

Sixty Fourth - Annual Report

Distribution of Waters of The Gila River

BY THE
GILA WATER COMMISSIONER
DON L. WEESNER

TO THE
UNITED STATES DISTRICT COURT
In and For The District of Arizona

1999



SIXTY-FOURTH ANNUAL REPORT

1999

DISTRIBUTION OF WATERS OF THE GILA RIVER

by the

GILA WATER COMMISSIONER

D.L. WEESNER

to the

UNITED STATES DISTRICT COURT

OFFICE OF THE
GILA WATER COMMISSIONER

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UNITED STATES OF AMERICA
vs.

GILA VALLEY IRRIGATION DISTRICT
ET. AL E-59 GLOBE

Phoenix, Arizona
April 28, 2000

Honorable John C. Coughenour
Judge of the United States District Court
Tucson, Arizona

No. E-59 Globe
Re: United States of America
vs.
Gila Valley Irrigation District, et al.

Dear Judge Coughenour:

I submit herewith the **Sixty-Fourth Annual Report** in the above-entitled cause on distribution of waters of the Gila River, tabulation of hydrologic data, and analysis of expenditures and collections for the calendar year 1999.

Very Truly yours,



Don L. Weesner
Gila Water Commissioner

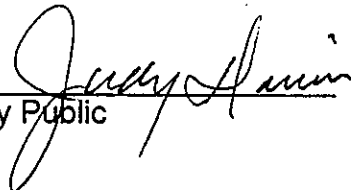
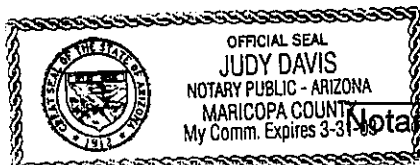
State of Arizona)
County of Maricopa) ss:

I, Don L. Weesner, Gila Water Commissioner, hereby certify that the following is a true and correct record of distribution of waters of the Gila River for the calendar year 1999, to the best of my knowledge and belief. Furthermore, that the **Financial Statement** submitted herein is a true and accurate record of all receipts and disbursements for the calendar year 1999.



Don L. Weesner
Gila Water Commissioner

Subscribed and sworn to before me this 28th day of April, 2000.



My commission expires:

TABLE OF CONTENTS

PAGES

Personnel / Sources and Accuracy of Data	1
Geographical Divisions / Distribution of Waters	2
Water Supply / Coper Crossing Table / Consumptive Use	3
Consumptive Use Tracking Table	4
Gila River System Tabulation and Summary	5
San Carlos Reservoir Summary / Apportionments	6
San Carlos Minimum Pool	7
Phelps Dodge Diversions	8
Geronimo Water Quality / SCAR Farm Reports / Land Use Audits	9
Actions Taken and Penalties Consented to for Violations of TBI Regulations	10
Report to Court of UVD's and SCAR Water Quality Actions / Small Parcels	11
Court Orders	12

PLATES

1 Financial Statement / Auditor's Report
2 Land Use Audits
3 Gila River Decreed Acreage and Diversions
4 Annual River Flows & Diversions, Gila System
5 San Carlos Apache Reservation, Farm Reports
<u>Duncan Valley</u>
6 Total Diversions
7 Mass Diagram of
Mean Daily Diversions
8 Sunset Canal
9 New Model Canal
10 Valley Canal
<u>Safford Valley</u>
11 Total Diversions
12 Mass Diagram of
Mean Daily Diversions
13 Consolidated Brown Canal
14 San Jose Canal
15 Furness Canal
16 Montezuma Canal
17 Union Canal
18 Graham Canal
19 Smithville Canal
20 Dodge-Nevada Canal
21 Curtis Canal
22 Fort Thomas Canal
23 Colvin-Jones Canal
<u>SCAR</u>
24 Black Point
25 Navajo Point
26 Anderson Flat

Winkelman Valley

27 ASARCO Incorporated, Monthly Diversions
28 J. J. Anderson, Mean Daily Diversions
29 Town of Kearny, AZ, Mean Daily Diversions
30 Mass Diagram of San Carlos Project
31 Ashurst-Hayden Dam, Mean Daily Diversions
32 Determination of Priority Water
33 Table of Relative Diversion Rights - Gila System
34 Table of Relative Diversion Rights - Duncan Valley
35 Table of Relative Diversion Rights - Safford Valley
36 Comparison, USGS Provisional data vs. Final Data
37 Gila below Blue Creek near Virden, NM
38 Gila River near Clifton, AZ
39 San Francisco River at Clifton, AZ
40 Gila River at Head of Safford Valley near Solomon, AZ
41 Gila River at Calva, AZ
42 San Carlos River at Peridot, AZ
43 Gila River below Coolidge Dam
44 Natural Flow Released at Coolidge Dam
45 Stored Water Released at Coolidge Dam
46 Gila River at Kelvin, AZ
<u>San Carlos Reservoir</u>
47 Operation of
48 Mass Diagram of
49 Water Surface Elevations
50 Water Surface Areas
51 Available Stored Water
52 Daily Evaporation
53 Daily Rainfall - Acre-feet
54 Daily Rainfall - Inches
55 Monthly Rainfall in Inches 1956 - 1999

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UNITED STATES OF AMERICA
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**GILA WATER COMMISSIONER'S SUMMARY
AND COMMENTS FOR 1999**

Surface water flows for 1999, were below normal for the year. Available storage on January 1, 1999, at San Carlos Reservoir was 77,178 acre-feet and ended on December 31, 1999, with storage at 70,760 less the minimum pool of 35,900. This amounted to a total of water available for release by SCIP of 41,250 acre-feet. This quantity is available for apportionments on January 1, 2000.

On May 27, 1999, the Court issued an Order titled "**Water Available as a Basis of Apportionment.**" This Order created a minimum pool in the San Carlos Reservoir. The minimum pool water stored **will not** be considered in determining apportionments to the UVD'S. This pool was established by making water available from the Central Arizona Project (CAP) aqueduct available to SCIP in lieu of releasing water from Coolidge Dam. The minimum pool maximum storage for 1999 was on September 2, 1999, at 39,460 acre-feet.

The minimum pool storage on December 31, 1999, was 35,900 acre-feet.

The peak flows of the Gila River recorded by the USGS in 1999 at Safford, Arizona, occurred on August 5, 1999, @ 1600 hours at a flow rate of 8,240 cfs.

The total recorded sluice and spill for 1999 at Ashurst-Hayden Dam were estimated by SCIP at 746 acre-feet.

Consumptive use, as defined by the Gila Decree, was at 68,292 acre-feet on December 31, 1999.

The Office of the Gila Water Commissioner implemented phase VI of the water measurement and telemetry system for the Upper Valleys' and ASARCO in the Winkelman Valley during 1999.

The telemetry system allows the Commissioner's Office to interrogate the recorders at any time for instantaneous flows at these sites for verification of quantity of water being diverted. This was an ongoing six (6) year program to install fourteen (14) sites. As of this date, fourteen (14) stations have been installed including the Geronimo Station (not

included in the original plan) and are operational. The Highline Canal had been originally scheduled but has not been installed as yet. During 1999 the Commissioner's Office installed radio telemetry at the Montezuma Canal Company.

The Commissioner's Office in 1998, had ASARCO install telemetry (SPATIA-Satellite) at six (6) pumping locations that provide Gila River water to the ASARCO facilities. The ASARCO sites utilize telemetry via satellite communications (ORB COM) furnished by the Salt River Project (SPATIA) such that the Commissioner's Office can receive hourly diversion data on a daily basis directly from the sites. In 1999 the Commissioner's Office installed two (2) back-up data loggers at ASARCO'S main pumps.

During the November 1994 trial, Judge Coughenour ordered the implementation of a "CALL SYSTEM" to begin on January 1, 1995. This system was formally instituted and made operational on January 1, 1995. The first status report by the Commissioner on the operation of the "Call System" was submitted to the Court on September 25, 1995. The second status report by the Commissioner on the operation of the "Call System" was submitted to the Court on March 27, 1996. The third status report by the Commissioner on the operation of the "Call System" was submitted to the Court on November 21, 1996. The fourth and final status report by the Commissioner on the operation of the "Call System" was submitted to the Court on September 12, 1997. This report was submitted as a notice of the "***Gila Water Commissioner's decision to adopt Call System version 5***". This was followed by a complaint filed by the Gila River Indian Community and a motion for a hearing was filed by the United States.

The call system proposals and issues related thereto were heard by the Court on October 5, through October 7, 1998, in Tucson, Arizona. The Court's decision was filed on March 15, 1999, adopting Call System 5. The Technical Committee met with the Commissioner in 1999, to review the advantages of Call 6 and decided to adapt call 5 into the format used by Call System 6. The modified Call System will be labeled Call 7. Gookin Engineering agreed to develop the program in conjunction with Dr. Matlock and attempt to have it available to the Commissioner by December of 1999. (Note: Call System 7 Beta Test was submitted to the Commissioner in February 2000)

The problems of the USGS gaging stations being unavailable or out of service has continued throughout 1999, as has been the situation since 1994. This continuing problem has an impact on the "Call System." The Commissioner is continuing to meet and work with the USGS in an attempt to remedy this problem.

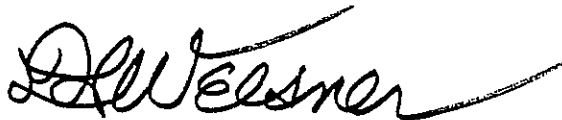
Pursuant to the Phase IV Memorandum and Order entered on April 14, 1995, the Court issued a Water Quality Injunction filed on June 3, 1996, to ensure that the San Carlos Apache Tribe receives quality water effective March 1, 1997. The Commissioner was directed to establish a water quality and flow measuring station at a location as close as possible to the San Carlos Apache Tribe's eastern Reservation boundary. This was implemented on March 1, 1997, by taking readings by hand until July 12, 1997, when the construction of the Geronimo Station was completed and put on line.

The Court in its Water Quality Injunction at page 10, line 8, requires the Water Commissioner to ***“advise the Court; the GVID and the Apache Tribe that he has not been able to maintain salinity levels within the maximums established by the injunction”***. This was the case in 1999 and the Commissioner so advised the Court in his report to the Court dated June 1, 1999. No subsequent actions have been taken therefore, the Commissioner will impose the Injunction in 2000 if the water quality is not within the limits set by the Court.

Throughout the 1998 year, the Commissioner did not receive complete and timely monthly ***farm reports*** from the Apache Tribe. Several letters were sent to the tribe requesting that they comply with the water quality injunction and the call system as prescribed by the Court. The Commissioner filed a petition to the Court on January 26, 1999, requesting guidance from the Court regarding implementation and enforcement of the Water Quality Injunction for 1999. The Court scheduled a hearing on this matter for February 23, 1999. At the conclusion of the hearing on February 23, 1999, the Court stated that the implementation of the Water Quality Injunction would be ***“delayed until April 23, 1999”***. The Court further ***“asked the Tribe to put in place, a program to comply with the reporting requirements of the Injunction”***. The Court ***“urged the Tribe to cooperate with the Water Commissioner regarding the installation and maintenance of water measurement devices that will allow the Water Commissioner to determine how much water has been used and when it was used”***.

As of December 31, 1999, no funding, design, or construction schedule was in place.

The Commissioner has found several violations of the ***“then being irrigated”*** (TBI) regulations within the upper and lower valleys that fall under the Gila Decree. These violations and resolutions will be covered in a separate section of this 1999, annual report.



Don L. Weesner
Gila Water Commissioner

PERSONNEL

Don L. Weesner, Gila Water Commissioner	Phoenix, Arizona
Jon W. Allred, Assistant Water Commissioner	Safford, Arizona
James W. Pavlacky, Water Specialist	Safford, Arizona
Waylon D. West, Water Specialist	Thatcher, Arizona

SOURCES OF DATA

Stream flow data of the Gila River and tributaries, and the San Carlos Reservoir data, except evaporation and rainfall at San Carlos Reservoir, are provided by the United States Geological Survey, Water Resources Division. Nick B. Melcher is the District Chief.

Records of diversions of water in the Gila River System are provided by the following agencies: "Upper Valleys" - Gila Water Commissioner; San Carlos Indian Reservation - San Carlos Agency; Winkelman Valley - ASARCO Inc. and the Town of Kearny; San Carlos Irrigation Project

The Gila Water Commissioner also provides information on the Internet, which includes text of the Gila Decree and the last 30 days of daily Call System Reports.

The Home Page Address is <http://www.zekes.com/~water/>

Evaporation and rainfall recorded at San Carlos Reservoir are provided by San Carlos Irrigation Project. Robert Carolin is the Acting Project Engineer.

The vicinity of Cospers Crossing, in Duncan Valley, Arizona, is monitored daily, during periods that the Gila River is not flowing. The observer of that location is Ray Tyler, or his designated aide.

ACCURACY OF DATA AND COMPUTED RESULTS

The tables of canal diversions and river station discharges are rated in regards to general accuracy of the records. "Excellent" indicates that, in general, the daily records are accurate within 5 percent; "Good" within 10 percent; "Fair" within 15 percent. Records that do not meet that criteria are rated "Poor".

All U.S.G.S. data herein, are provisional and subject to revision. Other data herein, are not routinely revised unless significant errors must be resolved after publication.

Computer-rounding was adopted on January 1, 1996, with general accuracy rated "excellent".

The data compiled in the Gila Water Commissioner's Monthly and Annual Reports may not coincide with values used in the computations of the Daily Call System. The Reports are based on mean daily values whereas, the Call System is calculated on instantaneous values.

GRAPHICAL DIVISIONS

Administration of the Decree, by necessity, follows the natural geographical divisions of the Gila Valley. Decreed acreage for each is as follows:

Duncan-Virden division, known as **Duncan Valley**, includes lands in Hidalgo County, New Mexico and Greenlee County, Arizona, to the extent of 8,061.35 acres;

Safford Valley, comprises lands in Graham County, Arizona, outside of the San Carlos Reservation, to the extent of 32,512.4 acres; **San Carlos Agency**, above the San Carlos Reservoir boundary with 1,000 acres of rights; **Winkelman Valley**, in Gila and Pinal Counties, Arizona, consists of 1,335.16 decreed acres, of which 440.43 acres have diversion rights from the Gila River, and 894.73 acres are designated as pumping rights for industrial, municipal, and domestic use; **San Carlos Project**, in Pinal County, Arizona, with water rights in the name of the United States of America aggregating 102,090.5 acres as follows:

<u>San Carlos Project</u>	<u>Acres</u>
San Carlos Irrigation & Drainage District	50,000
Indian Lands	50,000
Natural Flow Lands	1,544.5
Federal Agencies	546
	<hr/>
	102,090.5

The **Gila Crossing District**, under the Pima Agency at Sacaton, Arizona, has return flow rights for 2,992.5 acres.

The Total acreage under the Decree amounts to 147,991.91 acres.

DISTRIBUTION OF WATERS

January 1, 1999 the stored water in the San Carlos Reservoir amounted to 77,178 acre-feet of the 877,697 acre-feet total capacity. December 31, 1999, there was 70,760 acre-feet available stored water, at 8.1 percent of total capacity.

There was apportioned to the **Upper Valleys** for the year 1999, a total of 2.31 acre-feet of water for each acre then being irrigated.

The **San Carlos Irrigation Project** apportioned a total of .79 acre-feet of pumped and stored water for each acre. The gravity diversions of both natural flow and stored water are shown on Plate 31.

The total water diverted from the Gila River under the Decree for the year amounted to 247,626 acre-feet.

Mean daily diversions of apportioned and priority water for each canal in the Duncan, Safford, Winkelman Valleys, and industrial diversions by ASARCO Incorporated are shown on plates 6 to 29.

Determination of when priority water was available is shown on plate 32.

WATER SUPPLY

The flow of the Gila River, as recorded at **Gila River at Head of Safford Valley Near Solomon**, was **205,369 acre-feet**. Inflow into the San Carlos Reservoir from the Gila River and the San Carlos River totaled **139,780 acre-feet**.

For the year 1999, there was a total of **746 acre-feet** of water spilled and sluiced at **Ashurst-Hayden Dam**.

COSPER CROSSING

The Gila River was found to be dry in the vicinity of Cosper Crossing between April 19th and July 19th, 1999. During this dry period of time, the total flow of the Gila River above Cosper Crossing was issued to the Virden - Duncan Valley water users.

Date	Vicinity Status	Verification
1/01/99	FLOW	OBSERVED
4/19/99	DRY	REPORTED
7/19/99	FLOW	REPORTED

CONSUMPTIVE USE

The acre-feet consumptive use of water for the "**Upper Valleys**" as determined by the method set forth in Article VIII of the Decree is as follows:

1999	Gila River below Blue Creek (good)*	San Francisco River at Clifton (good)*	Total	Gila at Calva (poor)*	Consumptive use	Accumulated Consumptive use
Jan.	6,135	4,522	10,657	10,584	73	73
Feb.	5,193	3,660	8,853	4,340	4,513	4,586
Mar.	5,232	3,441	8,673	3,382	5,291	9,877
Apr.	4,389	4,249	8,638	2,245	6,393	16,270
May	2,745	2,519	5,264	1,345	3,919	20,189
Jun.	1,847	1,880	3,727	858	2,869	23,058
Jul.	8,610	9,396	18,006	7,339	10,667	33,725
Aug.	28,564	43,970	72,534	58,458	14,076	47,801
Sept.	11,121	17,375	28,496	17,445	11,051	58,852
Oct.	5,179	5,548	10,727	7,305	3,422	62,274
Nov.	5,580	4,364	9,944	6,175	3,769	66,043
Dec.	6,107	4,463	10,570	8,321	2,249	68,292
Totals	90,702	105,387	196,089	127,797	68,292	68,292

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1999

UPPER VALLEYS CONSUMPTIVE USE TRACKING

When cumulative FLOW BALANCE during January, February and March is less than 7,000 acre-feet, it is recommended to regulate diversions during March, April, and May, such that Consumptive Use is limited to 75,000 Ac-ft before the end of May; and 90,000 Ac-ft before the end of August. FLOW BALANCE is shown ONLY as an indicator of potential consumptive use.

THIS TRACKING METHOD HAS NOT BEEN ADOPTED AS THE ONLY INDICATOR OR GUIDELINE IN PROJECTING ACTUAL CONSUMPTIVE USE under the Gila Decree.

Input data rounded to USGS standards - IN ACRE-FEET

1999 MONTH	CONSUMPTIVE USE		UPPER VALLEYS AND SAN CARLOS APACHE TRIBE		HEAD OF SAFFORD VALLEY		FLOW BALANCE						ACCUM. FLOW BALANCE	TOTAL INFLOW G + SF	MAXIMUM CONSUMPTIVE USE RECOMMENDED
	RESULT	ACCUM. RESULT	DIV'S	ACCUM. DIV'S	GILA RIVER FLOW	GILA R. ACCUM. FLOW	FLOW BALANCE	GILA CALVA	GILA VIRDEN	GILA CLIFTON	SAN FRANCISCO	DIV'S			
JAN	70	70	6,260	6,260	11,520	11,520	6,190	10,580	6,130	4,520	6,260	6,190	10,650	75,000	
FEB	4,510	4,580	13,890	20,150	10,880	22,400	9,380	4,340	5,190	3,660	13,890	15,570	8,850	75,000	
MAR	5,290	9,880	11,160	31,310	8,960	31,350	5,870	3,380	5,230	3,440	11,160	21,440	8,670	75,000	
APR	6,390	16,270	8,900	40,210	8,210	39,560	2,510	2,250	4,390	4,250	8,900	23,950	8,640	75,000	
MAY	3,920	20,190	4,270	44,480	5,050	44,610	350	1,350	2,750	2,520	4,270	24,300	5,270	75,000	
JUN	2,870	23,060	3,770	48,250	5,750	50,360	900	860	1,850	1,880	3,770	25,200	3,730	80,000	
JUL	10,670	33,730	13,130	61,390	22,240	72,600	2,460	7,340	8,610	9,400	13,130	27,660	18,010	85,000	
AUG	14,080	47,800	21,920	83,310	77,160	149,760	7,850	58,460	28,560	43,970	21,920	35,510	72,530	90,000	
SEP	11,050	58,850	14,880	98,180	23,590	173,350	3,820	17,440	11,120	17,380	14,880	39,330	28,500	120,000	
OCT	3,420	62,270	10,160	108,340	10,100	183,450	6,740	7,310	5,180	5,550	10,160	46,070	10,730	120,000	
NOV	3,770	66,040	8,900	117,240	10,300	193,750	5,130	6,170	5,580	4,360	8,900	51,200	9,940	120,000	
DEC	2,250	68,290	10,710	127,950	11,620	205,370	8,460	8,320	6,110	4,460	10,710	59,660	10,570	120,000	
TOTALS		68,290		127,950	205,370	205,370	59,660	127,800	90,700	105,390	127,950	196,090			
				Diversions								Flow Bal	River Flo	Max Cons Use	

GRAPH: See graphic display on next page (4-2)

1999

Consumptive Use Accum vs. Diversions vs. River Flow



1999

MONTHLY RIVER FLOWS AND DIVERSIONS, GILA RIVER SYSTEM

Quantities in Acre-feet

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	TOTAL
Gila Blue	6135	5193	5232	4389	2745	1847	8610	28664	11121	5179	5580	6107	90702
Duncan Valley Diversions	1503	1716	1188	1758	1985	1221	1634	2451	2876	2984	1770	1687	22774
Gila River near Clifton	5913	4485	3794	2749	1908	3457	11760	9763	3749	5046	5732		89713
San Fran. River @ Clifton	4522	3660	3441	4249	2519	1880	9398	43970	17375	5548	4364	4463	105387
Gila Solomon	11520	10876	8957	8206	5054	5748	22241	77156	23588	10102	10302	11619	205369
Safford Valley Diversions	4750	12155	9958	7073	2160	2450	11455	19399	11937	7081	7131	9023	104549
San Carlos Agency Diva.	6	13	18	71	125	104	44	68	62	112			623
Gila Calva	10584	4340	3382	2245	1345	858	7339	58458	17445	7305	6175	8321	127797
San Carlos R. @ Peridot	893	774	849	857	410	211	4878	991	892	404	481	583	11983
Stored Water	84430	80700	63480	57090	41650	39910	43190	65380	68770	68230	73050	70760	
Gila Below Coolidge Dam	4310	9190	21941	9285	15424	55	2899	19770	7291	8128	70	10225	105588
Winkelman Divs. (Indust)	984	961	978	1050	1308	1097	875	976	925	1041	942	1086	12204
Winkelman Divs. (Ag.)	57	50	62	61	87	57						77	451
Gila River @ Kelvin	6706	9967	22806	10822	15767	839	9389	26248	9551	3850	567	8519	344909
A-H Diversions	6210	8856	19924	9557	12548	230	6661	20521	9852	3915		8753	107026
A-H Spilled										313	409	24	746
A-H Sluiced													
A-H Total	6210	8856	19924	9557	12548	230	6661	20521	9852	4228	409	8777	107771
Loss Kelvin to A-H	496	1111	2882	1265	3221	409	2728	5727	-301	-378	158	-258	17060
Sacaton Diversions													0

SUMMARY OF THE GILA RIVER SYSTEM

Quantities in Acre-feet

NATURAL FLOW FROM THE GILA RIVER AND TRIBUTARIES

Gila River Below Blue Creek	90,702
San Francisco River at Clifton	105,387
San Carlos River near Peridot	11,983
Gain from Gila Below Coolidge Dam to Gila at Kelvin	19,243

INFLOWS, SAN CARLOS RESERVOIR

Gila River at Calva plus San Carlos River near Peridot	139,780
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GILA RIVER BELOW COOLIDGE DAM

	105,588
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CONTENTS IN STORAGE, SAN CARLOS RESERVOIR

Available contents January 1, 1999	77,340
Available contents December 31, 1999	70,760

WATER DIVERTED FROM THE GILA RIVER

Duncan-Virden Valley canal diversions	22,774
Safford Valley canal diversions	104,549
San Carlos Apache Tribe	623
Winkelman Valley Agricultural diversions	451
Winkelman Valley industrial and municipal pumps	
ASARCO Incorporated	11,826
Town of Kearny	378
San Carlos Project	
Natural flow Ashurst-Hayden Dam	65,358
Stored water Ashurst-Hayden Dam	41,667
Natural flow Sacaton Dam	0

TOTAL DIVERSIONS	247,626
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SPILLED AND SLUICED ASHURST-HAYDEN DAM

746

SAN CARLOS RESERVOIR

The available stored water in the **San Carlos Reservoir** on January 1, 1999, was 77,340 acre-feet. The maximum storage for the year was on February 5, with 84,730 acre-feet (Plate 51).

Small flows recorded at **Gila River below Coolidge Dam** (Plate 43), when no water is being released are disregarded and are not shown on Determination of Priority (Plate 32), Natural Flow Releases (Plate 44), Stored Water Releases (Plate 45).

