before me, the undersigned authority, on this the 20th day of February, 1948.

Lorin A. Davis
Notary Public in and for (STATE) the District of Columbia
My Commission Expires Aug. 14, 1951

OFFICE RECORD

Received in the office of the Board of Water Engineers at ..... M. on the .....

day of ....., 19..... .....
Secretary

MEASUREMENT OF WATER

A cubic foot of water per second of time is the standard unit of measurement of flowing water for the purpose of distributing water for beneficial uses. Cubic foot per second is abbreviated second-foot, or sec. ft., or c.f.s. One c.f.s. equals 7.48 gallons per second; equals 448.80 gallons per minute; equals 646.272 gallons per day of 24 hours. Will deliver approximately two acre feet per day of 24 hours. Will deliver approximately one acre inch per hour. One acre-foot equals 43,560 cubic feet; equals approximately one-half c.f.s. flowing 24 hours; equals one acre covered 12 inches deep.

Application No. 978

WATER SERVICE REPORT FOR YEAR ENDING DECEMBER 31, 1946

To State Board of Water Engineers,
302 West 15th Street,
Austin, Texas

Gentlemen:

In compliance with Articles 7611 and 7612 of the Revised Civil Statutes of Texas, we (I or We) furnish you herewith information regarding our (my or our) diversion and use of water for the year ended December 31, 1946.

Name: United States of America, Department of the Interior, National Park Service. (Give name of corporation, municipality, district, association or individual appropriator or permittee).

Post Office Address: National Park Service, Merchandise Mart. (Street and number—R.F.D.)
Chicago, 54, Illinois (City or Town) (State)

Name of original appropriator or permittee: J. O. Wedin.

Name by which plant or system is commonly known: J. O. Wedin Irrigation Project.

Source of water supply: Rio Grande (Give name of stream, lake or other source)

Diversion plant located 70 miles in a southeasterly direction from Marathon (City or Town) on Survey No. 5, Block G-19, Grantee G. C. & (Name and number of Survey)
S. F. Ry. Co., in Big Bend National Park, in Brewster County, Texas

Method of diversion: (Check x)
- (X) Pumping from stream or lake without using storage.
- ( ) Pumping from stream when storage is used.
- ( ) Pumping impounded storm water.
- ( ) Pumping from wells.
- ( ) By gravity from stream or lake.
- ( ) By gravity from stream with storage.
- ( ) By gravity from springs or artesian wells without storage.
- ( ) By gravity from springs or artesian wells with storage.
- ( ) By what is commonly known as spreader dams.

If method of diversion is bp pumping, state: Number, size and type of pumps: The United States has not been able to replace pump removed by previous owner. See explanation page 3.

Capacity of pump or pumps in gallons per minute: --

Horsepower of engine or motor: --

Type of engine or motor: -- (Steam, oil, gas or electric)

Height of lift: 26 feet.

When was system constructed: Prior to September 18, 1925.

How many years has it been operated: Approximately 19 years.

N688-12-46-2M

If system was not operated during the preceding calendar year, state reasons why: Unable to obtain new equipment.

If system has been discontinued, give date of such discontinuance. Not discontinued. Reconditioning is a scheduled project in near future.

If system has been discontinued, have you abandoned your water right from the source of supply above named?

If system was operated during preceding calendar year, give the following information. Not operated.
Water was used for the following purpose or purposes during the year ended December 31, 19 43:
(Check x) ( ) Domestic and livestock; ( ) Municipal; ( ) Manufacturing and industrial; (X) Irrigation; ( ) Mining and recovery of minerals; ( ) Hydroelectric power; ( ) Game preserves; ( ) Public Parks; ( ) Recreation and Pleasure.
Quantity of water used for the purpose or purposes checked above:

PURPOSE	GALLONS OR ACRE-FEET	
For irrigation of 195 acres (1943 last year)	-	487.5

What method did you use in computing the quantity of water used: See report for 1944.

If water was used for irrigation, give the following information: See report for 1944.

KIND OF CROP	NO. OF ACRES	YIELD PER ACRE	NUMBER OF IRRIGATIONS	AVERAGE DEPTH IN INCHES APPLIED PER IRRIGATION

Total number of acres irrigated: 195 acres (1943).
Date of beginning irrigating season: See report for 1944.
Date of closing irrigating season: See report for 1944.

Number of water users on system: Owner. State rates charged:

If water was used for generating power, give the following information:

NO. DAYS PLANT OPERATED	CAPACITY OF PLANT (k.v.a.)	AMOUNT OF POWER GENERATED (k.w.h.) PRIMARY	SECONDARY	STANDBY

If water was diverted and used by what is commonly known as spreader dams, state number of such dams operated during year and number of times during year water was diverted, and approximately number of acres irrigated

If water was diverted from storage, give the following information: (Do not include settling or desilting basins)

Capacity of reservoir: acre-feet.

Number of times filled during year:

Amount in storage on December 31, 19...: acre-feet.

Was water supply sufficient during entire year: If not, give dates of insufficient supply:

ADDITIONAL INFORMATION

An emergency fund of $3,000 has been allotted from 1947 fiscal year funds to construct preliminary domestic water system for use of construction crews and public while the combined Daniels and Graham Ranches are being converted to campground use. More than $30,000 is involved in the proposed projects for restoration of the irrigation system under Application 978, Permit 927, when construction camp is completed and occupied.

Witness my hand at Chicago, Illinois, this the 14th day of February, 19 47.

(my or our) (City or Town)

United States of America,
Department of the Interior,
National Park Service.

By G. Vaux Dean
Hydraulic Engineer,
Chief, Water Division.

Subscribed and sworn to before me, the undersigned authority, on this the 14th day of February, 1947.

CARRIE E. DAWSON NOTARY PUBLIC COOK COUNTY, ILL.

Carrie E. Dawson
Notary Public
(Official Title)

My Commission Expires August 27, 1948

OFFICE RECORD

Received in the office of the Board of Water Engineers at ..... M. on the ..... day of ....., 19.....

Secretary

MEASUREMENT OF WATER

A cubic foot of water per second of time is the standard unit of measurement of flowing water for the purpose of distributing water for beneficial uses. The standard unit for volume of static water is the acre-foot.

Cubic foot per second is abbreviated second-foot, or sec. ft., or c.f.s. One c.f.s. equals 7.48 gallons per second; equals 448.80 gallons per minute; equals 646,272 gallons per day of 24 hours. Will deliver approximately two acre feet per day of 24 hours. Will deliver approximately one acre inch per hour.

One acre-foot equals 43,560 cubic feet; equals approximately one-half c.f.s. flowing 24 hours; equals one acre covered 12 inches deep.

One cubic foot equals 7.48 gallons and weighs 62.4 pounds. The unit of work is the foot-pound, or the amount of work to overcome a weight of one pound falling one foot.

Power equals rate of work equals work divided by time. One horse-power equals 550 foot-pounds per second. One horse-power equals one cubic foot of water falling 8.8 feet in one second. To calculate horse-power, (theoretical), multiply water in second feet by vertical fall in feet, and divide by 8.8.

One and one-third horse-power equals about one kilowatt.

WATER SERVICE REPORT FOR YEAR ENDED DECEMBER 31, 1945

To State Board of Water Engineers,
302 West 15th Street,
Austin, Texas.

Gentlemen:

In compliance with Articles 7611 and 7612 of the Revised Civil Statutes of Texas, we (I or we) furnish you herewith information regarding our (my or our) diversion and use of water for the year ended December 31, 1945.

Name: United States of America, Department of the Interior, National Park Service.
(Give name of corporation, municipality, district, association or individual appropriator or permittee).

Post Office address: National Park Service, Merchandise Mart,
(Street and number—R.F.D.)

Chicago 54, Illinois
(City or Town) (State)

Name of original appropriator or permittee: J. O. Wedin

Name by which plant or system is commonly known: J. O. Wedin Irrigation Project

Source of water supply: Rio Grande
(Give name of stream, lake or other source)

Diversion plant located 70 miles in a southeasterly direction from Marathon (City or Town) on Survey No. 5, Block G-19, Grantee G. C. & (Name and number of Survey) S.F. Ry. Co., in Big Bend National Park, in Brewster County, Texas.

Method of diversion: (Check x)

- (x) Pumping from stream or lake without using storage.
- ( ) Pumping from stream when storage is used.
- ( ) Pumping impounded storm water.
- ( ) Pumping from wells.
- ( ) By gravity from stream or lake.
- ( ) By gravity from stream with storage.
- ( ) By gravity from springs or artesian wells without storage.
- ( ) By gravity from springs or artesian wells with storage.
- ( ) By what is commonly known as spreader dams.

If method of diversion is by pumping, state: Number, size and type of pumps: It has not been possible to get new pump and motor to replace one removed by last owner in 1943.

Capacity of pump or pumps in gallons per minute: --

Horsepower of engine or motor: --

Type of engine or motor: -- (Steam, oil, gas or electric)

Height of lift: 26 feet.

When was system constructed: Prior to September 18, 1925.

How many years has it been operated: Approximately 19 years.

1-

If system was not operated during the preceding calendar year, state reasons why: Unable to obtain new equipment.

If system has been discontinued, give date of such discontinuance: Not discontinued. Reconditioning is scheduled under 2-year construction program for fiscal years 1947 and 1948.

If system has been discontinued, have you abandoned your water right from the source of supply above named? No.

If system was operated during preceding calendar year, give the following information. Not operated. Water was used for the following purpose or purposes during the year ended December 31, 1943: (Check x) ( ) Domestic and livestock; ( ) Municipal; ( ) Manufacturing and industrial; (X) Irrigation; ( ) Mining and recovery of minerals; ( ) Hydroelectric power; ( ) Game preserves; ( ) Public Parks; ( ) Recreation and Pleasure.

Quantity of water used for the purpose or purposes checked above:

PURPOSE		GALLONS OR ACRE-FEET
For irrigation of 195 acres (1943 last year)		487.5

What method did you use in computing the quantity of water used: See last year's report.

If water was used for irrigation, give the following information: See last year's report.

KIND OF CROP	NO. OF ACRES	YIELD PER ACRE	NUMBER OF IRRIGATIONS	AVERAGE DEPTH IN INCHES APPLIED PER IRRIGATION

Total number of acres irrigated: 195 acres.

Date of beginning irrigating season: See last year's report.

Date of closing irrigating season: See last year's report.

2

Number of water users on system: owner State rates charged: --

If water was used for generating power, give the following information:

NO. DAYS PLANT OPERATED	CAPACITY OF PLANT (k.v.a.)	AMOUNT OF POWER GENERATED (k.w.h.) PRIMARY	SECONDARY	STANDBY
--				

If water was diverted and used by what is commonly known as spreader dams, state number of such dams operated during year and number of times during year water was diverted, and approximate number of acres irrigated --

If water was diverted from storage, give the following information: (Do not include settling or desilting basins)

Capacity of reservoir: -- acre-feet.

Number of times filled during year: --

Amount in storage on December 31, 19...: -- acre-feet.

Was water supply sufficient during entire year: -- If not, give dates of insufficient supply:

ADDITIONAL INFORMATION

Plans to recondition system between January 1 and June 30, 1946, were rejected by Congress because of more urgent need for labor, materials and funds in other national recovery activities. The project of reconstruction has been approved by the Bureau of the Budget for construction as part of a 2-year program beginning July 1, 1946, but its priority will probably result in deferred activity until second year.

Witness my (my or our) hand at Chicago, ~~Texas~~ Illinois (name of state), this the 26th day of February, 1946.

United States of America,
Department of the Interior,
National Park Service

By A. Vaux Dunn
Hydraulic Engineer.

Subscribed and sworn to before me, the undersigned authority, on this the 26TH day of FEBRUARY, 1946.

Kent Fitzgerald
KENT FITZGERALD
Notary Public
Commission Expires Sept. 5, 1946
(Official Title)

OFFICE RECORD

Received in the office of the Board of Water Engineers at..... M. on the.....

day of....., 19.....

Secretary

3-

Copy.

Mr. Lemm.

WATER SERVICE REPORT FOR YEAR ENDED DECEMBER 31, 19~~44~~.

To State Board of Water Engineers,
302 West 15th Street,
Austin, Texas.

Gentlemen:

In compliance with Articles 7611 and 7612 of the Revised Civil Statutes of Texas, I (I or we) furnish you herewith information regarding our (my or our) diversion and use of water for the year ended December 31, 19~~44~~.

Name: United States of America, Department of the Interior, National Park Service. (Give name of corporation, municipality, district, association or individual appropriator or permittee).

Post Office address: National Park Service, Merchandise Mart, (Street and number—R.F.D.)

Chicago 54, (City or Town) Illinois (State)

Name of original appropriator or permittee: J. O. Wedin

Name by which plant or system is commonly known: J. O. Wedin Irrigation Project

Source of water supply: Rio Grande (Give name of stream, lake or other source)

Diversion plant located 70 miles in a southerly direction

from Marathon (City or Town) on Survey No. 5, Block G-19, Grantee G. S. & (Name and number of Survey)

S.F. R.R. Co., in Big Bend National Park, in Brewster County, Texas.

Method of diversion: (Check x)

- (x) Pumping from stream or lake without using storage.
- ( ) Pumping from stream when storage is used.
- ( ) Pumping impounded storm water.
- ( ) Pumping from wells.
- ( ) By gravity from stream or lake.
- ( ) By gravity from stream with storage.
- ( ) By gravity from springs or artesian wells without storage.
- ( ) By gravity from springs or artesian wells with storage.
- ( ) By what is commonly known as spreader dams.

If method of diversion is by pumping, state: Number, size and type of pumps: Initial installation by J. O. Wedin said to have been a 6" dentrifugal pump. A 10" centrifugal pump was substituted by Mary Coe Daniels in 1937 and used to end of 1943 season.

Capacity of pump or pumps in gallons per minute: Approximately 3,000 gpm 1937-1943 inclusive.

Horsepower of engine or motor: 35 HP - 1937-1943.

Type of engine or motor: Gas (Steam, oil, gas or electric)

Height of lift: 26 feet.

When was system constructed: Part of system, with 6" pump, seems to have been completed prior to Sept. 18, 1925.

How many years has it been operated: Approximately 19 years.

If system was not operated during the preceding calendar year, state reasons why: Not operated in 1944. Land in process of transfer to United States through State Park Commission and later under study, preparatory to redevelopment for recreational purposes.

If system has been discontinued, give date of such discontinuance: Not discontinued. Use to be resumed on completion of Park Development Plan and appropriation of funds for such development.

If system has been discontinued, have you abandoned your water right from the source of supply above named? No.

If system was operated during preceding calendar year, give the following information. Not operated.

Water was used for the following purpose or purposes during the year ended December 31, 19 43:
(Check x) ( ) Domestic and livestock; ( ) Municipal; ( ) Manufacturing and industrial; (X) Irrigation; ( ) Mining and recovery of minerals; ( ) Hydroelectric power; ( ) Game preserves; ( ) Public Parks; ( ) Recreation and Pleasure.

Quantity of water used for the purpose or purposes checked above: For 1943 from data supplied by Mrs. Mary Coe Daniels, successor to J. O. Wedin and predecessor of State Park Commission

PURPOSE		GALLONS OR ACRE-FEET
For irrigation of 195 acres		487.5

What method did you use in computing the quantity of water used: Report of Mrs. Mary Coe Daniels and standard tables were used to obtain best estimate.

If water was used for irrigation, give the following information: For 1943 - Information from Mary Coe Daniels, successor to J. O. Wedin and predecessor of State Park Commission

KIND OF CROP	NO. OF ACRES	YIELD PER ACRE	NUMBER OF IRRIGATIONS	AVERAGE DEPTH IN INCHES APPLIED PER IRRIGATION
Cotton	125	1-1.5 bales	5	6 inches
Stock feed	40	Several tons	5	6 inches
Alfalfa	30	"plenty"	5	6 inches

Mrs. Daniels claims to have irrigated every 2 weeks throughout the year with 6-inch applications. The United States will claim only the 2.5 acre-feet per acre authorized by permit.

Total number of acres irrigated: 195 acres.

Date of beginning irrigating season: Jan. 1 for some crops) According to Mrs. Daniels

Date of closing irrigating season: Dec. 31 for some crops)

Number of water users on system: Owner State rates charged: --

If water was used for generating power, give the following information:

NO. DAYS PLANT OPERATED	CAPACITY OF PLANT (k.v.a.)	AMOUNT OF POWER GENERATED (k.w.h.) PRIMARY	SECONDARY	STANDBY
--				

If water was diverted and used by what is commonly known as spreader dams, state number of such dams operated during year and number of times during year water was diverted, and approximate number of acres irrigated --

If water was diverted from storage, give the following information: (Do not include settling or desilting basins)

Capacity of reservoir: -- acre-feet.

Number of times filled during year: --

Amount in storage on December 31, 19....: -- acre-feet.

Was water supply sufficient during entire year: Yes If not, give dates of insufficient supply:

ADDITIONAL INFORMATION

Mrs. Mary Coe Daniels, successor to J. O. Wedin, deeded land and appurtenant water right to State Park Commission on July 16, 1942, but she retained possession and farmed the area until spring of 1944. She removed pump unit about February 1944. State Park Commission made no use of land but conveyed it to United States by deed accepted by Secretary of Interior on June 12, 1944. Pump unit was not conveyed with land. This report describes last year of irrigation under Permit No. 927 during period of transfer but does not indicate maximum past irrigation or proposed use by United States.

Witness my (my or our) hand at Chicago, Illinois (City or Town), this the 27th day of February, 19 45.

United States of America,
Department of the Interior,
National Park Service

By (Sgd) Hillory A. Tolson
Acting Director.

(SEAL)

Subscribed and sworn to before me, the undersigned authority, on this the 27th day of February, 19 45.

(Sgd) C. A. Sandberg
Notary Public
(Official Title)

OFFICE RECORD

Received in the office of the Board of Water Engineers at..... M. on the..... day of....., 19.....

Secretary

MEASUREMENT OF WATER

A cubic foot of water per second of time is the standard unit of measurement of flowing water for the purpose of distributing water for beneficial uses.

The standard unit for volume of static water is the acre-foot.

Cubic foot per second is abbreviated second-foot or, sec. ft., or c.f.s. One c.f.s. equals 7.48 gallons per second; equals 448.80 gallons per minute; equals 646,272 gallons per day of 24 hours. Will deliver approximately two acre feet per day of 24 hours. Will deliver approximately one acre inch per hour.

One acre-foot equals 43,560 cubic feet; equals approximately one-half c.f.s. flowing 24 hours; equals one acre covered 12 inches deep.

One cubic foot equals 7.48 gallons and weighs 62.4 pounds. The unit of work is the foot-pound, or the amount of work to overcome a weight of one pound falling one foot.

Power equals rate of work equals work divided by time. One horse-power equals 550 foot-pounds per second. One horse-power equals one cubic foot of water falling 8.8 feet in one second. To calculate horse-power, (theoretical), multiply water in second feet by vertical fall in feet, and divide by 8.8.

One and one-third horse-power equals about one kilowatt.

BOARD OF WATER ENGINEERS
STATE OF TEXAS
AUSTIN
Austin 14, Texas

November 8, 1943

The Director,
National Park Service,
Chicago, Illinois.

Attention: Mr. Hillory A. Tolson,
Acting Director

Dear Sirs:

We have your letter of November 2, 1943, regarding our notice of hearing in the matter of forfeiting, revoking and cancelling Permit No. 927 to divert, appropriate and use, not to exceed 780 acre feet of water per annum from the Rio Grande, in Brewster County, Texas, for the purpose of irrigating 312 acres of land described in said permit.

In reply, we beg to advise that this Board granted said permit to J. O. Wedin, Marathon, Texas, on November 4, 1927. It provides that "Unless otherwise ordered by the Board construction work on the herein described works must begin within ninety (90) days, and must be completed within one (1) year from the date hereof". It also provides that

> "This permit is granted with the express proviso that the grantee, his heirs or assigns, or any beneficiary hereunder, shall comply with all the rules and regulations of the Board of Water Engineers formulated by it in pursuance of the authority given in the General Irrigation Act of this State".

The Statutes of this State (Article 7612), as well as the rules and regulations of this Board, require all appropriators of water to file with the Board annual reports showing, among other things, the quantity of water used and the purposes for which it was used. This requirement has never been complied with as regards Permit No. 927, nor is there anything in our records to show that the project was ever completed or even started.

With the record in this condition, the Board of Water Engineers ordered a hearing to show cause why this permit should not be cancelled. However, in compliance with your request, the Board will defer further action in the matter of forfeiting and cancelling it until such time as you have completed your development plan for the Big Bend National Park area.

Also in compliance with your request, we are mailing to you, and to your Mr. A. van V. Dunn, Hydraulic Engineer, Region 4, San Francisco, California, two copies of our "Circular of Information" containing a reprint of portions of the Revised General Irrigation Act of 1925, together with requirements for maps and other drawings, fee list and the rules and regulations of the Board of Water Engineers of the State of Texas. We are also sending mimeographed copy of Attorney General's Opinion No. O-3397 wherein it is held that an appropriator of public water in this State for irrigation purposes is limited in his right to so use such water bo the lands described in his permit, and, therefore, cannot irrigate other land without a permit from this Board.

When we can be of service to you, kindly let us know.

Most respectfully yours,
State Board of Water Engineers
By (Sgd.) J. E. Sturrock
J. E. Sturrock, Attorney-Statistician

cc: Mr. A. van V. Dunn,
Hydraulic Engineer, Region 4, National Park Service,
601 Sheldon Building, San Francisco 5, California.

COPY

NOTICE OF HEARING

IN THE MATTER OF FORFEITING, REVOKING AND CANCELLING OF Permit No. 927 TO APPROPRIATE PUBLIC WATERS OF THE STATE OF TEXAS: TO National Park Service, U. S. Department of the Interior, Washington, D. C.

Under and by virtue of the authority vested by law in the Board of Water Engineers of the State of Texas, a hearing will be held by said Board at its office in Austin, Texas, beginning at 10:00 o'clock A.M., Monday, December 6th, A.D., 1943, in the MATTER of the forfeiting, revoking and cancelling of Permit No. 927 to divert, appropriate and use public waters of the State of Texas.

Said permit granted to J. O. Wedin, Marathon, Texas, by the Board of Water Engineers of the State of Texas, November 4, 1927, to divert, appropriate and use an amount of the public waters of the State of Texas, to consist of waters from the Rio Grande in Brewster County, Texas, not to exceed 780 acre-feet per annum, the rate of diversion not to exceed seven cubic feet per second of time, or so much thereof as may be necessary, when beneficially used for the irrigation of the following described lands, to-wit:

Beginning at the S. E. Corner of Survey No. 5, Block G-19, Grantee G C and S. F. Ry. Co., from where a hot spg. at base of cliff brs N. 3 deg. W. 50 vrs. another spg. brs. N. 17 deg. W. 550 vrs.; thence N. along E line Section 5, Block G-19 aforesaid, 1363 vrs. a rk md; thence W. 561 vrs to the beginning point of this Survey; thence N 11 deg. 30' W 860 vrs to rk md, thence S. 83 deg. 15' West 550 vrs. to rk md, thence S. 21 deg. W 550 vrs. to rk md. thence S 32 deg. 15' W. 50 vrs. at pump; thence S 68 deg. E 2300 vrs on N bank of Rio Grande River to rk md, being the S.E. corner of this Sur. thence N 151 vrs to rk md, thence N 60 deg. W. 450 vrs to rk md; thence N 553 vrs to the place of beginning, of this survey, containing 312 acres.

Now, therefore, you are hereby notified to be and appear at the office of the Board of Water Engineers of Texas, at Austin, Texas, at 10:00 o'clock A. M. on Monday, December 6th, A.D., 1943, to show cause, if any you have, why an order should not be entered by said Board, forfeiting, revoking and cancelling said Permit No. 927 on the grounds of willful abandonment and failure to comply with the terms and conditions of the permit.

Dated at Austin, Texas, this the 18 day of October , A.D., 1943.

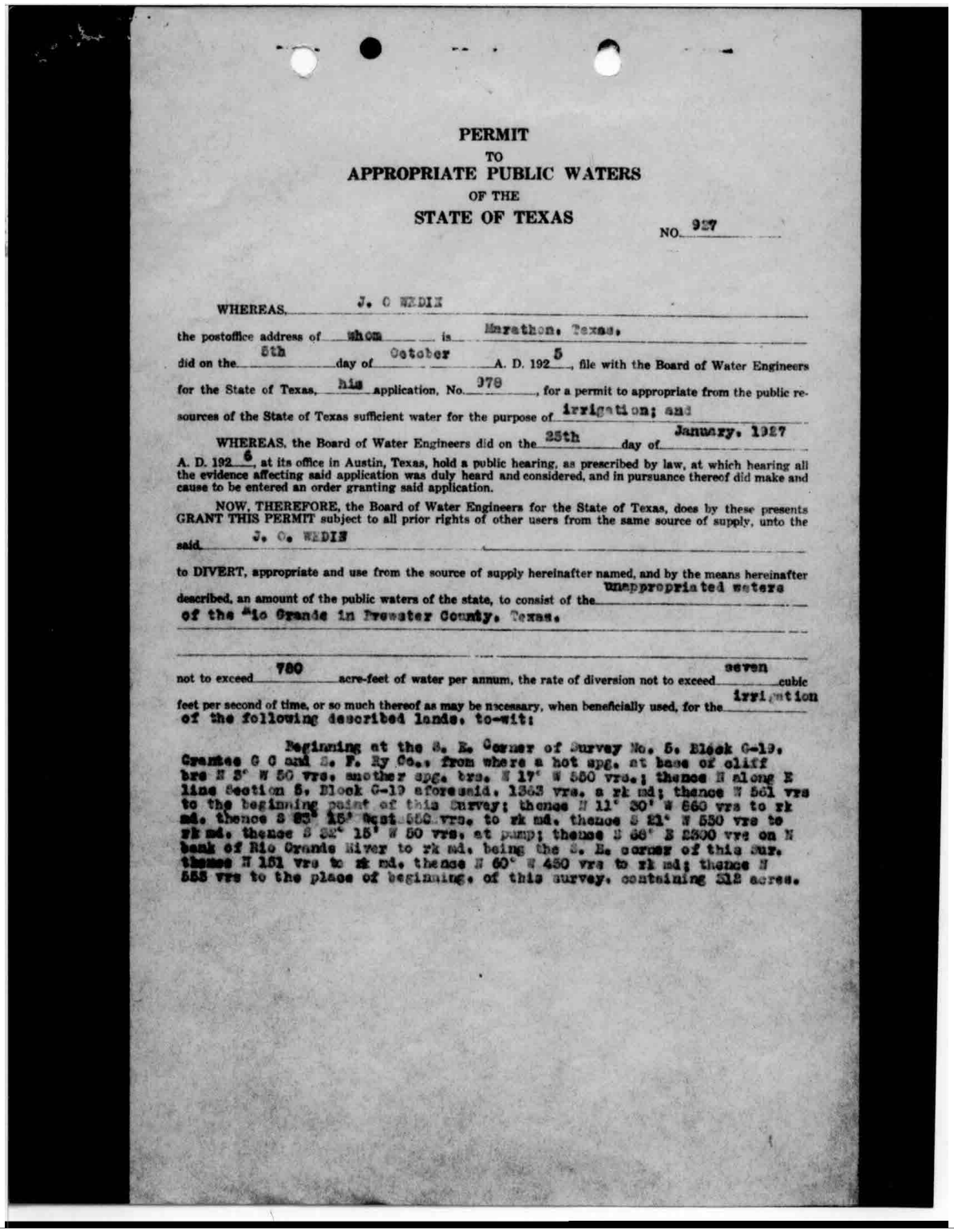
(Signed) A. W. McDonald

Secretary, Board of Water Engineers.

S E A L

C O P Y

00-00-0000: permit to appropriate public waters of the state of texas no. 927



PERMIT
TO
APPROPRIATE PUBLIC WATERS
OF THE
STATE OF TEXAS

NO. 927

WHEREAS, J. O WEDIN

the postoffice address of whom is Marathon, Texas,

did on the 5th day of October A. D. 1925, file with the Board of Water Engineers for the State of Texas, his application, No. 978, for a permit to appropriate from the public resources of the State of Texas sufficient water for the purpose of irrigation; and

WHEREAS, the Board of Water Engineers did on the 25th day of January, 1927 A. D. 1926, at its office in Austin, Texas, hold a public hearing, as prescribed by law, at which hearing all the evidence affecting said application was duly heard and considered, and in pursuance thereof did make and cause to be entered an order granting said application.

NOW, THEREFORE, the Board of Water Engineers for the State of Texas, does by these presents GRANT THIS PERMIT subject to all prior rights of other users from the same source of supply, unto the said J. O. WEDIN

to DIVERT, appropriate and use from the source of supply hereinafter named, and by the means hereinafter described, an amount of the public waters of the state, to consist of the unappropriated waters of the Rio Grande in Brewster County, Texas.

not to exceed 780 acre-feet of water per annum, the rate of diversion not to exceed seven cubic feet per second of time, or so much thereof as may be necessary, when beneficially used, for the irrigation of the following described lands, to-wit:

Beginning at the S. E. Corner of Survey No. 5, Block C-19, Grantee C C and S. F. Ry Co., from where a hot spg. at base of cliff brs N 3° W 50 vrs. another spg. brs. N 17° W 550 vrs.; thence N along E line Section 5, Block C-19 aforesaid, 1363 vrs. a rk md; thence W 561 vrs to the beginning point of this Survey; thence N 11° 30' W 660 vrs to rk md. thence S 83° 15' East 550 vrs. to rk md. thence S 21° W 550 vrs to rk md. thence S 32° 15' W 50 vrs. at pump; thence S 68° E 2300 vrs on N bank of Rio Grande River to rk md. being the S. E. corner of this Sur. thence N 151 vrs to rk md. thence N 60° W 450 vrs to rk md; thence N 555 vrs to the place of beginning, of this survey, containing 312 acres.

09-28-1925: application for a permit to appropriate and divert certain waters; september 28, 1925

Form 1577b-M760-426-500

IIIa

No. 978

APPLICATION FOR a Permit to Appropriate and Divert Certain Waters of the Unappropriated Waters of the State of Texas, without Impounding or Storing Same.

THE STATE OF TEXAS.
County of Brewster

TO THE BOARD OF WATER ENGINEERS FOR THE STATE OF TEXAS:

1 The undersigned, whose name and address is/are as follows:

J.O. Wedin (Name) Marathon Tex s (Postoffice address)

being first duly sworn, depose s and says that he desire s to appropriate and divert 936 acre-feet per annum of the unappropriated waters of the State of Texas, the same to be diverted from the Rio Grande River, a tributary of the ---- (Name of watercourse) for the purpose of Irrigation (Irrigation, Mining, Milling, etc.)

2. If a corporation, give name. Also names and postoffice addresses of principal officials:

3. The proposed pumping plant (Headgate, intake, pumping plant, etc.) is located at a point which bears NW 61° 15' W 2662 vs (Course and distance) from the SE corner of (Original) Survey No. 5, on the E bank of the Rio Grande (Watercourse) in Brewster County, Texas, and is distant in a S.E. direction from Alpine (County seat or nearest town) Texas about 110 miles.