The computed evaporation from the surface of the **San Carlos Reservoir** was 19,603 acre-feet (Plate 52). Computed rainfall on the lake was 2,775 acre-feet (Plate 53). There was a bank storage of 23,944 acre-feet for the year (Plate 47).

APPORTIONMENTS MADE DURING 1999

The following apportionments were made to the "**Upper Valleys**" under authority contained in Article VIII of the decree, and to the Winkelman Valley under authority contained in article IX and X of the Decree:

	Date	TBI Acreage	Acre-feet per acre	Accumulated apportionment	Re-Allocation
1	1/1/99	14,891.34	3.38	3.38	0.00
2	2/7/99	33,382.21		1.73	-1.65
1 st Re-Allocation	3/1/98	33,843.24		1.71	-0.02
2 nd Re-Allocation	4/1/98	34,186.79		1.69	-0.02
3	8/18/99	34,188.99	0.62	2.31	0.00
Total TBI	12/1/99				2.31

The following apportionments of stored and pumped water were made by the **San Carlos Irrigation Project** based on a total of 100,546.00 decreed acres. TBI is not used by SCIP in its apportionments.

Number	Date	Decreed Acres	Acre-feet per Acre	Accumulated Apportionment	TBI Acreage	TBI Acre-feet per Acre
1	3/01/99	100,546.00	0.75	0.75	53,046.41	1.422
2	3/15/99	100,546.00	0.04	0.79	53,046.41	1.497
TOTALS TBI	12/1/99			0.79	52,743.41	1.506

SAN CARLOS RESERVOIR MINIMUM POOL

The Court filed an order on August 27, 1999, stipulating that a portion of the stored water in the San Carlos Reservoir would be retained in the reservoir in exchange for delivery of an equal amount of Central Arizona Project ("CAP") water to the San Carlos Irrigation Project. The retained water would accumulate concurrently with the amount of CAP water delivered to SCIP on a daily basis, less losses for evaporation & seepage. The retained water would not be available for apportionments to the Upper Valleys, and in case of spill from the San Carlos Reservoir, would be the first water to spill. The following chart tracks the accumulation of the minimum pool by the month, daily figures are available in Commissioners office:

Date	Acre-feet
January 1, 1999	12,110 ac-ft
January 31, 1999	11,932 ac-ft
February 28, 1999	11,722 ac-ft
March 31, 1999	11,395 ac-ft
April 30, 1999	10,998 ac-ft
May 31, 1999	11,270 ac-ft
June 30, 1999	28,559 ac-ft
July 31, 1999	36,300 ac-ft
August 31, 1999	39,390 ac-ft
September 30, 1999	38,488 ac-ft
October 31, 1999	37,305 ac-ft
November 30, 1999	36,550 ac-ft
December 31, 1999	35,900 ac-ft

PHELPS DODGE MORENCI, INCORPORATED

Provisional records of pumped flow from Black River and Eagle Creek wells by the Phelps Dodge Corporation as compiled by the United States Geological Survey show the following information with quantities given in acre-feet.

1999	NET BLACK RIVER WATER PUMPED	NET UPPER EAGLE CREEK WATER PUMPED	TOTAL IMPORTED WATER PUMPED	TOTAL P. D. PUMPING FROM S.F. RIVER & EAGLE CREEK BASIN	TOTAL GILA WATERS PUMPED BY PHELPS DODGE
January	477	786	1,263	1,690	427
February	439	922	1,361	1,642	281
March	1,022	791	1,813	1,895	82
April	1,084	378	1,462	1,486	24
May	853	643	1,496	1,549	53
June	130	1,582	1,712	1,607	
July	326	1,176	1,502	1,568	66
August	388	339	727	779	52
September	346	282	628	657	29
October	570	218	788	810	22
November	324	499	823	950	127
December	331	481	812	922	110
TOTALS	6,290	8,097	14,387	15,555	1,273
Bypass					0
TOTAL					1,273

Note: There was a slight difference between the data furnished by P. D. and the data furnished by U.S.G.S.

This shows that **1,273 acre-feet** of water in excess of that brought in from Black River and Eagle Creek wells was pumped by Phelps Dodge Morenci from the tributary drainage of the Gila River.

GERONIMO STATION 1997

As stipulated by the Court in its Injunction filed June 6, 1996, the Commissioner's office on March 7, 1997 began taking water quality samples and making stream flow estimates at the site selected for the Geronimo Station. During the month of May 1997 construction on the Geronimo Station commenced and on July 11, 1997 was placed into service. Daily water quality sampling and flow measurements were begun at this time. During the irrigation season of March 1 through October 31, 1997, the final seasonal average salinity at the Geronimo Station was computed to be **2,236 uS/cm** (microsiemens per centimeter).

The commissioner was also instructed to make a comparison between the water quality and stream flow at the Geronimo Station to the water quality and stream flow at the Eastern Boundary of the San Carlos Reservation. This comparison was made and the Commissioner has concluded that the water quality and stream flows are comparable. His conclusion was based on the following data:

Geronimo Station EC Average	=	2,283.4 uS/cm
Reservation boundary EC Average	=	2,272.4 uS/cm
EC @ Reservation Boundary	=	0.48% lower than Geronimo
Geronimo Station flow average	=	288.9 cfs
Reservation Boundary flow average	=	284.3 cfs
Flow @ Reservation	=	1.59% less than Geronimo

Daily data in support of the above figures can be found published in the Water Commissioner's 1997 monthly reports or can be seen at the office of the Gila Water Commissioner.

GERONIMO STATION 1999

The Seasonal Average Salinity on October 31, 1999 was 2,544 uS/cm. Daily data in support of the above figures can be found published in the Water Commissioner's 1999 monthly reports or can be seen at the office of the Gila Water Commissioner

SAN CARLOS APACHE TRIBE FARMING REPORTS

The Court, in its Water Quality Injunction, filed June 6, 1996, stipulated that the San Carlos Apache Tribe would report to the Water Commissioner on a monthly basis, the crops planted, dates of irrigation, the amount and source of water applied to the lands, the crop yield, the use of crops for grazing and any unusual problems occurring. The above-mentioned data for 1999 have been supplied to the Water Commissioner and summarized on **Plate 5** of the 1999 yearly report.

LAND USE AUDITS, VIOLATIONS AND PENALTIES

The Court in its **Phase IV Memorandum and Order** dated March 25, 1996, directed the Water Commissioner to adopt a scheme for reporting and auditing lands "**then being irrigated**" and for correcting and penalizing violations. The Commissioner, as instructed, presented to the Court a reporting scheme and procedure to audit lands then being irrigated. On June 3, 1996, in its **Order on Water Quality Injunction and Related Matters** the reporting scheme and auditing procedures were adopted by the Court.

Audits of lands being irrigated were made though out the year of 1999. A summary of those audits can be found on **Plate 2** of the 1999 yearly report. Any actions taken and penalties consented to for violations of the TBI regulations can be found on **Page 10** of the 1999 annual report.

A **Joint Motion for Stay of Proceedings** was submitted to the Court on February 16, 2000, requesting an order from the Court to waive all Penalties and pay backs for violations of the "then being irrigated" regulations that occurred in 1999. On March 3, 2000, the Court issued an order waving all penalties and pay backs for all violations.

1 **GILA WATER COMMISSIONER**
2 **Donald L. Weesner**
3 2338 E. Cheryl Dr.
Phoenix, AZ 85028
Telephone (602) 867-1074

4
5
6 **UNITED STATES DISTRICT COURT**
7 **DISTRICT OF ARIZONA**

8 UNITED STATES OF AMERICA,

9 Plaintiff,

10 and

11 GILA RIVER INDIAN COMMUNITY,

12 Plaintiff in
Intervention,

13 and

14 SAN CARLOS APACHE TRIBE,

15 Plaintiff in
Intervention,

16 Vs.

17 GILA VALLEY IRRIGATION
18 DISTRICT, ET AL.,

19 Defendants.

GLOBE EQUITY NO. 59 (JCC)

**REPORT OF 1999 ACTIONS TAKEN
BY THE GILA WATER COMMISSIONER
AND THE PENALTIES TO LAND OWNERS
IN VIOLATION OF REGULATIONS
FOR IMPROPER REPORTING OF LANDS
"THEN BEING IRRIGATED" (1999 TBI)**

(Assigned to the Honorable
John C. Coughenour)

20
21 The Court entered the Final Memorandum and Order in this matter on September 18,
22 1992 and a Phase IV Memorandum and Order on April 14, 1995 which ordered that TBI
23 regulations be adopted. These regulations were approved by the Court by its order dated
24 **June 3, 1996**. These Regulations require the Commissioner to make periodic audits of lands
25 to determine if any reporting violations have occurred. The Commissioner is authorized and
26 empowered by these regulations to informally resolve violations as outlined in §4.2 of the
27 Regulations.

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1 A written summary of the action taken by the Commissioner and the penalty consented
2 to shall be filed with the Court within sixty (60) days thereof and shall be included in the
3 monthly report next published by the Commissioner after such sixty (60) days has elapsed and
4 in the annual report filed with the Court. A copy of the notification to the landowners and the
5 cease and desist, orders and consents thereto shall be kept in the records of the
6 Commissioner for three (3) years from the date of filing with the Court. Pursuant to the
7 Commissioner's audit of lands within the Decreed Lands, violations of the TBI regulations
8 were determined and resolved as set forth below.

9 The following is a summary of violations that have been resolved and the penalties that
10 would have been invoked :

11 The parties to the Decree filed a Joint Motion with the Court "For a Stay of
12 Proceedings", on February 16, 2000, Page 4 Line 7 which stated the following:

13 *"The parties also agree that no penalty or payback shall be imposed against any*
14 *of the parties for violations of the "then being irrigated" regulation that occurred in*
15 *1999. The parties shall be advised, however, of the penalty and payback that would*
16 *have otherwise been imposed."*

17 *"The parties agree that diversions from the Gila River within the San Carlos*
18 *Apache Reservation for the year 2000 shall be considered as one (1) diversion point at*
19 *5.35 cfs, rather than three (3) separate diversion points as in the past practice of*
20 *accounting."*

21 The Court signed the Order on February 29, 2000, GRANTING the Joint Motion For
22 a Stay. Therefore, the following 1999 TBI penalties are waived by the Commissioner for
23 violations that occurred in 1999.

24 **SUMMARY**

- 25 1. Attachment "A" is a summary of the Commissioner's findings for the 1999 audits
26 and the penalties that would have been imposed:

27 Revised 3/3/00

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Respectfully submitted this 7th day of April, 2000.



Donald L. Weesner
Gila Water Commissioner

ORIGINAL and one copy of the

foregoing mailed this 7th day

of April, 2000, to:

William M. McCool
Chief Deputy Clerk
United States District Court
44 East Broadway
Tucson, Arizona 85701

TWO COPIES of the foregoing
mailed via First Class Mail

this 7th day of April, 2000 to:

The Honorable John C. Coughenour
609 Federal Courthouse
1010 Fifth Avenue
Seattle, WA. 98104

COPIES of the foregoing mailed

this 7th day of April, 2000,

to:

Jon Allred
Assistant Gila Water Commissioner
P.O. Box 152
Safford, AZ 85546

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7503 First Street
Scottsdale, AZ. 85251

ATTACHMENT "A"

According to the Commissioner's 1999 audits the following is a summary of finding and penalties that would have been imposed if not waived by Court Order:

Franklin Irrigation District

1. **Mr. R. Thygerson** CEASE & DESIST RECEIVED & SIGNED

Parcel	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
unknown	SW1/4, SE1/4	39.90	0.00	39.90
unknown	Not Provided	8.55	0.00	8.55
Totals	SE1/4, SEC. 13	48.45	0.00	48.45

Payback and penalties for this violation are as follows:
 Sunset Canal Duty FOR 1999 = 4.26 ac-ft/ac.
 Payback: Duty x Acres in Violation = 4.26 x 48.45 = 206.40 ac-ft.
 Penalty: 50% of Payback = 103.20 ac-ft.
 Total Payback: 206.40 + 103.20 = 309.60 ac-ft.

2. **Mr. A. Thygerson** CEASE & DESIST RECEIVED & SIGNED

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
unknown	NW1/4, SE1/4	12.00	0.00	12.00
unknown	SW1/4, SE1/4	14.00	0.00	14.00
unknown	NE1/4, SW1/4	29.00	29.00	0.00
Totals	SE1/4, SEC. 13	55.00	29.00	26.00

Payback and penalties for this violation are as follows:
 Sunset Canal Duty FOR 1999 = 4.26 ac-ft/ac.
 Payback: Duty x Acres in Violation = 4.26 x 26.00 = 110.76 ac-ft.
 Penalty: 50% of Payback = 55.38 ac-ft.
 Total Payback: 110.76 + 55.38 = 166.14 ac-ft.

3. **Mr. S. Pugmire** CEASE & DESIST RECEIVED & SIGNED

parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
unknown	SE1/4, NE1/4, Sec 6	8.00	0.00	8.00

Payback and penalties for this violation are as follows:
 New Model Canal Duty for 1999 = 2.72 ac-ft/ac.
 Payback: Duty x Acres in Violation = 2.72 x 8.00 = 21.76 ac-ft.
 Penalty: 50% of Payback = 10.88 ac-ft.
 Total Payback: 21.76 + 10.88 = 32.64 ac-ft.

4. **Mr. D. Richens** CEASE & DESIST RECEIVED & SIGNED

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
unknown	SE1/4, NE1/4, Sec 6	20.60	0.00	20.60

Payback and penalties for this violation are as follows:
 New Model Canal Duty for 1999 = 2.72 ac-ft/ac.

Payback: Duty x Acres in Violation = 2.72 x 20.60 = 56.03 ac-ft.

Penalty: 50% of Payback = 28.02 ac-ft.

Total Payback: 56.03 + 28.02 = 84.05 ac-ft.

5. **Mr. J. Mosley** NO VIOLATION RECEIVED AFFIDAVIT

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
500-68-004	SE1/4, SE1/4	10.80	0.00	10.80
500-68-004	SW1/4, SE1/4	10.20	10.20	0.00

Payback and penalties for this violation are as follows:

New Model Canal Duty for 1999 = 3.04 ac-ft/ac.

Payback: Duty x Acres in Violation = 3.04 x 10.80 = 32.83 ac-ft.

Penalty: 50% of Payback = 16.42 ac-ft.

Total Payback: 32.83 + 16.42 = 49.25 ac-ft.

6. **Mr. L. Thelen** NO VIOLATION RECEIVED AFFIDAVIT

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
500-15-008	SW1/4, SE1/4	2.50	0.00	2.50
500-13-004	SE1/4, SW1/4	2.52	0.00	2.52
500-13-004	SW1/4, SW1/4	6.50	3.36	3.14
500-13-004	NW1/4, SW1/4	6.50	0.00	6.50
500-13-006	NE1/4, SW1/4	14.20	0.00	14.20
500-13-008	SE1/4, SW1/4	36.99	0.00	36.99
TOTAL	SOUTH 1/4	69.21	3.36	65.85

See attached aerial map for details of these parcels.

Payback and penalties for this violation are as follows:

New Model Canal Duty for 1999 = 3.04 ac-ft/ac.

Payback: Duty x Acres in Violation = 3.04 x 65.85 = 200.18 ac-ft.

Penalty: 50% of Payback = 100.09 ac-ft.

Total Payback: 200.08 + 100.09 = 300.17 ac-ft.

7. **Mr. W. Hart** CEASE & DESIST RECEIVED & SIGNED

Parcel	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
400-63-001	NW1/4, NE1/4	0.00	32.00	32.00
400-63-007	SW1/4, NE1/4	0.00	1.00	1.00
Totals	NE1/4, SEC. 13	0.00	33.00	33.00

Payback and penalties for this violation are as follows:

Valley Canal Duty FOR 1999 = 4.05 ac-ft/ac.

Payback: Duty x Acres in Violation = 4.05 x 33.00 = 133.65 ac-ft.

Penalty: 50% of Payback = 66.83 ac-ft.

Total Payback: 133.65 + 66.83 = 200.48 ac-ft.

GILA VALLEY IRRIGATION DISTRICT

1. **Dr. Rath** CEASE & DESIST RECEIVED & SIGNED

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
103-07-032	SW1/4, NE1/4 Section 20	14.00	0.00	14.00

Payback and penalties for this violation are as follows:
 San Jose Canal Duty for 1999 = 3.04 ac-ft/ac.
 Payback: Duty x Acres in Violation = 4.31 x 14.00 = 60.34 ac-ft.
 Penalty: 50% of Payback = 30.17 ac-ft.
 Total Payback: 60.34 + 30.17 = 90.51 ac-ft.

2. **Ms. L. Bass** NO VIOLATION RECEIVED AFFIDAVIT

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
103-11-040	SW1/4, SE1/4 Section 20	6.00	0.00	6.00

Payback and penalties for this violation are as follows:
 San Jose Canal Duty for 1999 = 3.04 ac-ft/ac.
 Payback: Duty x Acres in Violation = 4.31 x 6.00 = 25.86 ac-ft.
 Penalty: 50% of Payback = 12.93 ac-ft.
 Total Payback: 25.86 + 12.93 = 38.79 ac-ft.

3. **Mr. W. Weaver** CEASE & DESIST RECEIVED & SIGNED

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
104-28-075F	NE1/4, SE1/4 Section 11	3.80	1.00	2.80

Actual acres planted were estimated by auditor.

Payback and penalties for this violation are as follows:
 Highline Canal Duty for 1999 = 3.38 ac-ft/ac.
 Payback: Duty x Acres in Violation = 3.38 x 2.80 = 9.46 ac-ft.
 Penalty: 50% of Payback = 4.73 ac-ft.
 Total Payback: 9.46 + 4.73 = 14.19 ac-ft.

4. **Mr. Lines (Bryce Estate)** CEASE & DESIST RECEIVED & SIGNED

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
105-01-009	S1/2, SW1/4 Section 6	58.10	52.30	5.80

Payback and penalties for this violation are as follows:
 Graham Canal Duty for 1999 = 2.39 ac-ft/ac.
 Payback: Duty x Acres in Violation = 2.39 x 5.80 = 13.86 ac-ft.
 Penalty: 50% of Payback = 6.93 ac-ft.
 Total Payback: 13.86 + 6.93 = 20.79 ac-ft.

5. **Mr. R. Bryce** CEASE & DESIST RECEIVED & SIGNED

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
105-05-008B	SE1/4,NW1/4 Section 8	4.00	0.00	4.00

Actual acres planted were estimated by auditor.

Payback and penalties for this violation are as follows:

Highline Canal Duty for 1999 = 2.39 ac-ft/ac.

Payback: Duty x Acres in Violation = 2.39 x 4.00 = 9.56 ac-ft.

Penalty: 50% of Payback = 4.78 ac-ft.

Total Payback: 9.56 + 4.78 = 14.34 ac-ft.

6. **Mr. E. Brown** CEASE & DESIST RECEIVED & SIGNED

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
108-14-009	SE1/4,NE1/4 Section 19	6.00	0.00	6.00

Payback and penalties for this violation are as follows:

Ft. Thomas Canal Duty for 1999 = 3.89 ac-ft/ac.

Payback: Duty x Acres in Violation = 3.89 x 4.00 = 23.34 ac-ft.

Penalty: 50% of Payback = 11.67 ac-ft.

Total Payback: 23.34 + 11.67 = 35.01 ac-ft.

7. **Mr. W. Duncan** NO VIOLATION FARM SERVICE VERIFIED THIS WAS PLANTED IN BARLEY

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
108-20-003	SE1/4,NW1/4 Section 28	11.20	0.00	11.20

Payback and penalties for this violation are as follows:

Ft. Thomas Canal Duty for 1999 = 3.89 ac-ft/ac.

Payback: Duty x Acres in Violation = 3.89 x 11.20 = 43.57 ac-ft.

Penalty: 50% of Payback = 21.79 ac-ft.

Total Payback: 43.57 + 21.78 = 65.35 ac-ft.

8. **Mr. V. Hancock** CEASE & DESIST RECEIVED & SIGNED

Parcel No.	Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
108-19-002	NE1/4,NW1/4 Section 27	17.50	0.00	17.50

Payback and penalties for this violation are as follows:

Colvin-Jones Canal Duty for 1999 = 1.68 ac-ft/ac.

Payback: Duty x Acres in Violation = 1.68 x 17.50 = 29.40 ac-ft.

Penalty: 50% of Payback = 14.70 ac-ft.

Total Payback: 29.40 + 14.70 = 44.10 ac-ft.

SAN CARLOS APACHE TRIBE

1. **Navajo Point** NO VIOLATION

Location	TBI Acres Reported	Actual Acres Planted	Acres in Violation
Navajo Point	141.36	109.8	31.56
Totals	141.36	109.8	31.56

Note: Actual acres planted were determined by digitizing 1997 aerial photos of the lands actually planted in 1999.

The farm fields in question, that were not farmed in 1999 according to the Commissioner's audit are numbers 1041 & 1042 for a total of **31.56 acres**.

The violation at Navajo Point is very minor in respect to the quantity of water diverted and utilized on this farmed area at Navajo Point. The total use at Navajo Point for the entire year of 1999 was 65.1 acre-feet. The entitlement for the 141.36 TBI acres submitted in 1999 would allow 848.16 ac-ft (6.0 ac-ft/ac water duty) of water to be diverted. The actual water duty, for Navajo Point farms for the year was only, **0.5 acre-feet per acre**.

The diversion rate allowed for the total acreage TBI submitted is 1.77 cfs at Navajo Point. As this diversion rate was never reached during 1999, and only the quantity of water used being 65.1 acre-feet for the entire year the **Commissioner does not feel that a violation should be administered against Navajo Point. No Violation 1999.**

2. **ANDERSON FLAT** CEASE & DESIST RECEIVED & SIGNED

Field No.	TBI Acres Reported	Actual Acres Farmable	Actual Acres Planted	Acres in Violation
1047	28.31	26.1	26.1	2.21
1048	17.0	14.5	14.5	2.5
1049	21.0	21.3	7.6	13.4
1050	24.0	20.5	20.5	3.5
Totals	90.31	82.4	68.7	21.61

Note: Actual acres planted were determined by digitizing 1997 aerial photos of the lands actually planted in 1999.

The violation at Anderson Flat is very significant with respect to the quantity of water over-diverted and utilized on this farmed area. The total use at Anderson Flat for the entire year of 1999 was **545.60 acre-feet**. The entitlement for the 90.31 acres TBI acres submitted in 1999 would allow 541.86 ac-ft (6.0 ac-ft/ac water-duty) of water to be diverted. However, the actual acres, farmed, in 1999, was **68.70 acres**. The water duty, allowed for Anderson Flat farms for the year 1999 based on 68.70 acres actually farmed would allow a diversion of **412.20 acre feet** (6.0 ac-ft/ac x 68.70).

Consequently the Apache Tribe has exceeded the total diversion as stipulated in the Decree (6 ac-ft/ac) by **133.4 ac-ft**. (545.60 acre feet used minus 412.20 acre feet allowed).

The 1999 **water duty** calculated for Anderson Flat acres farmed (68.7 acres) equates to **7.94 ac-ft/ac** (545.6 ac-ft / 68.70 acres, = 7.94 ac-ft/ac). This exceeds the overall limitation specified in the Decree of 6 acre feet per acre by 1.94 acre feet per acre.

The penalty assessed for violations by other parties to the Decree has been the requirement to pay back the ac-ft over delivered (based on an over-statement of TBI acres farmed) plus a penalty of 50%. For the Anderson Flat violation the penalty equates to **66.7 ac-ft**. Therefore, the total payback (including penalty) by the Apache Tribe will amount to **200.10 ac-ft** during the year 2000. The maximum use at Anderson Flat during the year 2000 will be limited to a total diversion of **316.3 ac-ft**, based upon your TBI (2000) submission of 86.1 acres. (6 ac-ft/ac X 86.1 ac TBI = 516.6 ac-ft minus (-) 1999 penalty of 200.1 ac-ft = 316.5 ac-ft).

SAN CARLOS IRRIGATION & DRAINAGE DISTRICT

1. **Mr. W. Skousen 5822-1** **CEASE & DESIST RECEIVED & SIGNED**

1.	Priority year	1924
2.	Decreed Acres	148.23 acres
3.	TBI acreage reported	102.00 acres
4.	Actual acreage TBI	0.00 acres
5.	Violation	102.00 acres

The area in question, that was not farmed in 1999 according to the Commissioner's audit is the entire NE1/4 of Section 22 or this entire account.

The records supplied to the Commissioner's office by SCIDD indicate that no natural flow waters were used on this land during 1999. Because of this and also because the lands involved had a relatively high priority date (1924), the Commissioner has determined that a water reduction penalty in this case would not be useful or appropriate.