Give name and postoffice address of owner of land upon which proposed pumping plant (Headgate, intake, pumping plant, etc.) will be located.

J. O. Wedin (Name) Marathon, Texas (Postoffice address)

4. The detailed description of the works proposed to be installed is as follows:

(a) If pumping plant:

Size and type of pump 6" Centrifugal

Kind and horsepower of engine Hesc 22 HP oil

Height of lift 26 feet

(b) If by gravity:

The diversion dam will be ---- (Height, Length, etc.)

The headgate will be ---- (Size, Head, Capacity)

(c) Distribution system:

The distribution system will consist of dirt canals

5. The lands to be [illegible]igated are described as follows: (Give complete [illegible] notes with some corner of an original survey as the i[illegible] po[illegible]

Beg at the S E Cor of Sur. 5 Blk G-19, Grantee G C & S F Ry Co, Fd sh a hot spg at base of cliff brs N 3° W 50 vrs, another spg. brs. N 17° W 550 vrs, THENCE N along E Sec 5 Blk G-19 aforesaid, 1363 vrs a rk md THENCE W 561 vrs to the beginning point of this Survey,

Thence N 11° 30' W 860 vrs to rk md, THENCE S 70° W 850 vrs to rk md, THENCE S 83° 15' W 550 vrs to rk md, THENCE S 21° W 550 vrs to rk md, THENCE S 32° 15' W 50 vrs, at pump, THENCE S 68° E 2300 vrs on N bank of Rio Grande River to rk md, being the S E Cor of this Sur, THENCE N 151 vrs to rk md, THENCE N 60° W 450 vrs to rk md, THENCE N 553 vrs to the place of beginning, of this survey,

Containing 312 acres.

6. Surplus water will be returned to Rio Grande at about a point about 350 vrs N W of the S E Cor of this tract, and about 450 vrs E of S W corner of Survey No. 5 Blk G-19, as indicated on accompanying map.

The foregoing detailed statements are further delineated and described on the maps, plats, profiles and drawings submitted with this application.

7. If a permit for the appropriation is granted, either in whole or in part, construction work will be begun within ninety (90) days after such permit is issued.

8. The proposed work will be prosecuted with diligence, and will be sufficiently completed so that the application of the appropriated water to the proposed use will be made within three months from the date of issuance of the permit.

Witness my hand at Marathon, Texas, this the 28 day of September, 1925.

John O. Wedin

Subscribed and sworn to before me, a notary public in and for Brewster County, Texas, by J. O. Wedin, this the 28th day of September, 1925.

Lucille M. French

Notary Public. Brewster County, Texas.

This application must be accompanied by postoffice or bank draft for sufficient fees.

OFFICE RECORD

Received Sept 30, 1925. Returned for correction ..... 192..

Ordered filed Oct 5, 1925. Total fees ..... $ 82.50

Hearing set for Nov. 30 1925. Amount received ..... $ .....

A. M. McDonald
Secretary.

PROVIDED, that the said J. O. WADIN the beneficiary under this permit, is authorized to install a pumping plant to consist of a six (6) inch Centrifugal pump operated by an 22 horsepower oil Meco engine, having a height of lift of twenty-six (26) feet; the said pumping plant to be located at a point which bears North 61° 15' West 2662 varas from the Southeast corner of Survey No. 5, on the North bank of the Rio Grande River in Brewster County, Texas, and is distant in a Southeasterly direction from Alpine, Texas, about one hundred and ten (110) miles, and to divert therewith not to exceed 780 acre-feet of water per annum for the irrigation of not to exceed 312 acres of land hereinbefore described.

PROVIDED, that the amount of water which the said grantee is permitted to divert and appropriate in any one year shall be restricted to two and one half (2½) acre-feet per acre for each acre actually irrigated within the limitation of the 312 Acres hereinbefore described.

The measurement of the water herein permitted to be used is to be made at the point of diversion herein before described.

Provided, that the above allowance as to quantity is based upon the beneficial use of 780 acre-feet of water per annum, and is made with the express proviso that the amount of water which the said appropriator is permitted to divert and appropriate from the unappropriated waters, of the Rio Grande, in Brewster County, Texas, shall be available at the point of diversion from the said source of supply by the process of pumping only, and the right herein granted does not, and shall not, extend to any of the waters of the said Rio Grande at any point, or points, other than at the point herein described, and for the specific purposes herein stated.

This permit is granted with the express provisio that the grantee his heirs or assigns, or any beneficiary hereunder, shall comply with all the rules and regulations of the Board of Water Engineers formulated by it in pursuance of the authority given in the General Irrigation Act of this State, by virtue of which this Board was created.

Unless otherwise ordered by the Board construction work on the herein described works must begin within ninety (90) days, and must be completed within one (1) year from the date hereof.

Given under the hand and seal of the Board of Water Engineers for the State of Texas, this the 4th day of November A. D. 1927

Geo. A. Morris

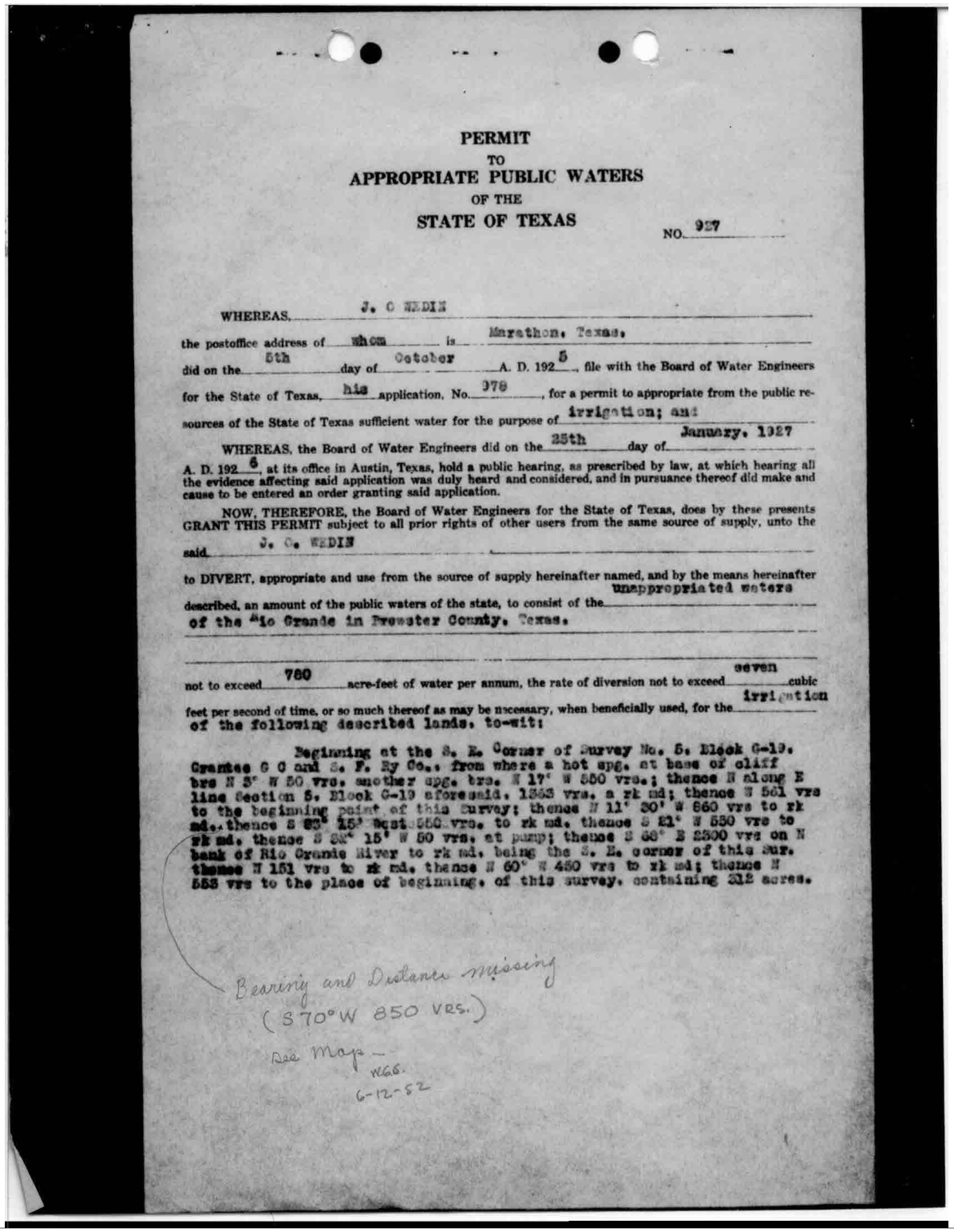
C. S. Clark

ATTEST:

A. N. McDonald
Secretary.

A. H. Dunlap
BOARD OF WATER ENGINEERS.

09-28-1925: permit to appropriate public waters of the state of texas; september 28, 1925



PERMIT
TO
APPROPRIATE PUBLIC WATERS
OF THE
STATE OF TEXAS

NO. 957

WHEREAS, J. C WEDIN

the postoffice address of whom is Marathon, Texas,

did on the 5th day of October A. D. 1925, file with the Board of Water Engineers for the State of Texas, his application, No. 378, for a permit to appropriate from the public resources of the State of Texas sufficient water for the purpose of irrigation; and

WHEREAS, the Board of Water Engineers did on the 25th day of January, 1927 A. D. 1926, at its office in Austin, Texas, hold a public hearing, as prescribed by law, at which hearing all the evidence affecting said application was duly heard and considered, and in pursuance thereof did make and cause to be entered an order granting said application.

NOW, THEREFORE, the Board of Water Engineers for the State of Texas, does by these presents GRANT THIS PERMIT subject to all prior rights of other users from the same source of supply, unto the said J. C. WEDIN

to DIVERT, appropriate and use from the source of supply hereinafter named, and by the means hereinafter described, an amount of the public waters of the state, to consist of the unappropriated waters of the Rio Grande in Brewster County, Texas.

not to exceed 760 acre-feet of water per annum, the rate of diversion not to exceed seven cubic feet per second of time, or so much thereof as may be necessary, when beneficially used, for the irrigation of the following described lands, to-wit:

Beginning at the S. E. Corner of Survey No. 5, Block C-19, Grantee C C and S. F. Ry Co., from where a hot spg. at base of cliff brs N 5° W 50 vrs. another spg. brs. N 17° W 550 vrs.; thence N along E line Section 5, Block C-19 aforesaid, 1363 vrs. a rk md; thence W 561 vrs to the beginning point of this Survey; thence N 11° 30' W 660 vrs to rk md. thence S 83° 15' East 550 vrs. to rk md. thence S 21° W 550 vrs to rk md. thence S 38° 15' W 50 vrs. at pump; thence S 60° E 2300 vrs on N bank of Rio Grande River to rk md. being the S. E. corner of this Sur. thence N 151 vrs to rk md. thence N 60° W 450 vrs to rk md; thence N 553 vrs to the place of beginning, of this survey, containing 312 acres.

Bearing and Distance missing
(S 70° W 850 VRS.)
See Maps —
WGS.
6-12-52

PROVIDED, that the said J. O. WADE the beneficiary under this permit, is authorized to install a pumping plant to consist of a six (6) inch Centrifugal pump operated by an 22 horsepower oil Waco engine, having a height of lift of twenty-six (26) feet; the said pumping plant to be located at a point which bears North 61° 15' West 2660 varas from the Southeast corner of Survey No. 5, on the North bank of the Rio Grande River in Brewster County, Texas, and is distant in a Southeasterly direction from Alpine, Texas, about one hundred and ten (110) miles, and to divert therewith not to exceed 780 acre-feet of water per annum for the irrigation of not to exceed 312 acres of land hereinbefore described.

PROVIDED, that the amount of water which the said grantee is permitted to divert and appropriate in any one year shall be restricted to two and one half (2½) acre-feet per acre for each acre actually irrigated within the limitation of the 312 Acres hereinbefore described.

The measurement of the water herein permitted to be used is to be made at the point of diversion herein before described.

Provided, that the above allowance as to quantity is based upon the beneficial use of 780 acre-feet of water per annum, and is made with the express proviso that the amount of water which the said appropriator is permitted to divert and appropriate from the unappropriated waters, of the Rio Grande, in Brewster County, Texas, shall be available at the point of diversion from the said source of supply by the process of pumping only, and the right herein granted does not, and shall not, extend to any of the waters of the said Rio Grande at any point, or points, other than at the point herein described, and for the specific purposes herein stated.

This permit is granted with the express provisio that the grantee his heirs or assigns, or any beneficiary hereunder, shall comply with all the rules and regulations of the Board of Water Engineers formulated by it in pursuance of the authority given in the General Irrigation Act of this State, by virtue of which this Board was created.

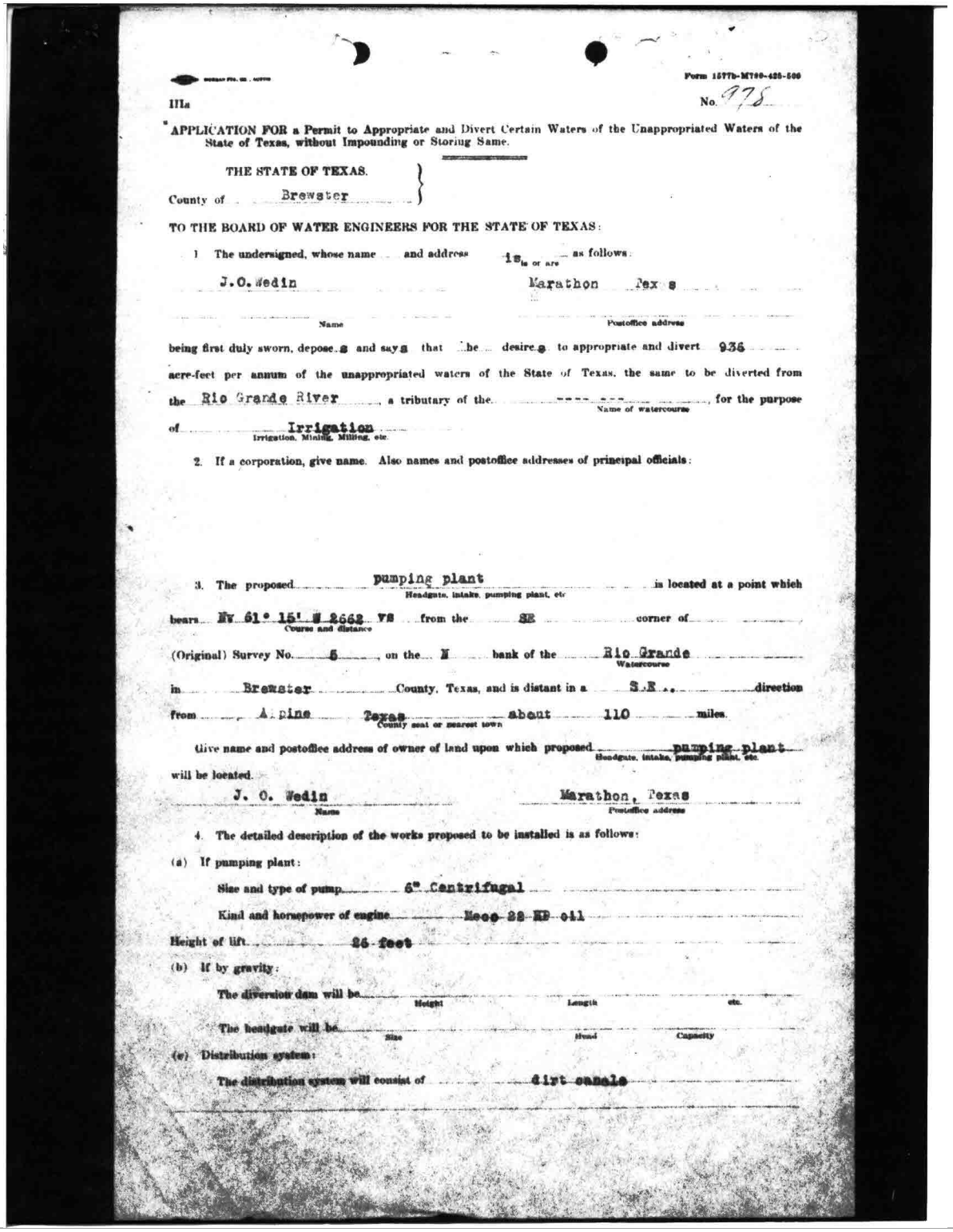
Unless otherwise ordered by the Board construction work on the herein described works must begin within ninety (90) days, and must be completed within one (1) year from the date hereof.

Given under the hand and seal of the Board of Water Engineers for the State of Texas, this the 4th day of November A. D. 1927

Jno. A. Wilmer
C. S. Clark
A. H. Dunlap
BOARD OF WATER ENGINEERS.

ATTEST:
A. W. McDonald
Secretary.

09-28-1925: application for a permit to appropriate and divert certain waters; september 28, 1925



Form 1577b-M700-425-500

IIIa

No. 978

APPLICATION FOR a Permit to Appropriate and Divert Certain Waters of the Unappropriated Waters of the State of Texas, without Impounding or Storing Same.

THE STATE OF TEXAS.
County of Brewster

TO THE BOARD OF WATER ENGINEERS FOR THE STATE OF TEXAS:

1 The undersigned, whose name and address is/are as follows:

J.O. Wedin — Marathon Texas
Name — Postoffice address

being first duly sworn, depose s and says that he desire s to appropriate and divert 936 acre-feet per annum of the unappropriated waters of the State of Texas, the same to be diverted from the Rio Grande River, a tributary of the ---- ---, Name of watercourse for the purpose of Irrigation (Irrigation, Mining, Milling, etc.)

2. If a corporation, give name. Also names and postoffice addresses of principal officials:

3. The proposed pumping plant (Headgate, intake, pumping plant, etc.) is located at a point which bears NW 61° 15' W 2662 vs (Course and distance) from the SE corner of (Original) Survey No. 5, on the N bank of the Rio Grande (Watercourse) in Brewster County, Texas, and is distant in a S.E. direction from Alpine (County seat or nearest town) Texas about 110 miles.

Give name and postoffice address of owner of land upon which proposed pumping plant (Headgate, intake, pumping plant, etc.) will be located.

J. O. Wedin — Marathon, Texas
Name — Postoffice address

4. The detailed description of the works proposed to be installed is as follows:

(a) If pumping plant:

Size and type of pump 6" Centrifugal

Kind and horsepower of engine Hesp 22 HP oil

Height of lift 26 feet

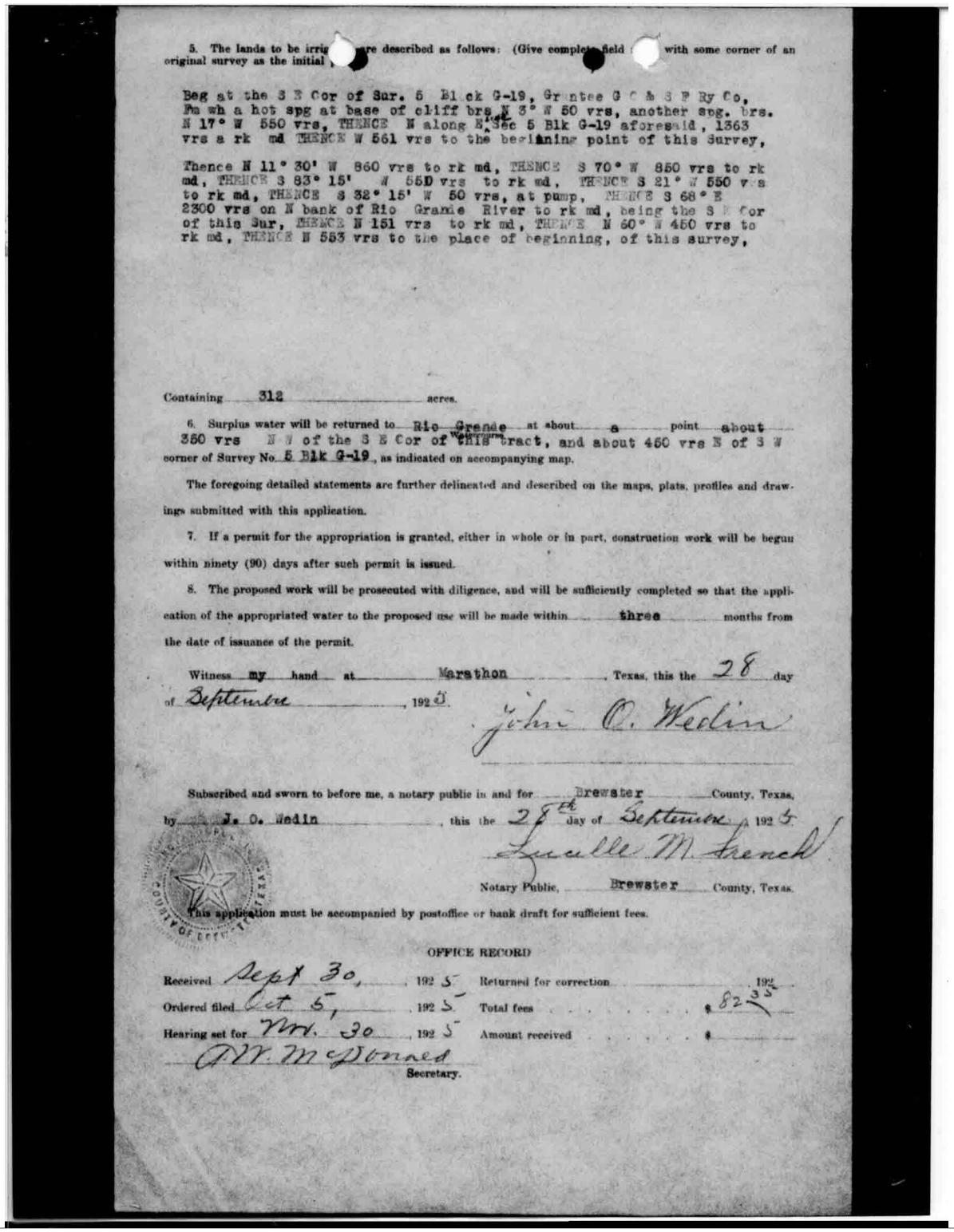
(b) If by gravity:

The diversion dam will be ---- (Height) ---- (Length) ---- etc.

The headgate will be ---- (Size) ---- (Head) ---- (Capacity)

(c) Distribution system:

The distribution system will consist of dirt canals



5. The lands to be irrig[illegible]are described as follows: (Give complete field [illegible] with some corner of an original survey as the initial [illegible]

Beg at the S E Cor of Sur. 5 Block G-19, Grantee G C & S F Ry Co, Pa wh a hot spg at base of cliff brs N 3° W 50 vrs, another spg. brs. N 17° W 550 vrs, THENCE N along E. Sec 5 Blk G-19 aforesaid, 1363 vrs a rk md THENCE W 561 vrs to the beginning point of this Survey,

Thence N 11° 30' W 860 vrs to rk md, THENCE S 70° W 850 vrs to rk md, THENCE S 83° 15' W 550 vrs to rk md, THENCE S 21° W 550 vrs to rk md, THENCE S 32° 15' W 50 vrs, at pump, THENCE S 68° E 2300 vrs on N bank of Rio Grande River to rk md, being the S E Cor of this Sur, THENCE N 151 vrs to rk md, THENCE N 60° W 450 vrs to rk md, THENCE N 553 vrs to the place of beginning, of this survey,

Containing 312 acres.

6. Surplus water will be returned to Rio Grande at about a point about 350 vrs N W of the S E Cor of this tract, and about 450 vrs N of S W corner of Survey No. 5 Blk G-19, as indicated on accompanying map.

The foregoing detailed statements are further delineated and described on the maps, plats, profiles and drawings submitted with this application.

7. If a permit for the appropriation is granted, either in whole or in part, construction work will be begun within ninety (90) days after such permit is issued.

8. The proposed work will be prosecuted with diligence, and will be sufficiently completed so that the application of the appropriated water to the proposed use will be made within three months from the date of issuance of the permit.

Witness my hand at Marathon, Texas, this the 28 day of September, 1925.

John O. Wedin

Subscribed and sworn to before me, a notary public in and for Brewster County, Texas, by J. O. Wedin, this the 28th day of September, 1925.

Lucille M. French

Notary Public, Brewster County, Texas.

This application must be accompanied by postoffice or bank draft for sufficient fees.

OFFICE RECORD

Received Sept 30, 1925. Returned for correction ____, 192__

Ordered filed Oct 5, 1925. Total fees $ 82.35

Hearing set for Nov. 30, 1925. Amount received $ ____

W. M. McDonald
Secretary.

Land History

11-04-1927: land ownership record; november 04, 1927

NATIONAL PARK SERVICE

LAND OWNERSHIP RECORD

State Texas

Tract No.

County Brewster

Deed No. 2

Civil Subdivision

Area acres

Big Bend National Park
Name of Park or Area

Right application & permit of
Area based on survey of J. O. Wedin Date Nov. 4, 1927 Guest Ranch Area.
Section of Park or Area

Legal Description: Water Right Application 973, Permit 927, Cert.

Method of Acquisition: Appurtenant to land covered by Deed 1 Appropriation or Source of funds: -

Cost (if purchased) or estimated value:

Acquired from: State of Texas

Accepted by Secretary (__) Opinion of Att'y. Gen.-title in U. S. (__) date:

Physical Characteristics: A conditional right to divert 700 acre-feet of water per annum from the Rio Grande for irrigation purposes on what was formerly the J. O. Wedin Ranch in Survey No. 5, Block G-10, GC & SF RR Co. Grant.

Improvements on Land at time of Acquisition:

Existing or outstanding special use permits, reservations, rights, or rights of way:

Report Based on: Records of Water Rights Division

Prepared by: A. van V. Bunn, Hydraulic Engineer date: July 5, 1944.

Map References: Map in deed.

Remarks: This right is in danger of lapsing or loss of priority if not perfected in near future.

Administrative Agreements

In reply refer to:
L5h BIGB-L

Memorandum

To: Regional Director, Region Three

From: Acting Assistant Director

Subject: Operation of the Wedin Ditch, Big Bend

In reply to the memorandum of March 6 to the Regional Landscape Architect from Mr. Carter, we enclose two copies of a memorandum of March 20 from Mr. Dunn, with two copies of Contract No. I-lp-16179 for insertion in Docket No. 1.

We believe that these instruments will permit you to correct some misunderstandings which Mr. Carter has suggested. In the intent of the concession contract may be read the obligation of National Park Concessions, Inc., to insist that its sublessee's operations conform to an approved plan for both farm and resort areas, that the cottonwood should be protected, and that the concession contract carries with it the requirement that this care be exercised by the concessioner, not in specific terms, but generally under Section 5 of the contract.

However, we do not see that Section 5 makes it mandatory that Mr. Beckett will pump all water from the Rio Grande. The concessioner should be reminded gently of his responsibilities as set forth in the preceding paragraph, if necessary, when this Service is ready to proceed with its planting program.

(SGD) CHARLES A. [illegible]

Acting Assistant Director

In duplicate

Attachments 4

In reply refer to:
L54 BIG-L

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

March 20, 1952

Memorandum

To: Director

Through: Chief of Lands

From: Chief, Water Resources Branch

Subject: Operation of the Wedin Ditch on the Daniels Ranch Area, Big Bend National Park

In the memorandum of March 6 to the Regional Landscape Architect, concerning planting in the subject area, Mr. Carter expresses regret that "there is no guarantee that this planting will receive the care necessary for its permanent survival," and recommends that a pump be installed as soon as electric power is available in case the farm project terminates. Although the agreement between the National Park Concessions and B. F. Beckett, of October 7, 1950, is not entirely in accordance with Mr. Demaray's memorandum of August 14, 1950, to the Regional Director, I believe we have ample guarantee that water will be available without the installation of another pump, but there is some ambiguity as to who shall operate the pump, and pay for fuel, when water is not needed on the "farm" lands.

On the assumption that copies of this memorandum will be forwarded to the Region, two copies of the Concession Contract I-lp-18179 are attached. These should be inserted just below the copies of the aforesaid agreement between the concessioner and Mr. Beckett in Big Bend Water Right Docket No. 1. I am also transferring my copy of Mr. Demaray's memorandum from my letter file to my assembly of the docket, placing it between the concession contract and the Beckett agreement. I recommend that the Regional Director and the Superintendent provide similar copies for their docket assemblies, because the three instruments seem to be essential to define the Federal intent and the ambiguity to which I have referred.

Paragraph 4 of the concession contract provides that all structures and improvement acquired by the operator shall become

the property of the United States. Paragraph 9 provides that the Secretary shall provide utilities at reasonable rates when available, and that the operator may provide additional facilities when Federal facilities are inadequate. Paragraph 16 provides for minor repairs, and the neat and orderly maintenance of the area surrounding the operations.

The Secretary provided the Wedin Ditch, in poor condition, and appurtenant water rights under Application 978, Permit 927. By the date of the Beckett agreement, he also had a one-second-foot pump in operation, regardless of whether it was installed by the United States or the concessioner.

Section 7 of the Beckett agreement provides that Mr. Beckett shall be bound by all terms of the concession contract. In accordance with that contract, and Section 6 of the agreement, Mr. Beckett must maintain the grounds and water system, and return the property to the United States on contract termination, in good condition except for reasonable wear and tear. Under Sections 2 and 3 of the agreement, Mr. Beckett must expand the irrigation system. He has done this by replacing the one-second-foot pump with one of seven-second-foot capacity.

Section 5 of the agreement seems to provide general agreement that Mr. Beckett will pump all water from the Rio Grande to the extent authorized by the water right (780 acre-feet per year). However, related Section 3 of the agreement is more specifically directed at farm operation than was intended in the instructions in the portion of Mr. Demaray's memorandum which relates to an earlier Condition 14.

Even though the exact terms outlined in Mr. Demaray's memorandum are not incorporated in the agreement, I am reasonably certain they were fully discussed, and that all parties to the negotiations are fully aware that the National Park Service will demand that irrigation water be pumped by Mr. Beckett or the concessioner, to the extent needed for planting of the type now proposed. It is significant that the National Park Service is only under contract with the concessioner, that the concession contract is general, and that there is no specific agreement between this Service and the concessioner concerning the rather unique conditions at the Daniels Ranch Area.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

Our copy of Docket No. 1 is attached for your convenience. I suggest that the Chief Counsel consider the adequacy of the existing instruments, and the intent in Mr. Demaray's memorandum, and define any further needs to obtain the desired operating procedure.