However, a serious violation of the reporting requirements of the TBI regulations has occurred. The Commissioner seeks to informally resolve this violation by assessing a monetary penalty in the amount of **\$5.00 per acre** (not to exceed \$500.00) to recover the costs involved in the audit which includes field verification, mileage, attorney involvement, digitization of the farm account and other office costs. The total penalty amounts to **\$500.00**.

2. **Tethro Farms 6712-3** **CEASE & DESIST RECEIVED & SIGNED**

1.	Priority year	1916
2.	Decreed Acres	160.00 acres
3.	TBI acreage reported	134.00 acres
4.	Actual acreage TBI	72.17 acres
5.	Violation	61.83 acres

The farm field in question, that was not farmed in 1999 according to the Commissioner's audit is the north 1/2 of this account or the N1/2, SW1/4 of Section 12.

A package of material is enclosed for your review to confirm the data submitted in our audit is correct.

The records supplied to the Commissioner's office by SCIDD indicate that no natural flow waters were used on this land during 1999. Because of this and also because the lands involved had a relatively high priority date (1916), the Commissioner has determined that a water reduction penalty in this case would not be useful or appropriate.

However, a serious violation of the reporting requirements of the TBI regulations has occurred. The Commissioner seeks to informally resolve this violation by assessing a monetary penalty in the amount of **\$5.00 per acre** to recover the costs involved in the audit which includes field verification, mileage, attorney involvement, digitization of the farm account and other office costs. The total penalty amounts to **\$309.15**.

3. **Mr. J. A. Roberts 6723-2** **CEASE & DESIST RECEIVED & SIGNED**

1.	Priority year	1916
2.	Decreed Acres	395.00 acres
3.	TBI acreage reported	366.95 acres
4.	Actual acreage TBI	74.32 acres
5.	Violation	292.63 acres

The only farm fields found to be planted in 1999 according to the Commissioner's audit are in the W1/2, NW1/4 of Section 23 for this account.

The records supplied to the Commissioner's office by SCIDD indicate that 85.54 ac-ft. of natural flow waters were used on this land during 1999, but due to the relatively high priority date (1916) of these lands, the Commissioner has determined that a water reduction penalty in this case would not be useful or appropriate.

However, a serious violation of the reporting requirements of the TBI regulations has occurred. The Commissioner seeks to

informally resolve this violation by assessing monetary penalty in the amount of \$5.00 per acre (not to exceed \$500.00) to recover the costs involved in the audit which includes field verification, mileage, attorney involvement, digitization of the farm account and other office costs. The total penalty amounts to \$500.00.

4. Ms. E. Curry 6726-2 CEASE & DESIST RECEIVED & SIGNED

1.	<u>Priority year</u>	<u>1916</u>
2.	<u>Decreed Acres</u>	<u>160.00 acres</u>
3.	<u>TBI acreage reported</u>	<u>146.13 acres</u>
4.	<u>Actual acreage TBI</u>	<u>71.63 acres</u>
5.	<u>Violation</u>	<u>74.50 acres</u>

The farm fields in question, that were not farmed in 1999 according to the Commissioner's audit are in the N1/2, NW1/4 of Section 26 or the N1/2 of this account.

The records supplied to the Commissioner's office by SCIDD indicate that no natural flow waters were used on your land during 1999. Because of this and also because the lands involved had a relatively high priority date (1916), the Commissioner has determined that a water reduction penalty in this case would not be useful or appropriate.

However, a serious violation of the reporting requirements of the TBI regulations has occurred. The Commissioner seeks to informally resolve this violation by assessing a monetary penalty in the amount of \$5.00 per acre (not to exceed \$500.00) to recover the costs involved in the audit which includes field verification, mileage, attorney involvement, digitization of the farm account and other office costs. The total penalty amounts to \$372.50.

5. Mr. J. A. Roberts 6726-4 CEASE & DESIST RECEIVED & SIGNED

1.	<u>Priority year</u>	<u>1916</u>
2.	<u>Decreed Acres</u>	<u>320.00 acres</u>
3.	<u>TBI acreage reported</u>	<u>303.94 acres</u>
4.	<u>Actual acreage TBI</u>	<u>145.16 acres</u>
5.	<u>Violation</u>	<u>158.78 acres</u>

The farm fields found to be planted in 1999 according to the Commissioner's audit are in the W1/2 of the NE1/4, SE1/4 of the NE1/4 and SE1/4 of the SE1/4 of Section 23 for this account.

The records supplied to the Commissioner's office by SCIDD indicate that 47.85 ac-ft. of natural flow waters were used on your land during 1999, but due to the relatively high priority date (1916) of these lands, the Commissioner has determined that a water reduction penalty in this case would not be useful or appropriate.

However, a serious violation of the reporting requirements of the TBI regulations has occurred. The Commissioner seeks to informally resolve this violation by assessing a monetary penalty in the amount of \$5.00 per acre (not to exceed \$500.00) to recover the costs involved in the audit which includes field verification, mileage, attorney involvement, digitization of the farm account and other office costs. The total penalty amounts to \$500.00.

6. Mr. Paul Johnson 6731-3 CEASE & DESIST RECEIVED & SIGNED

1.	<u>Priority year</u>	<u>1924</u>
2.	<u>Decreed Acres</u>	<u>160.00 acres</u>
3.	<u>TBI acreage reported</u>	<u>140.00 acres</u>
4.	<u>Actual acreage TBI</u>	<u>76.64 acres</u>
5.	<u>Violation</u>	<u>63.36 acres</u>

The farm field in question, that was not farmed in 1999 according to the Commissioner's audit is the W1/2, SW1/4 of Section 31 or the E1/2 of this account.

The records supplied to the Commissioner's office by SCIDD indicate that 11.6 ac-ft of natural flow waters were used on your land during 1999, but because the land involved had a relatively high priority date (1924), the Commissioner has determined that a water reduction penalty in this case would not be useful or appropriate. However, a serious violation of the reporting requirements of the TBI

regulations has occurred. The Commissioner seeks to informally resolve this violation by assessing monetary penalty in the amount of \$5.00 per acre (not to exceed \$500.00) to recover the costs involved in the audit which includes field verification, mileage, attorney involvement, digitization of the farm account and other office costs. The total penalty amounts to \$316.80.

7. Mr. J. A. Roberts 6819-3 CEASE & DESIST RECEIVED & SIGNED

1.	<u>Priority year</u>	<u>1916 & 1924</u>
2.	<u>Decreed Acres</u>	<u>166.42 acres</u>
3.	<u>TBI acreage reported</u>	<u>149.12 acres</u>
4.	<u>Actual acreage TBI</u>	<u>76.15 acres</u>
5.	<u>Violation</u>	<u>72.97 acres</u>

The farm field in question, that was not farmed in 1999 according to the Commissioner's audit is in the S1/2, SW1/4 of Section 19 or the S1/2 of this account.

The records supplied to the Commissioner's office by SCIDD indicate that no natural flow waters were used on your land during 1999. Because of this and also because the lands involved had a relatively high priority date (1916 & 1924), the Commissioner has determined that a water reduction penalty in this case would not be useful or appropriate.

However, a serious violation of the reporting requirements of the TBI regulations has occurred. The Commissioner seeks to informally resolve this violation by assessing monetary penalty in the amount of \$5.00 per acre (not to exceed \$500.00) to recover the costs involved in the audit which includes field verification, mileage, attorney involvement, digitization of the farm account and other office costs. The total penalty amounts to **\$364.85**.

8. Mr Eugene Carter 6812-44 CEASE & DESIST RECEIVED & SIGNED

1.	<u>Priority year</u>	<u>1916</u>
2.	<u>Decreed Acres</u>	<u>80.00 acres</u>
3.	<u>TBI acreage reported</u>	<u>73.60 acres</u>
4.	<u>Actual acreage TBI</u>	<u>0.00 acres</u>
5.	<u>Violation</u>	<u>73.60 acres</u>

The area in question, that was not farmed in 1999 according to the Commissioner's audit is the entire E1/2, SE1/4 of Section 12 or this entire account.

The records supplied to the Commissioner's office by SCIDD indicate that no natural flow waters were used on your land during 1999. Because of this and also because the lands involved had a relatively high priority date (1916), the Commissioner has determined that a water reduction penalty in this case would not be useful or appropriate.

However, a serious violation of the reporting requirements of the TBI regulations has occurred. The Commissioner seeks to informally resolve this violation by assessing a monetary penalty in the amount of \$5.00 per acre (not to exceed \$500.00) to recover the costs involved in the audit which includes field verification, mileage, attorney involvement, digitization of the farm account and other office costs. The total penalty amounts to **\$368.00**.

GILA RIVER INDIAN COMMUNITY

1. **Mr. Davis Pecusa**
Superintendent
Pima Agency
Bureau of Indian Affairs

CEASE & DESIST RECEIVED & SIGNED

Location	TBI Acres Reported in 1999	Actual Acres Planted in 1999	Acres in Violation	Comments
T4S, R4E, Section 7	614.1	546.9	67.2	Field in N 1/2, NW 1/4 Fallow

Note: Actual acres planted were determined by digitizing 1997 aerial photos of the lands actually planted.

Payback and penalties for this violation are as follows:
SCIP Duty for 1999 = 2.03 ac-ft/ac.
Payback: Duty x Acres in Violation = 2.03 x 67.2 = 136.42 ac-ft.
Penalty: 50% of Payback = 68.21 ac-ft.
Total Payback: 136.42 + 68.21 = 204.63 ac-ft.

WATER QUALITY ACTIONS TAKEN BY G.V.I.D.

To facilitate the monitoring of the salinity and flows at the Geronimo Station on a monthly basis the "Water Quality Injunction" dated June 3, 1996, instructed the Gila Valley Irrigation District to report, to the Water Commissioner, any steps taken to improve the water quality in the Gila River. The Injunction instructed the Water Commissioner to report, in his yearly report, any actions reported by the Gila Valley Irrigation District.

For the year 1999, the Commissioner's Office was notified by the G.V.I.D., in their letter dated December 14, 1999, that no actions had been taken by the G.V.I.D to improve the water quality in the Gila River.

SMALL PARCELS AND NON-AGRICULTURAL USES

The Court's Final Memorandum and Order filed on September 18, 1992, and the Phase IV Memorandum and Order filed April 14, 1995, ordered that a set of Rules and Regulations be adopted in regards to lands then being irrigated. The Rules and Regulations (**Regulations for Reporting and Auditing Lands "Then Being Irrigated"**) were adopted by the Court in its Order dated June 3, 1996, and was implemented on April 1, 1997.

Section 5.1 (e) **SMALL PARCELS and NON-AGRICULTURAL USES** (less than two (2) acres), within the **Regulations for Reporting and Auditing Lands "Then Being Irrigated,"** requires the Commissioner to summarize and report the acres involved, as soon as can be done in a monthly report (January 1999, final revision July 1999) and in the annual report filed with the Court.

The following is a summary of the acres taken from the forms that were submitted for small parcel lands "TBI" in 1999.

Location	Decreed Acres	Multiple use Acreage (lawns, trees, gardens, orchards & pastures) TBI	Yards Acres TBI	Garden Acres TBI	Orchard Acres TBI	Pasture Acres TBI	Commercial Acres TBI	TOTAL ACRES TBI
Duncan/ Virden Valley	49.40	28.82	4.38	0.00	1.49	3.85	0.00	38.54
Safford Valley	402.83	238.00	6.36	0.00	14.96	42.42	8.05	313.75
Lower valley SCIDD	235.23	66.29	85.51	0.45	0.75	8.82	0.00	161.82
TOTAL	687.46	333.11	96.25	4.41	17.20	55.09	8.05	514.11

The percent of SMALL PARCELS decreed lands irrigated in 1999 was 74.8 percent.

1999

COURT ORDERS

<u>Date of Order</u>	<u>Order</u>
January 12, 1999	Order Approving 3 rd Quarter Attorney Fees and Approving Use of 1999 Funds to Pay 98 Attorney Fees
February 5, 1999	Order Setting Date for Responses to Water Commissioner's Petition on Water Quality Injunction
February 9, 1999	Order Setting Date for Filing Objections to Water Commissioner's Petition for Approval of 4 th Quarter 1998 Attorney Fees
February 9, 1999	Order Setting Date of Hearing Concerning Implementation of Water Quality Injunction
March 1, 1999	Order Granting leave to Appear as Addition Counsel for the Gila River Indian Community
March 15, 1999	Order Approving 4 th Quarter 1998 Attorney Fees
March 15, 1999	Order Adopting Protocol of Call Systems 5 and 6 and Allowing Discretionary Override of Priority Dates
May 13, 1999	Order Setting Date for Filing Objections to Water Commissioner's Petition for Approval of 1st Quarter 1999 Attorney Fees
May 13, 1999	Order Extending Date to Submit Briefing Schedule on the Pooling Issues and Related Disputes
May 13, 1999	Order Dismissing Complaint of the San Carlos Apache Tribe Asserting Claims Under the Endangered Species Act, the Native American Graves Protection and Repatriation Act and Common Law Nuisance.
May 27, 1999	Order Re: Water Available as a Basis of Apportionment
June 21, 1999	Order Approving 1 st quarter 1999 Attorney Fees
July 15, 1999	Order RE: Substitution of Council
July 26, 1999	Order Striking Evidentiary Hearing In November. Will Rule on SCIDD Pooling Issues
September 10, 1999	Minute Entry Order Setting Hearing Date for Oral Arguments on the Objections to GRIC Amended Complaint and SCIDD's Pooling Motion.
October 13, 1999	Order Setting Schedule for Objections to Water Commissioner's Petition for Year 2000 Budget
November 1, 1999	Order Setting Date for Filing Objections to Water Commissioner's Petition for Approval of 2 nd & 3 rd Quarter 1999 Attorney Fees
November 1, 1999	Order Approving Water Commissioner's Year 2000 Budget
December 20, 1999	Order Approving Attorney Fees for Second and Third Quarters 1999

1999
FINANCIAL STATEMENT
WATER COMMISSIONER'S ACCOUNT
RECEIPTS

Plaintiffs			
San Carlos Irrigation Project	\$309,436.65		
SCIP 99 assessment pre-paid (98 Interest)	3,682.10		
San Carlos Agency	<u>3,085.00</u>		
		\$316,183.65	
Defendants			
Gila Valley Irrigation District	97,212.08		
Franklin Irrigation District	14,161.69		
Sunset Ditch Company	7,277.36		
New Model Canal Company	1,274.34		
ASARCO	11,793.82		
Kearny	623.80		
Kerlock	77.82		
York Valley	<u>1,322.47</u>		
		133,743.28	
Miscellaneous Receipts		1,625.00	
Supplemental Reports (TBI)		530.00	
Logger Payments		6,400.98	
Interest Income		<u>13,137.82</u>	
Total Receipts			\$470,620.73
Balance Forward 1998			<u>393,624.36</u>
			<u>\$864,245.09</u>

DISBURSEMENTS

Personnel			
Don L. Weesner	\$69,890.99		
Jon W. Allred	41,499.95		
James W. Pavlacky	34,462.91		
Waylon D. West	34,444.91		
F. I. C. A.	11,178.62		
Medicare	2,614.33		
Federal Unemployment Tax	<u>1,736.00</u>		
		\$195,827.61	
Employee Benefit Plan			
Retirement	9,958.80		
Medical Insurance	<u>12,998.23</u>		
		22,955.13	
George E. Greiner (Consulting Fee)		6,000.00	
Travel			
Don L. Weesner	2,669.62		
Jon W. Allred	3,133.28		
James W. Pavlacky	2,266.75		
Waylon D. West	<u>3,226.19</u>		
		11,295.74	
1998 Attorney Fees			
Brent F. Moody	46,865.70		
Charles W. Whetstine	<u>52.50</u>		
		46,918.20	
1999 Attorney Fees			
Brent F. Moody	24,608.78		
Charles W. Whetstine	<u>150.00</u>		
		24,758.78	
1998 Carry-over Expenses			10,561.62
Geronimo Station expenses			5,340.01
Joint Funding (Stream flow records)			82,700.00
Capital Purchases			
Telemetry	7,684.06		
GSI Monitoring	19,517.00		
Furniture	288.95		
Gateway Computer & monitor	2,416.06		
Logger Purchase	<u>2,300.00</u>		
		31,206.07	
Other expenses			
Annual Audit	1,100.00		
Communications	5,879.65		
Computer	1,622.28		
Insurance & Bonds	3,598.00		
Office Expenses	5,545.67		
Rent and Utilities	7,153.65		
Warranty Extension	567.60		
Tower Rental	862.50		
Workmen's Compensation	2,046.63		
Miscellaneous	585.54		
Water Quality Expendures	721.23		
Contingency Expenses	2,607.21		
Networking	366.86		
Satellite Communication Costs	<u>380.68</u>		
		33,536.41	
Total Disbursements			\$471,099.67
Balance on hand 1/1/2000			<u>393,145.62</u>
			<u>\$864,245.09</u>

Note: U.S.G.S. Billing for 99 not received to date. \$82,700.00
Geronimo Reserve Fund \$18,935.19

Colby & Company

CERTIFIED PUBLIC ACCOUNTANTS

1415 East Guadalupe #104

Tempe, Arizona 85283

David M. Colby, C.P.A.

Scott T. Powell, C.P.A.

TEL (480) 897-1743

FAX (480) 820-9959

INDEPENDENT AUDITORS' REPORT

To the Gila Water Commissioner
Safford, Arizona

We have audited the accompanying financial statements of the Gila Water Commissioner as of and for the year ended December 31, 1999, as listed in the table of contents. These financial statements are the responsibility of the Gila Water Commissioner's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As described in Note 1, these financial statements were prepared on the cash basis of accounting, which is a comprehensive basis of accounting other than generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly, in all material respects, the assets, liabilities, and equity of the Gila Water Commissioner as of December 31, 1999, and its revenue, expenses and changes in equity for the year then ended on the basis of accounting described in Note 1.

Colby & Company

March 7, 2000

**1999
SUMMARY OF AUDITS**

FRANKLIN IRRIGATION DISTRICT

PARCEL/OWNER NO.	TWP.	RNG.	SEC.	1/4-1/4	DECREED ACRES	TBI ACRES	RESULTS OF AUDIT	RESULTS OF INFORMAL RESOLUTION	PAYBACK & PENALTY	
NA	18S	21W	32	SWSE	48.45	48.45	0 ac. Planted, 39.05 ac. Violation	Owner Signed Cease & Desist Order	332.85 Ac-Ft	
NA	18S	21W	33	SE 1/4	55.00	55.00	29 ac. Planted, 26 ac. Violation	Owner Signed Cease & Desist Order	178.62 Ac-Ft	
NA	19S	21W	3	SENE, NESE	39.60	38.50	38.5 ac. Planted, No Violation	NA	NA	
NA	19S	21W	5	E1/2, NE1/4	32.19	32.19	32.19 ac. Planted, No Violation	NA	NA	
NA	19S	21W	6	SENE	8.00	8.00	0 ac. Planted, 6 ac. Violation	Owner Signed Cease & Desist Order	36.48 Ac-Ft	
NA	19S	21W	6	SENE	20.60	20.60	0 ac. Planted, 20.6 ac. Violation	Owner Signed Cease & Desist Order	93.93 Ac-Ft	
500-68-004	8S	32E	32	S1/2, SE1/4	21.00	21.00	21 ac. Planted, No Violation	NA	NA	
500-68-005, 72-002	8S	32E	33	SE 1/4	147.80	15.30	15.3 ac. Planted, No Violation	NA	NA	
500-15-008, 004, 006	8S	32E	18	SW 1/4	69.10	69.10	69.1 ac. Planted, No Violation	NA	NA	
NA	8S	32E	19	NENW	51.18	0.00	0 ac. Planted, No Violation	NA	NA	
400-63-001 & 007	8S	31E	13	W1/2, NE1/4	33.30	33.00	0 ac. Planted, 33 ac. Violation	Owner Signed Cease & Desist Order	209.88 Ac-Ft	
500-71-002	8S	32E	33	NENE	32.40	32.40	32.4 ac. Planted, No Violation	NA	NA	
DECREED ACRES AUDITED:					558.62	TOTAL PAYBACK & PENALTIES:				851.76 Ac-Ft
TBI ACRES REPORTED:					5780.82					
PERCENT AUDITED FOR 1999:					9.7%					

NOTE: SEE PAGES 10-1a to 10-3a FOR WRITTEN SUMMATION OF ACTION TAKEN BY THE GILA WATER COMMISSIONER AND PENALTIES CONSENTED TO BY LAND OWNERS IN VIOLATION OF THE REGULATIONS FOR REPORTING LANDS THEN BEING IRRIGATED (TBI).

NOTE: THE US DISTRICT COURT AGREED TO WAIVE ALL PENALTIES AND PAYBACKS FOR 1999 VIOLATIONS OF THE "THEN BEING IRRIGATED" REGULATIONS.

1999
SUMMARY OF AUDITS
GILA VALLEY IRRIGATION DISTRICT

PARCEL/OWNER NO.	TWP.	RNG.	SEC.	1/4-1/4	DECEASED ACRES	TBI ACRES	RESULTS OF AUDIT	RESULTS OF INFORMAL RESOLUTION	PAYBACK & PENALTY
107-33-011	7S	27E	3	W 1/2	197.60	145.10	145.1 ac. Planted, No Violation	NA	NA
107-37-004	7S	27E	8	N 1/2 SW 1/4	83.30	65.40	65.4 ac. Planted, No Violation	NA	NA
107-32-002 & 007	7S	27E	2	NE & SW 1/4	95.70	95.70	95.7 ac. Planted, No Violation	NA	NA
107-32-011	7S	27E	2	SW 1/4	28.30	28.30	28.3 ac. Planted, No Violation	NA	NA
103-07-032	7S	26E	20	SWNE	14.17	14.17	0 ac. Planted, 14.17 ac. Violation	Owner Signed Cease & Desist Order	90.51 Ac-Ft
103-11-040	7S	26E	20	SWSE	6.30	6.30	6.3 ac. Planted, No Violation	NA	NA
103-14-002	7S	26E	21	SW 1/4	66.80	65.70	65.7 ac. Planted, No Violation	NA	NA
103-22-001 & 044	7S	26E	28	E 1/2, NE 1/4	113.31	113.31	113.31 ac. Planted, No Violation	NA	NA
102-33-003B	7S	26E	13	SE 1/4	133.10	133.10	133.10 ac. Planted, No Violation	NA	NA
102-41-005, 42-002	7S	26E	16	W 1/2	142.00	138.70	138.70 ac. Planted, No Violation	NA	NA
107-49-004	7S	27E	18	N 1/2 SW 1/4	108.20	94.80	94.80 ac. Planted, No Violation	NA	NA
101-21-057A	7S	27E	18	NE SW	7.41	0.00	0 ac. Planted, No Violation	NA	NA
101-18 & 16	7S	27E	18	NE 1/4	39.83	31.10	31.10 ac. Planted, No Violation	NA	NA
104-28-075F	7S	25E	11	SENE	4.80	3.80	1.0 ac. Planted, 2.8 ac. Violation	Owner Signed Cease & Desist Order	14.19 Ac-Ft
109-65-013A	6S	24E	14	SE 1/4	75.40	75.40	75.40 ac. Planted, No Violation	NA	NA
102-29-002B	6S	26E	9	W 1/2 SE 1/4	31.90	24.80	24.80 ac. Planted, No Violation	NA	NA
109-52-001	6S	24E	1	NW 1/4	80.20	80.20	80.20 ac. Planted, No Violation	NA	NA
105-01-009	6S	25E	6	S 1/2 SW 1/4	67.80	58.10	52.30 ac. Planted, 5.8 ac. Violation	Owner Signed Cease & Desist Order	20.79 Ac-Ft
105-05-008B	6S	25E	8	NW 1/4, S 1/2	113.20	110.60	106.60 ac. Planted, 4 ac. Violation	Owner Signed Cease & Desist Order	14.34 Ac-Ft
109-65-021A	6S	24E	14	N 1/2	103.70	103.70	103.70 ac. Planted, No Violation	NA	NA
105-32-003	6S	25E	27	W 1/2	200.30	200.30	200.30 ac. Planted, No Violation	NA	NA
105-33-008	6S	25E	28	W 1/2	175.60	170.30	170.30 ac. Planted, No Violation	NA	NA
109-22-008	4S	23E	14	S 1/2	64.20	58.90	58.90 ac. Planted, No Violation	NA	NA
109-54-005, 6 & 7	6S	24E	3	S 1/2	119.50	113.80	113.80 ac. Planted, No Violation	NA	NA
109-55-009	6S	24E	4	W 1/2 W 1/2	155.80	136.10	136.10 ac. Planted, No Violation	NA	NA
109-32-010	5S	24E	18	NE 1/4	67.80	61.90	61.90 ac. Planted, No Violation	NA	NA
109-34-005	5S	24E	20	NW & SW 1/4	89.90	89.90	89.90 ac. Planted, No Violation	NA	NA
109-37-040	5S	24E	28	SW 1/4	61.90	61.90	61.90 ac. Planted, No Violation	NA	NA
108-15-006C	4S	23E	20	S 1/2	129.80	129.80	129.80 ac. Planted, No Violation	NA	NA
108-14-008 9 & 10	4S	23E	19	SENE, NESE	28.30	28.30	22.30 ac. Planted, 6 ac. Violation	Owner Signed Cease & Desist Order	35.01 Ac-Ft
108-20-003	4S	23E	28	W 1/2	116.50	110.70	110.70 ac. Planted, No Violation	NA	NA
108-19-001 & 002	4S	23E	27	E 1/2 & NENW	56.10	56.10	38.6 ac. Planted, 17.5 ac. Violation	Owner Signed Cease & Desist Order	44.10 Ac-Ft
DECEASED ACRES AUDITED:					2772.72			TOTAL PAYBACK & PENALTIES:	218.94 Ac-Ft
TBI ACRES REPORTED:					28,405.57				
PERCENT AUDITED IN 1999:					9.8%				

NOTE: SEE PAGES 10-1a to 10-3a FOR WRITTEN SUMMATION OF ACTION TAKEN BY THE GILA WATER COMMISSIONER AND PENALTIES CONSENTED TO BY LAND OWNERS IN VIOLATION OF THE REGULATIONS FOR REPORTING LANDS THEN BEING IRRIGATED (TBI).

NOTE: THE US DISTRICT COURT AGREED TO WAIVE ALL PENALTIES AND PAYBACKS FOR 1998 VIOLATIONS OF THE "THEN BEING IRRIGATED" REGULATIONS.

**1999
SUMMARY OF AUDITS
SAN CARLOS APACHE TRIBE**

LOCATION	DECREED ACRES	TBI ACRES	RESULTS OF AUDIT	RESULTS OF INFORMAL RESOLUTION	PAYBACK & PENALTY
BLACK POINT	69.86	69.86	69.50 Acres Planted Per GWC Audit, No Violation	NA	NA
NAVAJO POINT	141.36	141.36	109.80 Acres Planted Per GWC Audit, 31.56 Acre Violation Water Used = 65.1 ac-ft, Duty = .59 ac-ft/ac	Notified SCAR of violation, No penalty assessed. No Penalty assessed Due To Low Water Use.	NONE
ANDERSON FLAT	90.31	90.31	68.70 Acres Planted Per GWC Audit, 21.61 Acre Violation Duty on 68.7 ac Planted = 7.94 ac-ft/ac, Exceeded Max Div. (6ac-ft/ac)	Notified SCAR of both violations. SCAR signed Cease & Desist Order	200.10 Ac-Ft
DECREED ACRES AUDITED:		301.53			
TBI ACRES REPORTED:		301.53			
PERCENT AUDITED IN 1999:		100.0%			

NOTE: SEE PAGES 10-1a to 10-3a FOR WRITTEN SUMMATION OF ACTION TAKEN BY THE GILA WATER COMMISSIONER AND PENALTIES CONSENTED TO BY LAND OWNERS IN VIOLATION OF THE REGULATIONS FOR REPORTING LANDS THEN BEING IRRIGATED (TBI).

NOTE: THE US DISTRICT COURT AGREED TO WAIVE ALL PENALTIES AND PAYBACKS FOR 1999 VIOLATIONS OF THE "THEN BEING IRRIGATED" REGULATIONS.

**1999
SUMMARY OF AUDITS**

ASARCO INC. AGRICULTURAL LANDS (JJ Anderson Lands)

TWP.	RNG.	SEC.	DECREED ACRES	TBI ACRES	RESULTS OF AUDIT	RESULTS OF INFORMAL RESOLUTION	PAYBACK & PENALTY
4S	14E	35	167.07	123.40	123.4 ac. Planted, No Violation	NA	NA
4S	14E	36	47.80	34.60	34.6 ac. Planted, No Violation	NA	NA
DECREED ACRES AUDITED:				158.00			
TBI ACRES REPORTED:				158.00			
PERCENT AUDITED IN 1999:				100.0%			

NOTE: SEE PAGES 10-1a to 10-3a FOR WRITTEN SUMMATION OF ACTION TAKEN BY THE GILA WATER COMMISSIONER AND PENALTIES CONSENTED TO BY LAND OWNERS IN VIOLATION OF THE REGULATIONS FOR REPORTING LANDS THEN BEING IRRIGATED (TBI).

NOTE: THE US DISTRICT COURT AGREED TO WAIVE ALL PENALTIES AND PAYBACKS FOR 1999 VIOLATIONS OF THE "THEN BEING IRRIGATED" REGULATIONS.

**1999
SUMMARY OF AUDITS
SAN CARLOS IRRIGATION & DRAINAGE DISTRICT**

ACCOUNT NO.	TWP.	RNG.	SEC.	1/4-1/4	DECEED ACRES	TBI ACRES	RESULTS OF AUDIT	RESULTS OF INFORMAL RESOLUTION	PAYBACK & PENALTY
4836-14	4S	8E	36	SE1/4	35.00	0.00	0 Acres Planted, No Violation	NA	NA
5822-1	5S	8E	22	NE1/4	148.23	102.00	0 Acres Planted, 102 Acre Violation	Owner Signed Cease & Desist Order	\$500.00
5835-3	5S	8E	35	SW1/4	160.00	147.50	147.5 Acres Planted, No Violation	NA	NA
594-4	5S	9E	4	E1/2	278.31	248.00	32.19 ac. Planted, No Violation	NA	NA
5930-4	5S	9E	30	SE1/4	160.00	100.00	100 ac. Planted, No Violation	NA	NA
6515-2	6S	5E	15	SW1/4	200.00	36.00	36 ac. Planted, No Violation	NA	NA
6712-3	6S	7E	12	SW1/4	160.00	134.00	72.17 Ac. Plntd, 61.83 Ac. Violation	Owner Signed Cease & Desist Order	\$309.15
6723-2	6S	7E	23	W1/2	395.00	366.95	74.32 Ac. Plntd, 292.63 Ac. Violation	Owner Signed Cease & Desist Order	\$500.00
6726-2	6S	7E	26	NW1/4	160.00	146.13	71.63 Ac. Plntd, 74.5 Ac. Violation	Owner Signed Cease & Desist Order	\$372.50
6726-4	6S	7E	26	E1/2	320.00	303.94	145.16 Ac. Plntd, 158.78 Ac. Violation	Owner Signed Cease & Desist Order	\$500.00
6731-2	6S	7E	31	NW1/4	160.00	25.00	25 ac. Planted, No Violation	NA	NA
6731-3	6S	7E	31	SW1/4	160.00	140.00	76.64 Ac. Plntd, 63.36 Ac. Violation	Owner Signed Cease & Desist Order	\$316.80
6732-1	6S	7E	32	E1/2	259.70	252.82	252.82 ac. Planted, No Violation	NA	NA
6819-3	6S	8E	19	SW1/4	166.42	149.12	76.15 Ac. Plntd, 72.97 Ac. Violation	Owner Signed Cease & Desist Order	\$364.85
6812-44	6S	8E	12	E1/2, SW1/4	80.00	73.60	0 Ac. Plntd, 73.6 Ac. Violation	Owner Signed Cease & Desist Order	\$368.00
6812-1	6S	8E	12	NE1/4	240.00	75.00	75 ac. Planted, No Violation	NA	NA
6820-4	6S	8E	20	SE1/4	160.00	64.00	64 ac. Planted, No Violation	NA	NA
761-1	7S	6E	1	E1/2, E1/2	134.52	120.00	120 ac. Planted, No Violation	NA	NA
DECEED ACRES AUDITED:					3,377.18	TOTAL PAYBACK & PENALTIES:			
TBI ACRES REPORTED:					34,201.10				
PERCENT AUDITED FOR 1999:					9.9%				

NOTE: SEE PAGES 10-1a to 10-3a FOR WRITTEN SUMMATION OF ACTION TAKEN BY THE GILA WATER COMMISSIONER AND PENALTIES CONSENTED TO BY LAND OWNERS IN VIOLATION OF THE REGULATIONS FOR REPORTING LANDS THEN BEING IRRIGATED (TBI).

NOTE: THE US DISTRICT COURT AGREED TO WAIVE ALL PENALTIES AND PAYBACKS FOR 1999 VIOLATIONS OF THE "THEN BEING IRRIGATED" REGULATIONS.

**1999
SUMMARY OF AUDITS
GILA RIVER INDIAN COMMUNITY**

TOWNSHIP	RANGE	SECTION	DECREED ACRES	TBI ACRES	RESULTS OF AUDIT	RESULTS OF INFORMAL RESOLUTION	PAYBACK & PENALTY
4S	6E	19	539.60	504.30	504.30 Acres Planted, No Violation	NA	NA
4S	5E	24	349.80	313.02	313.02 Acres Planted, No Violation	NA	NA
4S	4E	7	612.00	614.10	546.90 Acres Planted, 67.2 Acre Violation	GRIC Signed Cease & Desist Order	204.63 Ac-Ft
3S	5E	21	207.20	14.04	14.04 Acres Planted, No Violation	NA	NA
DECREED ACRES AUDITED:			1708.60				
TBI ACRES REPORTED:			18,533.81				
PERCENT AUDITED IN 1999:			9.2%				

NOTE: SEE PAGES 10-1a to 10-3a FOR WRITTEN SUMMATION OF ACTION TAKEN BY THE GILA WATER COMMISSIONER AND PENALTIES CONSENTED TO BY LAND OWNERS IN VIOLATION OF THE REGULATIONS FOR REPORTING LANDS THEN BEING IRRIGATED (TBI).

NOTE: THE US DISTRICT COURT AGREED TO WAIVE ALL PENALTIES AND PAYBACKS FOR 1999 VIOLATIONS OF THE "THEN BEING IRRIGATED" REGULATIONS.

CALENDAR YEAR 1999

GILA RIVER DECREED ACREAGE'S AND DIVERSIONS

<u>DUNCAN VALLEY CANALS</u>	<u>Acreage's</u>	<u>T B I Acres</u>	<u>Acre-feet</u>	<u>Duty</u> <u>T B I a-f/a</u>
Sunset	2,759.90	2,531.80	11,583	4.58
New Model	2,717.65	2,160.12	6,576	3.04
Valley	1,387.20	1,088.90	4,615	4.24
Colmenero	441.00	0	0	0
Sexton	137.90	0	0	0
R. Sexton	144.10	0	0	0
York	315.10	0	0	0
Albert	8.80	0	0	0
F E Ross	11.60	0	0	0
R K Davis	26.30	0	0	0
J H Brown	25.60	0	0	0
York Cattle	49.80	0	0	0
Laura Short	36.50	0	0	0
Totals	8,061.35	5,780.92	22,774	3.94

Water issued for 5,780.92 T.B.I. acres on 12/01/99. Monthly modification of T.B.I. Acres are shown on diversions plates.

<u>SAFFORD VALLEY DIVERSIONS</u>	<u>Acreage's</u>	<u>T B I Acres</u>	<u>Acre-feet</u>	<u>Duty</u> <u>T B I a-f/a</u>
Consolidated Brown	1,326.90	1,101.43	3,561	3.23
Fournesss	210.70	189.6	427	2.25
San Jose	4,150.03	3,708.84	15,981	4.31
Montezuma	4,835.96	3,923.54	13,703	3.49
Union	7,371.96	6,102.38	22,951	3.76
Graham	4,217.68	3,890.88	9,287	2.39
Smithville	2,549.33	2,337.26	10,972	4.69
Dodge-Nevada	2,516.54	2,391.44	7,712	3.22
Curtis	1,971.70	1,752.85	8,611	4.91
Fort Thomas	3,155.70	2,841.85	11,066	3.89
Colvin-Jones	205.90	165.50	278	1.68
Totals	32,512.40	28,405.57	104,549	3.68

Water issued for 28,405.57 T.B.I. acres on 12/01/99. Monthly modification of T.B.I. Acres are shown on diversions plates.

<u>SAN CARLOS APACHE RESERVATION</u>	<u>Acreage's</u>	<u>T B I Acres</u>	<u>Acre-feet</u>	<u>Duty</u> <u>T B I a-f/a</u>
Black Point	69.86	69.86	13	0.19
Bylas (Navajo Point)	141.36	141.36	65	0.46
Anderson Flat	90.31	90.31	545	6.03
Non-designated lands	698.47	0	0	0.00
Totals	1,000.00	301.53	623	2.07

Water issued for 301.53 T.B.I. acres on 12/01/99. Monthly modification of T.B.I. Acres are shown on diversions plates.

<u>WINKELMAN VALLEY</u>	<u>Acreage's</u>	<u>T B I Acres</u>	<u>Acre-feet</u>	<u>Duty</u> <u>T B I a-f/a</u>
Industrial/Municipal (ASARCO) ⁽¹⁾	793.00	793.00	11,826	
Domestic/Municipal (Keamy, Arizona)	101.73	101.73	378	3.72
Farmlands	244.16	0	0	
J J Anderson	196.27	158.00	451	2.85
Totals	1,335.16	1,052.73	12,655	

Water issued for 1,052.73 T. B. I. Acres on 12/01/99. Monthly modification of T.B.I. Acres are shown on diversions plates.

<u>UNITED STATES OF AMERICA</u>	<u>Acreage's</u>	<u>T B I Acres</u>	<u>Acre-feet</u>	<u>Duty</u> <u>T B I a-f/a</u>	<u>Decreed</u> <u>Duty a-f/a</u>
Indian lands (Allotted/Tribal)	50,000	18,533.81	28,654	1.55	0.57
Federal Agencies	546	0	31,948	1.72	0.63
	<u>50,546</u>	<u>18,533.81</u>	<u>60,602</u>	<u>3.27</u>	<u>1.20</u>
White Lands					
San Carlos Irrigation & Drainage Dist	50,000	33,801.60	24,374	0.72	0.49
	<u>50,000</u>	<u>33,801.60</u>	<u>30,980</u>	<u>0.92</u>	<u>0.62</u>
Natural Flow Lands	1,544.5	408.00	55,354	1.64	1.11
	<u>51,544.5</u>	<u>34,209.60</u>	<u>457</u>	<u>1.12</u>	<u>0.30</u>
			<u>55,811</u>	<u>1.63</u>	<u>1.08</u>
Totals	102,090.5	52,743.41	116,413	2.21	1.14
	<u>102,090.5</u>	<u>52,743.41</u>			
	<u>100,546</u>	<u>52,743.41</u>	Nat. Flow	53,485	1.01
			Stored	62,928	1.19
					0.52
					0.63

Water issued for 52,743.41 T.B.I. acres on 12/01/99. Monthly modification of T.B.I. Acres are shown on diversions plates.

Diversion from Picacho Reservoir are reflected above.

⁽¹⁾ Entitled to annual diversion of 16,221 acre-feet. (Article IX, et al 59)

SAN CARLOS APACHE TRIBE FARM REPORT 1999

This annual farm report by the GWC is pursuant to the Court's Water Quality Injunction filed on June 3, 1996
All data reported is supplied by the San Carlos Apache Tribe unless shown otherwise

BLACK POINT

MONTH	FIELD	CROP	DATE PLANTED	ACRES TBI	DATES IRRIGATED -from - to	SOURCE OF WATER APPLIED				UNUSUAL PROBLEMS OR	DATA BY GWC	
						GILA RIVER DIVERSIONS (ac-ft)	WATER QUALITY (uS/cm)	TRIBAL WELLS (ac-ft)	WATER QUALITY (uS/cm)		COMBINED RIVER & WELLS (ac-ft)	USE OF CROP
JAN	1021W	ALF	96-97	11.27	JAN 14	0.90	2800	0.00	0.90	FEED		
	1021E	ALF	96-97	21.33		0.00		0.00	0.00	FEED		
	1022W	ALF	96-97	23.09		0.00		0.00	0.00	FEED		
FEB	1022E	ALF	96-97	13.65		0.00		0.00	0.00	FEED		
	1021W	ALF	96-97	11.27		0.00		0.00	0.00	FEED		
	1021E	ALF	96-97	21.33		0.00		0.00	0.00	FEED		
MAR	1022W	ALF	96-97	23.09		0.00		0.00	0.00	FEED		
	1022E	ALF	96-97	13.65		0.00		0.00	0.00	FEED		
	1021W	ALF	96-97	11.27		0.00		0.00	0.00	FEED		
APR	1021E	ALF	96-97	21.33	MAR 31-APR 1	0.00		0.00	0.00	FEED		
	1022W	ALF	96-97	23.09	MAR 23 & 30	5.90		0.00	5.90	FEED		03/20/99 03/26/99
	1022E	ALF	96-97	13.65		0.00		0.00	0.00	FEED		
MAY	1021W	ALF	96-97	11.27		0.00		0.00	0.00	FEED		
	1021E	ALF	96-97	21.33		0.00		0.00	0.00	FEED		
	1022W	ALF	96-97	23.09		0.00		0.00	0.00	FEED		
JUNE	1022E	ALF	96-97	13.65		0.00		0.00	0.00	FEED		
	1021W	ALF	96-97	11.27		0.00		0.00	0.00	FEED		
	1021E	ALF	96-97	21.33		0.00		0.00	0.00	FEED		
JULY	1022W	ALF	96-97	23.09		0.00		0.00	0.00	FEED		
	1022E	ALF	96-97	13.65		0.00		0.00	0.00	FEED		
	1021W	ALF	96-97	11.27		0.00		0.00	0.00	FEED		
AUG	1021E	ALF	96-97	21.33		0.00		0.00	0.00	FEED		
	1022W	ALF	96-97	23.09		0.00		0.00	0.00	FEED		
	1022E	ALF	96-97	13.65		0.00		0.00	0.00	FEED		
SEPT	1021W	ALF	96-97	11.27		0.00		0.00	0.00	FEED		
	1021E	ALF	96-97	21.33		0.00		0.00	0.00	FEED		
	1022W	ALF	96-97	23.09		0.00		0.00	0.00	FEED		
OCT	1022E	ALF	96-97	13.65		0.00		0.00	0.00	FEED		
	1021W	ALF	96-97	11.27		0.00		0.00	0.00	FEED		
	1021E	ALF	96-97	21.33		0.00		0.00	0.00	FEED		
NOV	1022W	ALF	96-97	23.09		0.00		0.00	0.00	FEED		
	1022E	ALF	96-97	13.65		0.00		0.00	0.00	FEED		
	1021W	ALF	96-97	11.27		0.00		0.00	0.00	FEED		
DEC	1021E	ALF	96-97	21.33		0.00		0.00	0.00	FEED		
	1022W	ALF	96-97	23.09		0.00		0.00	0.00	FEED		
	1022E	ALF	96-97	13.65		0.00		0.00	0.00	FEED		
TOTALS FOR BLACK POINT FOR 1999 =						12.80		0.00	12.80		0.00	

PER SCAR REPORT	TBI acres =	88.34	Duty on 12.8 ac-R =	.18 ac-R/ac
PER GWC DATA	TBI acres =	68.50	Duty on 13.2 ac-R =	.19 ac-R/ac

SAN CARLOS APACHE TRIBE FARM REPORT (CONT.)

1999

This annual farm report by the GWC is pursuant to the Court's Water Quality Injunction filed on June 3, 1998
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NAVAJO POINT

MONTH	FIELD	CROP	DATE PLANTED	ACRES TBI	DATES IRRIGATED from-to	SOURCE OF WATER APPLIED				USE OF CROP	CROP YIELD tons/acre	COMMENTS OR UNUSUAL PROBLEMS	DATA BY GWC		
						GILA RIVER DIVERSIONS (ac-ft)	WATER QUALITY (uS/cm)	TRIBAL WELLS (ac-ft)	WATER QUALITY (uS/cm)				COMBINED RIVER & WELLS (ac-ft)	DATE	Gila River Water Quality uS/cm
JAN	1041	NONE		31.85											
	1043	ALF	84-97	25.82											
	1044	ALF	84-97	14.72											
	1045	ALF	84-97	38.84											
FEB	1048	ALF	84-97	28.83											
	1041	NONE		31.85											
	1043	ALF	84-97	25.82											
	1044	ALF	84-97	14.72											
MAR	1045	ALF	84-97	38.84											
	1048	ALF	84-97	28.83											
	1041	NONE		31.85	MAR 2-3, 18-17 & 31		3900		14.50			Pump problems.	09/02/89	3680	
	1043	ALF	84-97	25.82											
APR	1044	ALF	84-97	14.72											
	1045	ALF	84-97	38.84											
	1048	ALF	84-97	28.83											
	1041	NONE		31.85											
MAY	1043	ALF	84-97	25.82											
	1044	ALF	84-97	14.72											
	1045	ALF	84-97	38.84											
	1048	ALF	84-97	28.83											
JUNE	1041	NONE		31.85	MAY 17-23 & 23-24 MAY 15-17		4575 4780		31.25 9.73			Stopped pump due to vandalism.	05/21/00 05/18/99	3650 3850	
	1043	ALF	84-97	25.82											
	1044	ALF	84-97	14.72											
	1045	ALF	84-97	38.84											
JULY	1048	ALF	84-97	28.83											
	1041	NONE		31.85											
	1043	ALF	84-97	25.82											
	1044	ALF	84-97	14.72											
AUG	1045	ALF	84-97	38.84											
	1048	ALF	84-97	28.83											
	1041	NONE		31.85											
	1043	ALF	84-97	25.82											
SEPT	1044	ALF	84-97	14.72											
	1045	ALF	84-97	38.84											
	1048	ALF	84-97	28.83											
	1041	NONE		31.85											
OCT	1043	ALF	84-97	25.82											
	1044	ALF	84-97	14.72											
	1045	ALF	84-97	38.84											
	1048	ALF	84-97	28.83											
NOV	1041	NONE		31.85											
	1043	ALF	84-97	25.82											
	1044	ALF	84-97	14.72											
	1045	ALF	84-97	38.84											
DEC	1048	ALF	84-97	28.83											
	1041	NONE		31.85											
	1043	ALF	84-97	25.82											
	1044	ALF	84-97	14.72											
TOTALS FOR NAVAJO POINT FOR 1999													35.48	55.38	0.00

PER ACRE REPORT TBI acres =	10816	Duty on 85.5 ac-ft =	406.0/ac.
PER GWC DATA TBI acres =	10880	Duty on 85.1 ac-ft =	38 ac-ft/ac.