(SGD.) A. VAN V. DUNN

A. van V. Dunn
Chief, Water Resources Branch

Attachments 3

09-01-1950: special use permit: no. 1-5np-99

W22 19B16B

No. I-5np-99

YEAR, 1950

10—114
(November 1937)

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Big Bend National Park

RECEIVED NOV 1950 National Park Service Region 1 Office

SPECIAL USE PERMIT

NATIONAL PARK CONCESSIONS, INC., a corporation organized and existing under the laws, of the STATE OF DELAWARE, is hereby authorized during the term of one year from September 1, 1950, to December 31, 1950, to use the following-described land in the above-named park: The land suitable for irrigation purposes, located in Sections 4 and 5, Block G-19, generally referred to as the Daniels Ranch Field, bordering the Rio Grande about two miles east of Hot Springs. The exact acreage is not known, but believed not to exceed three hundred twelve (312) acres as shown in water rights application

for the purpose of pasturing saddle stock authorized for use in the park and growing forage crops necessary in connection with the enjoyment of the basic Concession Contract I-lp-18179,

subject to the conditions on the reverse hereof and to the payment to the Government of the United States of the sum of One and 00/100 dollars ($ 1.00), in advance, or as follows: .....

....., payment to be made through the Superintendent of the Park by express or postal money order, certified check, or draft payable to Treasurer, United States.

Signed at Big Bend National Park, this 4th day of September, 1950

Ross A. Maxwell
Ross A. Maxwell *Superintendent.*

The undersigned hereby accepts the above permit and the right to exercise the privileges granted, subject to the terms, covenants, obligations, and reservations, expressed or implied, therein.

Two witnesses to signatures:

Margaret Bridwell
Address Cave City, Kentucky

Nina Williams
Address Horse Cave, Ky.

H. S. Sanborn
H. S. Sanborn, President & General Manager
National Park Concessions, Inc.
Address Mammoth Cave, Ky

APPROVED: DEC 15 1950

/s/ D. R. Patrick
Acting Regional ~~Director~~ *Associate Director, National Park Service.*

[Incoming]

*Sign name or names as written in body of permit; for copartnership, permittees should sign as "Members of firm"; for corporation, the officer authorized to execute contracts, etc., should sign, with title, the sufficiency of such signature being attested by the secretary, with corporate seal, in lieu of witnesses.

16—35968-1

Director, Final Opinions and Orders File

SPECIAL CONDITIONS OF THIS PERMIT

1. Permittee shall exercise this privilege subject to the supervision of the Superintendent of the Park and shall comply with the regulations of the Secretary of the Interior governing the park.

2. Use by the permittee of the land covered hereby is subject to the right of the Director, National Park Service, to establish trails, roads, and other improvements and betterments over, upon, or through said premises, and further to the use by travelers and others of such roads and trails as well as of those already existing.

3. No building or other structure shall be erected under this permit except upon plans and specifications approved by the Director, National Park Service, and the premises and all appurtenances thereto shall be kept in a safe, sanitary, and sightly condition.

4. Permittee shall dispose of brush and other refuse as required by the Superintendent.

5. Permittee shall pay the United States for any damage resulting from this use.

6. Permittee and his employees shall take all reasonable precautions to prevent forest fires and also shall assist the Superintendent to extinguish forest fires in the vicinity of any tract which may be used hereunder, and in the preservation of good order within the metes and bounds of the park.

7. No timber may be cut or destroyed without first obtaining permit therefor from the Director, National Park Service, in writing.

8. This permit may not be transferred or assigned without the consent of the Director, National Park Service, in writing.

9. This permit shall terminate upon the violation of any of the conditions hereof or of any Act of Congress or regulation of the Secretary of the Interior governing the park or anything in it, or at the discretion of the Director, National Park Service.

10. Neither Members of, nor Delegates to Congress, or Resident Commissioners, officers, agents, or employees of the Government shall be admitted to any share or part of this permit or derive, either directly or indirectly, any pecuniary benefit to arise therefrom.

11. Fencing necessary for the enjoyment of this use and for the protection of the lands, crops, and livestock involved, shall be constructed and maintained by and at the expense of the permittee. Such fencing, however, shall be only of a type and on a location approved in advance by the Park superintendent. Within 30 days after the termination of this permit, all fencing shall be removed by and at the expense of the permittee and to the satisfaction of the Park superintendent. Any fencing remaining in place after the expiration of the said 30 days shall become the property of the United States.

12. (a). Insofar as funds are available, the National Park Service agrees to furnish adequate pumping equipment and pipe lines, and maintain them in good mechanical condition. Should Federal funds not be available for such installation and maintenance, the permittee may make such installations or repairs according to plans approved by the Regional Director, and agrees to convey all interest thereto to the United States at cost upon request of the Director of the National Park Service.

(b). The permittee or its assignee agrees to rehabilitate and maintain the existing ditches and flumes as well as to construct and maintain any additional ditches and flumes needed for the proper distribution and use of the water, and such ditches and flumes shall become the property of the United States without recompense.

(c). The permittee or his assignee shall assume all costs of operating the pump unit and irrigation system except as specified in condition 14 (d).

(see continuation sheet)

U. S. GOVERNMENT PRINTING OFFICE 16—48008-1

13. All diversion and use of water shall conform to the rights being perfected by the United States under Application No. 978, Permit No. 927, or as the United States may amend such rights, said rights being limited to 780 acre-feet of water per annum.

14. (a). The permittee or its assignee shall improve and irrigate so much of the tract of approximately 312 acres designated in aforesaid permit, or lands adjacent thereto, as is practical with the available supply of water, and the National Park Service agrees to amend the water rights as needed to change the place of use in conformity with such development.

(b) The permittee agrees to supply the superintendent with a record of the areas planted to different types of crops, and the irrigation schedule followed, in order that the water rights may be amended and perfected.

(c). The United States reserves the right to pump water from the underground flow of the Rio Grande for domestic purposes under the same water rights, in quantities not to exceed 10 acre-feet of water per year, and the 780 acre-feet available for irrigation shall be reduced accordingly.

(d). The National Park Service reserves the right to improve and irrigate lands not cultivated by permittee or its assignee where practical and desirable, on payment of the proportionate share of the cost of pump operation.

(e). The permittee or its assignee may sell any hay grown on the land covered by this permit in excess of the need therefor with the understanding, however, that the authorization for the "growing of forage crops" is not to be construed to mean that such crops are to be grown for general commercial purposes.

15. The permittee shall submit an annual report, in triplicate, by December 1 of each year, indicating the number of acres irrigated, and planted; and the maximum and average daily guests and employees dependent on the domestic water system during the peak month of travel.

16. The permittee shall maintain the fertility and stability of the land by proper land use practices to be outlined and agreed upon under a detailed Land Use plan.

17. The permittee shall take adequate measures as directed and approved by the superintendent to arrest and prevent soil erosion on the lands covered hereby and shall so utilize such lands as not to contribute to erosion on adjoining lands.

18. The privilege of pasturing saddle stock and growing forage crops therefor is transferrable by the permittee to any authorized saddle horse subconcessioner, notwithstanding the terms of Condition No. 8 above.

19. All uranium, thorium, and all other materials determined pursuant to section 5(b)(1) of the Atomic Energy Act of 1946 (60 Stat.761) to be peculiarly essential to the production of fissionable material, contained, in whatever concentration, in deposits in the lands covered by this contract are hereby reserved for the use of the United States, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and prospect for, mine, and remove the same, making just compensation for any damage or injury occasioned thereby.

* ~~20. This permit may be cancelled by either party within 90 days upon written notice.~~

* 20. ~~21.~~ This permit shall be automatically renewed each year upon receipt of a written request from the permittee and upon payment in advance of the required fee, unless terminated pursuant to the condition ~~next~~ one above; provided, however, that this permit is not renewable beyond December 31 1961, the date of expiration of the basic Concession Contract I-lp-18179.

* Original Condition No. 20 deleted and Condition No. 21 renumbered Condition No. 20. See Mr. Sanborn's statement attached stipulating the change.

09-04-1950: conflict with condition 9; september 04, 1950

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

Big Bend National Park
Texas

Since Condition No. 20 of Special Use Permit No. I-5np-99 conflicts with Condition 9 of the permit, it is hereby agreed that Condition No. 20 be deleted and that the present condition No. 21 be changed to No. 20.

H. S. Sanborn, President and General Manager, National Park Concessions, Inc.

Robert F. Gibbs, Acting Supt. Big Bend National Park

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

In reply refer to:
L3015 BIGB

Big Bend Head 2

March 5, 1951

Memorandum

To: Regional Director, Region Three

From: Acting Chief of Public Services

Subject: Agreement Between National Park Concessions, Inc. and B. F. Beckett concerning use of Daniels Ranch Field, Big Bend National Park.

We have a copy of Mr. Patraw's letter of January 31 transmitting to the General Accounting Office the original signed agreement between the above concerning the use of the Daniels Ranch Field by Mr. Beckett.

In Section 7 of the agreement the special use permit, under which NPC is authorized to use this land, is shown to be dated September 1, 1950, whereas our copy of the permit is dated September 4. We should also like to suggest that it is unnecessary to forward a copy of such a document to the General Accounting Office as there is no provision for funds accruing to the United States thereunder.

(Sgd) George B. Hartzog, Jr.

Acting Chief of Public Services

In duplicate

GBHartzog:jh

01-31-1951: letter re: attached signed copy of agreement; january 31, 1951

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Region Three
Santa Fe, New Mexico

January 31, 1951

General Accounting Office
Audit Division
Washington 25, D. C.

Gentlemen:

There is attached the original signed copy of an agreement between the National Park Concessions, Inc., holder of Special Use Permit No. I-5np-99, and Mr. B. F. Beckett, entered into for the benefit of the Government in support of Water Right Permit No. 927.

This agreement, which has the approval of this office, dependent upon the life of the above permit, should be attached to the permit.

Sincerely yours,

(SIGNED)
P. P. Patraw
Acting Regional Director

Enclosure

Copy to: Director (3), each with copy of agreement
Supt., Big Bend (2), each with copy of agreement

C O P Y

AGREEMENT TO PREPARE LAND FOR FORAGE CROP AND
TO IRRIGATE SUCH CROP

THIS AGREEMENT made and entered into this 7th day of October, 1950, between National Park Concessions, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, hereafter called the lessor, the first party, and B. F. BECKETT, of the County of Brewster, State of Texas, hereafter called the sub-lessee, the second party.

WITNESSETH:

That the second party hereto agrees to clear and to level according to contour and seed to a forage crop, to the satisfaction of the first party, not more than 312 acres, for the growing of forage crops for hay and/or for pasturage of saddle horse stock, of the land suitable for irrigation purposes, located in Sections 4 and 5, Block C-19, generally referred to as the Daniels Ranch Field, bordering the Rio Grande about two miles east of Hot Springs, during the summer and fall of 1950 and the year 1951. The abovementioned acreage for hay and pasturage may be increased by mutual arrangement. It is further agreed that where the land is too level or flat for the proper flow of water, such land as is proposed to be placed under irrigation may be leveled and dyked so that it can be properly flooded.

SEC. 2. The second party further agrees that before the first day of September, 1952, he will restore present ditches and flumes and construct the necessary additional ditches and flumes necessary to demonstrate that water can be distributed over the land to be irrigated

as provided in this contract and will produce forage growing crops upon at least 150 acres of the land covered by this agreement.

SEC. 3. That the second party will, during the existence of this agreement, in addition to the placing of the land in cultivation, care for all crops of hay which are raised upon said premises and pay for the leveling and seeding of the ground and all expenses incident to the irrigation of such land, including the cost of pumping and delivering water upon the land, the operation and maintenance of pumping and power equipment and minor repairs thereto. The second party also agrees to pay all operating expenses in farm operations, as well as in the operation of the irrigation system, including the cost of rehabilitation of the present ditches and flumes and the cost of additional ditches and flumes necessary for the distribution of water to the land irrigated in the growing of forage crops.

SEC. 4. The second party hereby agrees to provide the fencing necessary for the protection of the lands, crops, and livestock which shall be constructed and maintained at the expense of the second party. Such fencing, however, shall be of a type and on a location approved in advance by the Superintendent of Big Bend National Park. Within 30 days after the termination of this agreement, all fencing shall be removed by and at the expense of the second party to the satisfaction of the said superintendent. Any fencing remaining in place after the expiration of the said 30 days shall become the property of the United States.

SEC. 5. It is understood and agreed that the second party may pump water from the Rio Grande under rights now owned or to be

provided by the United States under Water Right Permit No. 927 without reimbursement to the first party or the Federal Government for such water used.

SEC. 6. The party of the second part will keep the premises covered by this agreement in good repair, and will keep the premises and appurtenances and all things connected therewith, including the irrigation system, in a clean and healthy conditionand in good repair according to the direction from the superintendent of Big Bend National Park during the term of this agreement at his own expense; and upon the termination of this contract (in any way) will yield up the said premises to the first party in good condition, loss by fire or ordinary wear and tear excepted.

SEC. 7. It is expressly understood that the first party is not the owner of the premises herein sub-leased but holds a permit for the use of the property of which the sub-leased premises are a part and this sub-lease is on the condition that it is and shall at all times remain subject to all the terms and condition of such underlying use-permit to the first party insofar as applicable to the premises herein sub-leased. Copy of such underlying use-permit issued by the National Park Service of the Department of the Interior to the first party, dated September 1, 1950, is hereby attached and made a part of this agreement.

SEC. 8. The second party agrees to save the first party harmless and indemnified from all loss, damage, liability, or expense incurred or claimed by reason of the second party's neglect of the use of the premises, or by reason of any injury or damage to persons or property therein or by reason of any breach of any condition of this

agreement wherein the first party would become liable to the Federal Government by reason of its special use-permit entered into with the National Park Service.

SEC. 9. The second party, concurrent with the delivery of this agreement will execute and deliver to the first party a surety bond in the sum of Five Thousand($5000.00) Dollars, which bond shall be conditioned to secure the due and punctual performance of all obligations of the second party hereunder in accordance with the terms of this agreement.

SEC. 10. This contract may be terminated by the first party upon the violation of any of its conditions upon ninety (90) days' written notice by the first party to the second party.

SEC. 11. This contract shall be automatically renewable each year upon receipt of written request from the second party to the first party for a period not to exceed the expiration date of National Park Concessions, Incorporated, basic permit No. I-lp-18179, which is December 31, 1961, unless terminated pursuant to the provisions of this contract or by termination of the Special Use Permit issued by the National Park Service in accordance with the terms and conditions of such permit; since this sub-lease agreement is predicated upon the continuation of the aforesaid special use permit.

In Testimony Whereof, the second party has hereunto subscribed his name on this, the 7th day of October, 1950, and the first party has caused these presents to be executed by the President and General

Manager thereunto duly authorized and the execution of this instrument is attested by the corporate seal, and the same is executed in duplicate originals.

Witnesses

/s/ B. F. Beckett
Second Party

/s/ Ross A. Maxwell
Ross A. Maxwell

/s/ Robert J. Smith
Robert J. Smith

NATIONAL PARK CONCESSIONS, INC.
BY /s/ H. S. Sanborn
President and General Manager

(SEAL)

Attest:

/s/ Beulah B. Sanborn
Secretary

APPROVED
(SGD) /S/ P. P. Patraw
ACTING REGIONAL DIRECTOR

DATE JAN 31 1951

UNITED STATES
DEPARTMENT OF THE INTERIOR
National Park Service
Chicago 54, Illinois

February 29, 1944.

MEMORANDUM for the Secretary.

Anticipating the formal establishment of the Big Bend National Park in the near future consideration is being given to the need for facilities for the public in that area. We have made a study of the future requirements for public facilities and provision will be made to include some of them in a postwar development program.

For the present, the only facilities available in the area consist of the few small ranches and cabin developments which have been in the area for some time and a few cabins constructed by the Civilian Conservation Corps when the area was being operated as a State park. These cabins, with the former privately owned facilities, are sufficient to provide minimum accommodations for the public for the next year or two if they can be placed under the management of an experienced concessioner to operate.

In view of the Department's policy that concession operations in the national park areas should be handled by a non-profit corporation, wherever possible, we desire to request National Park Concessions, Inc., to take over the operation of the present available facilities for the public in the Big Bend National Park when it is established.

General authority for National Park Concessions, Inc., to operate in national park areas is contained in Section 2 of Contract I-lp-18179, a copy of which is attached, which reads in part as follows:

> "(a) To establish, maintain, and operate transportation service, hotels, lodges, cabins, coffee shops, gasoline filling stations, and other facilities as deemed necessary, in the judgment of the Secretary, for the accommodation of the public in such area or areas under the administration of the National Park Service, Department of the Interior, as shall be designated by the Secretary."

It is recommended that the Big Bend National Park be designated as an area in which National Park Concessions, Inc., shall furnish facilities for the public, and that it be authorized to take over, by assignment from the National Park Service, all government-owned concession facilities.

(Sgd.) Hillory A. Tolson
Acting Director.

Approved: March 9, 1944.

(Sgd.) OSCAR L. CHAPMAN
Assistant Secretary.

6473

I-lp-18179

THIS CONTRACT, made and entered into this 1st day of April 1942, by and between the United States of America, acting in this behalf by John J. Dempsey, Under Secretary of the Interior, party of the first part, and hereinafter referred to as the Secretary, and the National Park Concessions, Inc., a corporation organized and existing under the laws of the State of Delaware, party of the second part, hereinafter referred to as the Operator,

WITNESSETH: That pursuant to the authority contained in the Act of Congress approved August 25, 1916 (39 Stat. 535), establishing the National Park Service, and other laws supplemental thereto and amendatory thereof, the said parties have covenanted and agreed and by these presents do covenant and agree to and with each other and in consideration of the mutual promises herein expressed, as follows:

1. TERM OF CONTRACT. This contract shall be for and during the term of twenty years from January 1, 1942.

2. FACILITIES AND SERVICES AUTHORIZED. The Operator is hereby authorized and empowered under such a tariff or schedule of charges as is provided in Section 12 hereof:

(a) To establish, maintain, and operate transportation service, hotels, lodges, cabins, coffee shops, gasoline filling stations, and such other facilities as are deemed necessary, in the judgment of the Secretary, for the accommodation of the public in such area or areas under the administration of the National Park Service, Department of the Interior, as shall be designated by the Secretary.

(b) To sell in such designated areas, gasoline, oil and automobile supplies, meals, lunches, magazines, post cards, photographs, souvenirs, curios, confectionery, ice cream, soft drinks, cigars, cigarettes, tobacco, and such other articles as are deemed necessary in the judgment of the Secretary for the convenience of the visiting public.

Nothing in this contract, however, shall be construed to prevent the Secretary, in his discretion, from restricting or eliminating any of the facilities or accommodations specifically authorized to be established, maintained, and operated under the terms of this contract, nor from permitting the production, exhibition and sale of their handicraft by native Indians and native mountain people, under the supervision of the National Park Service as a part of its educational program for the entertainment of visitors to the areas.

3. TRANSPORTATION. It is expressly understood and agreed that in the event automobile sightseeing service or saddle horse transportation is authorized under the terms of this contract, no exclusive rights as to business originating outside of the area or areas are conferred upon the Operator and the Secretary may, in his discretion, authorize automobile and saddle horse operators, located outside the area or areas covered under the terms of this

contract, to conduct therein, under such regulations as he may prescribe, automobile and saddle horse business originating outside of such areas.

4. USE AND OWNERSHIP OF FACILITIES. The Secretary hereby agrees to assign to the Operator for the term and purposes of this contract, in the areas designated by him, such pieces and parcels of land including such buildings as may be located thereon, with such accompanying furniture, fixtures, supplies and equipment as may be designated by the Secretary in the exercise of his judgment and discretion from time to time, as necessary for use in connection with the conduct of operations hereunder and for the erection of buildings and other structures and improvements when deemed necessary or desirable by the Secretary; PROVIDED, HOWEVER, that, it is the intent of the parties to this contract that all the buildings, structures and permanent improvements erected or acquired by the Operator shall become the property of the United States. In conformity therewith the Operator agrees, from time to time, when such assets are no longer necessary as security for loans or other financial purposes, as determined by the Secretary, to transfer the title to such assets to the United States, without cost to the Federal Government. If and when such action is taken, the Operator shall be authorized to carry the net value of the assets so transferred as a deferred asset to be amortized annually as an expense of operation over such a period of years as may be approved by the Secretary.

5. METHOD OF OPERATION. It is the primary purpose of this contract to authorize the Operator to handle such concession facilities, with accompanying furniture, fixtures, supplies and equipment in the various national parks, national monuments, and other areas under the supervision of the National Park Service designated by the Secretary, as have been constructed by, donated or transferred to, or otherwise acquired by the Federal Government, so that there will be the least possible interference with the scenic or other aspects for which the area was set aside and established, to furnish the public the best services and accommodations possible, consistent with efficient and satisfactory business operations, and, when Government-owned facilities are not available, to furnish with the cooperation, aid and assistance of the National Park Service and other Federal or private agencies, needed additional facilities for the accommodation of the public out of available donations, loans, or the excess of income over expenses after making reasonable provision for future contingencies.

6. PLANS FOR IMPROVEMENTS. Plans and specifications for all structures and improvement of grounds (drives, walks, planting, etc.) shall be prepared or approved by the National Park Service. If the plans and specifications are prepared by the National Park Service, the Operator shall pay the actual cost to the Federal Government of furnishing them when Federal funds are not available for expenditure for such purpose.

7. RIGHT TO ENTER PREMISES. The Secretary shall have the right at all times to enter upon and construct, maintain and operate roads, trails, paths, bridges, automobile parking spaces, toilet houses and other sanitary facilities, electric, telephone, telegraph, water and sewer lines over any and all of the pieces and parcels of land, the use of which is assigned to the Operator.

8. USE OF TIMBER. The Operator is authorized, upon the approval of the National Park Service official in charge of the area covered by this contract first obtained, and under his supervision, and when in his discretion it is deemed available without detriment to the area, to use dead or fallen timber for fuel and other purposes incident to the operation of its lodges and camps, etc., provided that all slashings must be cleared and burned to the satisfaction of the official in charge of the area and provided, further, that where supervision of such resources if necessary, a charge to cover the cost of such supervision may be made.

9. UTILITIES. The Operator shall procure from the Secretary when available and at reasonable rates to be hereafter determined by the Secretary, water, electric energy, telephone, telegraph, and sewage disposal services, at and between its various operations in the area or areas covered by this contract, provided, however, that should any such services not be available or sufficient, the Operator may, with the approval of the Secretary, and under such regulations as may be prescribed by him, provide the same at its own expense from sources outside such area or areas.

It is understood and agreed, however, that the Government, in the administration of the area or areas covered by this contract, will provide all utility service, such as water, sewage, electricity and telephone, whenever practicable and when appropriations for that purpose have been made available sufficiently in advance of the needs therefor.

The Operator hereby covenants and agrees:

10. FACILITIES AND SERVICES. That it accepts and will observe the terms of this contract and will establish, maintain and operate such transportation service, hotels, lodges, cabins, camping facilities, and coffee shops, gasoline filling stations and such other facilities as may be authorized by the Secretary, and furnish such plant, personnel, and equipment, goods and commodities to such extent and in such manner as may from time to time in the judgment of the Secretary reasonably be required for the accommodation and comfort of visitors and in such manner as the Secretary shall deem in every respect satisfactory and designed to promote the object for which the area or areas were created and established; that in all its business relations with the public, its officers and employees will observe a strict and constant impartiality as to rates, services, and in all other respects, and that they will under all circumstances exercise courtesy and consideration in their relations to the public.

11. FRANCHISE FEE. That it will pay or cause to be paid to the Secretary at his office in the city of Washington, D. C., or to such person and at such place as he may designate, within thirty (30) days after the first day of January of each year during the term of this contract, the sum of One Hundred Dollars ($100), which shall be regarded as an expense for the year for which it is due; and a further sum equal to ten (10) per centum of the net gain arising, on a cumulative basis, by or through the business conducted by it during each calendar year under this contract, such payment to the

Secretary to be made within thirty (30) days after the 31st day of December of each year. Payments under this latter provision shall not be regarded as expenses for the purpose of computing the annual net gain under the terms of this contract

(a) It is expressly agreed and understood that in order to enable the financing of improvements and additional facilities the payment of the amount equal to the aforesaid percentage of net gain which may accrue to the Government at the end of any accountable year under the terms of this contract may be extended or waived in whole or in part by the Secretary, upon application in writing.

(b) The net worth of the Operator at the beginning of operations hereunder shall be determined by the Secretary from a balance sheet to be submitted, showing its assets and liabilities and capital as of that date, accompanied by a schedule describing the items sufficiently in detail to establish clearly their identity and respective values. After this balance sheet shall have been approved and the net worth of the Operator determined by the Secretary, the values of the assets shall not be increased unless through actual additions of value derived from contributions of capital, from borrowings or from earnings, unless with the written consent of the Secretary.

(c) Net gain or loss shall be defined substantially as follows: The net gain or net loss for each calendar year of the Operator shall be held to mean the difference between the total income of the Operator and the total expense defined as follows: Total income for the purpose of this paragraph shall be understood to mean the total amount received, realized, or accruing to the Operator from the sale for cash or credit of services, accommodations, materials, and other consideration made pursuant to the privileges authorized in this contract, including compensation or commissions earned on contracts or agreements with other persons, companies or associations whose merchandise is sold by the Operator. Total expense shall comprise all operating and selling expenses such as are ordinarily incurred in the operation of similar lines of business and shall specifically include any expenditures for maintenance and repair of equipment and buildings owned by the Government and depreciation on equipment and buildings installed by the Operator and not transferred to the Federal Government, at reasonable rates based upon the expected useful life of said property, but without reference to the duration of this franchise; amortization of the asset values the title or ownership of which has been transferred directly or indirectly to the United States, losses incurred by fire, storm or other damage in excess of insurance recovered thereon, interest paid or accrued as a legal liability, insurance expenses and taxes of all kinds paid or legally accrued, including estimated income taxes (in the event the Operator is not exempt from income taxes) credited to reserves at the end of the calendar year; provided, however, that the right is reserved to the Secretary in the case of dispute as to any item or items of income

or expense, to determine whether or not said item or items not herein specifically defined shall be included in determining the net gain or net loss for the purpose of this contract, and his decision in the premises shall be final.

12. APPROVAL OF RATES. That no charges shall be demanded or received from any person by or on behalf of the Operator for any accommodation or service furnished or rendered by it or for anything or article sold by it, except in accordance with a tariff or schedule approved by the Secretary, who shall have the power from time to time to make such alterations and modifications in such schedule or tariff as he may see fit.

13. OPERATOR'S EMPLOYEES. That its employees who come in direct contact with the public, in so far as practicable and if required by the park superintendent, shall wear a uniform or badge by which they may be known and distinguished as the servants and employees of said Operator, and that it will not employ or retain in its services, in any capacity, in the area or areas covered by this contract, or permit to remain upon any of the premises or within any building herein mentioned or provided for, any person declared by the Secretary to be unfit for such employment or otherwise objectionable. All salaries of employees or officers of the Operator paid at a rate of $3,000 per annum or higher must have the approval of the Secretary.

14. ACCOUNTING RECORDS AND REPORTS. That it will maintain such accounting records as may be prescribed by the Secretary and will submit annually to him as soon as possible but not later than ninety (90) days after the close of the calendar year, a report under oath, giving such detail of its business and operations in the area or areas covered by this contract as may be prescribed by the Secretary and such other reports and data as may be required from time to time by the Secretary, who shall have the right to verify all reports from the books, correspondence, memoranda and other records of the Operator.

15. RATES TO GOVERNMENT EMPLOYEES. That it will furnish available accommodations, including transportation, free of charge or at reduced rates to employees of the Department of the Interior visiting the area or areas covered by this contract on official business relating to such areas, and to the executive officers of such area covered by this contract away from their regularly assigned stations, but only upon certification by or presentation of proper credentials signed by the Secretary or by the Director of the National Park Service or his duly authorized representative in charge of such area or areas, but payments made by such employees in the absence of such evidence shall be without prejudice to a refund upon later presentation thereof.

16. MAINTENANCE AND REPAIRS. That it will furnish such necessary minor repairs and maintenance to the buildings and equipment owned by the Government, which are used as part of the concession operations, that shall be required by the Director of the National Park Service, and will keep in a neat and orderly condition the area immediately surrounding the operations.

17. MEDICAL SERVICE. That it will make all reasonable arrangements necessary with any operator authorized by the Secretary to maintain hospital and medical service in the area or areas covered by this contract for the rendition of such medical and surgical treatment as may be required by its employees.

18. TERMINATION OF OPERATIONS. That upon the termination of operations authorized in any area administered by the National Park Service under the terms of this contract, it will vacate the premises when requested to do so by the Secretary. The Secretary may, in his discretion and at such time as he may deem such action necessary for the full protection of the Government, require the Operator to discontinue operations in any area or areas in which operations have been authorized under the terms of this contract, in which event all or any portion of the fixed assets of the Operator in such area or areas shall, upon the request of the Secretary, be transferred to and become the property of the United States.

19. INSURANCE. That it will carry such fire and tornado insurance on all buildings and equipment, Government-owned or otherwise, operated by it under the terms of this contract as may be required from time to time by the Secretary without cost to the Federal Government. It is further understood and agreed that in the event of loss of any building, equipment, etc., by fire or otherwise covered by insurance, the proceeds received from the insurance company or companies shall be applied towards the cost of replacement of such destroyed property or for such other purposes as may be required by the Secretary.

The parties hereto further agree as follows:

20. PERFORMANCE BOND. That the Secretary may, in his discretion and at such time or times as he may deem such action necessary for the full protection of the Government, require the Operator to furnish a joint and several bond in such sum or amount as may be deemed by the Secretary adequate, duly executed to the United States of America, with a satisfactory surety company to be approved by the Secretary, conditioned upon the faithful performance of this contract in all its particulars by the Operator.

21. MORTGAGE AND ASSIGNMENT. No transfer or assignment of this contract or of any interest whatsoever in connection therewith, shall be valid or recognized by the Secretary; and no mortgage shall be executed, or any bonds or other evidences of interest in or indebtedness upon the rights and property of the Operator in the area or areas covered by this contract shall be issued unless for the purposes of installing, enlarging or improving plant and equipment and extending facilities for the accommodation of the public in such area or areas and then only upon prior authorization in each case obtained from the Secretary in writing.

22. RULES AND REGULATIONS. That the exercise of the privileges conferred by this contract shall be subject to the laws of Congress governing the area or areas covered thereby and the rules and regulations promulgated thereunder, whether now in force or hereafter enacted or provided, that wherever

in this contract the Secretary is referred to, the term shall include his duly authorized representative; that in all cases where rights or privileges are granted hereunder, in general or indefinite terms, the extent of the use of such rights or privileges by the Operator shall be determined by the Secretary, and that the mention of specific restrictions, conditions and stipulations herein shall not be construed as in any way impairing the general powers of supervision, regulation or control of the Secretary, which are hereby reserved over all the activities of the Operator hereunder in the area or areas covered by this contract.

23. DISPUTES. Except as otherwise specifically provided in this contract, all disputes concerning questions of fact, interpretation of the terms, the rights conferred upon the parties, the power and authority of the Federal Government, or any other dispute arising under the provisions of this contract shall be decided by the Director of the National Park Service subject to written appeal by the Operator within thirty (30) days to the Secretary, or his duly authorized representative, whose decision shall be final and conclusive upon the parties thereto.

24. OFFICIALS NOT TO BENEFIT. That no member of or delegate to Congress or Resident Commissioner or Government employee shall be admitted to any share or part of this contract or to any benefit that may arise herefrom but this restriction shall not be construed to extend to this contract if made with a corporation or company for its general benefit.

IN WITNESS WHEREOF, the said parties have hereunto subscribed their names and affixed their seals, the day, month and year first above written.

UNITED STATES OF AMERICA

By (Sgd) John J. Dempsey
Under Secretary, Department of the Interior

(SEAL)

NATIONAL PARK CONCESSIONS, INC.

(Sgd) W. W. Thompson
President.

(SEAL)

ATTEST:

(Sgd.) Beulah Brown Sanborn
Secretary.

89304 7

Interior--Duplicating Section--Washington 25, D. C.

Supporting Hydro Data

09-15-1986: letter re: pumping records for the rio grande village and castolon areas of bibe; september 15, 1986

United States Department of the Interior
NATIONAL PARK SERVICE
Big Bend National Park
Rio Grande Wild and Scenic River
Big Bend National Park, Texas 79834

IN REPLY REFER TO:

D5039

September 15, 1986

Mr. Scott Brown
National Park Service
Water Resources Division
301 South Howes Street
Federal Building, Room 335
Fort Collins, Colorado 80521

Dear Mr. Brown:

Enclosed are the pumping records for the Rio Grande Village and Castolon areas of Big Bend National Park. Except where indicated, the information covers the years 1980 through 1986. Enclosed also is a copy of the Rio Grande Watermaster Assessment for the period September 1, 1986 to August 31, 1987.

Sincerely,

Martin C. Ott

Martin C. Ott
Acting Superintendent

Enclosures

09-15-1986: water usage at rio grande village and castolon in gallons pumped from the rio grande river; september 15, 1986

Water Usage at Rio Grande Village and Castolon
in Gallons Pumped from the Rio Grande River.

Gallons Pumped per Year

1980-1986

Year	Gallons	Remarks
1980	185,439,000	Records unavailable for Feb-July
1981	302,008,200	
1982	261,826,360	
1983	232,877,616	
1984	187,538,872	
1985	197,209,680	August records unavailable
1986	129,242,240	Records through August

12-31-1981: water usage at rio grande village in gallons pumped from the rio grande river; 1986

Water Usage at Rio Grande Village in Gallons Pumped from the Rio Grande River.

Monthly Pumping Records, 1980-1986.

Month	1980	1981	1982	1983	1984	1985	1986
January	29,034,900	-0-	-0-	1,722,840	482,160	1,834,560	7,261,800
February		31,488,000	25,374,000	7,497,000	29,282,400	2,475,480	12,761,720
March		17,832,000	8,737,680	7,758,360	3,716,160	5,045,040	10,701,600
April		1,488,000	16,875,000	17,216,640	32,681,040	17,640,000	10,825,000
May		19,680,000	22,704,240	2,110,920	34,456,800	9,555,000	14,629,440
June		7,900,800	12,336,240	22,344,000	1,411,200	25,801,440	7,538,260
July		59,141,100	27,682,440	21,106,140	11,289,600	27,089,160	15,099,840
August	10,635,300	23,237,100	38,648,400	46,912,500	9,996,000		12,259,780
September	57,954,900	54,094,800	51,749,400	23,672,880	12,565,560	3,480,960	
October	48,339,900	-0-	9,831,360	26,624,640	2,304,960	10,595,760	
November	19,554,000	-0-	15,411,480	16,847,376	8,503,752	1,805,160	
December	-0-	40,994,400	3,292,800	5,080,320	1,311,240	6,961,920	
Totals	165,519,000	255,856,200	232,642,360	198,893,616	148,000,872	112,284,480	91,077,440
	afy 507.9	785.1	713.8	610.3	454.1	344.5	279.5

Big Bend Castolon #1 Well Log

Interval	Sample Description
	Alluvium
0-10	Sandy loam, coarse to μ, slightly calcareous, angular, microgranite with inclusions of ore minerals, biotite.
10-20	No sample.
20-30	Sandy clay loam, coarse to μ, angular, micorgranite complex.
30-40	No change.
40-50	Gravelly sandy clay loam, slightly calcareous, sandstone lenses, angular and mottled glaconitic brown clay.
50-60	No change.
60-70	Sandy loam, coarse to fine, subrounded, slightly calcareous, frosted grains, buff clay.
	Pen Formation
70-80	Limestone, nonporous coarse to fine, rounded to subrounded sand inclusions, grey.
80-90	No sample.
90-100	No change.
100-110	No change.
110-120	No change.
120-180	No samples.
	Aguja Formation
180-190	Clay, slightly calcareous, mottled grey to brown.
190-200	No sample.
200-210	No change.
210-240	No samples.
240-250	Sandstone, fine grained, rounded, slightly calcareous, yellow brown to brown.

250-260	Clay, calcareous brown to grey.
260-310	No samples.
310-320	Argillaceous sandstone, fine to μ, rounded calcareous, brown to yellow.
320-350	No samples.
350-360	Silty sandstone, well rounded, well sorted grains colorless to grey.
360-370	Sandstone, fine to medium, mottled grey to buff, with angular chert inclusions.
370-380	Silty sandstone, fine to μ, angular to rounded, crossbedded, calcareous, dark grey.
380-400	No samples.
400-410	Siltstone, angular to subrounded, platy, dark grey.

ROUGH DRAFT

MTrujillo:mf
4/6/83

SAMPLE ANALYSIS OF BIG BEND NATIONAL PARK'S

Castlon #2 Well

Interval	Sample Description
	Soil
0'- 10'	No Sample
10' - 20'	Gravelly sandy loam, rounded to angular, calcareous, loose, yellow and maroon.
	Aguja Formation
20' - 30'	Silty clay, well rounded, calcareous, loose, maroon.
30' - 40'	Silty clay, well rounded, clacareous, mottled grey and maroon.
40' - 50'	Clay, calcareous, brown.
50' - 60'	Clay, calcareous, light brown.
60' - 70'	Clay, calcareous, grey brown.
70' - 80'	Clay, calcareous, mottled maroon and grey.
80' - 90'	Clay, calcareous, brown some peat.
90' - 100'	Clay, calcareous, grey.

INTERVAL (ft)	SAMPLE DESCRIPTION
100' - 110'	No change.
110' - 120'	Silty clay, calcareous, mottled by orange iron stains, grey.
120' - 130'	Silty clay, calcareous, mottled, iron strains, grey, maroon.
130' - 140'	Sandy clay, rounded, calcareous, grey, maroon, calcite veins.
140' - 150'	Clay, calcareous, grey.
150' - 160'	Silty clay, rounded calcareous, grey.
160' - 170'	Silty sandstone, subrounded, calcareous platy, grey black banding.
170' - 180'	No change.
180' - 190'	Argillaceous sandstone, very fine sub rounded, milky sandgrains, maroon clay.
190' - 200'	Argillaceous sandstone, fine sub rounded, mottled grey to maroon.

12-31-1979: survey of ground and surface water use for the calendar year ending december 31, 1979

TEX DEPARTMENT OF WATER RESOURCES
P. O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711

JAN 1980 RECEIVED BIG BEND NATIONAL PARK TEXAS

SURVEY OF GROUND AND SURFACE WATER USE FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1979

TDWR CODE NO. 889520

ORIGINAL
RETURN TO TDWR

UNITED STATES DEPT OF INTERIOR
NATIONAL PARK SERVICE
C/O SUPT.

BIG BEND NATL PARK, TEXAS 79834

CONVERSION FACTORS

1 Acre Foot = 325,851 Gallons
1 Cubic Foot = 7.481 Gallons

Please indicate any changes in name and address or ownership

I. GROUND (WELL) WATER USE

Please answer the following questions if you used or pumped ground water for this location.

A. Number of and location [county(ies)] of water wells owned, operated or leased by you.
5 Wells: 2- K-Bar, 1- Panther Junction, 2- Castolon

B. County(ies) in which water was used Brewster

C. Please complete the following table. Indicate the total quantity (gallons) of ground water purchased from others and the amount that was self-supplied. Self-supplied water is the total quantity produced from wells owned, operated or leased including any water sold to others.

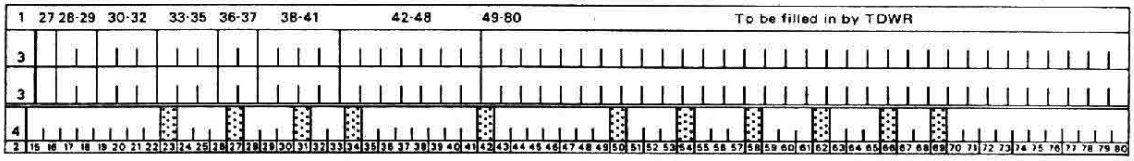
MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED
Jan.	903,700		May	996,100		Sep.	1,063,400	
Feb.	948,000		Jun.	779,800		Oct.	1,003,100	
Mar.	1,115,100		Jul.	1,029,200		Nov.	1,984,600	
Apr.	867,300		Aug.	1,059,500		Dec.	984,700	

Total ground water intake during the calendar year for: Self-Supplied 12,733,700 ; Purchased none

If purchased, from whom

Was purchased water raw ☐ or treated ☐? If both, % raw ____ % treated ____

How did you arrive at the ground water use figures which you provided above?
master meter ☐ customer meters ☐ estimated ☐ other ☒ Estimate based on meter readings.



II. SURFACE WATER USE N/A

Please answer the following questions if you used or diverted surface water for this location.

A. Source of diversion: County(ies)

Name of stream, river, lake, and/or reservoir

B. County(ies) in which water was used

C. Please complete the following table. Indicate the total quantity (gallons) of surface water purchased from others and the amount that was self-supplied. Self-supplied water is the total quantity of raw water you diverted including any water sold to others.

MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED
Jan.			May			Sep.		
Feb.			Jun.			Oct.		

12-31-1977: survey of ground and surface water use for the calendar year ending december 31, 1977

TEXAS DEPARTMENT OF WATER RESOURCES
P. O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711

SURVEY OF GROUND AND SURFACE WATER USE FOR THE
CALENDAR YEAR ENDING DECEMBER 31, 1977

TDWR CODE NO. 689520

ORIGINAL
RETURN TO TDWR

UNITED STATES DEPT OF INTERIOR
NATIONAL PARK SERVICE
C/O SUPT.

BIG BEND NATL PARK, TEXAS 79834

CONVERSION FACTORS

1 Acre Foot = 325,851 Gallons
1 Cubic Foot = 7.481 Gallons

Please indicate any changes in name and address or ownership

I. GROUND (WELL) WATER USE

Please answer the following questions if you used or pumped ground water for this location.

A. Number of and location [county(ies)] of water wells owned, operated or leased by you
Six wells: 2 K-Bar, 1 Panther Junction, 2 Castolon, and 1 Santa Elena.

B. County(ies) in which water was used Brewster

C. Please complete the following table. Indicate the total quantity (gallons) of ground water purchased from others and the amount that was self-supplied. Self-supplied water is the total quantity produced from wells owned, operated or leased including any water sold to others.

MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED
Jan.	685,510	N/A	May	1,293,930	N/A	Sep.	987,950	N/A
Feb.	806,630	N/A	Jun.	1,133,500	N/A	Oct.	912,810	N/A
Mar.	908,870	N/A	Jul.	1,114,770	N/A	Nov.	1,099,622	N/A
Apr.	1,158,480	N/A	Aug.	1,288,380	N/A	Dec.	1,254,658	N/A

Total ground water intake during the calendar year for: Self-Supplied 12,645,310 ; Purchased N/A

If purchased, from whom

Was purchased water raw ☐ or treated ☐? If both, % raw % treated

How did you arrive at the ground-water use figures which you provided above?
master meter ☐ customer meters ☐ estimated ☐ other ☐

1 27 28-29 30-32 33-35 36-37 38-41 42-48 49-80 To be filled in by TDWR

II. SURFACE WATER USE NONE

Please answer the following questions if you used or diverted surface water for this location.

A. Source of diversion: County(ies)

Name of stream, river, lake, and/or reservoir

B. County(ies) in which water was used

C. Please complete the following table. Indicate the total quantity (gallons) of surface water purchased from others and the amount that was self-supplied. Self-supplied water is the total quantity of raw water you diverted including any water sold to others.

MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED
Jan.			May			Sep.		
Feb.			Jun.			Oct.		
Mar.			Jul.			Nov.		
Apr.			Aug.			Dec.		

Total surface water intake during the calendar year for: Self-Supplied , Purchased

If Purchased, from whom

Was purchased water raw ☐ or treated ☐? If both, % raw % treated

How did you arrive at the surface water use figures which you provided above?
master meter ☐ customer meters ☐ estimated ☐ other ☐

1 27 28 29 30-32 33-35 36-37 38-41 42-48 49-80 To be filled in by TDWR

WATER SALES N/A

Please list the names of water purchasers, their location [county(ies)], and the quantities of water you sold to them during the calendar year for
1. all purchasers of 10 million gallons or more, and
2. all public water suppliers regardless of quantity purchased.

Please indicate treated or raw fresh water.

Name of Purchaser	Location (County)	Quantity Sold (Gallons)

Please use additional paper if necessary.

Did you include the above quantities in the amounts you indicated in questions I and II? Yes ☐ No ☐

IV. PUBLIC WATER SUPPLIERS N/A

A. Population served directly by you _____

B. Number of service connections served directly by you _____

C. (If applicable) number of service connections served directly by you outside city limits _____
Are these included in III above? Yes ☐ No ☐

D. Percentage of total service connections that are metered _____%,

E. Percentage of the total service connections that are residential _____%; commercial _____%;
Industrial _____%.

F. If treated effluent is used directly, please indicate the amount in gallons for:
(1) Industrial _____; (2) Irrigation _____; (3) Other (specify) _____
By whom are these amounts used? _____

G. Please provide your water rate schedule in the space below, or attach a preprinted rate schedule if available.

WATER RATE SCHEDULE

Please make any additional comments you may feel will be of assistance to us in understanding your present and future water needs and water problems. _____

To assure our addressing future correspondance to the proper person, please complete the following:

By: Robert C. Haraden	Superintendent	915-477-2251	3/29/78
Name	Title	Phone	Date

Robert C. Haraden

00-00-0000: survey of surface water use 1976

TEXAS WATER DEVELOPMENT BOARD

P. O. Box 13087, Capitol Station
AUSTIN, TEXAS 78711

PLEASE TYPE OR PRINT ALL ANSWERS

SURVEY OF GROUND AND SURFACE WATER USE 1976

Please indicate any changes in name and address or ownership

TWDB CODE NO. 889520

PLEASE NOTE: ALL OF THE FOLLOWING QUESTIONS ARE FOR THE CALENDAR YEAR 1976

I. GROUND (WELL) WATER USE

Please answer the following questions if you used or pumped ground water.

A. Number of and location (county(ies)) of water wells owned, operated or leased by you.
6 wells- 2 K Bar, 1 Panther Jct, 2 Castolon, 1 Santa Elena

B. County(ies) in which water was used Brewster

C. Please complete the following table. Indicate the total quantity (gallons) of ground water purchased from others and the amount that was self-supplied. Self-supplied water is the total quantity produced from wells owned, operated or leased including any water sold to others.

MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED
Jan.	783,290		May	1,336,810		Sep.	1,029,600	
Feb.	526,120		Jun.	1,251,430		Oct.	984,760	
Mar.	1,195,320		Jul.	1,272,670		Nov.	1,289,530	
Apr.	1,215,250		Aug.	1,761,570		Dec.	1,505,510	

Yearly Totals: Self-Supplied 14,151,860 Purchased

If purchased, from whom

Was purchased water raw ☐ or treated ☐ If both, % raw % treated

How did you arrive at the ground water use figures which you provided above?

master meter ☐ customer meters ☐ estimated ☐ other ☐

1 27 28-29 30-32 33-35 36-37 38-41 42-48 49-80 To be filled in by TWDB

3
3
4

II. SURFACE WATER USE

Please answer the following questions if you used or diverted surface water.

A. Source of diversion: County(ies)

Name of stream, river, lake, and/or reservoir

B. County(ies) in which water was used

C. Please complete the following table. Indicate the total quantity (gallons) of surface water purchased from others and the amount that was self-supplied. Self-supplied water is the total quantity of raw water you diverted including any water sold to others.

MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED	MONTH	SELF-SUP.	PURCHASED
Jan.			May			Sep.		
Feb.			Jun.			Oct.		
Mar.			Jul.			Nov.		
Apr.			Aug.			Dec.		

Yearly Totals: Self-Supplied Purchased

If purchased, from whom

Was purchased water raw ☐ or treated ☐ If both, % raw % treated

How did you arrive at the surface water use figures which you provided above?

master meter ☐ customer meters ☐ estimated ☐ other ☐

1 27 28-29 30-32 33-35 36-37 38-41 42-48 49-80 To be filled in by TWDB

3
3
5

Please list the names of water users, their location (county(ies)), and the quantities of water you sold to them during the calendar year for:

1. all purchasers of 10 million gallons or more, and
2. all public water suppliers regardless of quantity purchased.

Please indicate treated or raw fresh water.

Name and location of Purchaser	Quantity sold (Gallons)

Please use additional paper if necessary.

Did you include the above quantities in the amounts you indicated in questions I and II? Yes ☐ No ☐

IV. PUBLIC WATER SUPPLIERS N/A

A. Population served directly by you_____

B. Number of service connections served directly by you_____

C. Percentage of total service connections that are metered_____ %,

D. Percentage of the total service connections that are residential_____ %; commercial_____ %; industrial_____ %.

E. Please provide your water rate schedule in the space below, or attach a preprinted rate schedule if available.

WATER RATE SCHEDULE

V. SALINE WATER USE N/A

Total saline water intake during the calendar year_____ (gallons).

Source of saline water_____ County(ies) in which water was used_____

How did you arrive at the saline water figures which you provided above? meter ☐ estimated ☐

1	27-28	29	30-32	33-35	36-37	38-41	42-48	49-80	To be filled in by TWDB
3									
7									

VI. INDUSTRIAL AND COMMERCIAL ESTABLISHMENTS N/A

A. Type of business (Standard Industrial Classification) or major products manufactured or type of commercial activity_____

B. Total number of employees at this installation_____

C. Was fresh water intake recirculated? Yes ☐ No ☐

If Yes, how much_____ (gallons).

D. What quantity of fresh water intake was consumed and therefore not returned to a sewage system or water course_____ (gallons).

By: Name Cone J. Bala — Acting Superintendent, Big Bend Nat'l Park, TX 79834 2/18/77

Title

12-31-1976: survey of ground and surface water use for the calendar year ending december 31, 1976

TEX DEPARTMENT OF WATER RESO ES
P.O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711

Copy to WR Hydrologist 2-1-77 CKS

SURVEY OF GROUND AND SURFACE WATER USE FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1976

TDWR CODE NO. 889520

UNITED STATES DEPT OF INTERIOR
NATIONAL PARK SERVICE
C/O SUPT.

BIG BEND NATL PARK, TEXAS 79834

CONVERSION FACTORS

1 Acre Foot 325,851 Gallons
1 Cubic Foot 7.481 Gallons

Please indicate any changes in name and address or ownership

I. GROUND (WELL) WATER USE

Please answer the following questions if you used or pumped ground water for this location.

A. Number of and location [county(ies)] of water wells owned, operated or leased by you.
six wells - 2 K-Bar, 1 Panther Junction, 2 Castolon, 1 Santa Elena

B. County(ies) in which water was used Brewster County

C. Please complete the following table. Indicate the total quantity (gallons) of ground water purchased from others and the amount that was self supplied. Self supplied water is the total quantity produced from wells owned, operated or leased including any water sold to others.

MONTH	SELF SUP	PURCHASED	MONTH	SELF SUP	PURCHASED	MONTH	SELF SUP	PURCHASED
Jan	943,500	N/A	May	1,297,780	N/A	Sep	1,058,140	N/A
Feb	945,700	N/A	Jun	1,953,310	N/A	Oct	789,020	N/A
Mar	373,080	N/A	Jul	2,111,380	N/A	Nov	770,100	N/A
Apr	1,759,220	N/A	Aug	2,208,200	N/A	Dec	510,610	N/A

Total ground water intake during the calendar year for: Self-Supplied 14,721,940 Purchased none

If purchased, from whom N/A

Was purchased water raw [ ] or treated [ ]? If both, % raw ____ % treated ____

How did you arrive at the ground water use figures which you provided above?
master meter ☐ customer meters ☐ estimated ☐ other ☐

To be filled in by TDWR

II. SURFACE WATER USE

Please answer the following questions if you used or diverted surface water for this location.

A. Source of diversion: County(ies) ____

Name of stream, river, lake, and/or reservoir ____

B. County(ies) in which water was used ____

C. Please complete the following table. Indicate the total quantity (gallons) of surface water purchased from others and the amount that was self supplied. Self-supplied water is the total quantity of raw water you diverted including any water sold to others.

MONTH	SELF-SUP	PURCHASED	MONTH	SELF-SUP	PURCHASED	MONTH	SELF SUP	PURCHASED
Jan			May			Sep		
Feb			Jun			Oct		
Mar			Jul			Nov		
Apr			Aug			Dec		

Total surface water intake during the calendar year for: Self Supplied ____ Purchased ____

If Purchased, from whom ____

Was purchased water raw [ ] or treated [ ]? If both, % raw ____ % treated ____

How did you arrive at the surface water use figures which you provided above?
master meter ☐ customer meters ☐ estimated ☐ other ☐

To be filled in by TDWR

OVER

II. WATER SALES N/A

Please list the names of water purchasers, their location [county(ies)], and the quantities of water you sold to them during the calendar year for
1. all purchasers of 10 million gallons or more, and
2. all public water suppliers regardless of quantity purchased.

Please indicate treated or raw fresh water.

Name of Purchaser	Location (County)	Quantity Sold (Gallons)

Please use additional paper if necessary.

Did you include the above quantities in the amounts you indicated in questions I and II? Yes ☐ No ☐

IV. PUBLIC WATER SUPPLIERS N/A

A. Population served directly by you _____

B. Number of service connections served directly by you _____

C. (If applicable) number of service connections served directly by you outside city limits _____
Are these included in III above? Yes ☐ No ☐

D. Percentage of total service connections that are metered _____ %.

E. Percentage of the total service connections that are residential _____ %; commercial _____ %; Industrial _____ %.

F. If treated effluent is used directly, please indicate the amount in gallons for:
(1) Industrial _____; (2) Irrigation _____; (3) Other (specify) _____
By whom are these amounts used? _____

G. Please provide your water rate schedule in the space below, or attach a preprinted rate schedule if available.

WATER RATE SCHEDULE

Please make any additional comments you may feel will be of assistance to us in understanding your present and future water needs and water problems. _____

To assure our addressing future correspondance to the proper person, please complete the following:

By:	Name	Title	Phone	Date
	Robert C Hayden	Superintendent	(915) 477-2251	2-1-77

TEXAS WATER COMMISSION
P. O. BOX 12311, CAPITOL STATION
AUSTIN, TEXAS 78711

SURVEY OF GROUND WATER PUMPAGE IN TEXAS DURING CALENDAR YEAR 1964

DUPLICATE - RETAIN FOR YOUR FILES

1. County_____

2. Source of Water:

Water Wells_____

Surface Water_____

Other_____

United States Department of the Interior
National Park Service
Big Bend National Park, Texas 79834

TWC Code No. 7265

3. Number of water wells owned and operated by you 8 (K-Bar 3, Panther Junction 1, Lower Basin CCC Wells 2, Castolon 2)

4. Number of water wells owned by others but supplying water to you_____

Names of well owners_____

5. If your records show the amount of ground water pumped by months in 1964 or if you can reasonably estimate the monthly pumpage, please fill in the following table by reporting pumpage in gallons.

Mo.	Total Pumpage for Month in Gallons	Maximum Daily Pumpage for Month in Gallons	Mo.	Total Pumpage for Month in Gallons	Maximum Daily Pumpage for Month in Gallons
Jan	490,275	16,643	July	1,088,777	36,293
Feb	331,664	11,055	Aug	1,033,705	34,457
Mar	596,057	19,869	Sept	1,029,412	34,313
Apr	638,036	21,270	Oct	429,102	14,304
May	736,332	24,544	Nov	416,983	13,900
June	1,059,023	35,300	Dec	767,506	25,583

Total pumpage for year 1964 8,625,922 Gallons

Note: If you have not been able to give the pumpage by months, please show the yearly pumpage for 1964 in the above space.

6. Please check one of the following to indicate how the figures you have provided in item 5 were obtained.

____A. Master Meter X B. Well Meters X C. Average Pumping Rates

____D. Power consumption ____E. Storage Facilities ____F. Other

(See reverse side)

C-35 (62-2)

Name

Title

7. a. Additional well water used by you that is obtained from other cities, industries, water districts, water companies, etc.

Supplier	Quantity in Gallons per Year
NONE	

Is this quantity also reported in item 5? Yes_____ No_____

b. Well water that you supply to other cities, industries, water districts, water companies, etc.

User	Quantity in Gallons per Year
NONE	

Is this quantity also reported in item 5? Yes_____ No_____

8. Are water-level measurements made in your well(s) and recorded? Yes_____ No X

Number of wells measured_____ Number of measurements per year_____

9. The following information is requested to supply data for study by research groups to obtain an index for projection of water-use figures.

a. **To be completed by Municipalities, Water Districts, School Districts, etc:**

Population_____ No. of Services_____

b. **To be completed by Industries:**

Type of Industry_____ No. of Employees_____

c. **To be completed by Commercial Establishments:**

Type of Business_____

Principal Use of Water: Sanitary_____ Air Conditioning_____

Restaurant_____ Swimming Pool_____ Golf Course_____

Other_____

10. Estimated percentage of annual water represented in item 5 that is discharged as sewage or effluent 85 %. Name of stream or point of disposal Septic tanks & Sewage Lagoons

11. To assure that future inquiries are addressed to the proper person, please complete the following:

By Perry E. Brown (Name) Superintendent (Title)

00-00-0000: survey of ground water pumpage in texas during calendar year 1963

Docket No. 5

TEXAS WATER COMMISSION
P. O. BOX 2311, CAPITOL STATION
AUSTIN 11, TEXAS

SURVEY OF GROUND WATER PUMPAGE IN TEXAS DURING CALENDAR YEAR 1963

DUPLICATE - RETAIN FOR YOUR FILES

BIG BEND NATIONAL PARK
PARK ENGINEER
BIG BEND NATIONAL PARK, TEXAS

1. County Brewster
2. Source of Water:
   Water Wells X
   Surface Water
   Other

TWC Code No. 7265

3. Number of water wells owned and operated by you 9, (K-Bar 3, Panther Jct 1, CCC 2, Castolon 1 Dugout 1, Sam Nail 1)
4. Number of water wells owned by others but supplying water to you NONE

   Names of well owners

5. If your records show the amount of ground water pumped by months in 1963 or if you can reasonably estimate the monthly pumpage, please fill in the following table by reporting pumpage in gallons.

Mo.	Total Pumpage for Month in Gallons	Maximum Daily Pumpage for Month in Gallons	Mo.	Total Pumpage for Month in Gallons	Maximum Daily Pumpage for Month in Gallons
Jan	484,733	16,158	July	1,057,065	35,236
Feb	322,004	10,733	Aug	1,003,597	33,453
Mar	578,696	19,290	Sept	999,429	33,314
Apr	619,501	20,650	Oct	416,604	13,887
May	714,885	23,829	Nov	404,838	13,495
June	1,028,178	34,272	Dec	745,151	24,838

Total pumpage for year 1963 8,374,681 Gallons

Note: If you have not been able to give the pumpage by months, please show the yearly pumpage for 1963 in the above space.

6. Please check one of the following to indicate how the figures you have provided in item 5 were obtained.

   ___ A. Master Meter X B. Well Meters X C. Average Pumping Rates
   ___ D. Power consumption ___ E. Storage Facilities X F. Other Estimates on Windmill

(See reverse side)

7. a. Additional well water used by you that is obtained from other cities, industrial water districts, water companies, etc.

Supplier	Quantity in Gallons per Year
NONE	

Is this quantity also reported in item 5? Yes_____ No_____

b. Well water that you supply to other cities, industries, water districts, water companies, etc.

User	Quantity in Gallons per Year
NONE	

Is this quantity also reported in item 5? Yes_____ No_____

8. Are water-level measurements made in your well(s) and recorded? Yes_____ No X

Number of wells measured_____ Number of measurements per year_____

9. The following information is requested to supply data for study by research groups to obtain an index for projection of water-use figures.

a. **To be completed by Municipalities, Water Districts, School Districts, etc:**

Population_____ No. of Services_____

b. **To be completed by Industries:**

Type of Industry_____ No. of Employees_____

c. **To be completed by Commercial Establishments:**

Type of Business_____

Principal Use of Water: Sanitary_____ Air Conditioning_____

Restaurant_____ Swimming Pool_____ Golf Course_____

Other_____

10. Estimated percentage of annual water represented in item 5 that is discharged as sewage or effluent 60 %. Name of stream or point of disposal Septic Tanks & Sewage Lagoons

11. To assure that future inquiries are addressed to the proper person, please complete the following:

By Perry E. Brown (Name) Superintendent (Title)

00-00-0000: memorandum re: water use reports for 1957 calendar year bibe

WESTERN OFFICE
DESIGN & CONSTRU. DEPT
FEB 3 958A.M.
CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND, ARCH.
ACTION TAKEN—DATE

L54 1412

January 30, 1958

Memorandum

To: Director

From: Acting Superintendent, Big Bend National Park

Subject: Water Use Reports for 1957 Calendar Year - Big Bend National Park

Reference is made to Mr. Dunn's memorandum of January 23, 1957, to the Regional Director, Region Three, relating to the above subject.

We have attached to this memorandum a copy of a completed 1957 Water Use Report for Application #978,"Wedin Ditch" and for Spring No. 4 (Wedin Spring) as required by the Texas Board of Water Engineers.

Also included is one set of prints of NP-BB-3030 showing existing ditches. This drawing is not an "As Constructed" plan. It does, however, indicate the majority of the ditches and their approximate location. When "As Built" drawings are complete, one set will be forwarded to you.

Acreage irrigated was calculated by using the measured lengths of ditches and allowing a strip 150 feet wide on either side. This gives a figure of some 316 acres. This seems rather high to me but since we plan to flood irrigate as many areas as possible, the figure is probably satisfactory.