SAN CARLOS APACHE TRIBE FARM REPORT

1999

This annual farm report by the GWC is pursuant to the Court's Water Quality Injunction filed on June 3, 1988
All data reported is supplied by the San Carlos Apache Tribe unless shown otherwise

ANDERSON FLAT

MONTH	FIELD	CROP	DATE PLANTED	ACRES TBI	DATES IRRIGATED from - to	SOURCE OF WATER APPLIED			COMBINED RIVER & WELLS (ac-ft)	USE OF CROP	CROP YIELD tons/acre	COMMENTS OR UNUSUAL PROBLEMS	DATA BY GWC			
						GILA RIVER DIVERSIONS (ac-ft)	WATER QUALITY (uS/cm)	TRIBAL WELLS (ac-ft)					WATER QUALITY (uS/cm)	DATE	Gila River Water Quality uS/cm	
JAN	1047	NONE		31.81			0.00	0.00	0.00							
	1048	NONE		15.78			0.00	0.00	0.00							
	1049	NONE		20.73			0.00	0.00	0.00							
	1050	NONE		21.99	JAN 14, 21 & 28-29		1810	0.00	6.44			Amount of water applied estimated.				
FEB	1047	NONE		31.81			0.00	0.00	0.00							
	1048	NONE		15.78			0.00	0.00	0.00							
	1049	NONE		20.73			0.00	0.00	0.00							
	1050	NONE		21.99	FEB 1-2 & 8-25		28.10	0.00	28.10			Amount of water applied estimated.	02/17/99	3450		
MAR	1047	NONE		31.81			0.00	0.00	0.00							
	1048	NONE		15.78			0.00	0.00	0.00							
	1049	NONE		20.73			0.00	0.00	0.00							
	1050	NONE		21.99			0.00	0.00	0.00							
APR	1047	ALF	APRIL 17	31.81	APR 27-30		4850	0.00	14.90			Used permanent and portable pumps	04/20/99	4110		
	1048	ALF	APRIL 10	15.78	APR 12-15, 19-22, 26-27		4530	0.00	35.84			Used permanent and portable pumps	04/26/99	4000		
	1049	NONE		20.73			0.00	0.00	0.00							
	1050	NONE		21.99			0.00	0.00	0.00							
MAY	1047	ALF	APRIL 17	31.81	MAY 4-7		4825	0.00	10.83			Problems with irrigating.	05/07/99	4040		
	1048	ALF	APRIL 10	15.78	MAY 10-12		4813	0.00	11.28				05/11/99	3800		
	1049	NONE		20.73			0.00	0.00	0.00							
	1050	ALF	MAY 10-11	21.99	MAY 12-15 & 25-30		4712	0.00	44.85				05/25/99	3930		
JUNE	1047	ALF	APRIL 17	31.81	JUNE 19-26 & 30-JULY 2		3382	0.00	44.48			Excretion dam broke, moved pump.	06/29/99	3840		
	1048	ALF	APRIL 10	15.78	JUNE 6-7 & 18-19		3450	0.00	10.81				06/18/99	3730		
	1049	CNISC		20.73	JUNE 5-8 & 18-18		3860	0.00	18.88			Preparing to plant corn and sugar cane	06/04/99	3990		
	1050	ALF	MAY 10-11	21.99	JUNE 2-5 & 28-30		3840	0.00	31.81				06/29/99	3840		
JULY	1047	ALF	APRIL 17	31.81	JULY 10 & 15-18		2840	0.00	8.35			Cut alfalfa with high presence of weeds.	07/13/99	1768		
	1048	ALF	APRIL 10	15.78	JULY 7-9		3580	0.00	3.82			Cut alfalfa with high presence of grass.	07/09/99	3900		
	1049	CNISC	JULY 2-5	20.73	JULY 7-9		3810	0.00	12.85			Planted corn 7/2 & sugar cane 7/5	07/16/99	2370		
	1050	ALF	MAY 10-11	21.99	JULY 1-2 & 11-14		3123	0.00	17.78				08/20/99	1250		
AUG	1047	ALF	APRIL 17	31.81	AUG 6-7 & 19-24		1027	0.00	43.87			Cut alfalfa 8/3, problems with pump	08/06/99	3390		
	1048	ALF	APRIL 10	15.78	AUG 5-8		3220	0.00	3.28			Shut off pump due to potential flooding.	08/19/99	880		
	1049	CNISC	JULY 2-5	20.73	AUG 3-5, 18-19 & 28-31		878	0.00	21.04							
	1050	ALF	MAY 10-11	21.99			0.00	0.00	0.00							
SEPT	1047	ALF	APRIL 17	31.81	SEPT 13-21		50.89	0.00	50.89			Cut alfalfa 9/1-2 w/ lower presence of weeds	09/17/99	493		
	1048	ALF	APRIL 10	15.78			0.00	0.00	0.00			Cut alfalfa 9/3 w/ lower presence of grass	09/13/99	3590		
	1049	CNISC	JULY 2-5	20.73	SEPT 12-13 & 23-24		3900	0.00	11.52			Problems with port. pump.				
	1050	ALF	MAY 10-11	21.99			0.00	0.00	0.00			Cut alfalfa 9/2-3				
OCT	1047	ALF	APRIL 17	31.81	OCT 8-12		2590	0.00	43.00			Cut alfalfa 10/26-27	10/26/99	2370		
	1048	ALF	APRIL 10	15.78	OCT 14		3300	0.00	7.03			Cut alfalfa 10/26-29	10/15/99	2900		
	1049	CNISC	JULY 2-5	20.73	OCT 13		3200	0.00	7.10				10/12/99	3020		
	1050	ALF	MAY 10-11	21.99	OCT 15-22		3033	0.00	47.20				10/19/99	2610		
NOV	1047	ALF	APRIL 17	31.81			0.00	0.00	0.00			Baked alfalfa w/ lower presence of weeds				
	1048	ALF	APRIL 10	15.78			0.00	0.00	0.00			Baked alfalfa w/ lower presence of grass				
	1049	CNISC	JULY 2-5	20.73			0.00	0.00	0.00			Burned crop 11/1-3, SC seeds not mature				
	1050	ALF	MAY 10-11	21.99			0.00	0.00	0.00							
DEC	1047	ALF	APRIL 17	31.81			0.00	0.00	0.00			Cut alfalfa 12/7				
	1048	ALF	APRIL 10	15.78			0.00	0.00	0.00							
	1049	CNISC	JULY 2-5	20.73			0.00	0.00	0.00							
	1050	ALF	MAY 10-11	21.99			0.00	0.00	0.00							
TOTALS FOR ANDERSON FLAT FOR 1999													538.75	538.75	1.33	92.05
NOTE: CNISC = CORN AND SUGAR CANE													538.75	538.75	1.33	92.05

PER SCAR REPORT	TBI acres =	80.32	Duty of 538.75 ac-ft =	6.98 ac-ft/ac
PER GWC DATA	TBI acres =	68.70	Duty of 538.75 ac-ft =	7.94 ac-ft/ac

SUMMARY OF ALL SCAR LANDS	298.32 AC. REPORTED	607.01 AC-FT USED	DUTY = 2.03 AC-FT/AC	\$2.06 TON/AC
CROP YIELD APPLICABLE TO ANDERSON FLAT ONLY.				

1999

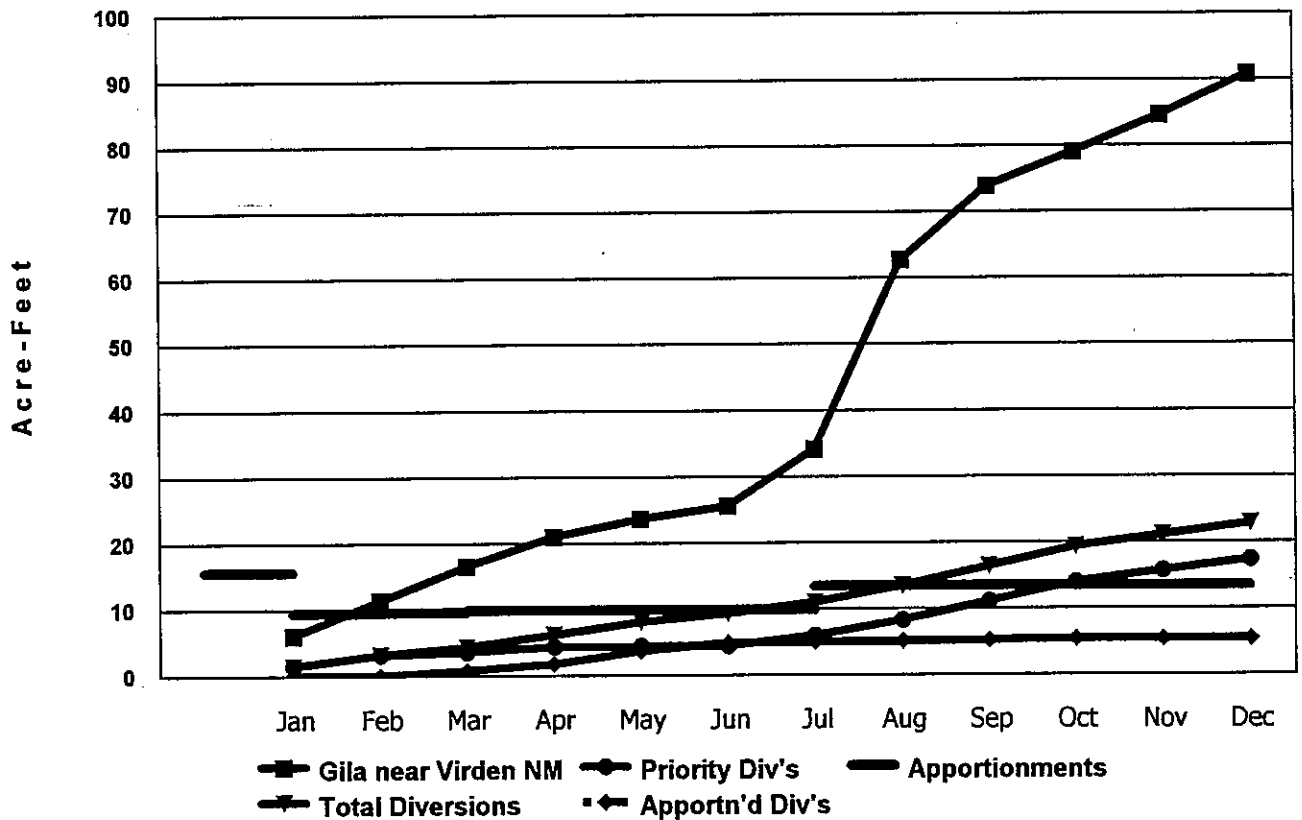
MASS DIAGRAM OF DUNCAN VALLEY

DIVERSIONS, APPORTIONMENTS, & RIVER FLOWS

In Acre-feet

Month	Monthly Gila River Below Blue Creek	Accumulated				Water Apportioned
		Gila River Below Blue Creek	Total Diversions	Priority Diversions	Apportioned Diversions	
JAN	6,135	6,135	1,503	1,491	12	15,579
FEB	5,193	11,328	3,219	3,170	49	9,427
MAR	5,232	16,560	4,407	3,615	792	9,572
APR	4,389	20,949	6,165	4,380	1,785	9,798
MAY	2,745	23,694	8,150	4,437	3,713	9,798
JUN	1,847	25,541	9,371	4,436	4,935	9,798
JUL	8,610	34,151	11,005	6,001	5,004	9,798
AUG	28,564	62,715	13,456	8,293	5,163	13,392
SEP	11,121	73,836	16,332	11,097	5,235	13,392
OCT	5,179	79,015	19,316	13,918	5,398	13,392
NOV	5,580	84,595	21,086	15,688	5,398	13,391
DEC	6,107	90,702	22,773	17,320	5,453	13,354

Graph :	Gila near Viriden NM	Total Diversions	Priority Div's	Apportn'd Div's	Apportionments
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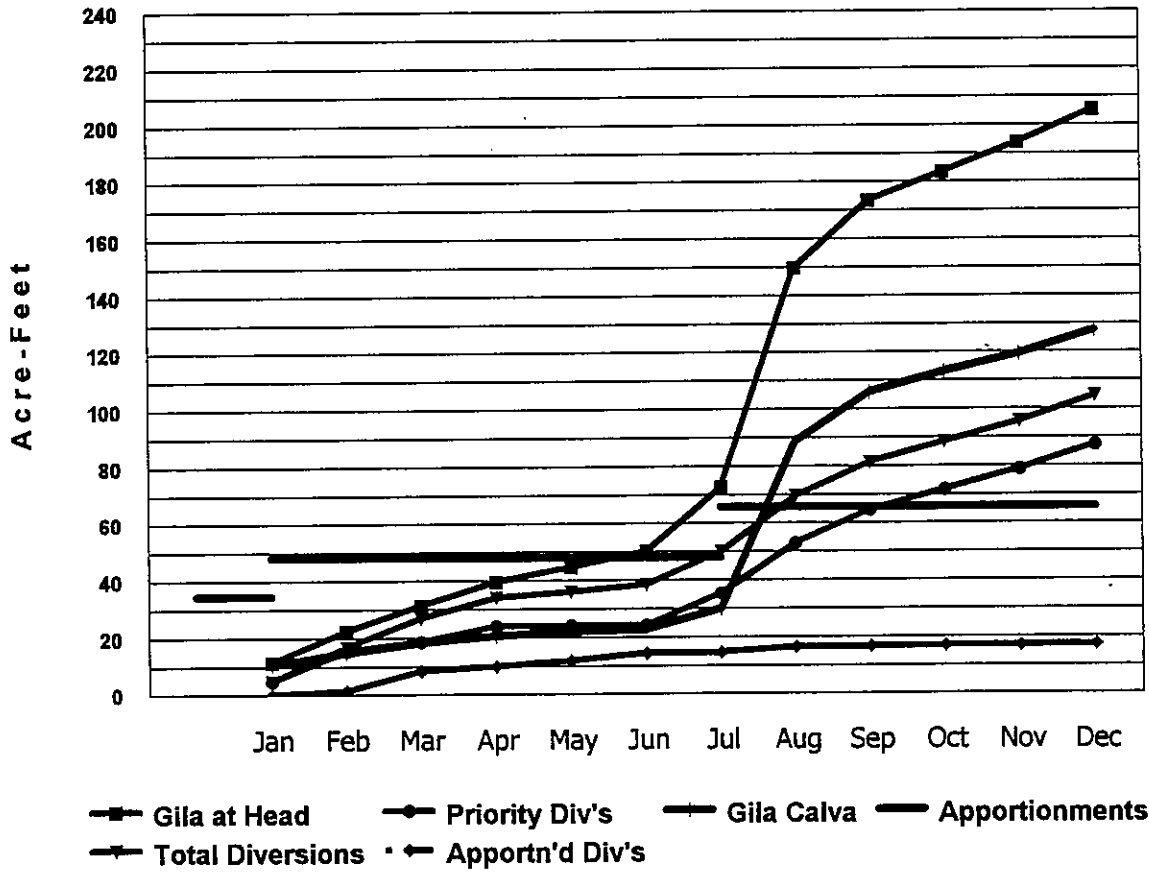
1999

MASS DIAGRAM OF SAFFORD VALLEY

DIVERSIONS, APPORTIONMENTS, & RIVER FLOWS

In Acre-feet

Month	Monthly Gila River at Head of Safford Valley	Accumulated				Water Apportioned	Accumulated Gila River At Calva	Monthly Gila River At Calva
		Gila River at Head of Safford Valley	Total Diversions	Priority Diversions	Apportioned Diversions			
JAN	11,520	11,520	4,750	4,748	2	34,754	10,584	10,584
FEB	10,876	22,396	16,905	15,518	1,387	48,324	14,924	4,340
MAR	8,957	31,353	26,861	18,573	8288	48,300	18,306	3,382
APR	8,206	39,559	33,934	23,914	10,020	47,979	20,551	2,245
MAY	5,054	44,613	36,094	24,191	11,903	47,979	21,896	1,345
JUN	5,748	50,361	38,544	24,191	14,353	47,979	22,754	858
JUL	22,241	72,602	49,999	35,358	14,641	47,982	30,093	7,339
AUG	77,156	149,758	69,398	52,917	16,481	65,582	88,551	58,458
SEP	23,588	173,346	81,335	64,652	16,683	65,617	105,996	17,445
OCT	10,102	183,448	88,396	71,606	16,790	65,617	113,301	7,305
NOV	10,302	193,750	95,527	78,737	16,790	65,617	119,476	6,175
DEC	11,619	205,369	104,549	87,280	17,269	65,617	127,797	8,321
Graph:	Gila at Head	Total Diversions	Priority Div's	Apportn'd Div's	Apportionments	Gila Calva		



1999

FOURNESS CANAL: 210.70 acres

Mean daily diversions, cubic feet per second

DAY	JAN			FEB			MAR			APR			MAY			JUN		
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15				1.6	1.6													
16				2.3	2.3													
17				2.3	2.3													
18				2.3	2.3													
19				2.3	2.3													
20				2.3	2.3													
21				2.3	2.3													
22				1.0		1.0												
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
Total				18.4	15.4	1.0												
Acres-feet					33													
Priority Diverted					31													
Apport Diverted					2													
Apport diverted to date					2			2			2			2			2	
TBI acreage				188.60			188.60			188.60			188.60			188.60		
Apporboned				328			324			320			320			320		
Duty				0.17														

DAY	JUL			AUG			SEP			OCT			NOV			DEC			Totals
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	
1				2.3	2.3		2.4	2.4		2.4	2.4								
2				2.3	2.3		2.4	2.4		2.4	2.4								
3				2.4	2.4		2.4	2.4		2.4	2.4								
4				2.4	2.4		2.4	2.4		2.4	2.4								
5				2.4	2.4		2.4	2.4		2.4	2.4								
6				2.4	2.4		2.4	2.4		2.4	2.4								
7				2.4	2.4		2.4	2.4		2.4	2.4								
8				2.4	2.4		2.4	2.4		2.4	2.4		2.4						
9				2.4	2.4		2.4	2.4		2.4	2.4		2.4	2.4					
10				2.4	2.4		2.4	2.4		0.9	0.9								
11				2.4	2.4		2.4	2.4											
12				2.4	2.4		2.4	2.4											
13				2.4	2.4		2.4	2.4											
14				2.4	2.4		2.4	2.4											
15				2.4	2.4		2.4	2.4											
16				2.4	2.4		2.4	2.4											
17				2.4	2.4		2.4	2.4											
18				2.4	2.4		2.4	2.4											
19	1.5	1.5		2.4	2.4		2.4	2.4											
20	2.3	2.3		2.4	2.4		2.4	2.4											
21	2.3	2.3		2.4	2.4		2.4	2.4											
22	2.3	2.3		2.4	2.4		2.4	2.4											
23	2.3	2.3		2.4	2.4		2.4	2.4											
24	2.3	2.3		2.4	2.4		2.4	2.4											
25	2.3	2.3		2.4		2.4	2.4	2.4											
26	2.3	2.3		2.4		2.4	2.4	2.4											
27	2.3	2.3		2.4	2.4		2.4	2.4											
28	2.3	2.3		2.4	2.4		2.4	2.4											
29	2.3	2.3		2.4	2.4		2.4	2.4											
30	2.3	2.3		2.4	2.4		2.4	2.4											
31	2.3	2.3		2.4	2.4		2.4	2.4											
Total	28.1	28.1		74.2	69.4	4.8	72.0	72.0		22.5	20.1	2.4							
Acres-feet		58			147			143			45							427	
Priority Diverted		58			138			143			40							410	
Apport Diverted					10						5							17	
Apport diverted to date		2			12			12			17			17			17	17	
TBI acreage		188.60		188.60			188.60			188.60			188.60			188.60		188.60	
Apporboned		328		438			438			438			438			438		438	
Duty		0.31		0.78			0.97			0.03								2.25	

1999

COLVIN-JONES CANAL: 205.90 acres

Mean daily diversions, cubic feet per second

DAY	JAN			FEB			MAR			APR			MAY			JUN		
	Total	Priority	Apport	Total	Priority	Apport	Total	Priority	Apport	Total	Priority	Apport	Total	Priority	Apport	Total	Priority	Apport
1							1.4		1.4	1.5		1.5						
2							1.1		1.1	1.6		1.6						
3							1.4		1.4	1.5		1.5						
4							1.4		1.4	1.7	1.4	0.3						
5							1.5		1.5	1.7	0.3	1.4						
6							1.5		1.5	1.6	1.6							
7							1.5		1.5	1.5	1.5					0.2		0.2
8							1.5		1.5	1.3	1.3					0.7		0.7
9							1.5		1.5	1.3	1.3					0.5		0.5
10							1.4		1.4	1.2	0.3	0.9	0.8		0.8	0.4		0.4
11							1.5		1.5	1.1		1.1	1.1		1.1			
12							1.4		1.4	1.1		1.1	1.1		1.1			
13							1.5		1.5	1.3		1.3	1.1		1.1			
14							1.5		1.5	1.2		1.2	1.2		1.2			
15							1.5		1.5	1.1		1.1	1.2		1.2			
16							1.4		1.4	0.5		0.5	1.2		1.2			
17							1.3		1.3				1.1		1.1			
18							1.3		1.3				1.1		1.1			
19							1.3		1.3				1.1		1.1			
20							1.3		1.3				0.5		0.5			
21							1.3		1.3							0.4		0.4
22				0.8		0.8	1.2		1.2							0.7		0.7
23				1.5		1.5	1.2		1.2							1.1		1.1
24				1.4		1.4	1.2		1.2							1.1		1.1
25				1.5		1.5	1.2		1.2							1.1		1.1
26				1.1		1.1	1.2		1.2							0.8		0.8
27				1.5		1.5	1.2		1.2									
28				1.5		1.5	1.2		1.2									
29							1.2		1.2									
30							1.1		1.1							0.8		0.8
31							1.1		1.1									
Total				9.3		9.3	41.3		41.3	21.2	7.7	13.5	11.3		11.3	6.5		6.5
Acres-feet						18			82			42			22			13
Priority Diverted												13						
Apport Diverted						18			82			27			22			13
Apport diverted to date						18			100			127			149			182
TIN acreage						185.50			185.50			185.50			185.50			185.50
Apportioned						288			283			280			288			280
Duty						0.11			0.58			0.25			0.13			0.08

DAY	JUL			AUG			SEP			OCT			NOV			DEC			Totals	
	Total	Priority	Apport	Total	Priority	Apport	Total	Priority	Apport	Total	Priority	Apport	Total	Priority	Apport	Total	Priority	Apport		
1	0.5		0.5	1.0	0.3	0.7														
2	0.8		0.8	0.8	0.3	0.5														
3	1.3		1.3	1.7	1.1	0.6														
4	1.3		1.3	1.0	1.0															
5	1.5		1.5	1.8	1.8															
6	0.5		0.5	1.3	1.3															
7				0.8	0.8															
8				0.5	0.5															
9				1.1	1.1															
10	0.3		0.3	1.1	1.1															
11	0.8		0.8	1.0	1.0															
12	1.2		1.2	1.0	1.0															
13	1.1	0.3	0.8	1.1	1.1															
14	0.7	0.3	0.4	0.8	0.8															
15	1.4	0.3	1.1	0.8	0.8															
16	1.3	1.3		0.8	0.8															
17	1.3	1.3		0.5	0.5															
18	1.2	1.2		0.8	0.8															
19	1.3	1.3		0.7	0.7															
20	0.8	0.8		0.8	0.3	0.5														
21	0.7	0.7		0.5	0.3	0.2														
22	1.3	1.3		0.4	0.4															
23	1.4	1.4		0.4	0.3	0.1														
24	1.3	1.3		0.5	0.3	0.2														
25	0.8	0.8		0.8	0.8															
26	0.8	0.8		0.8	0.8															
27	0.1	0.1		0.8	0.8															
28				0.8	0.3	0.5														
29	0.7	0.7		0.7	0.7															
30	1.3	1.3		0.8	0.8															
31	1.2	1.2		0.3	0.3															
Total	28.7	18.3	10.4	24.3	20.4	3.9														
Acres-feet			53			48														278
Priority Diverted			32			40														87
Apport Diverted			21			8														191
Apport diverted to date			183			191			191			191			191			191		191
TIN acreage			185.50			185.50			185.50			185.50			185.50			185.50		185.50
Apportioned			288			382			382			382			382			382		382
Duty			0.32			0.28														1.93

Diversions from North side of Old River in SE1/4NW, Sec.28, T.4 S., R.23 E. Water-stage recorder and 2 ft Parshall flume located in SE1/4NW, Sec.28, T.4 S., R.23 E. Record good

1999

SCAR @ BLACK POINT: 69.86 acres TBI

Total Monthly diversions, cubic feet per second

DAY	JAN			FEB			MAR			APR			MAY			JUN		
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
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18																		
19																		
20																		
21																		
22																		
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
Total							2.0	2.0		4.7	4.7							
Acres-feet								4			9							
Apport Diverted								4			9							
Appor diverted to date																		
TBI acreage		69.86			69.86			69.86			69.86			69.86			69.86	
Apportioned								0.06			0.13							
Duty																		

DAY	JUL			AUG			SEP			OCT			NOV			DEC			Totals	
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.		
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
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22																				
23																				
24																				
25																				
26																				
27																				
28																				
29																				
30																				
31																				
Total																				
Acres-feet																				13
Priority Diverted																				13
Apport Diverted																				
Appor diverted to date																				
TBI acreage		69.86			69.86			69.86			69.86			69.86			69.86			69.86
Apportioned																				
Duty																				0.19

Total SCAR diverted 1,000 acres

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1999

SCAR @ NAVAJO POINT: 141.36 acres TBI

Total Monthly diversions, cubic feet per second

DAY	JAN			FEB			MAR			APR			MAY			JUN		
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
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16																		
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18																		
19																		
20																		
21																		
22																		
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
Total							7.1	7.1		5.0	5.0		20.7	20.7				
Acres-feet							14	14		10	10		41	41				
Apport Diverted																		
Apport diverted to date																		
TBI acreage	141.36			141.36			141.36			141.36			141.36			141.36		
Apportioned																		
Duty							0.10			0.07			0.29					

DAY	JUL			AUG			SEP			OCT			NOV			DEC			Totals	
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.		
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
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22																				
23																				
24																				
25																				
26																				
27																				
28																				
29																				
30																				
31																				
Total																				
Acres-feet																				65
Priority Diverted																				65
Apport Diverted																				
Apport diverted to date																				
TBI acreage	141.36			141.36			141.36			141.36			141.36			141.36			141.36	141.36
Apportioned																				
Duty																				0.45

Total SCAR diverted 1,200 cfs

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1999

SCAR @ ANDERSON FLAT: 90.31 acres TBI

Total Monthly diversions, cubic feet per second

DAY	JAN			FEB			MAR			APR			MAY			JUN		
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
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30																		
31																		
Total	3.3	3.3		6.3	6.3					26.0	26.0		42.2	42.2		52.7	52.7	
Acres-feet		6			13						52			84			104	
Apport Diverted		6			13						52			84			104	
Apport diverted to date																		
TBI acreage		90.31			90.31			90.31			90.31			90.31			90.31	
Apportioned																		
Duty		0.07			0.14						0.58			0.93			1.15	

DAY	JUL			AUG			SEP			OCT			NOV			DEC			Totals
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			
25																			
26																			
27																			
28																			
29																			
30																			
31																			
Total	22.4	22.4		34.4	34.4		31.5	31.5		96.7	96.7								
Acres-feet		44			68			62			112								545
Priority Diverted		44			68			62			112								545
Apport Diverted																			
Apport diverted to date																			
TBI acreage		90.31			90.31			90.31			90.31			90.31			90.31		90.31
Apportioned																			
Duty		0.48			0.75			0.69			1.24								8.03

Total SCAR diverted 1,899 acres

1999

ASARCO INCORPORATED

Pumping for Industrial, Municipal, Domestic, and related beneficial purposes.