In case we are required to file an additional report on the surface waters sources for the Basin, the following information is given:

	Gals. Pumped	Guests	Employees	Park & Conc.
January	83,709	936	69	
February	83,709	873	69	
March	127,572	1,539	69	
April	136,112	3,559	69	

12-31-1976: big bend national park irrigation record 1956

File: L54

BIG BEND NATIONAL PARK
Irrigation Record 1956
Daniels Ranch Area

1	2	3	4	5	6	7	8
				Place of Use			Remarks
Month	Date	Hours Pumped	Gals. Pumped	Tract No.	Area in Acres	Crop	(indicate irrigation cycle, limits, etc.)
February	20	4	480,000	1.472 a/f	4	Trees	2,000 g./min.
March	5	4	480,000		4	Trees	" "
"	21	4	480,000		"	"	
March	2da.	8hr.	960,000	2.944 a/f	4	Trees	" "
April	10	4	480,000	1.472	"	"	" "
June		4	480,000	1.472 a/f	"	"	" "
July		4	480,000		"	"	" "
"		3	360,000		"	"	" "
July	2da.	7hr.	840,000	2.582 a/f	"	"	" "
August		4	480,000		"	"	" "
"		3	360,000		"	"	" "
"		3	360,000		"	"	" "
"		4	480,000		"	"	" "
"		4	480,000		"	"	" "
"		3	360,000		"	"	" "
August	6da.	21hr.	2,520,000	7.721 a/f	"	"	" "
September		4	480,000		"	"	2,000 g./min.
"		8	144,000		"	"	300 g./min.
"		8	144,000		"	"	" "
"		6	144,000		"	"	" "
"		3	54,000		"	"	" "
September	5da.	31hr.	966,000	2.970	"	"	

...e: L54 Sheet 2 of 5

BIG BEND NATIONAL PARK
Irrigation Record 1956
Daniels Ranch Area

1	2	3	4	5	6	7	8
				Place of Use			Remarks
Month	Date	Hours Pumped	Gals. Pumped	Tract No.	Area in Acres	Crop	(indicate irrigation cycle, limits, etc.)
October	1	8	144,000		4	Trees	300 g./min
"	2	8	144,000		"	"	" "
"	3	9	162,000		"	"	" "
"	23	8	144,000		"	"	" "
"	24	8	144,000		"	"	" "
"	25	8	144,000		"	"	" "
"	26	8	144,000		"	"	" "
"	29	6	108,000		"	"	" "
"	30	7	126,000		"	"	" "
October	9da.	70hr.	1,458,000	= 8.960 a-f	"	"	" "
November	1	8	144,000		4	Trees	300 g./min
"	13	8	144,000		"	"	" "
"	14	8	144,000		"	"	" "
"	15	8	144,000		"	"	" "
"	16	7	126,000		"	"	" "
"	19	8	144,000		"	"	" "
"	20	7	126,000		"	"	" "
"	21	8	144,000		"	"	" "
"	28	8	144,000		"	"	" "
"	29	8	144,000		"	"	" "
"	30	6	108,000		"	"	" "
November	11da	84hr.	1,512,000	= 4.640 a-f			
December	3	8	144,000		4	Trees	300 g./min
"	4	8	144,000		"	"	" "
"	5	7	126,000		"	"	" "
December	3da	23 hr.	414,000	= 1.272 a-f			

Other Supporting Information

BIBE March 25, 1987

Gayle Manges, Regional Solicitor's Office, Southwest Region, called the Water Rights Branch on March 24. He had been contacted by Keith Yarborough, who is our contact for the Southwest Region. Mr. Yarborough was apparently inquiring about the rationale behind BIBE's efforts to change its Rio Grande water rights (1530 afy) from municipal rights to a combination of irrigation and municipal rights.

Mr. Manges said that he had no strong feeling one way or the other; however, it is his recollection that the Park's direct diversion rights from the Rio Grande were identified as municipal rights because that was the recommendation of the Texas Water Commission approximately 10 years ago. He asked if anyone in the Water Rights Branch had given this issue any thought.

I informed Mr. Manges of last December's meeting at BIBE with the Rio Grande Water Master, John Hinojosa, and the Superintendent and his staff. The meeting had been set up for the purpose of discussing the Texas Water Commission's assessment of fees and the placement of flow meters; however, Mr. Hinojosa called our attention to the fact that, according to Texas' water laws, municipal water must be treated water. He suggested that the Park should amend its rights for direct withdrawals from the river to a combination of irrigation and municipal rights, limiting the amount of municipal right to that which the Park expects to treat and use as a potable water supply within the reasonably near future.

I suggested to Mr. Manges that I would review Texas' laws and rules, then contact Mr. Hinojosa again.

The Texas Water Code (Title 2, Subtitle A, Ch. 5, 1971) provides for the appropriation of water and the administration of water rights; however, it does not define municipal water. It merely describes the use of water for municipal purposes as beneficial. (Section 5.002 defines "Beneficial use.") The Rules of the Texas Water Commission (2nd Printing, 1976), which are authorized by Section 6.055 of the Texas Water Code (Title 2, Subtitle A, Ch. 6, 1971), define irrigation and municipal uses as follows:

1) "Irrigation use" is the use of water for the irrigation of crops, trees, and pastureland, including but not limited to golf courses and parks which do not receive water through a municipal distribution system (Section 129.016); and

2) "Municipal use" is the use of treated water within or without a municipality and its environs whether supplied by a person, privately-owned utility, political subdivision, or other entity. It includes the use of treated water for domestic purposes, fighting fires,

sprinkling streets, flushing sewers and drains, watering parks and parkways, and recreational purposes including public and private swimming pools, the use of treated water in industrial and commercial enterprises supplied by a municipal distribution system without special construction to meet its demands, and for the watering of lawns and family gardens (Section 129.019).

I contacted Mr. Hinojosa (512-968-5481) and asked him to iterate his reasons for recommending the amendment. He referred me to the rules of the Commission and added that the Commission is engaged in a process of clearing the books of misnamed water rights. He could find no record of the discussions that were held approximately 10 years ago between the Commission and the Park. He stated that it would be in the Park's interests to amend as soon as possible and in so doing request the Commission's recognition of the higher preference given municipal rights over irrigation rights. The Commission has the authority to recognize the higher preference and may do so in this case, according to Mr. Hinojosa.

I relayed that information to Mr. Manges and he stated that he would contact both Mr. Yarborough and Bob LaFrance at BIBE.

Scott Brown

Notes concerning BIBE

March 10, 1987

Robert LaFrance called and reported the following information:

1. The Rio Grande Water Master visited BIBE recently and a flow measurement was made at one of the diversion sites (either Rio Grande Village or Castolon). A measurement will be made at the second diversion site next month. The Water Master's measurement indicated that the actual volume being pumped is slightly less than the volume calculated from the rated pump capacity and kilowatts registered. However, the Superintendent has decided to have flow meters installed at the two sites. He was apparently persuaded by the Water Master's argument last fall, which pointed out that all other water users along the Rio Grande have been required to install flow meters, and if they were to learn that Big Bend National Park has been excused from the requirement the United States might be subjected to criticism.

2. An application to the Texas Water Commission is being prepared by BIBE to transfer its right of 1530 afy from a municipal right to a combination of municipal and irrigation rights. A total of 30 afy will be applied to the municipal right and 1500 afy will be applied to the irrigation right. (In Texas, any water that is treated is considered municipal water. At both Rio Grande Village and Castolon, the water used to supply the campgrounds and support facilities is either treated or will be treated in the near future.)

3. BIBE is interested in monitoring the flow of water from one of the springs at Rio Grande Village, which is used as a municipal water source as well as a supply of water for the mosquitofish (Gambusia). Mr. LaFrance asked how the Water Rights Branch might assist BIBE in obtaining funds for such a monitoring device and installing it. I suggested that the Superintendent might contact the Region and explore possibilities for funding and I would explore possibilitites with the Branch Chief.

I asked Mr. LaFrance to please send the Water Rights Branch a copy of the application materials and, once the Texas Water Commission acts on the request, a copy of the newly defined water rights.

Scott Brown 3-10-87

D. Scott Brown,
Hydrologist

RIO GRANDE
WATERMASTER ASSESSMENT

ASSESSMENT PERIOD - SEPTEMBER 1, 1986 TO AUGUST 31, 1987

DATE DUE - ON OR BEFORE - OCTOBER 10, 1986

TEXAS WATER COMMISSION
P.O. BOX 13087
CAPITOL STATION
AUSTIN, TEXAS 78711

WATER USE ASSESSMENT - $ 252.45
PREVIOUS BALANCE - $ .00

PAY TOTAL AMOUNT DUE - $ 252.45

ASSESSED FOR 1530.000 ACRE-FEET
PURPOSE OF USE: MUNICIPAL & DOMESTIC

THIS ASSESSMENT IS BASED ON $ .165 PER YEAR FOR EACH ACRE-FOOT OF RECOGNIZED WATER RIGHT WITH A MINIMUM OF $ 50.00 FOR EACH AUTHORIZED USE. NO WATER MAY BE ALLOTTED TO, DIVERTED, STORED OR USED BY ALLOTTEE OR DIVERTER WHO IS PAST DUE IN PAYMENT OF THE ASSESSED COST. IF PAYMENT IS RECEIVED AFTER OCTOBER 10, 1986 THERE WILL BE A $25.00 REINSTATEMENT FEE.

INSTRUCTIONS: SUBMIT PAYMENT WITH THE LOWER PORTION OF THIS ASSESSMENT BILL IN ENVELOPE PROVIDED. PLEASE COMPLETE THE RETURN ADDRESS ON ENVELOPE. IF MORE THAN ONE ASSESSMENT IS BEING PAID, PLEASE RETURN THE LOWER PORTION OF EACH ASSESSMENT BILL. MAKE CHECKS PAYABLE TO: TEXAS WATER COMMISSION.

NOTE: NO PAYMENTS WILL BE ACCEPTED IN WESLACO OR EAGLE PASS OFFICE.

RG3000987-000

YOUR CANCELLED CHECK WILL BE YOUR RECEIPT

U.S. NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NAT'L PARK, TX 79834

TEAR OFF HERE AND KEEP UPPER PORTION FOR YOUR RECORDS

RIO GRANDE
WATERMASTER ASSESSMENT

DUE DATE: OCTOBER 10, 1986

WATER USE ASSESSMENT - $ 252.45
PREVIOUS BALANCE - $ .00

TOTAL AMOUNT DUE - $ 252.45

ASSESSED FOR 1530.000 ACRE-FEET

RG3000987-000

U.S. NATIONAL PARK SERVICE
SUPERINTENDENT
BIG BEND NAT'L PARK, TX 79834

FOR STATE USE ONLY

REFERENCE #----------

CHECK #----------

CHECK AMT.----------

AMOUNT PAID: $ ---------

PLEASE SEND THIS PORTION WITH PAYMENT

December 23, 1986

L54 (479)
SWR/BIBE Water Rights

Memorandum

To: Chief
Water Resources Division

Through: Chief, Water Rights Branch
Water Resources Division

From: Hydrologist, Water Rights Branch
Water Resources Division

Subject: Trip Report (Big Bend National Park, December 7-11)

Purposes: Two purposes were served by this trip. First, a Water Rights Branch representative's presence was requested at a meeting of BIBE officials and the Rio Grande Water Master concerning fees and metering requirements. Second, advice was sought by the Superintendent and the Southwest Regional Office concerning the advisability of acquiring additional water rights on the Rio Grande.

Itinerary

Sunday, Dec. 7	Denver to El Paso Drove to Alpine, Texas
Monday, Dec. 8	Traveled to BIBE Inspected irrigation works at Castolon Chisos Basin
Tuesday, Dec. 9	Met with Superintendent and his staff Inspected springs, Gambusia ponds and irrigation works at Rio Grande Village
Wednesday, Dec. 10	Met with Superintendent, his staff and Water Master Inspected irrigation works at Rio Grande Village with Water Master Traveled to El Paso
Thursday, Dec. 11	Returned via Phoenix

People Contacted

Jim Carrico, Superintendent
Robert LaFrance, Chief of Maintenance
Mike Fleming, Resource Management Specialist
John Hinojosa, Rio Grande Water Master
Jose Luna, Assistant Water Master (Eagle Pass District)

Discussion

Upon arriving at BIBE, I inspected the diversion and irrigation works at Castolon. One pump with a capacity of 1000 gpm withdraws water from a concrete covered cistern located approximately 50 feet from the active channel of the Rio Grande. An 8-inch pipe conveys the water to an open ditch, which distributes water to Cottonwood Campground. The pump is equipped with an electric meter that monitors only that pump. Referring to pumping records that were provided earlier by the Superintendent, I calculated the total yearly volume of water diverted for irrigation at Castolon during the period 1980-1986. Those figures are:

1980	1981	1982	1983	1984	1985	1986
61af	142af	89af	104af	121af	261af	117af

While at Castolon, I also walked to the end of the Santa Elena Canyon Trail, which is noteworthy simply because the hike is such an exhilarating experience.

On Tuesday, I met with Superintendent Jim Carrico, Bob LaFrance, and Mike Fleming. We reviewed the Texas Water Commission's assessment of fees for water master operations on the Rio Grande, the issue concerning flow meters at diversion points, and the availability and desirability of acquiring additional water rights on the Rio Grande.

Following the meeting with the Superintendent, Bob LaFrance, Mike Fleming and I traveled to Rio Grande Village to inspect the park's second irrigation diversion site. It consists of two 1000 gpm pumps; however, the two pumps are seldom, if ever, operated simultaneously. They withdraw water directly from the river and convey it through two 10-inch discharge pipes for a distance of approximately 200 feet. The water empties into a concrete bin and flows to a settling pond. The water is distributed by gravity flow to the campground. As at Castolon, a separate electric meter serves the pumps at Rio Grande Village.

Referring again to pumping records provided earlier, I calculated the total yearly volume of water diverted for irrigation at Rio Grande Village for the period 1980-1986. Those figures are:

1980	1981	1982	1983	1984	1985	1986
508af	785af	714af	610af	454af	344af	279af

We also inspected two warm water springs at Rio Grande Village. Spring No. 1 supplies water to a display pond inhabited by an endangered mosquitofish (Gambusia gaigei). Spring No. 4 supplies water to another Gambusia pond; however, it serves also as the supply of potable water for Rio Grande Village. Mike Fleming emphasized the need for a continuous flow monitoring device at the outflow of Spring No. 4. Should Rio Grande Village's need for potable

water increase in the near future, which is likely to be the case, an accurate measure of the spring's ability to supply that need, as well as the more critical need associated with the Gambusia pond, will be required.

On Wednesday, we met with John Hinojosa and Jose Luna. The Superintendent opened discussions with them concerning the requirement of flow meters and the availability of additional water rights on the upper Rio Grande.

Mr. Hinojosa indicated that the state wants to be flexible whenever possible. But, he suggested there are other factors for the Superintendent to consider in his decision concerning the placement of flow meters: The United States may wish to reconsider its request to be excused from the Commission's requirement in light of the fact that all other water users are being required to purchase and install meters. Those people may resent the fact that the United States has been given special concessions. He added that the devices are not nearly as expensive as some people have thought. He estimated that it would cost the United States about $1200-$1600 to install meters at the two sites.

With respect to the availability of water rights on the upper Rio Grande, the Superintendent indicated that he had been contacted by Mr. Terry Bishop of Presidio, who is seeking to sell 42 acre feet of water. Mr. Hinojosa was aware of the fact that Mr. Bishop has been interested in selling some of his rights, but such a sale is unprecedented in the upper Rio Grande. Downstream, where such transactions have been made rather frequently, water rights have brought as much as $600-$1000 per acre foot. Mr. Hinojosa offered to send information concerning Mr. Bishop's right, as such information is available to the public.

Mr. Hinojosa also pointed out that the Park's water right certificate, which allows 1530 acre feet of Rio Grande water to be diverted each year, apparently identifies municipal purposes only. Since Texas defines municipal water as water that has been treated, he suggested that we may want to amend the certificate.

I called his attention to the Commission's recent fee assessment announcement, which identifies both municipal and domestic purposes. He agreed that a combination of the two purposes would more accurately define the Park's uses. Therefore, he offered to research the issue and communicate his findings to the Superintendent.

After the Superintendent's briefing, Bob LaFrance and I traveled to Rio Grande Village with Mr. Hinojosa and Mr. Luna. There, Mr. Hinojosa was able to inspect the pumping and irrigation works. He seemed to be satisfied at the procedure used to estimate diversions. We showed him the pumping records for the period 1980-1986, which demonstrate that the Park has diverted only about 43 percent of its entitlement during that period.

Mr. Hinojosa felt it was not necessary to travel to Castolon, since the irrigation works there are not significantly different from those at Rio Grande Village. Instead, he proposed to defer any action by either party until next spring. At that time, he would like to return to the Park and

measure the pumping rates at each diversion site when irrigation is actually taking place. Park officials will contact him when pumping is resumed. We returned to the Superintendent's office. The Superintendent agreed with Mr. Hinojosa's proposal to consider carefully the points made at this meeting and defer a decision until spring or summer.

With respect to the advisability of acquiring additional water rights at this time, we had all come to the same conclusion: Less than half of the Park's entitlement of 1530 acre feet is being exercised at this time. An additional 42 acre feet would increase the total right by only 2.7 percent, but at an estimated cost of $25,000 to $42,000. It would appear there is a more urgent need to retain the right to the Park's current entitlement. Texas law authorizes the Water Commission to cancel any portion of a water right that goes unexercised for 10 years.

One final point is noteworthy. Unless a significant number of water rights are cancelled along the upper Rio Grande, there will be no additional appropriations. Therefore, the river's flow should not be reduced except by natural occurrences or the exercise of senior water rights. It follows that it would be neither necessary nor fruitful to devote a portion of the Park's water right to instream flow or seek additional rights for instream purposes.

Upon my return to Fort Collins, I contacted Bill Bramhall and Keith Yarborough in the Southwest Regional Office and conveyed these thoughts to them.

Action Items

1. The Water Rights Branch will request from the Water Master more specific information concerning flow meters (prices, availability, maintenance requirements, etc.). That information will be passed on to the Superintendent.

2. The Park will send to the Water Rights Branch copies of other information that Mr. Hinojosa agreed to send to BIBE:

   a. information concerning Mr. Bishop's water right; and
   b. the Commission's records regarding purposes associated with the Park's rights to Rio Grande water.

3. If an amendment application is in order, the Water Rights Branch will be responsible for initiating the process.

4. Park officials will notify Mr. Hinojosa when pumping resumes in the Spring of 1987. Mr. Hinojosa or one of his assistants will then measure pumping rates. A final meeting will follow, at which time the Superintendent and the Water Master will resolve the issue concerning the placement of flow meters at diversion points within the Park.

Scott Brown

D. Scott Brown

FNP:DSBrown:cs:221-5341:12/22/86:scottll

00-00-0000: letter re: rand office map

RE
APR 18 1977

April 15, 1977

L54(SWR)OM

J. W. McGhee
Water Rights Division
Texas Water Rights Commission
Stephen F. Austin State Office Building
PO Box 13207
Austin, TX 78711

Dear Mr. McGhee:

Your letter of March 11, 1976 to Mr. Gary Moore of our Southwest Regional Office was forwarded to the park for reply.

Somehow the Rand Office map which you had included got separated from the correspondence. Rather than delay further in trying to locate the map, we have identified the diversion points both active and under construction at Rio Grande Village and Castolon.

These points are identified on xerox copies of the current USGS 7.5 min quadrangle maps attached.

Hopefully these will be satisfactory for your use. If not, please let us know and we can send a more complete description relative to existing survey points.

Sincerely,

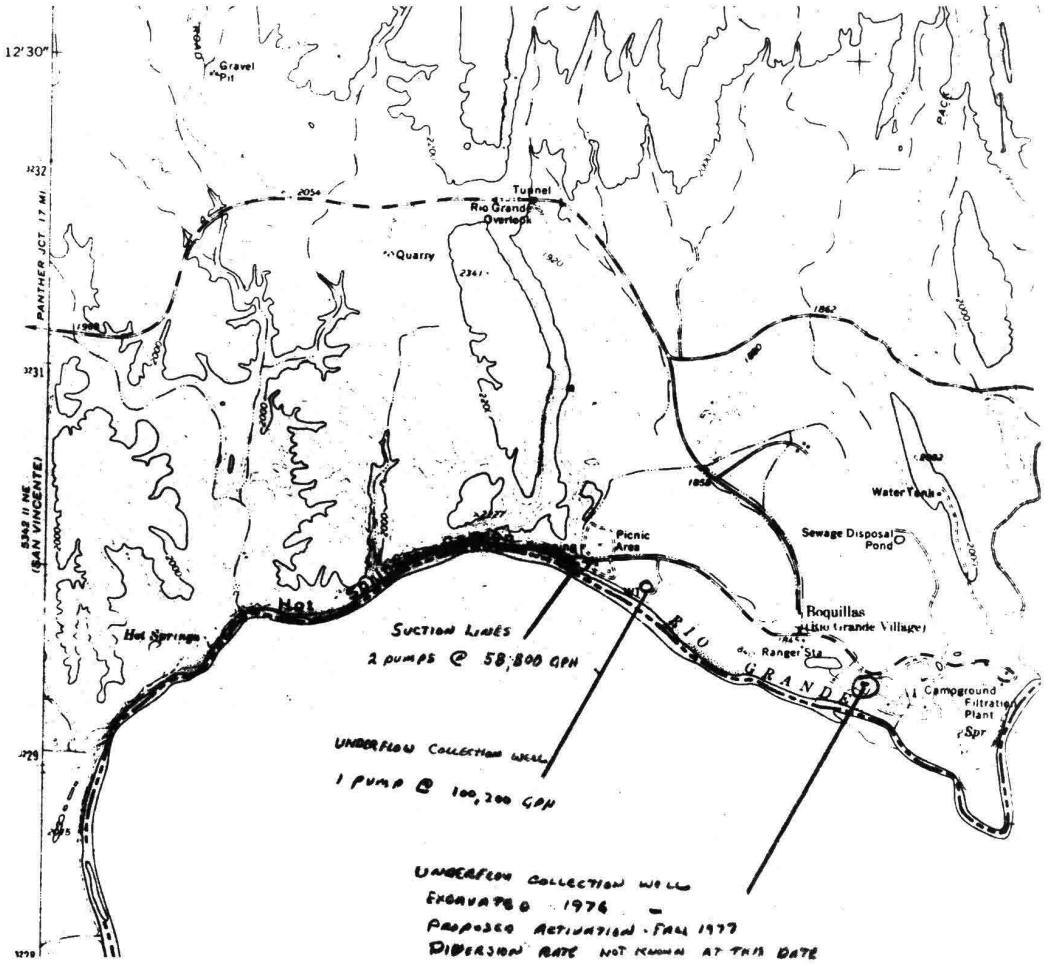
(Sgd) GENE J. BALAZ

Gene J. Balaz
Acting Superintendent

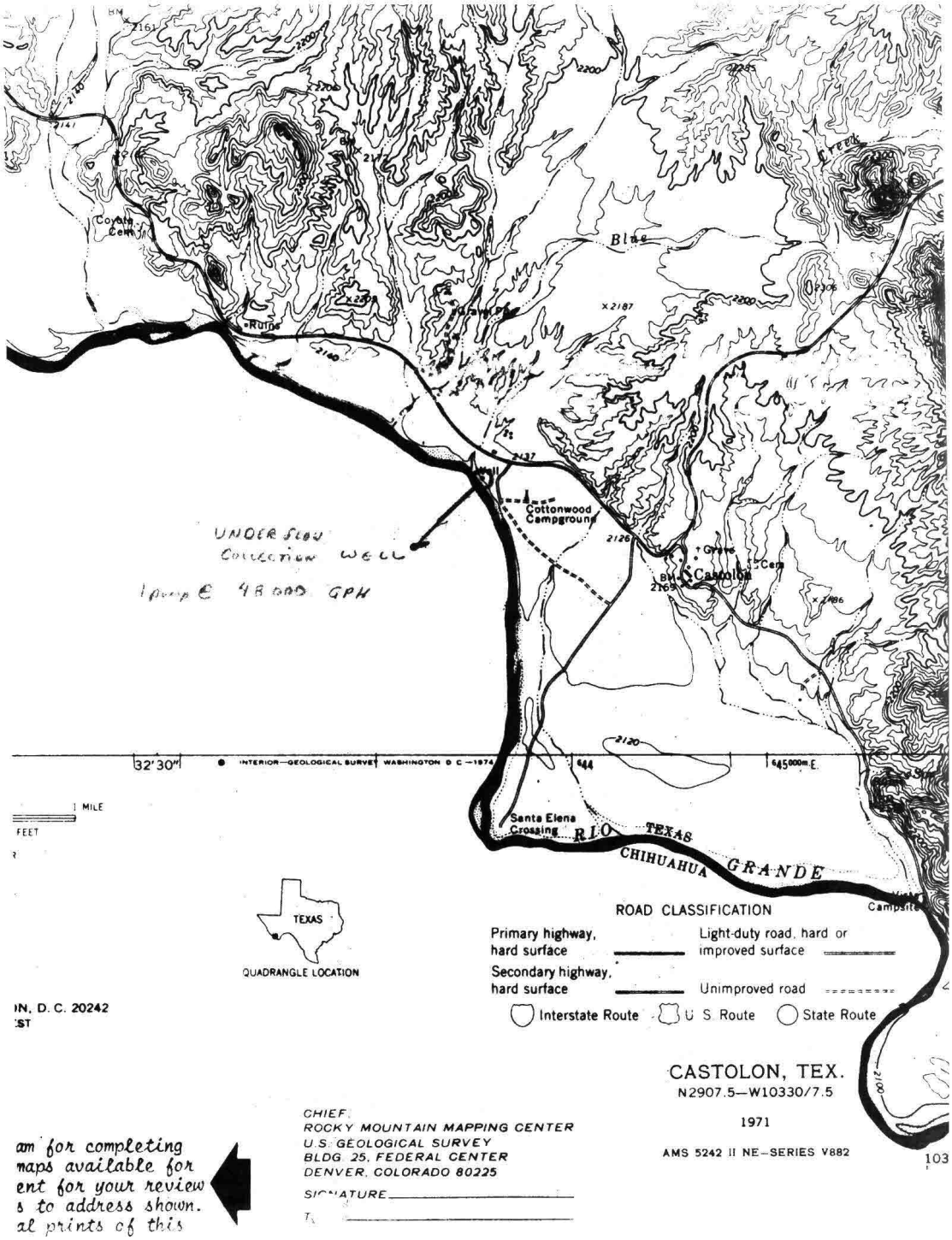
Encl.

cc: SWR, Attn: Gary Moore

09-27-1956: map: rio grande



09-27-1956: map: rio grande



IN, D. C. 20242
:ST

CHIEF
ROCKY MOUNTAIN MAPPING CENTER
U.S. GEOLOGICAL SURVEY
BLDG. 25, FEDERAL CENTER
DENVER, COLORADO 80225

SIGNATURE _____

T _____

am for completing
maps available for
ent for your review
s to address shown.
al prints of this

00-00-0000: water system data

WATER SYSTEM DATA

Area BIG BEND Recorded by _____ Date / / (Mo.,Da.,Yr.)

1. Name of System: RIO GRANDE IRRIGATION

2. Location: State TEXAS County BREWSTER General Area RIO GRANDE VILL.

3. General Description: Irrigation system for approximately 128 acres of grass, trees, etc (Type of System, Use, Sources, Capacity, etc.)

The source is the Rio Grande. A shallow well will also be in use in Summer of 1972.

4. Water Rights: Type of Right Appropriative (Riparian,Appropriative,Absolute,etc.) Claim No. 1913

Permit No. 927 Docket No. W.R. #1 Remarks: Application #978

Priority Date - Nov. 1927 (e.g. see addendum)

5. Sources of Supply: No./Type of Sources 1/River Surface, 1/Shallow Well (Use Addendums for Source Data)

6. Storage: No. of Storage Sites N/A

*Storage Data #1: Location: Latitude / / (Deg.Min.Sec.) Longitude / / (Deg.Min.Sec.)

Other Location Descriptions: _____

Type Storage _____ (Pneumatic, Elevated, Underground, Ground Level, etc.)

Pressure Setting _____ (If Pneumatic) Type Construction _____

Capacity _____ gal. Inlet Size _____ in. Outlet Size _____ in.

Remarks: _____

*Storage Data #2: Location: Latitude / / (Deg.Min.Sec.) Longitude / / (Deg.Min.Sec.)

Other Location Descriptions: _____

Type Storage _____ (Pneumatic, Elevated, Underground, Ground Level, etc.)

Pressure Setting _____ (If Pneumatic) Type Construction _____

Capacity _____ gal. Inlet Size _____ in. Outlet Size _____ in.

Remarks: _____

7. Distribution: Residences _____ Trailers _____

Drinking Fountains _____ Fire Hydrants _____ Other _____

00-00-0000: addendum for source data

ADDENDUM FOR SOURCE DATA

Source No./Names ORIGINAL DIVERSION POINT ON RIO GRANDE

Power Source Electric (Electric, Gas, Generator) Motor: Make _____ HP _____

RPM _____ Type _____ Phase _____ Cycles _____

Pump Housing: Type Const. _____ (Walls) ; _____ (Roof) Size _____ x _____ x _____ (W x L x H)

Control: Automatic _____ (Float, Electrode, Pressure, Time, etc.)

Manual _____

Other _____ (Explain)

History: Driller or Construction Co. _____ (Name) (Address)

Date Drilled: / / Mo.Da.Yr. Pump Intake Setting _____ ft.

Method Drilled: _____ (Air, Rot, Bored, Cable, Dug, Hyd. Rot, Jetted, Air Percussion, Raverse Rotary, Trenching, etc.)

Lift Type: _____ (Air, Bucket, Cent, Jet, Nose, Piston, Submerg, Turb, etc.)

Hgt. of Casing above Ground _____ ft. Static Water Level _____ ft. (From top of casing to water level)

Drawdown _____ ft. Q at Specified Drawdown _____

Method of Measurement:

Static Water Level _____ (Air Line, Steel Tape, Electric Probe, etc.)

Drawdown _____ (Air Line, Steel Tape, Electric Probe, etc.)

Remarks: _____ (e.g. see addendums for chemical analysis, water usage, etc.)

_____

ADDENDUM FOR SOURCE DATA

Source No./Names SHALLOW WELL (unamed at this time)

Power Source Electric (Electric, Gas, Generator) Motor: Make _____ HP _____

RPM _____ Type _____ Phase _____ Cycles _____

Pump Housing: Type Const. _____ (Walls) ; _____ (Roof) Size _____ x _____ x _____ (W x L x H)

Control: Automatic _____ (Float, Electrode, Pressure, Time, etc.)

Manual _____

Other _____ (Explain)

History: Driller or Construction Co. _____ (Name) (Address)

Date Drilled: / / Mo.Da.Yr. Pump Intake Setting _____ ft.

Method Drilled: _____ (Air, Rot, Bored, Cable, Dug, Hyd. Pot, Jetted, Air Percussion, Reverse Rotary, Trenching, etc.)

Lift Type: _____ (Air, Bucket, Cent, Jet, Nose, Piston, Submerg, Turb, etc.)

Hgt. of Casing above Ground _____ ft. Static Water Level _____ ft. (From top of casing to water level)

Drawdown _____ ft. Q at Specified Drawdown _____

Method of Measurement:

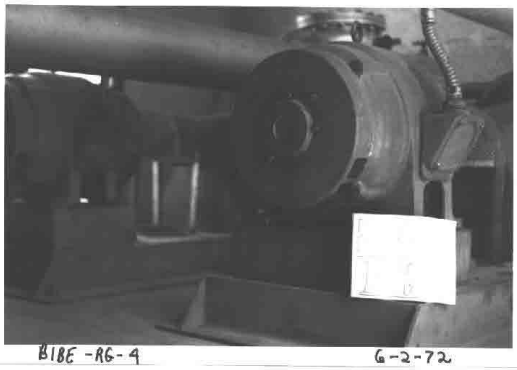
Static Water Level _____ (Air Line, Steel Tape, Electric Probe, etc.)

Drawdown _____ (Air Line, Steel Tape, Electric Probe, etc.)

Remarks: _____ (e.g. see addendums for chemical analysis, water usage, etc.)

_____

PHOTOGRAPHIC ADDENDUM FOR BIG BEND NATIONAL PARK



BIBE -RG-4 6-2-72

RIO GRANDE IRRIGATION
DIVERSION POINT

Water is drawn directly from the Rio Grande. The pump house is located approximately 75' from the banks of the river.



BIBE - RG-3 6-2-72

PHOTOGRAPHIC ADDENDUM FOR BIG BEND NATIONAL PARK



BIBE -RG -1 6-2-72

RIO GRANDE IRRIGATION DIVERSION POINT

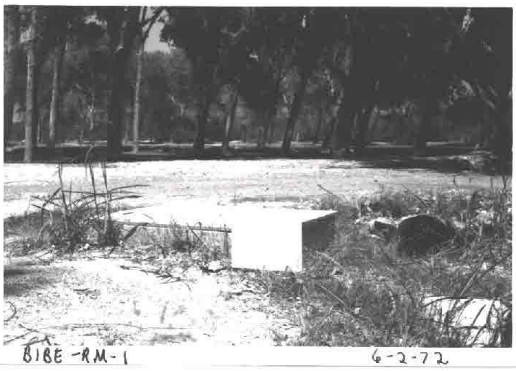
Water is drawn directly from the Rio Grande. The pump house is located approximately 75' from the banks of the river.



BIBE -RG-2 6-2-72

00-00-0000: photographic addendum for bibe

PHOTOGRAPHIC ADDENDUM FOR BIG BEND NATIONAL PARK



BIBE -RM-1 6-2-72

RIO GRANDE MEADOWS

Originally these were cotton and hegari fields (approx. 312 acres). Currently the Park irrigates about 128 acres of grass and trees.



BIBE - RM-2 6-2-72

00-00-0000: photographic addendum for bibe

PHOTOGRAPHIC ADDENDUM FOR BIG BEND NATIONAL PARK



BIBE - RL-1 6-2-72



BIBE - RL-2 6-2-72

RIO GRANDE VILLAGE LAKE

This "lake" is supplied with water by the irrigation system at Rio Grande Village. Photos #BIBE-RL-1&2 show where the water enters the lake.



BIBE - RL-3 6-2-72

PHOTOGRAPHIC ADDENDUM FOR BIG BEND NATIONAL PARK

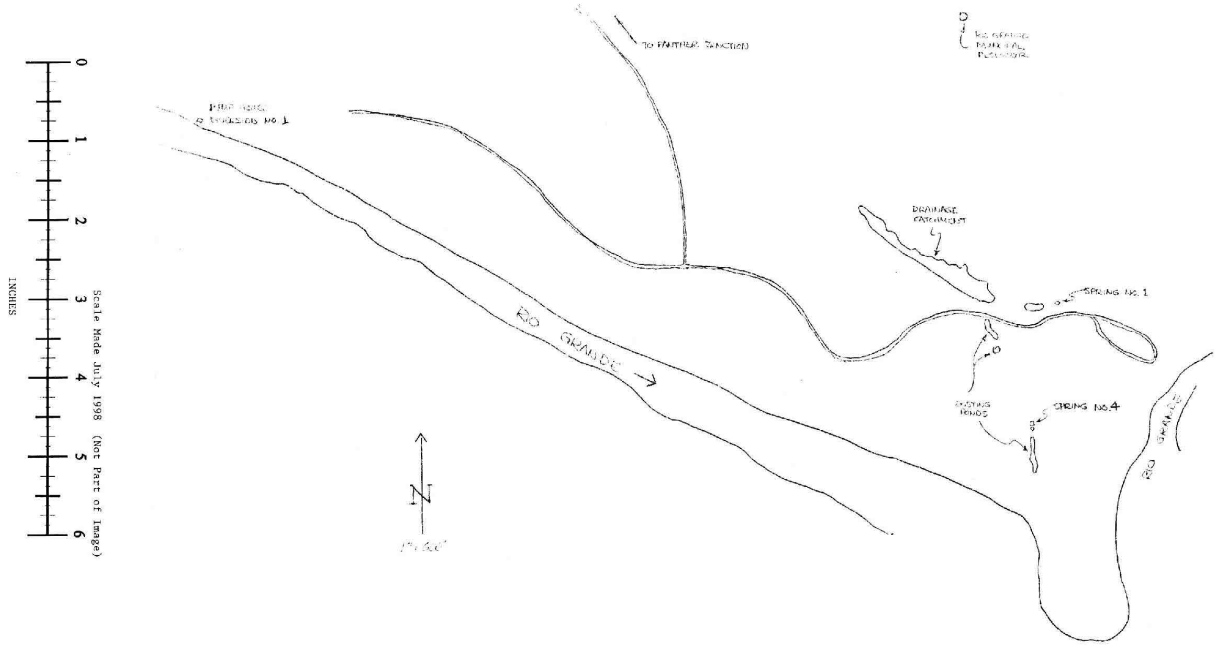


NEW WELL AT RIO GRANDE IRRIGATION

This shallow well was dug in 1971. It is located a few hundred feet from the banks of the Rio Grande. It feeds water about 600' through a pipeline to the irrigation system.



09-27-1956: map: rio grande



00-00-0000: letter re: referenced amending permit

TEXAS WATER RIGHTS COMMISSION

SAM HOUSTON STATE OFFICE BUILDING

COMMISSIONERS
OTHA F. DENT, CHAIRMAN
475-2451
JOE D. CARTER
475-2453
DORSEY B. HARDEMAN
475-4325



LOUIS L. McDANIELS
EXECUTIVE DIRECTOR
475-2452
AUDREY STRANDTMAN
SECRETARY
475-4514

September 22, 1972

Action:		Init.	Date
✓	SUPERINTENDENT		10-4
	CHIEF RANGER		9/25
✓	ADMIN. OFFICER		
	CHIEF OF MAINT.		
	CHIEF NATURALIST		
	FISCAL CLERK		
	PROG. ANALYST ASST.		
	PERSONNEL		
	SECRETARY		
✓	FILE		

LAST

Big Bend National Park
National Park Service
U. S. Department of Interior
Big Bend National Park, Texas 79834

Attn: Mr. J. F. Carithers, Superintendent

Re: Construction or Installation
Time Limitations
Application No. 978-A
Permit No. 927-A

Gentlemen:

This is to remind you that your referenced amending permit issued June 28, 1972, contains provisions for the requested 10 years in which to provide for the optimum development of the system. See the enclosed copy of the amending Permit No. 927-A, Section 2, Time Limitations: "construction or installation of all works necessary for the optimum development of the municipal uses herein authorized shall be completed by permittee within 10 years from the date of issuance of this amendment (or to July 28, 1982). However, this limitation may be extended by the Commission upon a showing of factual and economic justification by permittee."

Compliance with provisions of the permit and Commission rules will keep your permit active and in force.

If we can be of assistance do not hesitate to call on us.

Very truly yours,

TEXAS WATER RIGHTS COMMISSION

By: John R Clarke
John R. Clarke, P. E.
Head, Structural Review
and Inspection Section

BRB:jc
Enclosure

P. O. BOX 13207 AREA CODE 512 AUSTIN, TEXAS 78711

00-00-0000: memorandum re: water rights docket no. 1, big bend

File

SAN FRANCISCO PLANNING AND SERVICE CENTER
Office of Land and Water Rights
450 Golden Gate Avenue, Box 36063
San Francisco, California 94102
December 20, 1966

L54-LWSSC

Memorandum

To: Superintendent, Big Bend

From: Supervisory Hydraulic Engineer, LWSSC

Subject: Water Rights Docket No. 1, Big Bend

Enclosed is the revised docket No. 1. As soon as Dockets No. 2, No. 3, No. 4 and No. 5 have been reviewed and reassembled, they will be returned to you.

As appropriate, we reproduce materials from our dockets and add these to yours, and we are doing the same with your materials. The one change which we made, aside from reorganization of the subject parts, was to remove those materials dealing with well No. 4. We found that Dockets No. 1 and No. 3, had considerable overlap which we feel we have reduced by including well No. 4 with the other wells listed in Docket No.3. This confusion came from an effort to consider the water from well No. 4 as either underflow of the Rio Grande or return flow from the Wedin Ditch. Because the State of Texas disdained any interest in this well, (it was not drilled in the river bed), I can see little reason to insist that the water withdrawn from this well should be charged against the Wedin Ditch right. It would only serve to reduce our direct withdrawals from the Rio Grande. Further, unless there have been recent changes in Texas laws effecting ground water, a formally filed water right should not be necessary for the well. Besides, it appears quite unlikely that the right to this water could be challenged. There always remains the question of jurisdiction and the Winters Doctrine which

00-00-0000: memorandum re: water rights docket no. 1, big bend, cont.

provides Federal reservations with sufficient water rights for present and future needs. Should the doctrine ever be upset, verifiable usage alone should serve to confirm the right to the water from well No. 4.

(Sgd) MANUEL MORRIS
Manuel Morris

Enclosure

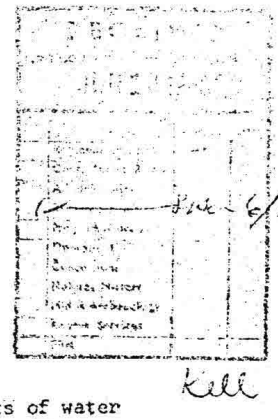
cc:
Chief, Branch of Water Resources, WASO w/docket
Hydraulic Engineer, Santa Fe w/o enc.
Regional Director, SWR w/o enc.

P. S. On your next visit to San Francisco, bring your copy of Docket No.1 for comparison and conformance with the revised docket. We will look forward to your comments at that time.

M. M.

Big Bend National Park, Texas

L54 June 7, 1963



Office of the Commisioner
International Boundary & Water Commission
P.O. Box 1859
El Paso, Texas

Attention: Mr. J.F. Friedkin

Gentlemen:

In accordance with your request for monthly reports of water pumped from the Rio Grande in Big Bend National Park, we submit the following:

Water pumped in May, 1963 - Rio Grande Area
24,984,000 gallons

Water pumped in May, 1963 - Castolon
2,058,000 gallons

Sincerely yours,

McCune C. Ott
Maintenance Supervisor

RPB-1/2/60
DHE 2/2/6
ESS 3/4/60

Big Bend National Park
Texas

January 29, 1960

Memorandum:

To: Park Engineer through the Chief Ranger

From: Boquillas Sub-District Acting Ranger

Subject: Pumping records for the Annual Water Use Report - 1959
Big Bend Water Right Permit 927, Docket 1, Wedin Ditch
(Daniels Ranch) and Docket 3, Spring No. 4, (Graham Ranch)

Enclosed are the 1959 pumping records for pumps operated at the Daniels Pump House and at Spring No. 4 in the Rio Grande Village Area.

Wedin Ditch, Docket 1 (Daniels Pump House)

A total of 214,140,000 gal. water was pumped from the Rio Grande during the year and distributed through irrigation ditches to approximately [illegible],000 planted trees in the Rio Grande Village Area. This is an increase of 65,244,000 gal. over the amount pumped from the Rio Grande during 1958.

Docket 3 (Graham Ranch) Spring No. 4

A total of 81,000 gal. of water was pumped from Spring No.4 for domestic use. This is a decrease of 2,145,120 gal. under the amount pumped during 1958. All water pumped from Spring No. 4 during 1959 was used for employee and public campground use. None was used for irrigation, therefore, the large decrease of gallonage pumped.

John C. Armfield

John C. Armfield
Sub-District Acting Ranger

00-00-0000: letter re: water use reports

BOARD OF WATER ENGINEERS

DURWOOD MANFORD, CHAIRMAN
R. M. DIXON
O. F. DENT
1959 FEB 9 AM 9 16
BEN F. LOONEY, JR.
SECRETARY

1410 LAVACA STREET
AUSTIN

IN REPLY REFER TO
Legal
(DIVISION)

February 9, 1959

Mr. A. Van V. Dunn
Chief, Water Resources Section
United States Department of the Interior
National Park Service
Washington 25, D. C.

Re: Water Use Reports- permits 125 and 927 and Riparian #5825, Big Bend National Park.

Dear Mr. Dunn:

Please refer to your letter of February 4, 1959, to Mr. Durwood Manford. Additional forms which you request have previously been mailed.

As you state, both domestic and municipal use are defined in Rule 115.1 of Rules, Regulations and Modes of Procedure of the Board of Water Engineers. For the purpose of reporting under Riparian Report No. 5825 you should classify the use as municipal if the water used is diverted by a common means and such water is distributed through a central water supply system for the consumers and provided compensation is paid for the service. Otherwise the use would be domestic.

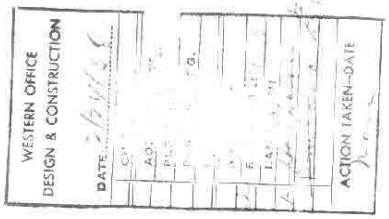
Your cooperation is appreciated and if we can be of further assistance, please feel free to call upon us.

Very truly yours,

F. R. Booth
Examiner

FRB:ps

00-00-0000: memorandum re: reports of water use for 1957; wedin ditch



L54-L

February 20, 1958

Memorandum

To: Regional Director, Region Three

From: Chief, Water Resources Section

Subject: Reports of Water Use for 1957; Wedin Ditch, Docket 1; and Wedin Spring, Docket 3, Big Bend

With copies of this memorandum we are distributing the copies of subject water use reports, the letter by which they were submitted to the State Board of Water Engineers, and copies of letter of February 13 from Board of Water Engineers concerning the Castellan Project. Three "Secretary" copies of the blank forms for report on the Castellan Irrigation Project are also being sent to the Superintendent.

The Superintendent supplied the information in excellent form with memorandum of January 30 from Mr. Emrich, but I have made a few changes for the following reasons:

Wedin Ditch, Permit 927, Docket 1

The irrigation ditches also serve the pond where consumptive use of water should be recognized. Before another year, we should have better description of dam or other structure by which the water is impounded, and the pond might be described to fit blanks in question 9. I have indicated that pump capacity is based on rating because it has not been checked, and may be higher with only 32 ft. pump lift. I have added names of other trees which Mr. Emrich supplied in August, in answer to question 13a. I have also reduced the irrigated acreage by about 1% to agree with area authorized in permit until more refined measurements are available.

Wedin Spring (formerly Spring 4 or B), Claim 5825, Docket 3

The claim to overflow water for the pond below the Spring is added in answer to question 4. The pump rating has been qualified by my measurements of August 16. The pump would develop a friction head of 840 ft. per 1000 feet of 1½ inch pipe at 90 gpm. There is a friction head of 188 feet per 1000 ft. at 35 gpm, 340 feet per 1000 feet at 55 gpm, and 459 feet per 1000 feet at 65 gpm. Clearly

the pipe is too small for the pump. Reference to Drawing 6952 is deleted because we, and presumably the Board of Water Engineers, do not have prints with latest revisions. The Superintendent's note 3 has been rewritten as note 4. Drawing 3030 shows the storage pond to have an area of 2.3 acres which suggests that potential storage of 700,000 gallons instead of 70,000 gallons may be possible, and evaporation of 8 feet, or more, per year, would be far more than 1.65 acre feet. I seem to have less notes than I thought on this pond and the one below the spring, and on the concrete spring well. I have tried to suggest water uses without giving too much detail as to designs of dams, levees, and pump sumps. This data should be supplied to answer question 9.

The memorandum of February 13 from Mr. LaBounty does not include any reply to my memorandum, or indicate whether forms for the Castellan Project were sent to Mr. Cartledge before the transfer of title was received or recorded by the Board. It is quite possible that Mr. Cartledge submitted his report to the Board before receipt of Mr. Emrich's letter, or that he has, or will comply with the latter. The 3 blank forms are for use, if desired, to make copies of the Cartledge report for him, the Superintendent, and one to be sent to this office for transcription on the originals. It is essential to know what Mr. Cartledge has done, and get his data before we file any report. We can also file the report with data in form he usually supplies, even if it is not entirely up to snuff.

A. vanV. Dunn
Chief, Water Resources Section

Attachments 4

Copy to: Superintendent, Big Bend, with 7 attachments
Chief, WCBC, with 4 attachments and Docket Folder No. 1

L54-L

September 27, 1956

Memorandum

To: Regional Director, Region Three

From: Chief, Water Resources Section

Subject: Water Rights, Rio Grande Area, Permit 927, Docket 1, Big Bend

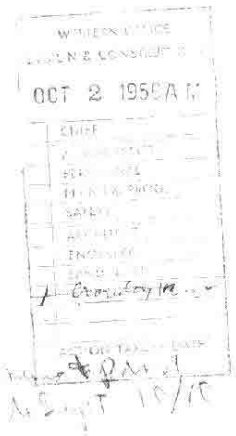
Sheet 1 of Drawing NP-BB-3030 will be very helpful to support our annual report on the subject water right, next February, particularly if there has been no use of water from the Wedin Ditch this year. By reference to the correspondence and reports of this past year, you will also note that we now have to report on some water use for which no appropriative rights have been established.

Accordingly, please supply us with five prints of sheet 1 of said drawing, together with the previously reported reports on water use this year, early in January. The reports for Rio Grande area should include any changes in the Wedin Ditch or water systems nearer the Mexican Village, and explanations of such water use as has been made through those systems, to answer the specific questions on the forms used last year. It may be desirable to illustrate with a soft pencil on one copy of said sheet 1 of Drawing 3030, which I will keep as our copy.

(Signed)

A. van W. Dunn
Chief, Water Resources Section

Copy to: Superintendent, Big Bend
Western Office of Design and Construction



06-29-1956: memorandum re: water right permit 927, docket 1, wedin ditch; june 29, 1956

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

L54

June 29, 1956



Memorandum

To: Regional Director, Region Three

From: Superintendent, Big Bend

Subject: Water Right Permit 927, Docket 1, Wedin Ditch, Graham-Daniels area, Big Bend National Park

This is our request for an allotment from the water right funds in the amount of $6500.00 for the purchase of an irrigation pump and electric motor unit, together with related items and installation costs. Our object is to protect our right to draw 780 acre-feet of irrigation water annually from the Rio Grande in the Graham-Daniels area, under Permit 927, by utilizing this proposed installation to pump and put to beneficial use the full 780 acre-feet.

The required items and estimated costs are as follows:

25 HP electric motor & 10-inch centrifugal pump combination	$ 1,500
Reduced voltage magnetic starter for above	150
150 lineal ft. of 12-inch steel suction and discharge line	730
Fabricated bends	160
Dresser couplings (3)	130
Foot valve - 12-inch	60
Indicating, totalizing irrigation meter....	400
Materials - Sub-total	$ 3,130

X ref in blocks,

Installation	$ 800
Rehabilitate pump house	500
Sub-total	4,430
Rehabilitate irrigation ditches and turnouts	1,500
Contingencies	570
Grand Total	$ 6,500

In addition to permitting the beneficial use of the full authorized of 780 acre-feet of irrigation water annually, which is essential to protect our existing water right, the installation of a pumping and irrigation system will further the development of the park in the following ways:

(a) It ties into MISSION 66 proposals for developing a system for watering of trees and shrubs in the proposed development area on the Rio Grande.

(b) It will permit the initiation of a planting program.

(c) It will protect our investment in the trees already planted.

(d) Last but not least it will permit the removal by the owner of the existing worn out, inefficient and out-dated pump which we might be forced to buy at a rather exorbitant figure should anything go wrong while we are using it.

We hope you support this proposal and we will appreciate your efforts to obtain the necessary funds from any available water rights funds.

Your office has a pencilled sketch of the existing pumping system as prepared by George Johnston, dated May 14, 1956. Would you please send a print to WODC and should you forward this request to the Director, it is suggested that a print be also forwarded to that office with the request. Any new installation would necessarily be installed on about the same design.

(Sgd) GEORGE W. MILLER

George W. Miller
Superintendent

In duplicate

Copy to: WODC

03-19-1956: memorandum re: water use reports, rio grande area; march 19, 1956

L54

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

WESTERN OFFICE
DESIGN & CONSTRUCTION
MAR 21 1956 A.M
CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN—DATE

March 19, 1956

Memorandum

To: Regional Director, Region Three

From: Acting Superintendent, Big Bend

Subject: Water Use Reports, Rio Grande Area, Big Bend

We have reviewed the water use problems of Big Bend in light of Mr. Allen's memorandum of March 8th, 1956, and recommend: (1) That the Service provide the basic facility for irrigation from the river at the Daniel Ranch; (2) that the Service initially assume the cost of operation of this pump to draw from the Rio Grande as much of the authorized amount of water as is feasible at this time; (3) that the Service lease, subject to withdrawal for visitor use, the farming of approximately 195 acres to a competent private person in return for a reasonable share of the income from the crop and the irrigation of tree plantings; (4) that $4500 be allocated immediately for the surveying of the major water systems of the park with the possibility that an additional $4500 might be necessary for surveying minor water sources; (5) that this survey be accomplished by a negotiated contract with a local surveyor.

To preserve, by putting the water to use, the water right under Permit 927, Docket 1, an initial investment of $7800 would be required to purchase a pump, to repair the ditches and to rehabilitate the Daniel's ranch house. The annual maintenance and operation cost for the pump would amount to $3000. Assuming that the Service could realize $12,000 per year, this investment in the basic plant would be amortized the first year, an annual return of $9000 would result thereafter.

The advantages to the Service in this type of arrangement are:

(1) The water right (Wedin Ditch Permit 927, Docket 1) would be preserved and use data of the accuracy required by the State Water Board could be compiled.

(2) The type of green oasis that is essential for attractive visitor accommodations in the Rio Grande Village area would be achieved

without involving the Service in a commercial type operation. It would also be achieved at a modest cost in a location where the prohibitive cost of electricity deters initiative.

Analysis of the agricultural possibilities of this area contrasts sharply with that now current. It is based upon a studied comparison of this area with similar ones in the vicinity of El Paso, by Mr. O. L. Kay, of the Soil Conservation Service. He believes that the problem of farming at the Daniel Ranch is due possibly to poor management and lack of adequate equipment. If the government installs a sound basic facility and presents an attractive opportunity, we shall be more likely to secure the services of the right type of person. Once the farming operation became stabilized economically and the risk factor alleviated, it is expected that the lessee would assume the cost of the electricity and the maintenance cost (the $3000 item listed above).

(3) Withdrawal of the land as needed for development and visitor use would create no problem, providing such was clearly understood in advance, since the lessee would have no capital investment in the basic physical plant. Since it is going to always be necessary to cultivate this area in order to keep it attractive throughout the year, it is reasonable to assume that this arrangement would continue indefinitely but on a reduced scale.

This water use problem at the Daniel Ranch has been with us since 1947. Various methods of solving it have been undertaken and considerable money invested. We have made little real progress towards a permanent solution. Our existing arrangement with National Park Concessions, Inc., is a stopgap. We believe our recommendation merits a trial and urge its acceptance.

Documenting in proper fashion our water right claims for all the major water systems of the park is the other aspect of Mr. Allen's memorandum.

The major water systems which should be mapped at this time are enumerated on the attached list. To accomplish this in the manner requested will be quite expensive due to the rugged terrain. It is estimated that it would require a survey party approximately 30 days at $150.00 per day, or a total cost of $4500.00. If, upon further analysis we also map minor water sources, an additional $4500 will be required.

It is recommended that a local surveyor ob the county engineer who has a knowledge of the country, including the location of all known section corners or monuments, be employed on a negotiated contract basis to do the work. In this way a substantial saving will result, compared to using our own forces.

/SGD/ David J. Jones

In duplicate
Copy to: WODC

David J. Jones
Acting Superintendent

PLEASE SHOW TO GEORGE MILLER.

MAJOR WATER SYSTEMS

GROUPED BY DEVELOPED AREAS

1. BASIN - Chisos Mts. Water System
   - a. Basin well
     - Upper
     - Lower
   - b. Oak Spring
   - c. Cattail Falls
   - d. Boot Spring

2. PANTHER JUNCTION Water System
   - a. Panther Junction Well #4
   - b. K-Bar Well #2
   - c. K-Bar Well #3
   - d. K-Bar Ranch Well

3. RIO GRANDE VILLAGE (Graham Ranch)
   - a. Spring #3, Berkeley Ranch - 160 gal.
   - b. Spring #4 or B, Pump House - 90 gal.
   - c. Wedin Ditch

4. CASTOLON - developed area

   Water right to be evaluated and proved upon acquisition of property.

5. BOQUILLAS Ranger Station

   Spring

03-19-1956: supporting detail for irrigation proposal; march 19, 1956

SUPPORTING DETAIL FOR IRRIGATION PROPOSAL

Daniel Ranch - Rio Grande Village Area

3000 GPM Pump With motor	$ 1800	
Repair of ditches	1000	
Rehabilitation of house	5000	
Annual maintenance on pump	150	
Pump operation costs (electricity) ...	2700	
Demand charge $450		
1500 kwh at $1.50 - $2250		
for pumping 780 acre-feet as authorized		
Crop yield:		
Based upon alfalfa only and an estimated production of 1 ton per acre for 6 cuttings per year(200 acres); realizing $30 per ton at the field the gross proceeds would be		$36,000
Service's share		12,000

6. PERSIMMON GAP

   No. Water to be purchased outside of park

7. WEST ENTRANCE

   no — Water from outside of park

   Tule Spring — Tule Spring

8. SANTA ELENA CANYON

   Dug well

9. OUTLYING AREAS

   1. Government Spring
   2. Grapevine Ranch Spring
   3. Glenn Spring
   4. Dugout Well
   5. Hot Springs
   6. Boquillas Crossing Spring

MINOR WATER SYSTEMS
(Subject to further evaluation)

1. Pena Spring
2. Wasp Spring
3. Smoky Spring
4. Domingues Springs (2)
5. Cedar Spring
6. Robbers Roost Spring
7. Lower Juniper Spring
8. McKinney Springs
9. Quail Spring
10. Muskhog Spring
11. Chilicotal Spring
12. Croton Spring
13. Kibbe Spring
14. Panther Spring
15. Solis Spring
16. San Vicente Spring

03-08-1956: memorandum re: water use reports, rio grande area; march 08, 1956

L54-L

WESTERN OFFICE
DESIGN & CONSTRUCTION
MAR 19 1956 A.M
CHIEF
ADMIN.ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN—DATE

MAR - 8 1956

Memorandum

To: Regional Director, Region Three

From: Assistant Director

Subject: Water Use Reports, Rio Grande Area, Big Bend

The memorandum of February 24 to us from the Superintendent merits careful consideration.

It is imperative that we preserve the rights under Permit 927, Docket 1, to the waters of the Rio Grande because they are the only Federal rights to river water with sufficient priority to have any value. The rights will probably not be lost by one year of nonirrigation but the rights have been in questionable status since before the United States acquired title. It will be extremely desirable to have a pump and irrigate the trees during this year. It would be better to continue irrigation of some of the hay fields if possible, if the hegari or alfalfa is still properly rooted. We suggest that you determine the price for which Mr. Beckett would sell his pump, before it is removed, and consider some irrigation with Park personnel with records suitable for this year's water use report.

In connection with the irrigation from Spring #4, we should have a map of the conduits, areas to which water is applied, and records of pumping. For the 1956 report to be filed by March 1957, the map need be only a tracing of part of Drawing NP-BB-6951-A with the conduits and swimming pool sketched on; an outline of the pondage behind the dikes, with an estimate of average depth of water; and an outline of areas irrigated. This sketch is for the assistance of Mr. Dunn in preparing the water use report, but no map will be filed with the State Board of Water Engineers.

Mr. Miller is correct in that no reports are now needed for the use of well water in any cases. However, the state water laws are subject to further change. Accordingly, with water right funds which we can supply, we should obtain maps of all water systems in the Park, with ties to section corners, outlines of irrigated areas, and the proposed building developments. Such additional surveys as may be needed, should be made as engineering personnel are assigned to the areas for other purposes.

We advise against inviting a representative of the State Board of Water Engineers to the Park until developments and water use are more permanently established. This Service would be decidedly on the defensive if such an engineer were to observe the abandonment of irrigation by Mr. Beckett with no substantial alternative water use. The Board has not questioned the Federal water use, and it is allowing far more time than might be expected to complete construction and beneficial use of the water.

This Service should first complete plans for all of its water development and use, whether from surface of groundwater, and express them as water claims which are incorporated in the master plan and a group of water right dockets. Then, after evaluation by this Service, we can amend Permit 927 and file such supplemental applications for appropriation as the state water laws require at that date.

As Mr. Miller states, we do not have to report to the Board of Engineers on the use of groundwater or the use of water for purely domestic and stock watering purposes at this time. Until this year we did not have to report on riparian use of the water of Spring #4 for irrigation. However, the one change is indicative of others which may be expected, and this Service should have its water claims defined before the water laws are further amended, and before the Board of Water Engineers start inspections.

(SGD) THOMAS J. ALLEN

Assistant Director

Copy to: Superintendent, Big Bend
Western Office of Design and Construction

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

In reply refer to:
L54

February 24, 1956

Memorandum

To: Director

From: Superintendent, Big Bend National Park

Subject: Water Use Reports, Big Bend

WESTERN OFFICE
DESIGN & CONSTRUCTIO
FEB 27 1956 A.M
CHIEF
ADMIN.ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN-DATE

Reference is made to Mr. Van Dunn's memorandum of February 13, 1956, commenting on the 1955 water use report for Big Bend and making recommendations for the compilation of that for 1956.

We shall undertake the use of the new form for reporting monthly irrigation, but it is premature to develop the data requested with respect to the Wedin Ditch water right. As you know, the farming arrangements for this area which have been in effect for some time were terminated last fall. Mr. Beckett found the operation unprofitable and to date we have been unsuccessful in interesting anyone else to take over the farming operation. Unless there is an unexpected development our 1956 water use report for this water right will be limited to the irrigation of four acres of trees approximately twice a month. Furthermore, the present pump that is installed for diverting water from the Rio Grande under the Wedin Ditch permit is the property of Mr. Burt Beckett, the horse concessioner. It is unlikely that we or National Park Concessions, Inc. will purchase this pump from him and so we can expect that it will be removed. There are several substitutes that we can make for this pump as long as only a small area is to be irrigated. The desired information will be provided when the substitution is made.

In addition, it is quite likely that the existing ditch system will be modified considerably whenever an active planting program is undertaken. With all of the planning and development that will be devoted to the Rio Grande within the next year or two certain definite results with respect to planting and the design of an irrigation system can be expected. Whenever this is the case you can expect that irrigation will be performed on a regular basis and accurate data can be furnished you, but until that time it is impossible, and that is why we consider that efforts to accumulate definite information are premature.

The other major point of Mr. Van Dunn's memorandum concerned Docket No. 3, the water use report on Hot Springs #4, or "B". We consider that the preparation of a water use report for this source is unnecessary since it is ground water. In his letter of January 24, 1956, Mr. Loftin, the assistant examiner of the Board of Water Engineers, specifically states "no reports.. .... are required on the use of ground water."