Month	Total Gallons Pumped	Equivalent Acre-feet
January	308,273,400	946
February	306,924,100	942
March	309,252,600	949
April	331,971,500	1,019
May	410,015,600	1,258
June	337,184,800	1,035
July	270,871,200	831
August	304,674,100	935
September	286,367,800	879
October	334,268,300	1,026
November	303,314,900	931
<u>December</u>	<u>350,143,600</u>	<u>1,075</u>
Total for year 1999	3,853,261,900	11,826

1999

ASARCO INCORPORATED (J. J. ANDERSON): 196.27 acres

Mean daily diversions, cubic feet per second

DAY	JAN			FEB			MAR			APR			MAY			JUN		
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.
1										1.91		1.91				2.89		2.89
2										1.91		1.91				2.89		2.89
3										1.91	0.11	1.80				2.89		2.89
4				3.14	2.00	1.14	2.39	1.04	1.35	1.91		1.91				2.89		2.89
5				3.14	1.00	2.14	2.39	0.88	1.51	1.91	1.04	0.87	2.75	0.11	2.64	2.89		2.89
6				3.14	1.00	2.14	2.39	1.04	1.35	1.91	1.88	0.03	2.75		2.75	2.89		2.89
7				3.14	1.00	2.14	2.39	0.88	1.51	1.91	1.88	0.03	2.75		2.75	2.89		2.89
8				3.14	1.00	2.14	2.39	1.04	1.35	1.91	1.88	0.03	2.75		2.75	2.89		2.89
9				3.14	1.00	2.14	2.39	0.88	1.51	1.91	1.88	0.03	2.75		2.75	2.89		2.89
10				3.14	1.00	2.14	2.39	0.88	1.51	1.91	1.76	0.15	2.75		2.75	2.89		2.89
11				3.14	1.00	2.14	2.39	0.11	2.28	1.91	1.04	0.87	2.75		2.75			
12							2.39	0.11	2.28	1.91	1.04	0.87	2.75		2.75			
13							2.39	0.11	2.28	1.91	1.04	0.87	2.75		2.75			
14	1.00	1.00					2.39	0.11	2.28	1.92	1.04	0.88	2.75		2.75			
15	1.00	1.00					2.39	0.11	2.28	1.92	0.88	1.04	2.75		2.75			
16	1.00	1.00					2.39	0.11	2.28	1.92	0.88	1.04	2.75		2.75			
17	1.00	1.00											2.75		2.75			
18	1.00	1.00											2.75		2.75			
19	1.00	1.00											2.75		2.75			
20	1.00	1.00											2.75		2.75			
21	1.00	1.00																
22	1.00	1.00																
23	1.00	1.00																
24	1.00	1.00																
25	1.00	1.00																
26	1.00	1.00																
27	1.00	1.00																
28	1.00	1.00																
29	1.00	1.00																
30	1.59	1.59																
31	1.59	1.59																
Total	28.9	28.9		25.1	9.0	16.1	31.1	7.2	24.0	30.6	18.2	14.4	44.0	0.2	43.8	28.9		28.9
Acra-foot		57			58			82			61			87				57
Priority Diverted		57			18			14			32							57
Apport Diverted					32			48			29			87				
Apport diverted to date					32			30			100			198				203
TBI acreage	158.00			158.00			158.00			158.00			158.00		158.00			158.00
Apportioned	395			273			270			267			267		267			267
Duty	0.28			0.32			0.38			0.39			0.55		0.58			0.58

DAY	JUL			AUG			SEP			OCT			NOV			DEC			Totals
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	
1																			
2																			
3																			
4																			
5																2.44	1.01	1.43	
6																2.44	1.48	1.04	
7																2.44	1.40	1.04	
8																2.44	0.10	2.34	
9																2.44	0.77	1.67	
10																2.44	1.01	1.43	
11																2.44	1.01	1.43	
12																2.44	1.40	1.04	
13																2.44	1.40	1.04	
14																2.44	1.40	1.04	
15																2.44	1.40	1.04	
16																2.44	1.01	1.43	
17																2.44	1.01	1.43	
18																2.44	1.40	1.04	
19																2.44	1.01	1.43	
20																2.44	1.40	1.04	
21																			
22																			
23																			
24																			
25																			
26																			
27																			
28																			
29																			
30																			
31																			
Total																			
Acra-foot																			77
Priority Diverted																			35
Apport Diverted																			42
Apport diverted to date																			295
TBI acreage	158.00			253			253			253			253		253				158.00
Apportioned	267			385			385			385			385		385				385
Duty																			0.48
																			2.85

1999

KEARNY ARIZONA: 101.73 acres

Mean daily diversions, cubic feet per second

DAY	JAN			FEB			MAR			APR			MAY			JUN					
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.			
1	0.29	0.29		0.34	0.34		0.48	0.48		0.52		0.52	0.82			0.82	1.05		1.05		
2	0.29	0.29		0.34	0.34		0.48	0.48		0.52		0.52	0.82			0.82	1.05		1.05		
3	0.29	0.29		0.34	0.34		0.48	0.48		0.52	0.10	0.42	0.82			0.82	1.05		1.05		
4	0.29	0.29		0.34	0.34		0.48	0.48		0.52		0.52	0.82	0.10	0.72	1.05			1.05		
5	0.29	0.29		0.34	0.34		0.48	0.48		0.52	0.52		0.82	0.18	0.72	1.05			1.05		
6	0.29	0.29		0.34	0.34		0.48	0.48		0.52		0.52	0.82	0.10	0.72	1.05			1.05		
7	0.29	0.29		0.34	0.34		0.48	0.48		0.52	0.52		0.82		0.82	1.05			1.05		
8	0.29	0.29		0.34	0.34		0.48	0.48		0.52	0.52		0.82		0.82	1.05			1.05		
9	0.29	0.29		0.34	0.34		0.48	0.48		0.52	0.52		0.82		0.82	1.05			1.05		
10	0.29	0.29		0.34	0.34		0.48	0.48		0.52	0.52		0.82		0.82	1.05			1.05		
11	0.29	0.29		0.34	0.34		0.48	0.10	0.38	0.52		0.52	0.82			0.82	1.05		1.05		
12	0.29	0.29		0.34	0.34		0.48	0.18	0.38	0.52		0.52	0.82			0.82	1.05		1.05		
13	0.29	0.29		0.34	0.34		0.48	0.10	0.38	0.52		0.52	0.82			0.82	1.05		1.05		
14	0.29	0.29		0.34	0.34		0.48	0.10	0.38	0.52		0.52	0.82			0.82	1.05		1.05		
15	0.29	0.29		0.34	0.34		0.48	0.10	0.38	0.52		0.52	0.82			0.82	1.05		1.05		
16	0.29	0.29		0.34	0.34		0.48	0.10	0.38	0.52		0.52	0.82			0.82	1.05		1.05		
17	0.29	0.29		0.34	0.34		0.48	0.10	0.38	0.52	0.30	0.22	0.82			0.82	1.05		1.05		
18	0.29	0.29		0.34	0.34		0.48	0.48	0.52	0.52		0.52	0.82			0.82	1.05		1.05		
19	0.29	0.29		0.34	0.34		0.47	0.10	0.37	0.52		0.52	0.82			0.82	1.05		1.05		
20	0.29	0.29		0.34	0.34		0.47	0.47	0.52	0.30	0.22	0.82			0.82	1.05			1.05		
21	0.29	0.29		0.34	0.34		0.47	0.10	0.37	0.52		0.52	0.82			0.82	1.05		1.05		
22	0.29	0.29		0.34	0.34		0.47	0.10	0.37	0.52	0.30	0.22	0.82			0.82	1.05		1.05		
23	0.29	0.29		0.35	0.35		0.47	0.47	0.52	0.52		0.52	0.82			0.82	1.05		1.05		
24	0.29	0.29		0.35	0.35		0.47	0.47	0.52	0.30	0.22	0.82			0.82	1.04			1.04		
25	0.29	0.29		0.35	0.35		0.47	0.47	0.52	0.30	0.22	0.82			0.82	1.04			1.04		
26	0.29	0.29		0.35	0.35		0.47	0.47	0.52	0.10	0.42	0.82			0.82	1.04			1.04		
27	0.29	0.29		0.35	0.35		0.47	0.47	0.52	0.52	0.52		0.82			0.82	1.04		1.04		
28	0.29	0.29		0.35	0.35		0.47	0.47	0.52	0.52	0.52		0.82			0.82	1.04		1.04		
29	0.29	0.29		0.35	0.35		0.47	0.47	0.52	0.52	0.52		0.82			0.82	1.04		1.04		
30	0.29	0.29		0.35	0.35		0.47	0.47	0.52	0.52	0.52		0.82			0.82	1.04		1.04		
31	0.29	0.29		0.35	0.35		0.47	0.47	0.52	0.52	0.52		0.82			0.82	1.04		1.04		
Total	9.0	9.0		9.6	9.6		14.8	5.8	9.0	15.6	10.0	5.8	25.4	0.3	25.1	31.4			31.4		
Acres-foot			18			18			29			31			50			62			
Priority Diverted			18			18			11			28			1			62			
Apport Diverted									18			29			76			141			
Apport diverted to date									18			29			76			141			
TBI acreage	101.73			101.73			101.73			101.73			101.73			101.73			101.73		
Apportioned	254			178			174			172			172			172			172		
Duty	0.18			0.18			0.29			0.39			0.39			0.50			0.61		

DAY	JUL			AUG			SEP			OCT			NOV			DEC			Totals	
	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.	Total	Priority	Apport.		
1	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
2	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
3	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
4	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
5	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
6	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
7	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
8	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.10			0.97
9	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
10	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
11	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
12	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
13	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
14	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
15	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
16	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
17	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
18	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
19	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
20	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
21	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
22	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
23	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
24	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
25	0.71	0.30	0.41	0.67	0.67		0.78	0.78		0.25	0.25		0.19	0.19		0.17	0.17			
26	0.72	0.30	0.42	0.67	0.67		0.77	0.77		0.25	0.25		0.19	0.19		0.18	0.18			
27	0.72	0.30	0.42	0.67	0.67		0.77	0.77		0.25	0.25		0.19	0.19		0.18	0.18			
28	0.72	0.30	0.42	0.67	0.67		0.77	0.77		0.25	0.25		0.20	0.20		0.18	0.18			
29	0.72	0.30	0.42	0.67	0.67		0.77	0.77		0.24	0.24		0.20	0.20		0.18	0.18			
30	0.72	0.30	0.42	0.67	0.67		0.77	0.77		0.24	0.24		0.20	0.20		0.18	0.18			
31	0.72	0.30	0.42	0.67	0.67		0.77	0.77		0.24	0.24		0.20	0.20		0.18	0.18			
Total	22.1	17.7	4.4	20.8	20.8		23.3	23.3		7.7	7.7		5.7	5.7		5.4	5.3		0.1	
Acres-foot			44			41			46			15			11			11		378
Priority Diverted			35			41			48			15			11			11		228
Apport Diverted			9																	150
Apport diverted to date						150			150			150			150			150		150
TBI acreage	101.73			101.73			101.73			101.73			1							

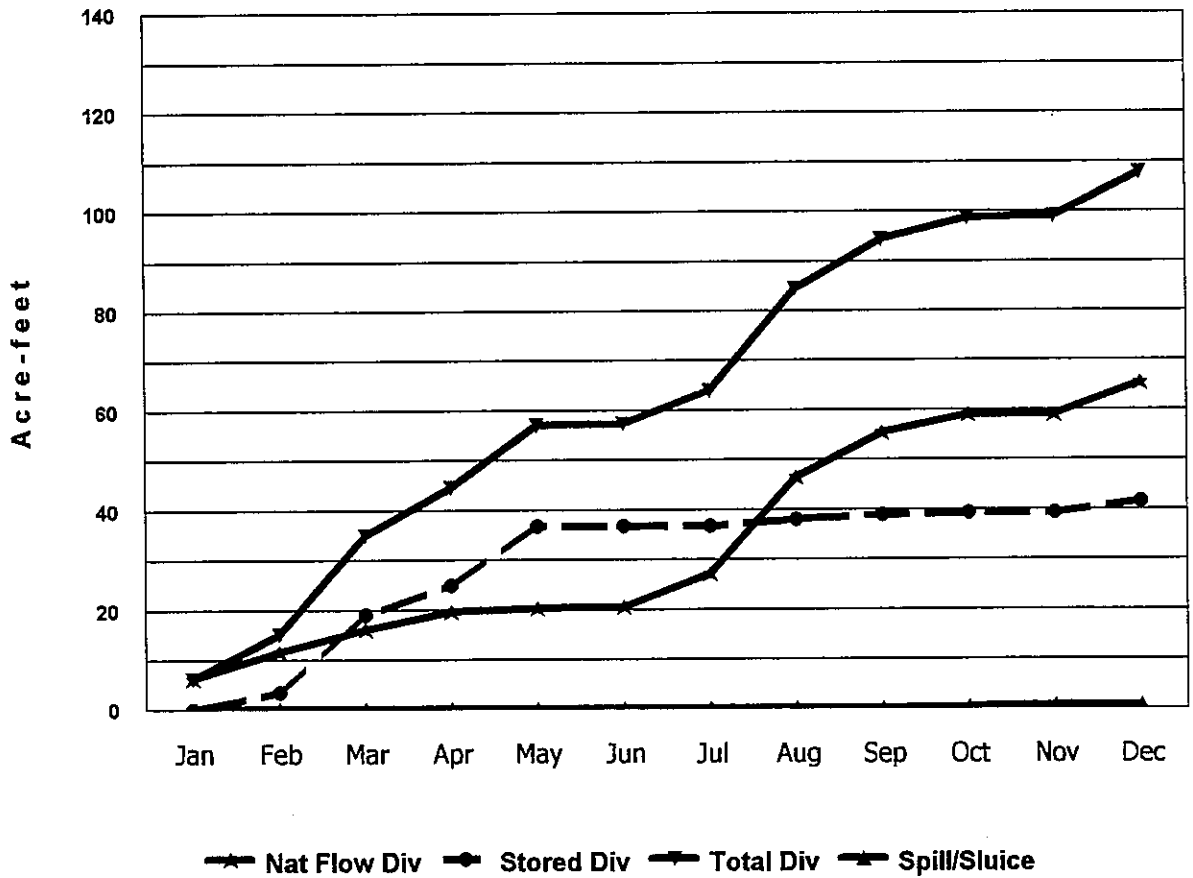
1999

**MASS DIAGRAM OF SAN CARLOS PROJECT
DIVERSIONS AT ASHURST-HAYDEN DAM**

In Acre-feet

Month	Accumulated		Monthly Total Diversions	Accumulated	
	Natural Flow Diversions	Stored Water Diversions		Total Diversions	Spilled and Sluiced
JAN	6,210		6,210	6,210	0
FEB	11,575	3,491	15,066	15,066	0
MAR	15,982	19,008	34,990	34,990	0
APR	19,600	24,947	44,547	44,547	0
MAY	20,247	36,846	57,093	57,093	0
JUN	20,477	36,846	57,323	57,323	0
JUL	27,138	36,846	63,984	63,984	0
AUG	46,443	38,062	84,505	84,505	0
SEP	55,369	38,988	94,357	94,357	0
OCT	58,977	39,295	98,272	98,585	313
NOV	58,977	39,295	98,272	98,994	722
DEC	65,358	41,667	107,025	107,771	746

Graph: Nat Flow Div Stored Div Total Div Spill/Sluice



SAN CARLOS IRRIGATION PROJECT DIVERSIONS at ASHURST-HAYDEN DAM

Original Decreed 102,090.5 Acres

Mean daily diversions - cubic feet per second

1999

JANUARY

T.B.I. Acres - 30,804.46

FEBRUARY

T.B.I. Acres - 41,110.57

MARCH

T.B.I. Acres - 51,456.71

	Diversions			Passing Dam		
	Total	Stored	Nat Flow	Spill	Sluice	
1999	142	142	142			
1	124	124	108			
2	115	115	103			
3	105	105	101			
4	99	99	8			
5	97	97	19			
6	87	87	22			
7	87	87	26			
8	73	73	40			
9	71	71	46			
10	70	70	48			
11	67	67	51			
12	64	64	54			
13	64	64	57			
14	70	70	58			
15	87	87	60			
16	101	101	61			
17	111	111	62			
18	115	115	62			
19	116	116	63			
20	116	116	67			
21	118	118	94			
22	118	118	111			
23	119	119	102			
24	120	120	116			
25	112	112	132			
26	110	110	131			
27	108	108	134			
28	108	108	136			
29	108	108				
30	108	108				
31	108	108				
Total	3131	3131	2705			
Ac-ft	6210	6210	5365			
To Date			11575			
Duty	0.20	0.20				

Diversions from South side of Gila River at A-H Dam, in Sec 8, T. 4S, R. 11E, 10 miles NE of Florence, AZ
 Water-stage recorder and Parshall flume near China Wash, 3 miles below A-H Dam
 Water passing dam estimated by San Carlos Irrigation Project...

SAN CARLOS IRRIGATION PROJECT DIVERSIONS at ASHURST-HAYDEN DAM

Original Decreed 102,090.5 Acres
Mean daily diversions - cubic feet per second

1999

APRIL

T.B.I. Acres - 53,046.41

MAY

T.B.I. Acres - 53,369.68

JUNE

T.B.I. Acres - 52,992.21

1999	Diversed			Passing Dam		
	Total	Stored	Nat Flow	Spill	Sluice	
1	288	170	88			
2	269	172	97			
3	265	90	175			
4	203	9	194			
5	156		156			
6	142		142			
7	139		139			
8	121		121			
9	99		99			
10	82		82			
11	66	34	32			
12	69	40	29			
13	94	66	28			
14	110	89	21			
15	129	86	43			
16	127	88	39			
17	137	90	47			
18	136	89	47			
19	134	90	44			
20	134	107	27			
21	145	130	15			
22	156	135	21			
23	160	160	10			
24	175	175				
25	206	194	12			
26	218	194	24			
27	226	193	33			
28	220	196	24			
29	219	200	19			
30	223	207	16			
31						
Total	4818	2994	1824			
Ac-ft	9557	5939	3618			
To Date	44547	24947	19600			
Duty	0.18					

	Diversed			Passing Dam		
	Total	Stored	Nat Flow	Spill	Sluice	
	222	194	28			
	209	166	43			
	188	158	30			
	182	159	23			
	181	161	20			
	179	164	15			
	177	164	13			
	175	161	14			
	172	161	11			
	168	163	5			
	165	165				
	174	174				
	176	176				
	184	184				
	189	189				
	193	193				
	203	203				
	210	210				
	226	226				
	265	265				
	273	273				
	274	274				
	273	273				
	272	272				
	271	271				
	266	266				
	266	266				
	269	269				
	179	168	21			
	90	29	61			
	54	12	42			
	6325	5999	326			
	12546	11899	647			
	57093	36846	20247			
	0.24					

	Diversed			Passing Dam		
	Total	Stored	Nat Flow	Spill	Sluice	
	33		33			
	21		21			
	11		11			
	8		8			
	8		8			
	7		7			
	6		6			
	2		2			
	1		1			
	2		2			
	1		1			
	1		1			
	3		3			
	1		1			
	3		3			
	2		2			
	2		2			
	116		116			
	230		230			
	57323	36846	20477			

Water passing dam estimated by San Carlos Irrigation Project...

SAN CARLOS IRRIGATION PROJECT DIVERSIONS at ASHURST-HAYDEN DAM

Original Decreed 102,090.5 Acres
Mean daily diversions - cubic feet per second

1999

JULY

T.B.I. Acres - 52,900.21

AUGUST

T.B.I. Acres - 52,900.21

SEPTEMBER

T.B.I. Acres - 52,794.91

1999	Diversed			Passing Dam		
	Total	Stored	Nat Flow	Spill	Stuice	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15	129		129			
16	224		224			
17	341		341			
18	61		61			
19	60		60			
20	74		74			
21	88		88			
22	43		43			
23	38		38			
24	67		67			
25	108		108			
26	229		229			
27	169		169			
28	301		301			
29	610		610			
30	566		566			
31	250		250			
Total	3358		3358			
Ac-ft To Date	6661		6661			
Duty	63984	36846	27138			
	0.13					

1999	Diversed			Passing Dam		
	Total	Stored	Nat Flow	Spill	Stuice	
1	200		200			
2	186	58	128			
3	170		170			
4	82		82			
5	47		47			
6	98		98			
7	334		334			
8	539		539			
9	372		372			
10	332		332			
11	508		508			
12	583		583			
13	426		426			
14	396		396			
15	398		398			
16	393		393			
17	393		393			
18	411		411			
19	402		402			
20	392	23	369			
21	376	29	347			
22	301	14	287			
23	275	13	262			
24	268	40	228			
25	258	82	176			
26	260	85	175			
27	297	98	199			
28	348	70	278			
29	427	39	388			
30	381		381			
31	493	62	431			
Total	10346	613	9733			
Ac-ft To Date	20521	1216	19305			
Duty	84505	38062	46443			
	0.39					

1999	Diversed			Passing Dam		
	Total	Stored	Nat Flow	Spill	Stuice	
1	401	26	375			
2	461	62	399			
3	450	99	351			
4	380	40	340			
5	373	60	313			
6	184	60	124			
7	163	33	130			
8	160	26	134			
9	164	26	128			
10	121	11	110			
11	139	7	132			
12	115	10	105			
13	110	4	106			
14	64	1	63			
15	115	2	113			
16	77		77			
17	76		76			
18	70		70			
19	195		195			
20	106		106			
21	96		96			
22	103		103			
23	122		122			
24	129		129			
25	122		122			
26	117		117			
27	110		110			
28	91		91			
29	84		84			
30	80		80			
31						
Total	4967	467	4500			
Ac-ft To Date	94357	38988	55369			
Duty	0.19					

Water passing dam estimated by San Carlos Irrigation Project...

SAN CARLOS IRRIGATION PROJECT DIVERSIONS at ASHURST-HAYDEN DAM

Original Decreed 102,090.5 Acres
 Mean daily diversions - cubic feet per second

1999

OCTOBER

T.B.I. Acres - 52,734.91

NOVEMBER

T.B.I. Acres - 52,734.91

DECEMBER

T.B.I. Acres - 52,743.41

1999	Diverter			Passing Dam		
	Total	Stored	Nat Flow	Spill	Sluice	
1	77		77			
2	6		6			
3	43		43			
4	71		71			
5	71		71			
6	72		72			
7	105		105			
8	108		108			
9	100	8	92			
10	103	18	85			
11	102	11	91			
12	91	11	80			
13	88	14	74			
14	87	13	74			
15	89	11	78			
16	87	10	77			
17	84	12	72			
18	83	11	72			
19	87	8	79			
20	87	8	79			
21	87	10	77			
22	87	10	77			
23	88		88			
24	38		38			
25	12		12		36	
26	11		11		22	
27	10		10		22	
28					22	
29					22	
30					17	
31					17	
Total	1974	155	1819		158	
Ac-ft To Date	3915	307	3608		313	
Duty	98272	39295	68977		313	

Diverter			Passing Dam		
Total	Stored	Nat Flow	Spill	Sluice	
36	36				
161	95	56			
176	92	84			
192	92	100			
186	78	118			
190	76	115			
192	72	120			
194	71	123			
197	71	126			
199	68	131			
201	67	134			
203	70	133			
205	75	130			
202	61	141			
191	52	139			
189	52	137			
190	53	137			
188	16	172			
143		143			
132		132			
126		126			
122		122			
121		121			
125		125			
126		126			
116		116			
110		110			
4413	1196	3217			12
8753	2372	6381			24
107025	41667	65368			746
0.17					

Diverter			Passing Dam		
Total	Stored	Nat Flow	Spill	Sluice	
17		17			
17		17			
10		10			
7		7			
7		7			
7		7			
7		7			
6		6			
6		6			
6		6			
5		5			
5		5			
5		5			
5		5			
5		5			
5		5			
5		5			
206		206			
409		409			
722		722			
98272	39295	68977			

Water passing dam estimated by San Carlos Irrigation Project...