Furthermore, the instructions for filing water use reports state "If you are using underground water exclusively and no surface water, please so state on the form and return it to us so your name can be removed from our mailing list, as no water use reports are required from use of ground water."

At present, the water from Spring #4 is pumped to an open pond which has 8 to 10 cottonwood trees around it. We propose to pipe this water into the small irrigation ditches that will water approximately 30 trees that will surround the campground that is being developed in the Rio Grande Village area.

Data on the capacity of pumps and the flow production of various springs will be accumulated during the year. Also, plans on the various systems of the Rio Grande Village area will be developed as a result of our extensive planning activities. Since it is important that we retain our water rights in the Rio Grande Village area, I feel that it would be wise to invite one of the officials of the Texas Board of Water Engineers to visit this area. He would get a better picture of what we are attempting to do, and past correspondence infers that they will be sympathetic even to an increase in our water right. This would insure their sympathetic cooperation. We could also clarify any confusion that exists with respect to just what sources of water we should make annual water use reports on.

Do you concur in this suggestion?

George W. Miller
Superintendent

Copy to: Regional Director, Region Three
WODC

1#3

L54-L WESTERN OFFICE
DESIGN & CONSTRUCTION
FEB 23 1956 A.M

CHIEF
ADMIN.ASSIST.
PERSONNEL
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SAFETY
ARCHITECT
ENGINEER
LAND. &ROW.
ACTION TAKEN—DATE

February 13,1956

Memorandum

To: Superintendent, Bend Bend

From: Chief, Water Resources Section

Subject: Water Use Reports, Big Bend

Attached copies of letter of January 24 from the State Board of Water Engineers, instructions for filing report, and our reply of February 9, indicate the reason that we have submitted only two reports--for the Wadin Ditch and the Spring "4" or "B" in Rio Grande area. Copies of this memorandum and all attachments are also being sent to the Region and the Western Office of Design and Construction.

Also attached are your copy of the report on the Wedin Ditch rights under Permit 927, which should be filed in Docket 1; and a new Docket 3, including report, covering the subject spring. We may be able to combine Dockets 1 and 3 at a later date.

It is evident that the field reports should be modified and clarified for future years. The first problem is to rate the pumps or explain how they have been rated, or to install measuring devices in the ditches. The Board of Water Engineers will ultimately require measuring devices, so it is suggested that weirs or Parshall flumes be installed far enough below the pump discharges to permit uniform approach flows to them. We are reminded that we do not have plans of the Spring "B" system, or cross-sections of the Wedin Ditch by which to offer suggestions or answer all questions in the two reports.

We also attach two copies of a new form for reporting monthly irrigation. We will send six prints of Drawing NP-BB-6951-A as soon as they are made. Please advise if you do not have mimeograph to make the total number of forms needed. It is suggested that the areas of hegari, alfalfa, trees, and any other irrigated vegetation be shown on drawings as closely as possible when they are planted, and numbered or lettered, and that the drawings then be considered as part of the data for the 1956 irrigation report. If there are several non-contiguous areas of hegari, alfalfa, or other vegetation, it may be desirable to designate them as 1, 2 and 3, or A.,B. and C. As soon as all the tracts can be sketched in and numbered, the sixth print of drawing should be given to Park Engineer, or sent here for planimeter measurements.

The first objective is to obtain beginning and end of each cycle of irrigation of each tract of a given crop, by the use of columns 1, 2, 3, 5, 12 and 8. If all the land is irrigated once in a 15-day period, with approximately the same quantity of water being applied to each acre, the first and last should be shown in Column 8. The same dates could also be entered on one line in Column 2. In that case the hours of pumping could be entered in Column 3 as a series on one or two lines, or as the final sum, and the conversion to gallons in Column 4 could be left for future reduction. The areas for Column 6 could also be left for planimetering by the Park Engineer or this office.

In many cases the laterals to different tracts will carry different quantities of water so that the number of hours pumped to a tract will not be the same, or give accurate results. The best record would be obtained by weir measurements of each turnout, with gallons or the time limit and depth of water on the weir entered in Column 4. For 1956, however, it may be necessary to estimate percentage of total day's pumped quantity of water applied to a tract. The more variable rates, or dates of irrigation there are on different crops, the more lines will be needed, but there will be relatively few cases when day by day details are needed, and one sheet may be enough for several months. There should certainly be no monthly breakdown when an irrigation cycle begins in one month and ends in the next.

Provision is being made for five copies of the 1956 report, to supply you, the concessioner, region, WODC and this office. It should produce better results with little more day to day work by the irrigator, but it is offered for experimental use this year. There will have to be two sets of reports for the Wedin Ditch, and the Spring "B" water system.

Question 15 on the form for the Wedin Ditch will be partially answered in the future by difference between water actually applied to the land and that required for the particular crop. If a precipitation gauge is operated at the Rio Grande area we should like to have the monthly rain fall at the end of the year. If none exists, we will have to use weather bureau reports for some other station on the Rio Grande. Another nonconsumptive use is in transit loss, and we should like to know whether seepage losses in the Wedin Ditch seem high or low.

We are sending a copy of the pump record to the Region and WODC, and are returning your copy herewith. We are sending the Region a copy of the additional basic water use that was attached to your memo of January 30 since we note from the distribution that WODC received a copy of this water use with their copy of memo but that the Region only received copy of the memo.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Copy to: Regional Director, Region Three, with attachments
WODC, with attachments

154-L

WESTERN OFFICE
DESIGN & CONSTRUCTION
JAN 23 1956 A.M.
CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER 1/23/56
LAND. ARCH.
ACTION TAKEN—DATE

January 18, 1956

AIR MAIL

Memorandum

To: Superintendent, Big Bend

From: Chief, Water Resources Section

Subject: Annual Water Use Reports, Big Bend

Please refer to our 1954 report on the use of the Wedin Ditch, #1 Application 978, Permit 927, in Docket 1, your memorandum of March 31, 1955, advising that pump delivered only 2000 gpm and total of 108,000,000 gallons during 1954, and my memorandum of April 20, 1955 to the Regional Director. We will prepare the 1955 report like that of 1954 but reducing water use and depths of irrigation to fit a total use of 332 acre-feet instead of 617.38 acre-feet unless advised to the contrary at once. You may be able to report a new pump or change in acreages.

Attached is a copy of our letter to the Chief Engineer of the State Board of Water Control, concerning amended Article 7612 of the Water Code, to require reports on all water use. The list of water systems is from our tabulation for MISSION 66 with additions we have picked up since last spring. It does not specifically list the Gilmore development. It will be quite a task to dig out all records relating to each system which are on file here, or to prepare intelligent reports. It will be appreciated if you can supply a complete list of all existing water systems and those which are to be constructed during the rest of this year and 1957, with the following approximate supporting data while we are awaiting a reply from the Board of Water Control, following the questions in last year's report:

1. Name of system.
2. Location.
3. Source, or sources of supply.
4. Date constructed, or to be constructed, and by whom.
5. Year of last use.
6. Reservoir capacities.
7. Method of diversion (question 5).
8. Number and sizes of pumps (question 6).
9. Is original diversion point still used (question 7). (Some wells may be replacements for abandoned older ones.)
10. What is condition (question 8)?

11. How do you determine water diversion or use (question 10).

12. Purpose of use (question 11).

13. Quantity of water used in 1955 (questions 12 and 13). (Approximate acres of different types of vegetation should be somewhat low rather than high, to prevent future reductions. For domestic use, give population served, with breakdown as to employees and families, overnight guests, and day visitors, and specify whether residences have bath rooms, and campgrounds have flush toilets. Also list number of stock watered. For nonpermanent use, give approximate limits of season, and approximate maximum and minimum population).

We should have this data during the first week of February. For that reason, we are only asking for approximations which can be supplied without research, and it need not be typed. We will supply typed copies later.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Attachment

Copy to: Regional Director, Region Three, with attachment
Western Office of Design and Construction, with attachment

00-00-0000: letter re: water service report 1955

L54-L

January 17, 1956

Mr. Ivan M. Stout, Chief Engineer
Board of Water Engineers
302 West 15th Street
Austin, Texas

Dear Mr. Stout:

The Instructions with your form for the Water Service Report for 1955, under Water Right Application 978, Permit 927, quotes a more comprehensive Article 7612 than the Instructions of past years. The significant addition is that reports are prescribed for water used under riparian or prescriptive rights, or otherwise, in addition to use under established permits.

The following list of existing and proposed water systems at Big Bend National Park may, or may not be complete, and includes many for which the records of this office are incomplete, and some proposals which may not be attempted. There may be a few more actually in operation:

System	Source	Comments
Basin Water System	2 Wells	Domestic use
Boot Spring	Spring	
Border Patrol Camp	Well	Domestic use
Boquillas		
Castolon		
Government Camp	Spring	
K-Bar	Well	Domestic
Mexican Village	Well and Spring	(See maps with Wedin Ditch File)
Panther Junction	3 Wells	
Rio Grande	Well	(See maps with Wedin Ditch File)
Santa Elena		
Wedin Ditch	Rio Grande	Appl. 978, Permit 927

We shall need at least 22 more report forms if we are to report on all systems, and at least 30 forms if a report is needed for each source, with a copy for our files. It is also probable that we can do little more than supply an inventory for this year, in many cases.

Please advise what procedure is desired, and supply us with a somewhat liberal supply of forms to meet the need.

Sincerely yours,

A. van V. Dunn
Chief, Water Resources Section

Copy to: Superintendent, Big Bend, detached
Regional Director, Region Three, detached
Western Office of Design and Construction, detached

00-00-0000: letter re: water right application 978, permit 927

In reply refer to:
154-L

April 20, 1955

Memorandum

To: Regional Director, Region Three

From: Chief, Water Resources Section

Subject: Water Right Application 978, Permit 927, Docket 1, Big Bend

Attached are two copies of a letter of April 6 from the Chief Engineer of the Texas Board of Water Engineers, which was received at the time of the memorandum of April 9 from Mr. Bowen. The expression of approval is the result of my question in my letter of February 9, as to whether the wells should be omitted from the annual report, as they were. The reference to care and promptness probably indicates that many water users have had trouble with the new form adopted for this year's report.

Mr. Miller's memorandum to you of March 31, will be very helpful next year, particularly if Mr. Beckett will supply the additional details which have been promised for this year. From Mr. Miller's memorandum, however, it is evident that the water demand for the type of crops merits careful consideration by Mr. Beckett.

The permit No. 927 of November 1927, grants a right to 780 acre-feet for 312 acres, based on a water demand of 2.5 acre-feet per acre per year. The type of crops do not appear to have been designated in the portion of the records we have in Docket 1. We now have about 160 acres of water loving vegetation, and Mr. Miller's 100,000,000 gallons of applied water for 1954 is equivalent to 332 acre-feet, or 2.08 acre-feet per acre.

We have just obtained some figures from Mr. T. W. Robinson of the Geological Survey, in connection with his studies of water consumption by tules, tamarack and willow, in Arizona and his recommended estimate of a water demand of 13.7 acre-feet per acre for such crops at Death Valley, when in water, and progressively less as the water table falls below the ground surface. The hayfields are reported to be of about 25 feet above the level of the Rio Grande so the duty of water for alfalfa, salt cedar and willow is probably about 8.5 acre-feet per acre per annum.

On this basis any success with 2.08 acre-feet per acre per annum implies that the root systems are established in groundwater in filtrations from the Rio Grande, or the local precipitation occurs at particularly favoreble periods in the growing season. From these observations, it seems quite possible that irrigation is needed in large quantities only until the root systems get down to underground seepage from the Rio Grande, or to some artesian basin, and then in lesser amounts as a supplemental supply.

The ultimate water demand will have to be worked out by Mr. Beckett and local Park personnel, probably in part by trial and error over several years. During that period it will be very helpful to have detailed reports on the irrigation schedule, as planned, and also on the resulting tonnage of produced crops, in time for the annual reports to the Board of Water Engineers, in order that no implication of a low water demand becomes the basis for reduction in water rights.

From this analysis it also seems possible that it will not be possible to irrigate the entire 312 authorized acres with the authorized 780 acre-feet per year. We should not increase the acreage too much until we know what area can be supported by the water or what other water can be obtained. We can double the existing water diversions with a larger pump or longer hours of pumping before that question has to be settled, however.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

In duplicate

Attachments 2

In reply refer to:
L54-L

February 9, 1955

Mr. Ivan M. Stout, Chief Engineer
Board of Water Engineers
302 West Fifteenth Street
Austin, Texas

Dear Mr. Stout:

The accompanying Water Service Report for 1954 relates entirely to the diversion and use of waters of the Rio Grande by the Wedin Ditch in Big Bend National Park. The use of water from wells and springs for domestic purposes, additional irrigation in the Mexican Village area, and to maintain ponds for recreation, has been omitted on the basis of the letter of March 22, 1954, from you.

Well number 4, which is shown in the Hacienda Rio Grande area on the map submitted with the 1953 report, is still used for domestic purposes, but we gather that the source should be treated as percolating groundwater at this time. Well 2 in the Mexican Village; and Well 3, north of the Hacienda Rio Grande area, have been back-filled. Well 1, on the edge of the Rio Grande, was incorrectly classified on the map, being reality a spring which has not been developed. The water system from Springs A and B, in the Mexican Village, was improved at a cost of $1,500 during the year, but we assume that the use of these sources does not require appropriative permits because they are well above and away from the Rio Grande channel.

Sincerely yours,

(SGD.) A. V[illegible]

A. van V. Dunn
Chief, Water Resources Section

Enclosure

Copy to: Regional Director, Region Three (2), with copy of report (detached)
Western Office of Design and Constriction, with copy of report (detached)
Mr.

04-22-1954: memorandum re: water right permit no. 927, docket 1, for irrigation on graham-daniel's ranch area by wedin ditch; ap

In reply refer to:
L54-L

To - Big Bend

April 22, 1954

ROUTING
SUPERINTENDENT
ASST. SUPT.
CHIEF RANGER
CHIEF CLERK
MAINT. FOREMAN
ROAD FOREMAN
SHOP FOREMAN
CLERK-STENO
FILES

Memorandum

To: Regional Director, Region Three

From: Chief, Water Resources Section

Subject: Water Right Permit No. 927, Docket 1, for Irrigation on Graham-Daniels Ranch Area by Wedin Ditch, Big Bend

The attached letter, in duplicate, of March 22, from the Chief Engineer of the Texas Board of Water Engineers, contributes significant information concerning Texas water laws which most states do not recognize.

1. Surface water does not seem to be a tributary source of the Rio Grande until it passes over or through the cut bank of the main river. A small tributary stream from springs can be diverted for use under what is equivalent to the riparian rights, although the old state laws are based on the Roman Laws instead of the English Common Law.

2. Water can be used and reused after diversion from the Rio Grande, under the one appropriative right. The reuse of "return flow" is also permitted in Colorado, but not in Wyoming, which has complicated the negotiation of interstate compacts because the Colorado use results in multiple consumptive uses by evaporation and transpiration.

3. Mr. Stout has suggested that no attempt be made to revise the water claim until ultimate development is completely planned or a resultant fact, whereas such states as Utah are demanding diligent completion of projects if the initial priorities are to be retained.

We should still obtain the information on pumps and use, as previously requested, for the annual reports for next February, but we will use it in a less committal form than contemplated. We

RECEIVED
APR 1954
BIG BEND
NATIONAL PARK

should also know when the well near the Daniels Ditch diversion is put to use and the type of installation provided. Finally, we should know how much water is collected in the old ditch extending from NW to SE along the lower easterly bluffs of the area to the ponds in the Mexican Village; and whether that water seems to be "return flow" from the Wedin Ditch, with the amount dependent on the variable quantities carried in or released from the Wedin Ditch. It may take several years of observation to determine the last point.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

In duplicate

Attachment

C
P
Y

BOARD OF WATER ENGINEERS

302 West Fifteenth Street
Austin

March 22, 1954

United States Department of the Interior
National Park Service
Washington 25, D.C.

Re: File L54-L

Gentlemen:

We have reviewed the report prepared by Mr. A. van V. Dunn, Chief, Water Resources Section, in which was discussed the water service report which was filed in connection with Permit No. 927. We offer the following comments.

At this time there are no underground water laws in Texas which would in any way regulate water being taken from the wells described as numbers 2 and 4. It is stated that well number 4 probably intercepts the underflow of the Rio Grande. Unless the well was located in the bed of the river, we doubt our authority at this time, at least, to assume jurisdiction. There have been a few instances in which this Board has permitted the underflow of streams, but the well were located entirely within the stream bed.

From the description given of well number 2, it is our opinion that the water being recovered is either spring water or return water from the irrigation operation. In either case if the water is recovered prior to its entry into the cut bank of the river, we again regard the water as belonging to the land owner.

It is suggested that we lave the application in its present status until you determine whether or not additional water will be needed from the Rio Grande, or other sources over which this Board has authority. If a new permit is filed, these added uses can be considered at that time.

Very truly yours,

(SGND)

Ivan M. Stout, Chief Engineer
BOARD OF WATER ENGINEERS

05-16-1952: memorandum re: operation of, and perfection of rights for the wedin ditch; may 16, 1952

In reply refer to:
L54 BIGB-L

May 16, 1952

Memorandum

To: Regional Director, Region Three

From: Chief, Water Resources Branch

Subject: Operation of, and Perfection of Rights for the Wedin Ditch, Big Bend National Park

We have received the memoranda of May 7 from Mr. Miller and May 9 from Mr. Kell, relating to different features of the designated subject. In addition, Mr. Robertson has been at Big Bend the past week to obtain better first-hand information on the matter.

The memorandum of April 22 from Mr. Maxwell provides part of the information which is needed, but not all. Presumably Mr. Robertson has obtained the rest of the desired information which is available, and we will await his return before making further requests for that type of information.

However, in anticipation of Mr. Robertson's visit to Santa Fe about the time this memorandum arrives, it should be noted that if the pump at the Wedin Ditch headgate only delivers 1,200 gallons per minute the rate of diversion is 2.67 second-feet, and only 5.29 acre-feet of water can be applied to the land per day. Pumping 5 days per week and 52 weeks per year, a total of 1,375 acre-feet could be applied to the land.

The water right permit authorizes diversion of 7 second-feet with a limit of 780 acre-feet per year. Apparently, the authorized quantity of water can be delivered, but not as fast as authorized or as fast as is probably desired for proper timing of all of the irrigation. This can be corrected by installing a larger pump, or by installing additional pumps. The additional pumps can be either at the same diversion or at new points along the river, although we will have to amend the right to provide for diversions at new points. Since you seem to favor the use of one or more additional points of diversion, one of Mr. Robertson's objectives is to describe their locations, with ties to the original point, and determine what size pumps you propose to install.

The map which Mr. Kell returned, with certain information on planting, may be sufficient for our needs, but only Mr. Robertson can tell at this time. We wish to be able to block out each area of different types of culture, including the hay, willow, etc.

As previously mentioned, the existing pump permits delivery of 1,375 acre-feet of water per year, but only 780 acre-feet are authorized or probably needed. Presumably a larger part is needed in the spring than can be delivered. Accordingly, it is essential that Mr. Robertson determine, so far as possible, the months or weeks of the year when water should be applied, and the percentage of the annual total which is now applied in each such period, and also the more desirable quantity which would be applied if the greater pumping capacity were provided. This problem will also involve the possible subdivision of the ditch system as units to be supplied from each pump as mentioned by Mr. Miller.

We were particularly pleased to learn that Special Use Permit I-Snp-99 is still in force. With water use privileges treated separately under concession contracts, grazing permits, and special use permits, I should have checked further than I did. Very definitely, Permit I-Snp-99 should be substituted for the memorandum of August 14, 1950, to the Regional Director from Mr. Demaray. We are having photostat copies made, and will forward them in a few days.

(SGD.) A. VAN V. DUNN

A. van V. Dunn
Chief, Water Resources Branch

In duplicate

05-07-1952: memorandum re: operation of the wedin ditch on the daniel's ranch area; may 07, 1952

	ROUTING
✓	SUPERINTENDENT
✓	ASST. SUPT.
✓	CHIEF RANGER
✓	CHIEF CLERK
	MAINT. FOREMAN
	ROAD FOREMAN
	TRAIL FOREMAN
	FILES
1	

refer to:
L7619 CGD-L
215
15
444

Region
Santa Fe, New Mexico

May 7, 1952

Memorandum

To: Director

From: Acting Regional Director

Subject: Operation of the Wedin Ditch on the Daniels Ranch Area, Big Bend

We have received Mr. Richey's memorandum of April 24, suggesting that we require the concessioner, National Park Concessions, Inc., through its subconcessioner, Mr. Beckett, to provide water for the areas of the Daniels Ranch which have recently been planted to cottonwood trees. Mr. Dunn's memorandum of March 20, two copies of which were attached to Mr. Richey's memorandum, expresses regret that the terms proposed in Mr. Demaray's memorandum of August 14, 1950, particularly the several parts of Condition 14, did not become effective. One of the purposes of this memorandum is to show that all provisions under Condition 14 of Mr. Demaray's memorandum are now in effect, through a special use permit issued to National Park Concessions, Inc., (No. I-Snp-09) for the period beginning September 1, 1950, and automatically renewable until December 31, 1961. The terms of this special use permit are incorporated by reference in Section 7 of the agreement of October 7, 1950, between National Park Concessions, Inc., and B. F. Beckett.

Mr. Demaray's memorandum of August 14, 1950, contained a recommended Condition 14(d) for the purpose of providing water for future plantings by the National Park Service on the Daniels Ranch. This condition is included in the special use permit and reads as follows:

> "The National Park Service reserves the right to improve and irrigate lands not cultivated by permittee or its assignee where practical and desirable, on payment of the proportionate share of the cost of pump operation."

In view of the obvious applicability of this condition, we think it is not only unnecessary, but improper, to rely upon generalities and implications in the main concession contract, to carry out the purpose. Accordingly, we have the right to pump water

RECEIVED
MAY 12 1952
BIG BEND NATIONAL PARK

from the river to supply the cottonwood areas and the right to use the Beckett pumping system on payment of a proportionate share of the cost of pump operations.

However, the pumping and distribution system as it now exists is unsuited for direct irrigation of the cottonwood areas. We recommend that a separate pump be installed by the Government, to be operated by the commercial electrical power which is about to be made available. Although the distribution of water from the pump discharge to the trees can be made through the present ditches, the waste of water which would be involved in using the present ditches, with their circuitous routes, would make it more economical to construct new ditches directly from the proposed new pump discharge to the cottonwood areas. The total area planted to cottonwoods is 3½ acres. The water demand for cottonwoods of this species (Populus palmeri) native around springs and in damp arroyos is 8 to 10 acre feet per acre per year. After the trees have become established and matured, the percolation from the adjoining ditches and irrigated fields will nearly, if not entirely, provide the necessary water for the present plantings. However additional plantings are planned for the future which should triple the acreage to be irrigated. There is also a possibility that Mr. Beckett may cease to irrigate the surrounding fields, by reason of breakdown of his pumping system or for any other reason, so that an assured independent supply should be available for any contingency.

Please consider the entire matter in view of the provisions of the above-mentioned special use permit. We are withholding the copies of documents which we were directed to insert in Big Bend Water Right Docket No. 1. We suggest that copies of the special use permit (Contract I-5np-89) be inserted in the water right docket at the same time.

(SIGNED)

Hugh M. Miller
Acting Regional Director

Copy to: Supt., Big Bend, with copies of
Mr. Richey's Apr. 24 memorandum
and Mr. Dunn's Mar. 20 memorandum

02-01-1952: memorandum re: planting plan, hacienda rio grande; february 01, 1952

In reply to:
D3215 BIGB-L

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

February 1, 1952

Memorandum

To: Regional Director, Region Three

From: Chief, Water Resources Branch

Subject: Planting Plan, Hacienda Rio Grande, Drawing NP-BB-2126, Big Bend National Park

The subject drawing has come across my desk just after I executed the water service report for 1951 under Water Right Application No. 978, Permit 927, and seems to supply the answer to questions which arose during my work, but I should appreciate confirmation for next year's report.

If you will refer to the similar report for last year, at the top of your Docket No. 1, you will note that we claimed 14 acres of cottonwood, willow, and salt cedar, and the rest of the acreage in hay. By the excellent memorandum of August 10, 1951, from Mr. Maxwell, we obtained information to show that the permittee now thinks he has about 175 acres under irrigation, out of the gross irrigated area of about 264 acres circled on his attached map. There are about 75 acres unaccounted for.

Drawing BB-2126 shows spotty planting over about 30 acres, of which about half is planting, or more or less of the aforesaid 14 acres. This leaves only 45 acres unaccounted for, partially due to the approximate nature of the permittee's estimate of 175 acres, and partially due to the possibility of unirrigated islands in his gross area. It will help to have this interpretation confirmed or corrected.

It will also be helpful for next year's report to know whether the areas between the planting along ditches will be in irrigated lawn, or some form of paving or gravel on which to park and camp.

(SGD.) A. VAN V. DUNN

A. van V. Dunn
Chief, Water Resources Branch

In duplicate

00-00-0000: letter re: water service report for 1951

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

In reply refer to:
L54 BIBB

February 1, 1952

State Board of Water Engineers
302 West Fifteenth Street
Austin, Texas

Gentlemen:

The Water Service Report for 1951 for the Wedin Ditch at Big Bend National Park, under Application 978, Permit 927, is enclosed herewith.

Within the next year or two we should be able to report full use of the water with well-established trees in the recreational portion of the area, and routine annual farming on the portion devoted to the growing of stock feed. We should like to know just what form of proof will be required to obtain the final certificate.

In addition, we should like to know whether a minor amendment of the application should be filed before making proof. The description of the area in the original application was quite crude. Due to topography, the actual area bulges beyond the described limits in some spots, and does not include all of the described area, and the total acreage will probably be slightly less than originally specified if islands of undeveloped land, and land developed as roads, parking areas and building sites, are omitted.

Very truly yours,

(SGD.) A. VAN V. DUNN

A. van V. Dunn
Chief, Water Resources Branch

Enclosure

Copy to: Regional Director, Region Three (2)

07-10-1950: memorandum re: water rights appurtenant to wedin ditch at daniel's ranch; july 10, 1950

Big Bend

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

In reply refer to:
L54 BIBE

July 10, 1950

Memorandum

To: Regional Director, Region Three

From: Chief, Water Resources Branch

Subject: Water Rights Appurtenant to Wedin Ditch at Daniels Ranch Area of Big Bend National Park

Enclosed are four copies of a letter of July 6 from the Chairman, Texas State Board of Water Engineers, in reply to my letter of June 29 of which you have already received copies. Please have one copy inserted in each of the assemblies of Big Bend Deed 2 in your office and at the PARK. The two extra copies are provided for cross-reference filing in connection with proposed Special Use Permit L-Sap-99 to authorize the National Parks Concessions, Inc., to use the Daniels Ranch Area, which is still being considered in this Office.

The enclosure gives the following information to clarify the water right:

1. The right is limited to the use of 780 acre-feet of water per year, and this quantity cannot be increased because there is no more unappropriated water in the Rio Grande.

2. There is no limit on the irrigation season. Therefore, the water can be applied by pumping 8 hours per day for 6 months of the year at slightly under 7.0 second-feet, or by pumping only slightly more than 1.0 second-foot continuously 24 hours per day, 365 days per year. Your use, and therefore the size of pump, will depend on how much of the year you need to apply water to the crops to be raised.

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CHIEF [illegible]	
MAINT. FOREMAN	
ROAD FOREMAN	
SHOP FOREMAN	
CLERK-STENO	
FILES	

You may change the place of use and amend the water right accordingly.

You may apply more than the average 2.5 acre-feet per acre of water to some crops if you reduce the rate of application to others, or reduce the total acreage irrigated, and amend the water right accordingly.

RECEIVED
JUL 17 1950
BIG BEND NATIONAL PARK

5. You may also irrigate part of the area fairly continuously throughout the year and apply water to other areas only when the crops require it.

Also, as indicated in the letter of March 1 from the Chairman of the Board of Water Engineers, of which copies were sent to you by memorandum of April 11, the quantity of water pumped independently for the domestic water supply should be deducted from the 750 acre-feet formerly allocated to irrigation.

With these explanations, it is evident that the capacity of pump needed to perfect the water right may be anywhere from 1.25 to 7.0 second-feet, depending on the irrigation schedule which will suit the agricultural needs best. The agricultural needs cannot be determined until the acreage of different crops is determined, and this may change during the next 5 or 10 years as the development is made.

(SGD.) A. VAN V. DUNN

A. van V. Dunn
Chief, Water Resources Branch

Attachments 4

In duplicate

07-06-1950: letter re: application no. 978, permit no. 927; july 06, 1950

C O P Y

BOARD OF WATER ENGINEERS
STATE OF TEXAS
302 WEST FIFTEENTH STREET
AUSTIN

July 6, 1950

Mr. A. Van V. Dunn
Chief Water Resources Branch
National Parks Board
Washington 25, D. C.

Ref: L54 BIGB

Dear Mr. Dunn:

Reference is made to your letter of June 29, 1950, relative to water rights under Application No. 978, Permit No. 927, originally in the name of J. O. Wedin, Marathon, Texas.

We think that after an investigation, it is found advantageous to transfer the use of the water allocated under the permit to another tract of land without increasing your appropriation, the transfer can be made without difficulty so long as no increase in the appropriation is requested. There is no unappropriated water in the ordinary flow of the Rio Grande to permit an increase in the present appropriation.

In paragraph No. 2 of your letter, you note that the duty of water is limited in the permit to 2.5 acre-feet per acre while in the application a duty of three acre-feet per acre was requested. Information developed at the hearing on the application for permit probably led the Board to believe that the duty of 2½ acre-feet of water per acre was sufficient when economically distributed to irrigate the lands under consideration. However, if it were shown that it is economically advantageous to use more of the total appropriated water on certain lands for the production of some crops while using less water on some of land in the production of less valuable crops, it might be possible to amend a permit to conform to such usages. The Board of Water Engineers is interested in seeing the water put to the greatest beneficial use.

Under the present permit, the only limitations have to do with duty of water, maximum rates of diversion and total amount of appropriation and area on which the water is to be used. There is no limitation as to seasons of the year in which water is used, river stage, or duration of pumping periods. We think probably that after the Service has determined how much land it has in that region that it would be economically feasible to irrigate and what crops are best adapted to



its use, a conference between a representative of the service who is familiar with local conditions and the Board of Water Engineers would be very helpful.

We trust that we can be of service to you in the development of your project.

Yours very truly,

/s/ H. A. Beckwith

H. A. Beckwith, Chairman
BOARD OF WATER ENGINEERS

HAB:fs

06-29-1950: letter re: rehabilitation of the wedin ditch system; june 29, 1950

Big Bend

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

In reply refer to:

	PARK	
	SUPERINTENDENT	KM
	C. ASST. SUPT.	
	CHIEF RANGER	
	CHIEF CLERK	
	MAINT. FOREMAN	
	ROAD FOREMAN	
	SHOP FOREMAN	
	CLERK-STENO	
	FILES	

June 29, 1950

State Board of Water Engineers
302 West 15th Street
Austin, Texas

Gentlemen:

Several questions have arisen in connection with our rehabilitation of the Wedin Ditch system on the former Daniels Ranch at Big Bend National Park under Water Right Permit No. 927 (Application No. 978).