DETERMINATION OF PRIORITY WATER

JANUARY 1999

Mean daily diversions - cubic feet per second

1999		SAN CARLOS RESERVOIR				ASHURST-HAYDEN DAM				DAILY CALL SYSTEM							
		RELEASES		STORAGE		Spilled and/or		Natural Flow		COMPUTED PRIORITY YEAR		DAILY CALL SYSTEM					
		River Inflow	Total	Natural Flow	Stored	Inflow minus Outflow	Ac-ft change	Siliced and/or Spilled	Diverted	Stored	Natural Flow	Gain/Loss Nat. Flow	Available to Project	JAN	Durcatt Virden	Safford	Winkelman
DEC 31	184	67	67		117	320	142	142		142	76	269	1	1924	1924	1916	1916
JAN 1	186	67	67		119	180	124	124		124	67	243	2	"	"	1924	1924
2	202	67	67		135	200	115	115		115	48	250	3	"	"	"	"
3	208	68	68		140	320	106	106		106	37	246	4	"	"	"	"
4	211	68	68		143	200	99	99		99	31	242	5	"	"	"	"
5	214	39	39		176	380	97	97		97	58	272	6	"	"	"	"
6	217	25	25		192	400	87	87		87	62	279	7	"	"	"	"
7	216	25	25		191	360	73	73		73	48	264	8	"	"	"	"
8	219	25	25		194	530	71	71		71	46	266	9	1992	1920	"	"
9	211	25	25		186	240	70	70		70	45	266	10	1924	1924	"	"
10	205	25	25		180	630	67	67		67	42	247	11	"	"	"	"
11	198	24	24		175	480	64	64		64	40	239	12	"	"	"	"
12	193	55	55		138	200	64	64		64	9	202	13	"	"	"	"
13	186	71	71		115	130	70	70		70	-1	185	14	"	"	"	"
14	182	85	85		97	120	87	87		87	2	184	15	"	"	"	"
15	182	95	95		87	80	101	101		101	6	188	16	"	"	"	"
16	182	95	95		87	130	111	111		111	16	198	17	"	"	"	"
17	179	96	96		83	200	116	116		116	19	198	18	"	"	"	"
18	177	96	96		81	170	116	116		116	20	197	19	"	"	"	"
19	178	96	96		82	120	116	116		116	20	198	20	"	"	"	"
20	184	96	96		88	330	118	118		118	22	206	21	"	"	"	"
21	186	95	95		90	90	118	118		118	22	208	22	"	"	"	"
22	174	97	97		77	80	119	119		119	22	196	23	"	"	"	"
23	169	87	87		82	120	120	120		120	33	202	24	"	"	"	"
24	169	81	81		88	260	112	112		112	31	200	25	"	"	"	"
25	173	81	81		92	300	110	110		110	29	202	26	"	"	"	"
26	167	81	81		86	80	108	108		108	27	194	27	"	"	"	"
27	160	81	81		79	210	108	108		108	27	187	28	"	"	"	"
28	165	81	81		84	170	108	108		108	27	192	29	"	"	"	"
29	171	81	81		90	170	108	108		108	27	198	30	"	"	"	"
30	163	82	82		81	120	108	108		108	26	189	31	"	"	"	"
31	168	82	82		76	210	108	108		108	26	189					

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams. 12% transit loss on daily Stored releases...

DETERMINATION OF PRIORITY WATER

FEBRUARY 1999

Mean daily diversions - cubic feet per second

1999	SAN CARLOS RESERVOIR					ASHURST-HAYDEN DAM			DAILY CALL SYSTEM							
	RELEASES		STORAGE			Sluiced and/or Spilled	Diverted	Stored	Natural Flow	Gain/Loss Nat.Flow	Nat. Flow Available to Project	COMPUTED PRIORITY YEAR				
	River Inflow	Total	Natural Flow	Stored	Outflow							Ac-ft change	Duncan Virden	Safford	Winkelman	Ashurst-Hayden
JAN 31	158	82	82	76	210	108	108	108	26	184	1924	1924	1924	1924	1924	
FEB 1	158	82	82	76	30	103	30	103	21	179	"	"	"	"	"	
FEB 2	141	116	116	26	120	101	101	101	-14	127	1904	1900	"	"	"	
FEB 3	125	134	125	9	-9	129	8	121	-4	121	1897	1804	"	"	"	
FEB 4	112	134	112	22	-22	143	19	124	12	124	1900	1897	1900	1900	1900	
FEB 5	109	134	109	26	-26	149	22	127	18	127	1904	1900	1904	1904	1904	
FEB 6	105	134	105	29	-40	148	26	122	17	122	1900	1904	1897	1897	1897	
FEB 7	103	149	103	46	-46	150	40	110	7	110	1904	1900	1900	1900	1900	
FEB 8	99	161	99	52	-52	160	46	114	16	114	1896	1904	1904	1904	1904	
FEB 9	93	148	93	55	-40	159	48	111	18	111	"	1896	1900	1900	1900	
FEB 10	90	148	90	58	-58	168	51	107	17	107	1899	"	1904	1904	1904	
FEB 11	87	148	87	61	-61	159	54	105	18	105	"	1899	1896	1896	1896	
FEB 12	84	149	84	65	-65	159	57	102	18	102	"	"	"	"	"	
FEB 13	84	150	84	66	-66	159	58	101	17	101	1898	"	1899	1899	1899	
FEB 14	83	151	83	68	-68	160	60	100	17	100	1893	1898	"	"	"	
FEB 15	84	163	84	69	-69	160	61	99	15	99	1895	1893	"	"	"	
FEB 16	84	164	84	70	-70	161	62	99	15	99	"	1896	1896	1896	1896	
FEB 17	84	155	84	71	-71	161	62	99	15	99	1898	"	1893	1893	1893	
FEB 18	84	156	84	72	-72	161	63	98	14	98	1895	1898	1895	1895	1895	
FEB 19	82	168	82	76	-76	161	67	94	12	94	20	1893	1895	"	"	
FEB 20	81	188	81	107	-107	163	94	69	-12	69	21	1890	1893	1898	1898	
FEB 21	78	204	78	126	-126	181	111	70	-8	70	22	1888	1890	1895	1895	
FEB 22	81	197	81	116	-116	185	102	83	2	83	23	1889	1888	1893	1893	
FEB 23	79	211	79	132	-132	182	116	66	-13	66	24	"	1889	1890	1890	
FEB 24	75	225	75	150	-150	197	132	65	-10	65	25	1888	"	1888	1888	
FEB 25	75	224	75	149	-149	201	131	70	-5	70	26	"	1888	1889	1889	
FEB 26	74	226	74	152	-152	203	134	69	-6	69	27	1887	"	"	"	
FEB 27	72	227	72	155	-155	204	136	68	-4	68	28	1888	1887	1888	1888	
FEB 28	72	228	72	156	-156											

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams.

12% transit loss on daily Stored releases...

DETERMINATION OF PRIORITY WATER

MARCH 1999

Mean daily discharge - cubic feet per second

1999		SAN CARLOS RESERVOIR					ASHURST-HAYDEN DAM					DAILY CALL SYSTEM								
		RELEASES		STORAGE			Silt/ced and/or Spilled		Natural Flow			Gain/Loss Nat. Flow		Nat. Flow Available to Project		COMPUTED PRIORITY YEAR				
		River Inflow	Total	Natural Flow	Stored	Inflow minus Outflow	Ac-ft change S C Res.	Diverted	Stored	Natural Flow	Nat. Flow	Nat. Flow	Available to Project	Duncan Virdan	Safford	Winkelman	Ashurst-Hayden			
FEB 28	72	228	72	166	-156	-160	201	137	64	-8	64	64	1887	1888	1888	1888	1888			
MAR 1	72	230	72	158	-158	-410	207	139	68	-4	68	68	"	1887	1887	1887	1887			
MAR 2	70	244	70	174	-174	-240	208	153	55	-15	55	55	"	1885	1885	1885	1885			
MAR 3	65	263	69	184	-184	-440	212	162	50	-19	50	50	1886	1887	1887	1887	1887			
MAR 4	70	330	70	260	-260	-610	232	229	3	-67	3	3	1887	1886	1885	1885	1885			
MAR 5	70	378	70	308	-308	-520	300	271	29	-41	29	29	1884	1887	1887	1887	1887			
MAR 6	70	377	70	307	-307	-470	319	270	49	-21	49	49	"	1884	1886	1886	1886			
MAR 7	70	378	70	308	-308	-710	339	271	68	-2	68	68	1879	"	1887	1887	1887			
MAR 8	72	378	72	306	-306	-280	339	269	70	-2	70	70	"	1879	1884	1884	1884			
MAR 9	73	398	73	325	-325	-580	347	286	61	-12	61	61	"	"	"	"	"			
MAR 10	71	404	71	333	-333	-630	367	293	74	3	74	74	1877	"	1879	1879	1879			
MAR 11	71	400	71	329	-329	-780	360	290	70	-1	70	70	"	1877	"	"	"			
MAR 12	70	400	70	330	-330	-640	361	290	71	1	71	71	1878	"	"	"	"			
MAR 13	70	400	70	330	-330	-620	364	280	74	4	74	74	"	1878	"	1877	1877			
MAR 14	70	400	70	330	-330	-700	363	290	73	4	73	73	1876	"	"	"	"			
MAR 15	69	399	69	330	-330	-650	364	290	74	5	74	74	1878	1876	1876	1878	1878			
MAR 16	69	399	69	330	-330	-650	364	290	74	5	74	74	1878	1876	1876	1878	1878			
MAR 17	67	387	67	330	-330	-610	361	290	71	4	71	71	1876	1878	"	"	"			
MAR 18	67	388	67	321	-321	-570	355	282	73	6	73	73	1877	1876	1876	1876	1876			
MAR 19	72	380	72	308	-308	-670	359	271	88	16	88	88	"	1877	1878	1878	1878			
MAR 20	68	380	68	312	-312	-650	357	276	82	14	82	82	1876	"	"	"	"			
MAR 21	70	372	70	302	-302	-570	352	256	86	16	86	86	1876	1876	1876	1877	1877			
MAR 22	69	368	69	299	-299	-520	347	263	84	15	84	84	1874	1875	"	"	"			
MAR 23	68	366	68	298	-298	-560	352	262	90	22	90	90	"	1874	1876	1876	1876			
MAR 24	69	381	69	312	-312	-830	363	275	88	19	88	88	1868	"	1876	1876	1876			
MAR 25	70	391	70	321	-321	-550	376	282	94	24	94	94	1869	1868	1874	1874	1874			
MAR 26	69	389	69	320	-320	-630	376	282	94	25	94	94	1846	1869	"	"	"			
MAR 27	66	388	66	322	-322	-700	367	283	84	18	84	84	1873	1846	1868	1868	1868			
MAR 28	67	346	67	279	-279	-410	344	246	98	31	98	98	1846	1846	1869	1869	1869			
MAR 29	66	325	66	260	-260	-480	305	229	76	11	76	76	1846	1846	1846	1846	1846			
MAR 30	64	296	64	232	-232	-400	291	204	87	23	87	87	1876	1876	1873	1873	1873			
MAR 31	65	273	65	208	-208	-470	257	193	74	9	74	74	1877	1876	1846	1846	1846			
MAR 31	61	254	61	193	-193	-610							1877	1876	1846	1846	1846			

12% transit loss on daily Stored releases...

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams.

DETERMINATION OF PRIORITY WATER

APRIL 1999

Mean daily discharge - cubic feet per second

1999		SAN CARLOS RESERVOIR					ASHURST-HAYDEN DAM					DAILY CALL SYSTEM								
		RELEASES		STORAGE			Silted and/or Spilled		Natural Flow			Gain/Loss		Nat. Flow Available to Project		COMPUTED PRIORITY YEAR				
		River Inflow	Total	Natural Flow	Stored	Inflow minus Outflow	S.C.Res.	APR	Diverted	Stored	Natural Flow	Nat. Flow	Nat. Flow	APR	Vjrden	Safford	Winkelman	Ashurst-Hayden		
MAR 31	61	264	61	183	-193	-510	1	268	170	88	27	88	1	1874	1877	Immem	Immem			
APR 1	48	243	48	195	-196	-40	2	268	172	97	49	97	2	1892	1874	1876	1876			
2	67	169	67	102	-102	220	3	266	90	175	108	175	3	1912	1892	1877	1877			
3	70	80	70	10	-10	70	4	203	9	194	124	194	4	1804	1912	1874	1874			
4	67	60	60	7	80	7	5	156	156	156	96	163	5	1911	1904	1892	1892			
5	64	24	24	40	40	70	6	142	142	142	118	182	6	1924	1924	1924	1924			
6	62			62	220		7	139		139	139	201	7	"	"	"	"			
7	55			55	-110		8	121		121	121	176	8	"	"	"	"			
8	51			51	220		9	98		98	98	150	9	"	"	"	"			
9	56			56	14	-110	10	82		82	40	96	10	1884	1886	1916	1916			
10	51	90	61	39	-39	70	11	66	34	32	-19	32	11	1897	1894	1906	1906			
11	52	97	52	45	-45	-150	12	69	40	29	-23	29	12	1884	1887	1896	1896			
12	53	128	53	75	-75	-400	13	94	66	28	-25	28	13	1885	1884	1894	1894			
13	49	150	49	101	-101	-70	14	110	88	21	-28	21	14	1883	1885	1887	1887			
14	51	149	51	98	-98	-180	15	129	86	43	-8	43	15	1884	1883	1884	1884			
15	48	148	48	100	-100	-180	16	127	88	39	-9	39	16	"	1884	1885	1885			
16	46	148	46	102	-102	-180	17	137	90	47	1	47	17	1883	"	1883	1883			
17	47	148	47	101	-101	-330	18	136	89	47	47	47	18	1884	1883	1884	1884			
18	46	148	46	102	-102	-140	19	134	90	44	-2	44	19	1883	1884	"	"			
19	46	168	46	122	-122	-430	20	134	107	27	-19	27	20	1884	1883	1883	1883			
20	41	189	41	148	-148	-400	21	146	130	15	-26	15	21	1880	1884	1884	1884			
21	41	194	41	153	-153	-280	22	156	135	21	-20	21	22	1881	1880	1883	1883			
22	42	213	42	171	-171	-470	23	160	150	10	-32	10	23	1878	1881	1884	1884			
23	41	249	41	208	-208	-630	24	175	175	10	-41	10	24	1875	1878	1880	1880			
24	40	260	40	220	-220	-390	25	206	194	12	-28	12	25	"	1875	1881	1881			
25	42	262	42	220	-220	-390	26	218	194	24	-18	24	26	1876	"	1878	1878			
26	44	263	44	219	-219	-420	27	226	193	33	-11	33	27	1875	1876	1876	1876			
27	41	264	41	223	-223	-390	28	220	196	24	-17	24	28	1872	1875	"	"			
28	38	265	38	227	-227	-490	29	219	200	19	-19	19	29	1868	1872	1876	1876			
29	30	265	30	236	-236	-740	30	223	207	16	-14	16	30	1875	1868	1876	1876			
30	36	267	36	221	-221	-620														

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams. 12% transit loss on daily Stored releases...

DETERMINATION OF PRIORITY WATER

MAY 1999

Mean daily discharge - cubic feet per second

1999		SAN CARLOS RESERVOIR					ASHURST-HAYDEN DAM					DAILY CALL SYSTEM					
		RELEASES		STORAGE			Sluicad and/or Spilled	Diverted	Stored	Natural Flow	Gain/Loss Nat. Flow	Nat. Flow Available to Project	Duncan Virden	Safford	Winkelman	Ashurst-Hayden	
		River Inflow	Total	Natural Flow	Stored	Ac-ft change S.C. Res.											MAY
30	36	257	36	221	-221	-620	1	222	194	28	-8	28	1878	1876	1872	1872	1872
MAY 1	41	230	41	189	-189	-460	2	209	166	43	2	43	1877	1878	1868	1868	1868
2	40	220	40	180	-180	-310	3	188	168	30	-10	30	1878	1877	1876	1876	1876
3	39	220	39	181	-181	-660	4	182	169	23	-16	23	"	1878	1878	1878	1878
4	37	220	37	183	-183	-380	5	181	161	20	-17	20	1846	1868	1877	1877	1877
6	34	220	34	186	-186	-340	6	179	164	16	-19	16	1873	1846	1878	1878	1878
6	34	220	34	186	-186	-310	7	177	164	13	-21	13	"	1873	1868	1868	1868
7	37	220	37	183	-183	-370	8	176	161	14	-23	14	1875	"	1846	1846	1846
8	37	220	37	183	-183	-640	9	172	161	11	-26	11	1874	1876	1873	1873	1873
9	36	220	36	186	-186	-410	10	168	163	6	-30	6	Imm	1874	"	"	"
10	31	235	31	204	-204	-610	11	166	166		-31		"	Imm	1875	1875	1875
11	30	243	30	213	-213	-470	12	174	174		-30		"	"	1874	1874	1874
12	34	246	34	212	-212	-370	13	176	176		-34		"	"	Imm	Imm	Imm
13	34	248	34	214	-214	-830	14	184	184		-34		"	"	"	"	"
14	31	248	31	217	-217	-300	15	189	189		-31		"	"	"	"	"
16	33	265	33	232	-232	-430	16	193	193		-33		"	"	"	"	"
16	29	276	29	246	-246	-660	17	203	203		-29		"	"	"	"	"
17	30	276	30	246	-246	-390	18	210	210		-30		"	"	"	"	"
18	29	326	29	296	-296	-650	19	226	226		-29		"	"	"	"	"
19	27	346	27	319	-319	-760	20	265	265		-27		"	"	"	"	"
20	23	345	23	322	-322	-710	21	273	273		-23		"	"	"	"	"
21	22	344	22	322	-322	-860	22	274	274		-22		"	"	"	"	"
22	22	347	22	326	-326	-550	23	273	273		-22		"	"	"	"	"
23	22	349	22	327	-327	-760	24	272	272		-22		"	"	"	"	"
24	20	348	20	328	-328	-660	25	271	271		-20		"	"	"	"	"
25	20	346	20	326	-326	-630	26	266	266		-20		"	"	"	"	"
26	20	346	20	326	-326	-620	27	266	266		-20		"	"	"	"	"
27	20	356	20	336	-336	-830	28	269	269		-20		"	"	"	"	"
28	19	198	19	179	-179	-490	29	179	158	21	2	21	"	"	"	"	"
29	21	64	21	33	-33	-100	30	90	29	61	40	61	"	"	"	"	"
30	19	33	19	14	-14	-160	31	54	12	42	23	42	"	"	"	"	"
31	18	14	14	4	4	-60							"	"	"	"	"

12% transit loss on daily Stored releases...

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams.

DETERMINATION OF PRIORITY WATER

JUNE 1999

Mean daily discharge - cubic feet per second

1999	SAN CARLOS RESERVOIR				ASHURST-HAYDEN DAM			DAILY CALL SYSTEM														
	RELEASES		STORAGE		Sluiced and/or Spilled	Diverted	Stored	Natural Flow	Gain/Loss Nat.Flow	Nat. Flow Available to Project	COMPUTED PRIORITY YEAR			Ashurst- Hayden								
	River Inflow	Total Flow	Natural Flow	Stored							Immem	Safford	Winkelman		Immem							
MAY 31																						
JUN 1	18	14	14	4	33	21	33	19	37	1	Immem				Duncan							
JUN 2	16	16	30	16	21	11	21	21	37	2					Virdean							
JUN 3	17	17	-120	17	11	8	11	11	28	3					Immem							
JUN 4	18	16	-30	16	8	8	8	8	23	4					Immem							
JUN 5	13	13	-160	13	8	8	8	8	21	5					Immem							
JUN 6	13	13	-60	13	7	7	7	7	20	6					Immem							
JUN 7	15	16	16	16	6	6	6	6	21	7					Immem							
JUN 8	16	16	-60	16	2	2	2	2	17	8					Immem							
JUN 9	14	14	-130	14	2	2	2	2	16	9					Immem							
JUN 10	14	14	-60	14	1	1	1	1	14	10					Immem							
JUN 11	12	12	-30	12	1	1	1	1	13	11					Immem							
JUN 12	11	11	-60	11	2	2	2	2	13	12					Immem							
JUN 13	10	10	-30	10	1	1	1	1	11	13					Immem							
JUN 14	8	8	-30	8	1	1	1	1	8	14					Immem							
JUN 15	8	8	-30	8	1	1	1	1	8	15					Immem							
JUN 16	7	7	-60	7	1	1	1	1	7	16					Immem							
JUN 17	7	7	-30	7	1	1	1	1	7	17					Immem							
JUN 18	3	3	-60	3	1	1	1	1	3	18					Immem							
JUN 19	4	4	4	4	1	1	1	1	6	19					Immem							
JUN 20	5	5	-60	5	1	1	1	1	7	20					Immem							
JUN 21	5	5	-60	5	1	1	1	1	6	21					Immem							
JUN 22	116	116	116	116	1	1	1	1	117	22					Immem							
JUN 23	62	62	-90	62	3	3	3	3	66	23					Immem							
JUN 24	39	39	39	39	1	1	1	1	40	24					Immem							
JUN 25	34	34	-90	34	1	1	1	1	34	25					Immem							
JUN 26	27	27	-120	27	3	3	3	3	30	26					Immem							
JUN 27	22	22	-60	22	2	2	2	2	22	27					Immem							
JUN 28	13	13	-60	13	2	2	2	2	15	28					Immem							
JUN 29	10	10	-80	10	2	2	2	2	10	29					Immem							
JUN 30	9	9	-100	9	2	2	2	2	11	30					Immem							
JUN 30	5	5	-60	5	2	2	2	2	11	30					Immem							

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams.

12% transit loss on daily stored releases...
June 01 - 30, 1999, daily call system computed priority years are disregarded due to exchange of CAP water to SCILP.

DETERMINATION OF PRIORITY WATER

JULY 1999

Mean daily discharge - cubic feet per second

1999		SAN CARLOS RESERVOIR				ASHURST-HAYDEN DAM				DAILY CALL SYSTEM									
		RELEASES		STORAGE		Sluicad and/or Spilled	Diverted	Stored	Natural Flow	Gain/Loss Nat.Flow	Nat. Flow Available to Project	COMPUTED PRIORITY YEAR			Ashurst-Hayden				
		Total	Natural Flow	Inflow minus Outflow	Ac-ft change S C Res.							Viridan	Safford	Winkelman					
River Inflow				JUL	JUL	JUL	JUL	JUL	JUL	JUL	JUL	JUL	JUL	JUL	JUL				
JUN 30	6			6	-60	1								1881		1881			
JUL 1	5			5	-150	2								"		"			
JUL 2	1			1		3								"		"			
JUL 3	2			2		4								1880		1876			
JUL 4	3			3	-60	5								1881		1880			
JUL 5	15			15	-30	6								1883		1881			1876
JUL 6														1889		1883			1880
JUL 7	26			26	-120	7								1882		1889			1881
JUL 8	26			26	120	8								1884		1882			1883
JUL 9	23			23	-60	9								1882		1884			1883
JUL 10	23			23		10								1885		1882			1889
JUL 11	28			28		11								1882		1882			1882
JUL 12	70			70	30	12								1885		1885			1884
JUL 13	69			69	-120	13								1890		1882			1882
JUL 14	76			76	-120	14								1899		1897			1885
JUL 15	86			86	600	15								1896		1899			1895
JUL 16	212			212	110	16								1924		1895			1890
JUL 17	134			134	60	17								"		"			1897
JUL 18	121			121		18								"		"			1895
JUL 19	93			93	120	19								"		"			1895
JUL 20	76			76		20								"		"			1890
JUL 21	182			182		21								"		"			1890
JUL 22	234			234	90	22								"		"			1895
JUL 23	171			171	210	23								"		"			1895
JUL 24	221			221	150	24								"		"			1895
JUL 25	617	38	38	475	300	25								"		"			1895
JUL 26	497	142	142	345		26								"		"			1895
JUL 27	574	152	152	422	490	27								"		"			1895
JUL 28	403	176	176	227	360	28								"		"			1895
JUL 29	1374	206	206	1168	800	29								"		"			1895
JUL 30	295	167	167	128	470	30								"		"			1895
JUL 31	280	216	216	64	30	31								"		"			1895
JUL 31	225	205	205	20										"		"			1896

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams.

12% transit loss on daily Stored releases....