1. On drawing NP-BB-6951, which was submitted with our annual report for 1946, you will note that the former owners irrigated some lands to the north of the area authorized in the permit, and that this Service has restored the ditch serving the western parcels of these unauthorized areas. We have not yet fully determined how much of the authorized area may not be suitable for irrigation. Accordingly, we have not yet applied for a change in place of use, but we assume from the State Attorney General's Opinion No. 3397 that the amendment can be made. What we should like to know, however, is whether you still recognize the existence of unappropriated water of the Rio Grande in case the total area proves to be greater than 312 acres, and we desire to appropriate more than the authorized 780 acre-feet.

2. In Article 7528, Title 128, of Vernon's Annotated Revised Civil Statutes, we note that you are authorized to define the duty of water for different sections of the State. We also note that Mr. Wedin's application called for a duty of 3 acre-feet per acre, but that the permit is limited to 2.5 acre-feet per acre. In general, the National Park Service tries to preserve native vegetation which requires a relatively low duty of water. However, we are considering the introduction of some alfalfa in this area to provide feed for saddle stock. Accordingly, we should like to know whether we are limited to 2.5 acre-feet per acre, or can obtain different rates of irrigation for different crops in application for amendment of the permit.

3. The application and permit say nothing about the period during which the water will be used, although the authorized amo

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JUL 6 1950
BIG BEND NATIONAL PARK

capacity of 7.0 second-feet to deliver 2[illegible] acre-feet per year suggests a 6-months irrigation season running 8 hours per day. I might also add that I have no information to indicate whether it might be desirable for this Service to irrigate at seasons other than those usually scheduled for the ranches of the vicinity. Accordingly, it will be appreciated if you can tell us how our rights may be limited as to seasons, whether other schedules are practical, and whether a modification of our authorized schedule would require additional rights or only an amendment of the existing permit if the same total quantity of water were used in either case.

Sincerely yours,

(SGD.) A. VAN V. DUEM

A. van V. Duem,
Chief, Water Resources Branch

Copy to: Regional Director, Region Three (2)

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

In reply refer to:
I54 BIGB

Big Bend National Park
Marathon, Texas

May 1, 1950

Memorandum

To: Regional Director

From; Superintendent, Big Bend

Subject: Wedin Ditch Water Rights, Permit No. 927, Daniels Ranch area

This will acknowledge receipt of Mr. Diehl's memorandum of April 25 with which was enclosed copy of a letter from Mr. A. Van V. Dunn and Mr. H. A. Beckworth, Chairman of the State Board of Water Engineers regarding the well at the Daniels ranch site, Big Bend National Park. This matter was discussed with Mr. Dunn during my recent visit to the Washington Office, and I believe that he now has all the information. In order to keep the records straight, however, I wish to advise that this is a shallow well and that the water in it percolates through the river valley fill and that the water comes directly from the Rio Grande.

Ross A. Maxwell
Superintendent

In duplicate

183

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

In reply refer to:
L54 BIGB

April 11, 1950

Memorandum

To: Regional Director, Region Three

From: Chief, Water Resources Branch

Subject: Wedin Ditch Water Rights, Permit No. 927, Daniels Ranch Area, Big Bend National Park

Enclosed is a copy of a letter of March 1 from H. A. Beckwith, Chairman, Board of Water Engineers, State of Texas, in duplicate, advising that the diversion of water by the well at the Daniels Ranch, Big Bend National Park, will be recognized as part of the diversion under the original Wedin Ditch right, Permit No. 927, provided the well is shallow and there is reasonable certainty that it does intercept the underground flow of the Rio Grande River. If it is believed that the well has intercepted percolating waters from within the Monument or an underground artesian basin, there would be no relation between the diversion and the Wedin Ditch rights.

No final decision is necessary until about time to make proof on the Wedin Ditch rights. However, we shall appreciate your opinion as to whether the well is in fact used to divert the underground flow of the river, as we claimed when we wrote to the State Board of Water Engineers on February 6. If this is the case, the domestic supply will constitute a partial but very small use of water under the right we are now trying to preserve by various methods of development and use.

(SGD.) A. VAN V. DUNN.

A. van V. Dunn
Chief, Water Resources Branch

In duplicate

Attachments 2

03-01-1950: letter re: legal status of a shallow well; march 01, 1950

C O P Y

STATE BOARD OF WATER ENGINEERS
STATE OF TEXAS
302 WEST FIFTEENTH STREET
AUSTIN

March 1, 1950

Hon. A. van V. Dunn
Chief, Water Resources Branch
U. S. D. I. National Park Service
Washington 25, 1950

Dear Sir:

We have received and considered your letter dated February 6, 1950, wherein you make inquiry as to the legal status of a shallow well which you state is presumably the water from the under ground flow of the river itself. You further state that the intent in excavating the well was to obtain river water, using the infiltration to the well as a preliminary filtration. You state that the well is located on the banks of the Rio Grande, adjacent to the river and desire to know whether such well will be recognized as a partial appropriation of river waters under the National Park Service Permit No. 927.

It is our thought, if the well is a shallow well as you have stated, and if same is more than likely a part of the flow of the Rio Grande, then same would constitute a part of the water used and appropriated under your Permit. On the other hand, if the well constitutes a part of the percolating waters from an underground source, the landowner can withdraw from said well without the necessity of a Permit, and in any amounts it desires.

Hoping that this information will satisfy you, I am,

Yours very truly,

/s/ H. A. Beckwith

H. A. Beckwith, Chairman
BOARD OF WATER ENGINEERS

RBT:HAB:pm

12-31-1949: letter re: water service report for the year ending december 31, 1949

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

In reply refer to:
D5039 BIGB

February 6, 1950

State Board of Water Engineers
302 West 15th Street
Austin, Texas

Gentlemen:

We enclose a Water Service Report for the year ending December 31, 1949, in connection with the right to use waters of the Rio Grande in the Daniels Ranch area of Big Bend National Park under Application No. 978, Permit No. 927.

The irrigation system is largely restored and further beneficial use of the water will depend largely upon the replanting of the area during the next few years. Full irrigation may require installation of a larger pump, although it seems probable that the original water claim was excessive.

In addition to the improvement of the grounds, the Service is proposing to provide accommodations for the visiting public. As a preliminary step, we have excavated a shallow well adjacent to the river to obtain a potable water supply of a better quality than is available directly from the surface flow, chlorination of course being necessary in either case. Presumably the water from the shallow well is only the underground flow of the river itself. The question is whether the well supply, not far from the authorized surface water diversion, will be recognized as a partial appropriation of river waters under Permit No. 927. The intent at least was to obtain river water, using the infiltration to the well as a preliminary filtration. Since ordinary wells more remote from the river do not seem to come under your jurisdiction, we shall appreciate information regarding the status of this well on the bank of the Rio Grande.

Sincerely yours,

(SGD.) A. VAN V. DUNN

A. van V. Dunn
Chief, Water Resources Branch

Enclosure

Copy to: Regional Director, Region Three (2).

Big Bend

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

ADDRESS:
THE DIRECTOR, NATIONAL PARK SERVICE

RECEIVED
APR 28 1949
BIG BEND NATIONAL PARK

April 13, 1949.

MEMORANDUM for the Regional Director, Region Three.

This refers to the memorandum of March 25 for you from Mr. Maxwell with regard to property corners in the Daniels Ranch area of Big Bend National Park.

The map of the irrigation ditch as already submitted fits the area described in Water Right Application 978 so closely that remote ties would have very little value. When it is convenient to obtain a tie from the rock pile described at the bottom of the third paragraph of Mr. Maxwell's memorandum, that might give us slightly increased refinement. Also, if we knew the relative locations of old fence lines and the ditches, that might be helpful. It occurs to me that some of this information may be available on maps which have not been submitted to this Office.

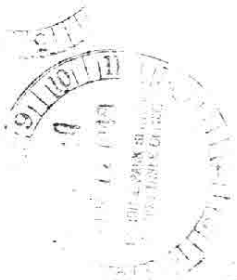
We are not making final proof under this water right in any case for several years. Therefore, there is no reason to make any special effort to tie in additional landmarks at this time. Mr. Maxwell's explanation is such that I would not hesitate to complete a final proof map from the data at hand if necessary, but I think it is well to keep in mind that it would be helpful and add weight to our authority if we had a better idea of the relative positions of old fence lines and rock piles, and the ditches, when final proof is made. The main thing at this time would be not to destroy evidence still remaining on the ground without tying it in to the survey of the area.

(SGD.) A. VAN V. DUNN.

Chief, Water Resources Branch.

In duplicate.





03-25-1949: memorandum re: water rights of daniel's ranch; march 25, 1949

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

Big Bend National Park
Marathon, Texas.

March 25, 1949.

MEMORANDUM for the Regional Director, Region Three.

Reference is made to our copy of Mr. A. Van V. Dunn's memorandum of February 23, to the Regional Director and to Mr. Lassiter's memorandum of March 4 to the Director regarding the water rights of the Daniel's Ranch, Big Bend National Park. Much of the data desired is not available. However, we will do our best to furnish what we can.

In the second paragraph of Mr. Dunn's memorandum, so far as I have been able to determine there is no official corner established for the S. E. corner of Section 5. I discussed this with Mr. Frank Wedin on March 15. He advised that he was told that the original pile of rock that was supposed to be the S. E. corner of Section 5 was near an ocotillo bush on the bank of the river, but that the rock pile had been scattered. If he were down there he thought he could probably show me the ocotillo bush or approximately where it was.

In this connection I discussed the location of section corners with County Surveyor Card, and his predecessor, Mr. Stovell. Both told me that so far as they knew the closest established corner is about ten miles west of San Vicente which is the one that Mr. Lassiter started from, when he and Ranger senter made the survey of the Wiedermann property, Section 3, Block G-17. There is another established corner, I think, the S. E. corner of Section 20, Block 20. There is an old rock monument on what appears to be the east line of Section 5. This monument is on a rock bluff fifty feet north of the river and 75 feet above the river. This rock monument is on the highest point of the cliff in the bend of the river. It is also in line with several rock piles that suggestthat rock were piled around fence posts on an old fence line, which is approximately due north. According to the best of our survey and estimate the rock pile mentioned above is the monument that Mr. Wedin, Frank Wedin's father, accepted as the S. E. corner of Section 5, although it is fifty feet north of the corner of the section, for this ties in with the map in Water Rights Application No. 978, drawing NP-BB-6951, with Deed No. 2.

It is doubtful if there was ever a marker, fence line or other feature to mark the east side of Section 3. The ditch mentioned by Mr. Dunn is out in the field and apparently is not on any property line.

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

Our present pump is forty-two feet from the river and is resting on the same rock foundation on which the Wedin and Daniels pumps were set. The intake from the pump is in the river, and the direction is N 32° E from the intake to the pump. The river bank at the intake is stable. This stability is produced by massive ledges of Lower Cretaceous limestone (Devils River limestone) whose lower end is covered by the water, and as these ledges rise their northern extension form an escarpment. It is also along these ledges that the main ditch into which the water is pumped has been excavated. This rock ledge has been stable for centuries as proven by the numerous rock mortars made by the Indians, in the ledges just above the normal river water level.

Evidence that this is the same site used by Messrs. Wedin and Daniels are: that it is the only deep hole in the river in that vicinity, the engine foundations are on the bank above the hole, part of the old intake pipes were still in the hole at the time the park made its installation, and during the period from 1936 to 1942, the park superintendent has seen the Daniels pumping installation in operation many times. The Rio Grande emerges from a canyon cut through Lower Cretaceous rock just above this site, and because of the natural confines of the river this hole will not silt up unless it destroys the massive limestone ledges which it has been working at through the geological ages, and has made only enough progress to slightly modify the rock mortars since the days of the Indians.

The above information is definitely sketchy, but is the best we can do without a thorough survey.

Ross A. Maxwell,
Superintendent

In duplicate

03-04-1949: memorandum re: water rights at the daniel's ranch at bibe; march 04, 1949

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

Region Three
Santa Fe, New Mexico

March 4, 1949.

MEMORANDUM for the Director.

Reference is made to Mr. Dunn's memorandum of February 23 relative to land surveys in connection with water rights at the Daniels Ranch at Big Bend National Park.

We are sending a copy of this memorandum together with a copy of Mr. Dunn's memorandum to Superintendent Maxwell with the request that he advise us if there is any marker on the ground which may be considered as the southeast corner of Section 5 or if there are any local accepted property lines which may have been existent when the Graham and Daniels tracts were both occupied. This is the information requested in the second and third paragraphs of Mr. Dunn's memorandum.

The present site of the pump is, I believe, on the original site selected by Mr. Wedin. This site is on the solid rock outcropping which is an extension of the high ridge to the west of the irrigated section of the Daniels Ranch. This point has not changed any and is not subject to change. Its shape is such as to make a natural pump foundation, and I do not think that Mr. Wedin used any other site for his pump installation.

Upon receiving further information on this from Superintendent Maxwell we will forward it to you.

J. R. Lassiter,
Regional Engineer.

cc: Superintendent, Big Bend, with copy of Mr. Dunn's memorandum.

RECEIVED
MAR 7 1949
BIG BEND NATIONAL PARK

12-18-1949: memorandum re: statutory vera; december 18, 1949

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

ADDRESS ONLY
THE DIRECTOR, NATIONAL PARK SERVICE

~~[illegible]~~
Washington 25, D. C.

Big Bend Alien WR-1

December 13, 1948.

MEMORANDUM for the Regional Director, Region Three.

Mr. Harrington, Bureau of Land Management, advises that the statutory vera in Texas is now 33.33333 inches. This memorandum is being sent to you in sufficient copies to permit filing in Big Bend Deed No. 3 and Alien Water Right No. 1 in your office and at the Park.

(SGD.) A. VAN V. DUNN.
Chief, Water Resources Branch.

AvVD:sh.
In quadruplicate.



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CHICAGO, ILLINOIS
54

ADDRESS ONLY
THE DIRECTOR, NATIONAL PARK SERVICE

November 2, 1943.

Board of Water Engineers,
State of Texas,
Austin, Texas.

Gentlemen:

Reference is made to Mr. McDonald's letter of October 18 and Notice of Hearing relating to possible abandonment of our water right under Permit 927 for the proposed Big Bend National Park.

The right covered by the above-mentioned permit is appurtenant to land conveyed to the State for park purposes by Nellie E. and Joe M. Graham by deed dated June 6, 1942. The said land is part of a larger tract conveyed to the United States for the Big Bend National Park by deed signed by the Governor on August 26, 1943. We are now awaiting acceptance of the deed by the United States.

The same area, or that adjacent to it, is to require water for park use but such development is delayed, in part, by the time required to perfect title. In addition, the United States has had to defer nearly all such work in all of the national parks and monuments until the close of the war in order that available labor and materials may be diverted to the prosecution of the war.

We definitely plan to exercise rights under Permit 927. There has been no abandonment, but there may have been a year or two of non-use, including that from June 1942 to August 1943 when title was held by the State. We request as broad an interpretation of the law as possible to permit us to retain the right until we are able to use it again.

In reply to this letter, will you please send a copy to A. van V. Dunn, Hydraulic Engineer of our Region Four Office, 601 Sheldon Building, San Francisco 5, California, who handles National Park Service water right matters there. Also, if you have a manual of water right procedure for your State, will you please send two copies to this Office and two copies to Mr. Dunn? There are probably other water rights in the Big Bend area and we shall wish to retain them at least until we complete our development plan.

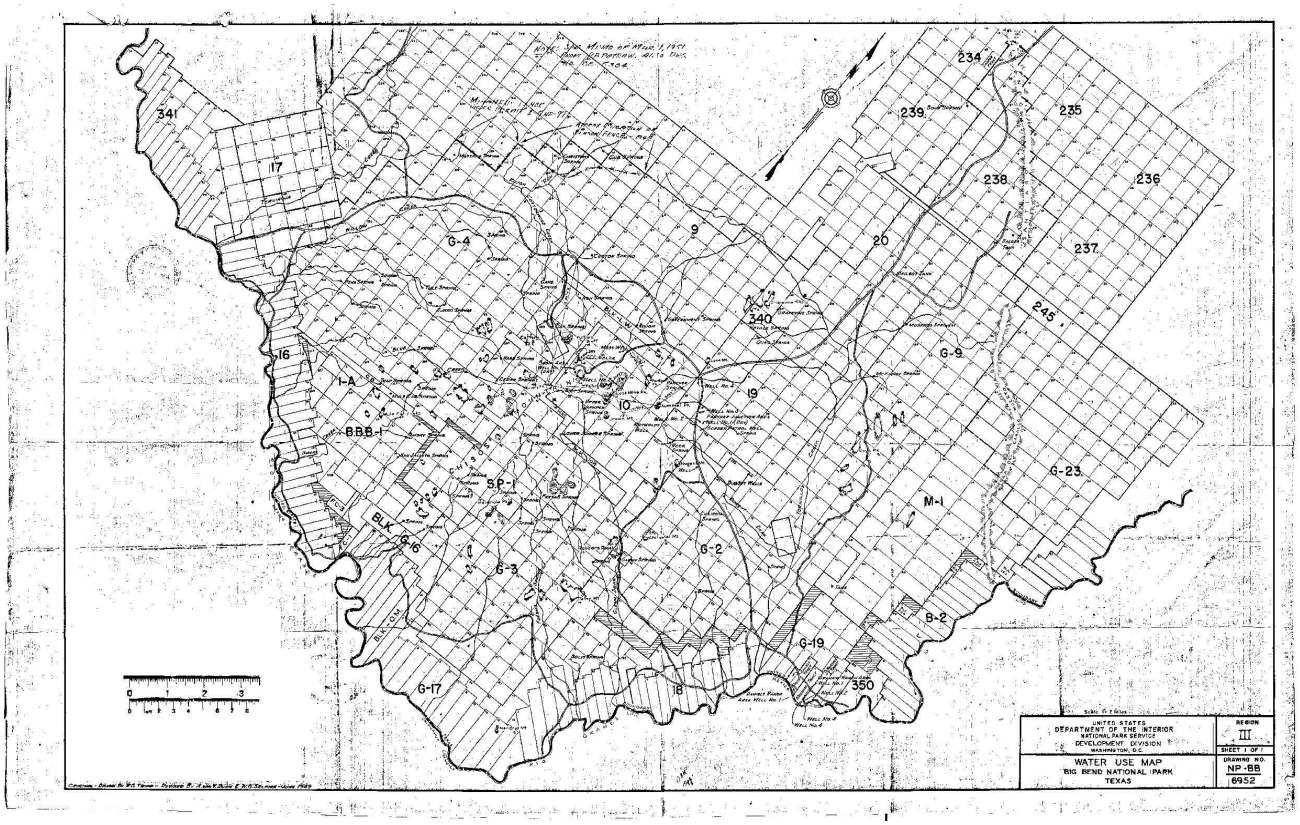
Sincerely yours,

(SGD) Hillory A. Tolson
Hillory A. Tolson,
Acting Director.

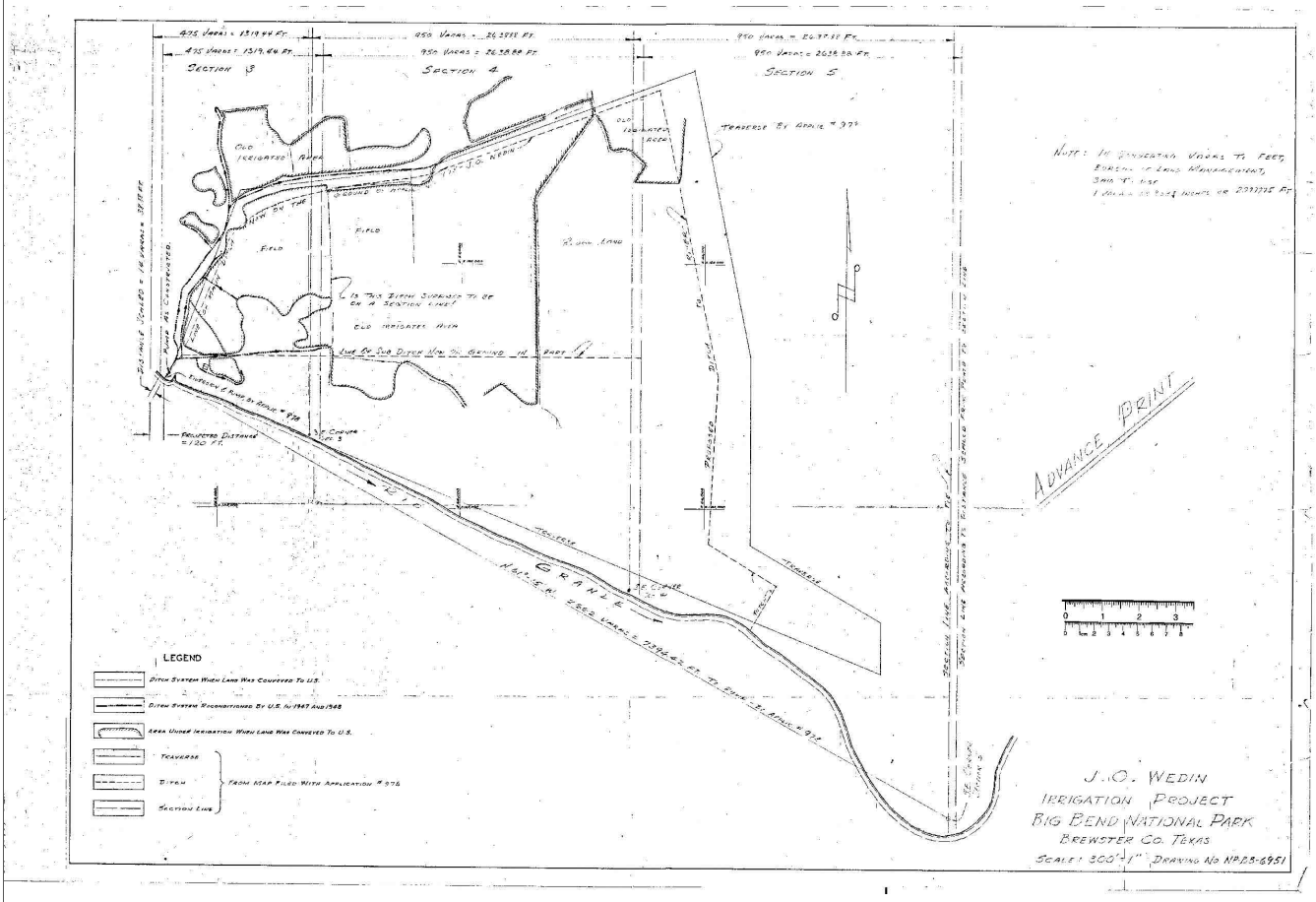


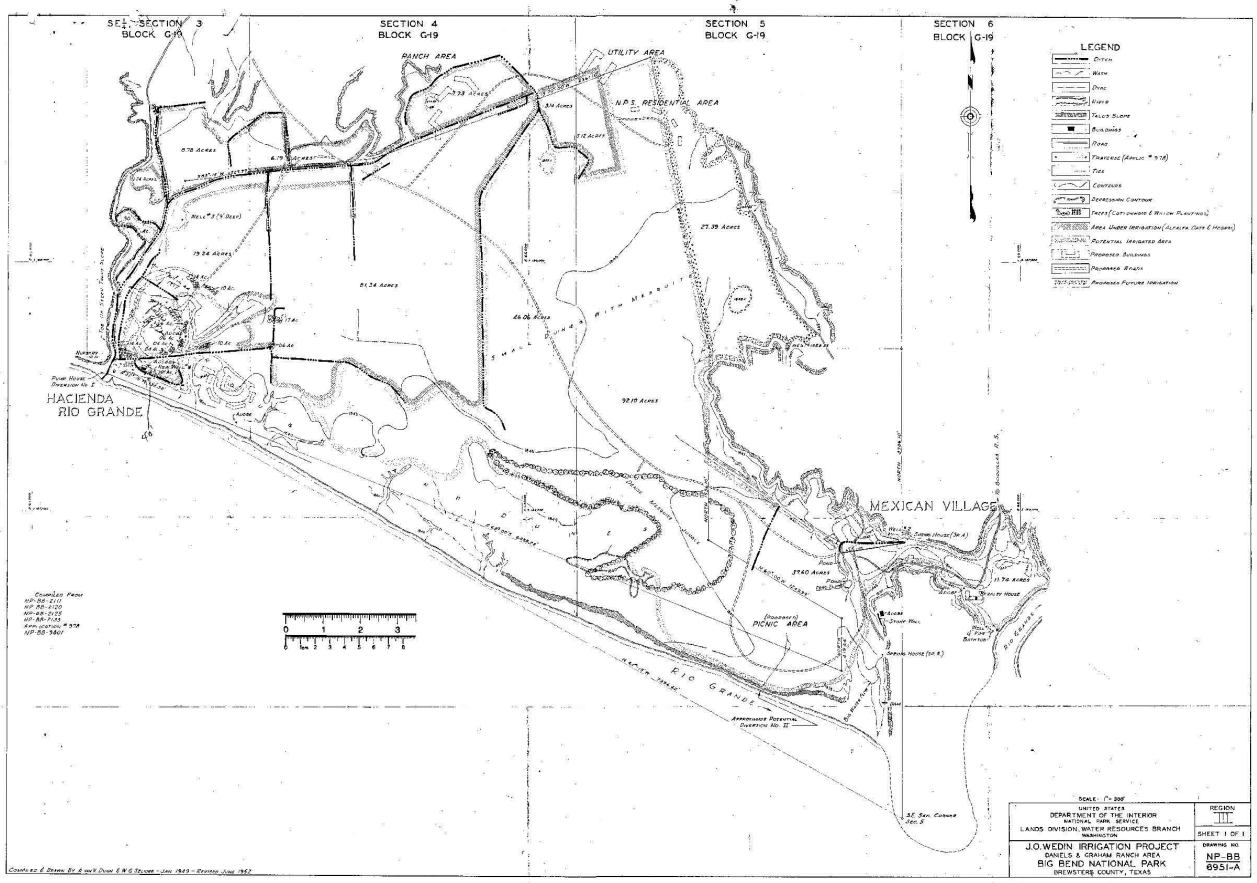
cc: Water Rights Section, Region Four.
Regional Director, Region Three (detached).
Mr. Dunn, Room 1150.

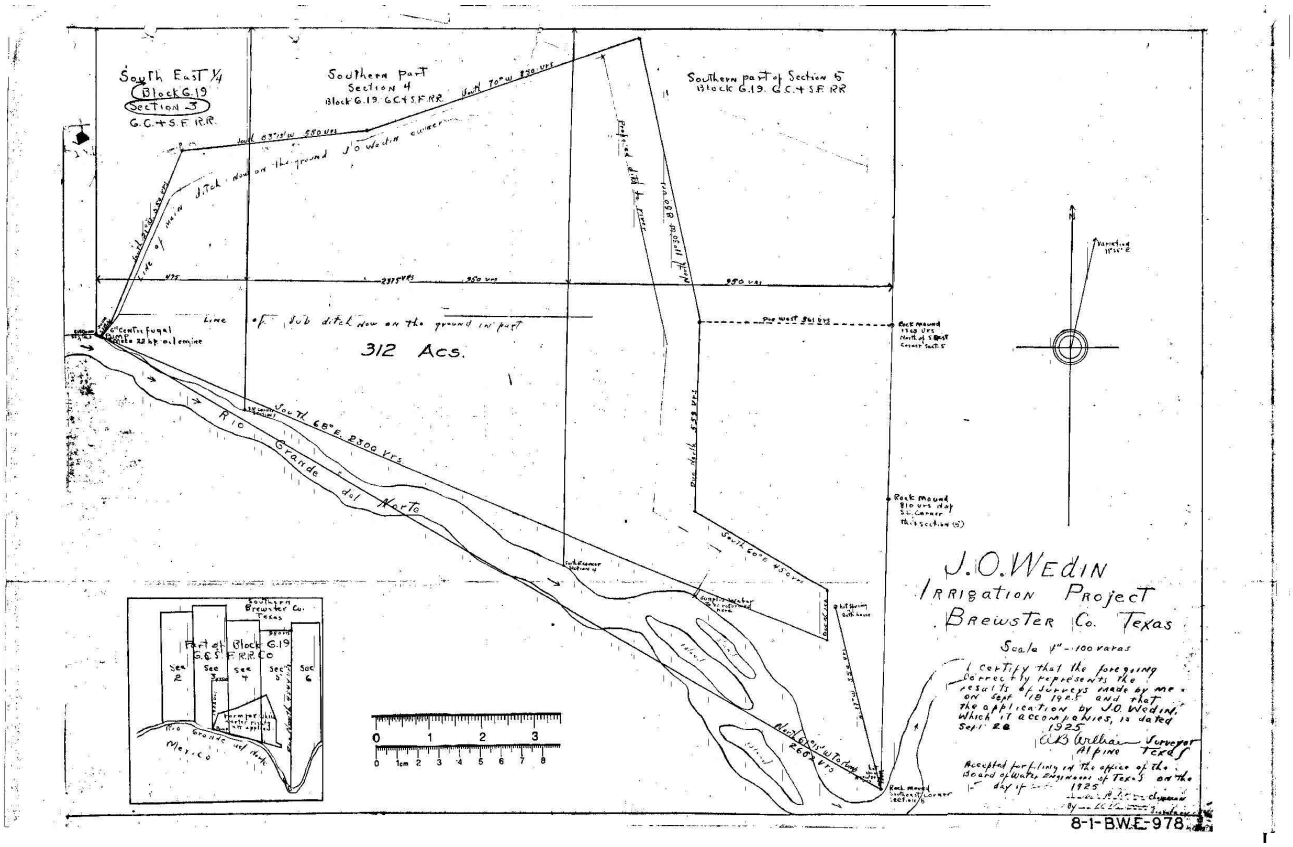
00-00-0000: water use map



00-00-0000: irrigation project




SE¼ SECTION 3
BLOCK G-19
SECTION 4
BLOCK G-19
SECTION 5
BLOCK G-19
SECTION 6
BLOCK G-19
RANCH AREA
UTILITY AREA
N.P.S. RESIDENTIAL AREA
HACIENDA
RIO GRANDE
MEXICAN VILLAGE
PROPOSED
PICNIC AREA
RIO GRANDE
LEGEND
0 1 2 3
SCALE: 1" = 200'
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
LANDS DIVISION, WATER RESOURCES BRANCH
WASHINGTON
REGION
III
SHEET 1 OF 1
J.O. WEDIN IRRIGATION PROJECT
DANIELS & GRAHAM RANCH AREA
BIG BEND NATIONAL PARK
BREWSTER COUNTY, TEXAS
DRAWING NO.
NP-BB
6951-A



Docket Information

Number of Documents in Docket 251

Documents Dated from 9/28/1925 to 1/16/1996

Docket Compiled: 1/31/2011