DETERMINATION OF PRIORITY WATER

AUGUST 1999

Mean daily discharge - cubic feet per second

1999	SAN CARLOS RESERVOIR					ASHURST-HAYDEN DAM					DAILY CALL SYSTEM					
	River Inflow	RELEASES		STORAGE		Spilled and/or	Diverted	Stored	Natural Flow	Gain/Loss Nat.Flow	Nat. Flow Available to Project	COMPUTED PRIORITY YEAR			AUG	
		Total	Natural Flow	Inflow minus Outflow	Ac-ft change S C Res.							Viridan	Safford	Winkelman		Ashurst-Hayden
1	225	206	205	20	20	200	186	68	200	-5	220	1899	1896	1924	1924	
2	140	206	140	-66	-30	186	170	170	128	-12	128	1909	1899	"	"	
3	106	93	93	13	-30	170	82	82	170	64	188	"	1909	1896	1896	
4	124	116	116	106	-70	82	47	47	82	-69	304	"	"	1924	1899	
5	373	116	116	257	190	82	98	98	47	-101	497	"	"	1909	1909	
6	598	189	189	399	190	98	334	334	98	28	1577	"	"	1924	1924	
7	1549	306	306	1243	1090	334	539	539	334	142	7696	"	"	"	"	
8	7554	397	397	7157	2790	539	372	372	539	-28	5673	"	"	"	"	
9	5601	400	400	5201	6740	372	332	332	372	-72	2127	"	"	"	"	
10	2199	404	404	1795	4230	332	508	508	332	79	800	"	"	"	"	
11	721	429	429	292	2370	508	583	583	508	135	1081	"	"	"	"	
12	946	448	448	498	1570	583	426	426	583	-23	1884	"	"	"	"	
13	1907	449	449	1458	1300	426	396	396	426	-54	1553	"	"	"	"	
14	1607	450	450	1157	1970	396	398	398	396	-53	1013	"	"	"	"	
15	1066	451	451	615	1140	398	393	393	398	-60	703	"	"	"	"	
16	763	453	453	310	590	393	393	393	393	-60	517	"	"	"	"	
17	577	453	453	124	340	393	411	411	393	-42	482	1915	"	"	"	
18	624	453	453	71	370	411	402	402	411	-51	406	1904	1915	"	"	
19	457	453	453	4	-40	402	352	352	402	-37	369	1895	1904	"	"	
20	406	432	406	-26	-520	352	376	376	352	4	347	1913	1895	1915	1915	
21	343	376	343	-33		376	301	301	376	-22	287	1906	1913	1904	1904	
22	309	325	309	-16	-70	301	275	275	301	-35	262	1898	1906	1895	1895	
23	297	312	297	-15	-80	275	268	268	275	-38	228	1885	1898	1913	1913	
24	266	311	266	-45	-220	268	258	258	268	-42	176	1890	1885	1906	1906	
25	218	311	218	-93	-370	258	260	260	258	-39	175	1912	1890	1898	1898	
26	214	311	214	-97	-260	260	297	297	260	6	199	1906	1912	1885	1885	
27	193	304	193	-111	-290	297	348	348	297	136	278	1924	1906	1890	1890	
28	142	222	142	-80	-260	348	427	427	348	256	388	"	1924	1912	1912	
29	132	176	132	-44	-150	427	381	381	427	124	412	"	"	1906	1906	
30	288	257	257	31	-150	381	493	493	381	272	431	"	"	1924	1924	
31	159	230	159	-71	-290	493			493			"	"	"	"	
31	193	222	193	-29	110											

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams. 12% transit loss on daily stored releases...

DETERMINATION OF PRIORITY WATER

SEPTEMBER 1999

Mean daily discharge - cubic feet per second

1999	SAN CARLOS RESERVOIR					ASHURST-HAYDEN DAM					DAILY CALL SYSTEM							
	RELEASES		STORAGE			Spilled	Diverted	Stored	Natural Flow	Gain/Loss Nat. Flow	Nat. Flow Available to Project	Duncan		Winkelman		Ashurst-Hayden		
	River Inflow	Total	Natural Flow	Stored	Inflow minus Outflow							Ac-ft change S C Res.	SEP	SEP	SEP	SEP	SEP	SEP
AUG 31																		
SEP 1	193	222	193	29	-29	110	401	26	375	182	375	1	1924	1924	1924	1924	1924	
2	152	222	152	70	-70	-80	461	62	399	247	399	2	"	"	"	"	"	
3	91	203	91	112	-112	-180	460	99	351	260	351	3	"	"	"	"	"	
4	112	168	112	46	-46	-40	380	40	340	228	340	4	"	"	"	"	"	
5	124	192	124	68	-68	-140	373	60	313	189	313	5	"	"	"	"	"	
6	106	174	106	68	-68	-260	184	60	124	18	124	6	"	"	"	"	"	
7	97	135	97	38	-38	-180	163	33	130	33	130	7	1904	"	"	"	"	
8	98	128	98	30	-30	-110	160	26	134	36	134	8	1913	1904	"	"	"	
9	98	128	98	30	-30	-220	154	26	128	30	128	9	1906	1913	"	"	"	
10	86	98	86	12	-12	-290	121	11	110	24	110	10	1900	1906	1904	1904	1904	
11	90	98	90	8	-8	-110	139	7	132	42	132	11	1912	1900	1913	1913	1913	
12	80	91	80	11	-11	-180	115	10	105	25	105	12	1893	1912	1906	1906	1906	
13	79	84	79	5	-5	-30	110	4	106	27	106	13	1896	1893	1900	1900	1900	
14	77	78	77	1	-1	-220	64	1	63	-14	63	14	1899	1896	1912	1912	1912	
15	74	76	74	2	-2	-220	115	2	113	39	113	15	1924	1899	1893	1893	1893	
16	84	76	76	8	8	250	77	77	77	1	85	16	"	1924	1896	1896	1896	
17	225	76	76	149	149	70	75	75	75	-1	224	17	"	"	1899	1899	1899	
18	372	108	108	284	284	-30	70	70	70	-38	334	18	"	"	1924	1924	1924	
19	571	128	128	251	251	360	195	195	195	67	446	19	"	"	"	"	"	
20	756	128	128	443	443	400	106	106	106	-22	549	20	"	"	"	"	"	
21	765	128	128	628	628	770	96	96	96	-32	724	21	"	"	"	"	"	
22	713	128	128	636	636	880	103	103	103	-26	739	22	"	"	"	"	"	
23	571	129	129	585	585	770	122	122	122	-6	707	23	"	"	"	"	"	
24	657	130	130	442	442	710	129	129	129	-8	649	24	"	"	"	"	"	
25	605	130	130	475	475	480	122	122	122	-13	592	25	"	"	"	"	"	
26	605	111	111	494	494	490	117	117	117	-1	604	26	"	"	"	"	"	
27	521	102	102	419	419	340	110	110	110	-11	510	27	"	"	"	"	"	
28	387	102	102	285	285	260	91	91	91	-18	369	28	"	"	"	"	"	
29	347	102	102	245	245	220	84	84	84	-22	325	29	"	"	"	"	"	
30	323	104	104	219	219	230	80	80	80			30	"	"	"	"	"	

12% transit loss on daily Stored releases...

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams.

DETERMINATION OF PRIORITY WATER

OCTOBER 1999

Mean daily discharge - cubic feet per second

1999	SAN CARLOS RESERVOIR				ASHURST-HAYDEN DAM				DAILY CALL SYSTEM						
	River Inflow	RELEASES		STORAGE	Sluiced and/or Spilled	Diverted	Stored	Natural Flow	Gain/Loss Nat. Flow	Nat. Flow Available to Project	OCT	Viriden Duncan	Safford	Winkelman	Ashurst-Hayden
		Total	Natural Flow	Inflow minus Outflow											
SEP 30	323	104	104	219	230			77	-27	296	1	1924	1924	1924	1924
OCT 1	273	104	104	169	110			6	-98	175	2	"	"	"	"
2	235	104	104	131	120			43	-61	174	3	"	"	"	"
3	213	104	104	109	40			71	-33	180	4	"	"	"	"
4	196	104	104	92	70			71	-33	163	5	"	"	"	"
5	225	144	144	81				72	-72	163	6	1896	"	"	"
6	191	169	169	32	-110			105	-64	137	7	1887	1896	"	"
7	168	140	140	18	-160			108	-32	126	8	1893	1887	"	"
8	131	140	131	9	-80			100	-39	92	9	1906	1893	1896	1896
9	124	144	124	20	-230			103	-39	85	10	1924	1906	1887	1887
10	118	130	118	12	-180			102	-27	91	11	1896	1924	1893	1893
11	110	122	110	12	-190			91	-30	80	12	"	1896	1906	1906
12	106	122	106	16	-160			88	-32	74	13	"	"	1924	1924
13	105	120	105	16	-190			87	-31	74	14	1924	"	1896	1896
14	102	116	102	13	-160			89	-24	78	15	"	1924	"	"
15	98	109	98	11	-190			87	-21	77	16	"	"	"	"
16	95	109	95	14	-220			84	-23	72	17	"	"	1924	1924
17	96	109	96	13	-190			83	-24	72	18	"	"	"	"
18	100	109	100	9	-180			87	-21	79	19	"	"	"	"
19	100	109	100	9	370			87	-21	79	20	"	"	"	"
20	98	109	98	11	70			87	-21	77	21	"	"	"	"
21	98	109	98	11	-740			87	-21	77	22	"	"	"	"
22	97	41	41	56	-300			88	47	144	23	"	"	"	"
23	97			97	180			38	38	135	24	"	"	"	"
24	94			94	230			12	48	142	25	"	"	"	"
25	92			92	70			11	33	125	26	"	"	"	"
26											27	"	"	"	"
27	92			92	120			10	32	124	28	"	"	"	"
28	90			90	140			22	22	112	29	"	"	"	"
29	89			89	80			22	22	111	30	"	"	"	"
30	89			89	70			17	17	106	31	"	"	"	"
31	87			87	87			17	17	104		"	"	"	"
87				87	40							"	"	"	"

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams. 12% transit loss on daily Stored releases...

DETERMINATION OF PRIORITY WATER

NOVEMBER 1999

Mean daily discharge - cubic feet per second

1999	SAN CARLOS RESERVOIR				ASHURST-HAYDEN DAM				DAILY CALL SYSTEM				
	RELEASES		STORAGE		Sluiced and/or Spilled	Diverted	Stored	Natural Flow	Gain/Loss Nat. Flow	Nat. Flow Available to Project	COMPUTED PRIORITY YEAR		Asthurst-Hayden
	River Inflow	Total	Natural Flow	Stored							Inflow minus Outflow	Ac-ft change S C Res.	
OCT 31	87				17				17	104	1924		
NOV 1	92			87	40				17	109	"		
2	94			92	110				17	109	"		
3	91			94	80				10	101	"		
4	95			91	110				10	105	"		
5	99			95	110				7	106	"		
6	102			99	230				7	109	"		
7	105			102	260				7	112	"		
8	106			105	230				7	113	"		
9	111			106	150				7	118	"		
10	110			111	150				5	115	"		
11	110			110	160				5	115	"		
12	109			110	190				5	114	"		
13	108			109	220				5	113	"		
14	110			108	120				5	115	"		
15	113			110	190				5	118	"		
16	112			113	110				5	117	"		
17	115			112	230				5	120	"		
18	114			115	300				5	119	"		
19	114			114	120				5	119	"		
20	118			114	70				5	123	"		
21	118			118	270				5	122	"		
22	117			117	150				5	123	"		
23	118			118	40				5	119	"		
24	116			114	40				5	121	"		
25	120			116	270				5	125	"		
26	121			120	40				5	126	"		
27	125			121	110				5	130	"		
28	127			125	120				5	132	"		
29	128			127	300				5	133	"		
30	131			128	120				5		"		
				131	230						"		

12% transit loss on daily Stored releases...

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams.

DETERMINATION OF PRIORITY WATER

DECEMBER 1999

Mean daily discharge - cubic feet per second

1999	SAN CARLOS RESERVOIR				ASHURST-HAYDEN DAM				DAILY CALL SYSTEM				
	RELEASES		STORAGE		Sluiced and/or Spilled	Diverted	Stored	Natural Flow	Gain/Loss Nat.Flow	Nat. Flow Available to Project	COMPUTED PRIORITY YEAR		DEC
	River Inflow	Total	Natural Flow	Stored							Inflow minus Outflow	Ac-ft change S C Res.	
NOV 30	131				5				5	136	1924	1924	1
DEC 1	132				5				5	137	"	"	2
DEC 2	133				2				2	135	1903	1903	3
DEC 3	131	154	131	23					-131		1915	"	4
DEC 4	128	248	128	120		36	36		-128		"	1903	5
DEC 5	141	249	141	108		151	95	56	-85	56	1878	1915	6
DEC 6	145	250	145	105		176	92	84	-61	84	1881	"	7
DEC 7	146	250	146	104		192	92	100	-46	100	1895	1878	8
DEC 8	143	232	143	89		196	78	118	-25	118	1897	1881	9
DEC 9	138	223	138	85		180	75	115	-23	115	1908	1895	10
DEC 10	141	223	141	82		192	72	120	-21	120	1912	1908	11
DEC 11	142	223	142	81		194	71	123	-19	123	1908	1907	12
DEC 12	143	224	143	81		197	71	126	-17	126	1903	1908	13
DEC 13	148	225	148	77		199	68	131	-17	131	1907	1912	14
DEC 14	148	224	148	76		201	67	134	-14	134	1908	1908	15
DEC 15	145	226	145	80		203	70	133	-12	133	1908	1903	16
DEC 16	142	227	142	85		205	75	130	-12	130	1911	1907	17
DEC 17	142	211	142	69		202	61	141	-1	141	1904	1908	18
DEC 18	144	203	144	59		191	52	139	-5	139	1910	1898	19
DEC 19	145	204	145	59		189	52	137	-8	137	1912	1911	20
DEC 20	145	205	145	60		190	53	137	-8	137	1913	1904	21
DEC 21	143	161	143	18		188	16	172	29	172	1924	1910	22
DEC 22	146	122	122			143		143	21	167	"	1912	23
DEC 23	142	120	120	40		132		132	12	154	"	1913	24
DEC 24	145	117	117	28		126		126	9	154	"	1924	25
DEC 25	151	117	117	34		122		122	5	156	"	"	26
DEC 26	154	118	118	36		121		121	3	157	"	"	27
DEC 27	159	118	118	41		125		125	7	166	"	"	28
DEC 28	158	118	118	40		126		126	8	166	"	"	29
DEC 29	156	118	118	38		116		116	-2	154	"	"	30
DEC 30	153	42	42	111		110		110	68	221	"	"	31
DEC 31	154			154									31

24 hour lag allowed between Coolidge/Ashurst-Hayden Dams.

12% transit loss on daily Stored releases...

RELATIVE DIVERSION RIGHT FOR DUNCAN VALLEY
Based on one cubic foot per second for each eighty acres

THEN BEING IRRIGATED

Year	Sunset		New Model		Valley		Colimera		Sexton		R. Sexton		York		F. E. Ross		York Cattle		J H Brown		R K Davis		Laura Short		Total		
	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	TBI 1999	Decreed	Total Modified	
1874	6.3	5.8																							6.3	5.8	
1881	12.1	11.1																								12.1	11.1
1882	13.2	12.1																								13.2	12.1
1884			0.5	0.4																						13.7	12.5
1885	15.5	14.2	2.2	1.7	1.0	0.8														0.1						18.7	16.7
1886			4.1	3.3	2.0	1.6																				21.6	19.1
1887	16.1	14.8	4.2	3.3																						22.3	19.7
1888			6.6	5.2	7.2	5.7																				28.9	25.7
1889			7.9	6.3																						31.2	26.8
1891	16.5	15.1	8.0	6.4																						31.7	27.2
1892	17.7	16.2																								32.9	28.3
1893	17.8		8.8	7.0																						33.8	28.3
1894			11.1	8.8	8.2	6.4																				37.1	32.2
1895	19.8	18.2	12.0	9.5	9.6	7.5																				41.4	35.2
1896	21.0	19.3	14.2	11.3																						44.8	38.1
1897	21.1	19.4	23.5	18.7	13.7	10.8	0.3																			58.3	48.9
1898	24.4	22.4	29.5	23.5	14.4	11.3	1.1			0.8																68.4	57.2
1900	27.6	25.3	30.7	24.4	14.6	11.5	1.2			0.6																72.9	61.2
1901							1.5			1.3																76.2	61.2
1902							2.4			1.3																79.3	61.2
1903							15.1			1.0																74.3	62.4
1904	28.5	26.1			15.2	11.9	3.0			1.3																75.0	62.9
1905			31.3	24.9			3.4			2.1																76.2	63.0
1906			31.5	25.0			5.0			2.1																76.3	63.0
1907			31.6	25.1			5.0			3.6																77.4	63.1
1908			32.3	25.7	16.6	13.0	5.3			3.6																77.4	64.8
1909										0.1																80.4	64.8
1910			32.5	25.8						3.7																77.6	64.9
1911	29.1	26.7								1.7																76.2	65.5
1912			32.7	26.0						1.4																78.4	65.7
1913			32.8	26.1						1.4																78.5	65.8
1914	29.4	27.0	33.1	26.3																						79.1	66.3
1915					17.0	13.3	5.4																			79.5	66.6
1916					17.1	13.4																				84.1	66.7
1917	33.6	30.9	33.3	26.5	17.2	13.5	5.5																			98.4	70.8
1918	34.4	31.6			17.3	13.6				1.8																85.0	45.2
1919			33.5	26.6						1.7																89.8	45.2
1920																										100.0	45.2
1921																										85.3	45.2
1926	34.5	31.6																								85.8	72.2
1929			34.0	27.0																						100.6	72.2
Total	34.5	31.6	34.0	27.0	17.3	13.6	5.5	1.7	1.7	1.8	3.3	0.1	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.0	85.8	72.2	
DECREED ACRES	2,759.90	2,717.55			1,387.20	441.00	137.90	144.10	144.10	144.10	11.60	49.90	25.60	26.30	26.30	26.30	26.30	26.30	26.30	26.30	26.30	26.30	26.30	26.30	36.50	8,061.35	
TBI ACRES	2,531.80	2,160.12			1,088.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,780.82	
% REDUCTION	8.26%	20.51%			21.50%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	28.23%	
% ACRES TBI	91.74%	79.48%			78.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	71.71%	

Note: for blank spaces use first figure above
modified effective December 1, 1999 in accordance with Court Order

RELATIVE DIVERSION RIGHT FOR SAFFORD VALLEY

Based on one cubic foot per second for each eighty acres

THEN BEING IRRIGATED

Year	Consolidated Brown		Fourness		San Jose		Montezuma		Union - Starflower		Graham		Smithville		Dodge - Nevada		Curtis		Fort Thomas		Colvin - Jones		Total			
	Decreased	TBI 1989	Decreased	TBI 1989	Decreased	TBI 1989	Decreased	TBI 1989	Decreased	TBI 1989	Decreased	TBI 1989	Decreased	TBI 1989	Decreased	TBI 1989	Decreased	TBI 1989	Decreased	TBI 1989	Decreased	TBI 1989	Decreased	TBI 1989	TBI 1989	
1972																										
1973																										
1974																										
1975																										
1976																										
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2009																										
2010																										
2011																										
2012																										
2013																										
2014																										
2015																										
2016																										
2017																										
2018																										
2019																										
2020																										
Total	18.8	13.8	2.6	2.4	51.8	48.4	4.4	4.6	4.4	4.6	4.4	4.6	4.4	4.6	4.4	4.6	4.4	4.6	4.4	4.6	4.4	4.6	4.4	4.6	4.4	
DECREASED ACRES	1,328.98	1,191.43	18.88	18.01	4,158.03	3,788.84	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54
TBI ACRES	1,191.43	1,191.43	18.88	18.01	4,158.03	3,788.84	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54	303.54
% REDUCTION	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%	16.99%
% ACRES TBI	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%	83.01%

Note: for blank spaces use first figure above
modified effective December 1, 1989 in accordance with Court Order

1999

COMPARISON OF U.S.G.S. 1999 PROVISIONAL TO FINAL DATA

Negative number means revised down from original data

STATION	JANUARY REVISED AC-FT	FEBRUARY REVISED AC-FT	MARCH REVISED AC-FT	APRIL REVISED AC-FT	MAY REVISED AC-FT	JUNE REVISED AC-FT	JULY REVISED AC-FT	AUGUST REVISED AC-FT	SEPTEMBER REVISED AC-FT	OCTOBER REVISED AC-FT	NOVEMBER REVISED AC-FT	DECEMBER REVISED AC-FT	TOTAL REVISED AC-FT
Gila Below Blue Creek	(50)	(58)	(29)	(29)	8	(32)	(305)	1,325	(19)	131	(34)	(6)	902
Gila River Near Clifton	(0)	(0)	0	0	0	(2)	0	0	(0)	(195)	0	(204)	(400)
San Francisco River @ Clifton	(27)	(0)	262	10	38	(2)	264	901	359	(167)	(0)	(58)	1,579
Head of Safford Valley	193	(679)	(303)	(86)	16	(742)	(1,718)	4,314	(6)	296	209	445	1,938
Gila @ Calva	254	178	(423)	161	(0)	0	135	(635)	163	18	(0)	(0)	(149)
San Carlos River @ Peridot	47	(4)	(141)	(2)	0	35	(189)	69	127	5	(0)	1	(52)
Gila Below Coolidge Dam	145	(280)	(107)	0	(0)	(0)	(1)	17	173	67	7	(0)	20
Gila @ Kelvin	(160)	238	528	(335)	(119)	(71)	(48)	(209)	(1,569)	(198)	(0)	(0)	(1,944)

Note: revised data not used in Water Commissioner's 1999 Annual Report

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1999

GILA RIVER BELOW BLUE CREEK, NEAR VIRDEN, N. M.

Mean daily discharge, cubic feet per second

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	106	101	89	68	78	33	17	334	141	125	93	96
2	104	103	88	84	74	34	17	270	139	116	92	96
3	104	101	87	89	77	35	19	264	189	110	91	95
4	105	99	83	92	71	35	21	354	178	103	94	96
5	101	97	82	94	61	34	23	1270	159	96	97	96
6	95	94	85	94	55	30	24	2650	149	89	97	101
7	93	96	86	92	53	27	25	1470	140	82	98	100
8	92	100	89	90	51	24	28	945	134	79	93	101
9	92	98	89	89	48	23	30	706	126	78	90	100
10	93	96	86	86	44	22	31	629	121	77	87	103
11	95	97	89	79	41	22	32	812	123	77	90	102
12	97	98	88	75	39	23	33	664	122	77	90	102
13	99	99	85	73	40	30	33	475	122	76	89	104
14	99	98	87	65	41	36	35	390	125	74	89	103
15	98	98	82	62	40	28	37	422	152	74	93	104
16	97	97	75	70	40	25	37	314	164	76	93	101
17	100	97	82	70	40	22	130	272	210	78	88	100
18	99	92	88	71	40	24	81	228	252	81	86	96
19	98	90	88	73	39	50	66	196	364	80	91	95
20	97	90	87	73	37	45	110	217	370	78	96	96
21	98	89	89	64	36	52	418	188	322	79	97	97
22	102	89	90	58	36	50	433	166	278	77	100	96
23	104	88	89	62	36	47	583	152	251	76	99	99
24	106	85	86	61	36	41	386	139	231	78	97	101
25	107	80	84	60	36	31	273	131	207	79	96	103
26	106	77	84	59	35	27	252	112	184	81	96	104
27	104	83	86	60	34	24	262	143	171	81	96	99
28	103	86	87	61	33	21	240	133	167	85	96	92
29	103		85	63	32	19	310	116	162	86	99	94
30	98		74	76	31	17	193	123	154	81	100	102
31	98		69		30		162	116		82		105
Total	3093	2618	2638	2213	1384	931	4341	14401	5607	2611	2813	3079
Ac-ft	6135	5193	5232	4389	2745	1847	8610	28564	11121	5179	5580	6107

Total for year: 90,702 acre-feet

Drainage area—3,203 sq. mi., excluding Animas River Basin

1999

GILA RIVER NEAR CLIFTON, ARIZONA

Mean daily discharge, cubic feet per second

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	114	73	63	45	32	25	33	114	114	131	60	95
2	117	71	64	56	33	25	32	321	118	124	63	91
3	117	76	67	49	32	24	36	250	140	114	70	85
4	116	87	70	51	34	25	58	1030	153	101	76	90
5	118	92	68	50	33	27	146	1650	164	96	83	101
6	121	84	60	57	33	32	112	2440	146	82	90	101
7	112	74	66	62	33	29	79	1920	131	73	96	103
8	102	68	72	65	34	28	76	1040	116	67	100	104
9	95	71	75	66	32	31	135	698	106	62	102	103
10	91	72	80	64	32	33	80	514	92	61	97	102
11	91	68	80	64	31	32	148	623	81	58	92	102
12	92	72	77	61	31	31	64	713	77	55	94	98
13	94	79	74	56	31	64	59	592	75	52	91	94
14	96	85	69	48	31	403	56	458	101	49	94	94
15	98	88	60	44	30	122	89	445	94	48	90	94
16	97	89	56	42	31	94	56	373	121	44	85	101
17	91	93	48	38	33	98	115	294	162	43	82	101
18	93	97	46	38	32	103	130	250	175	41	70	95
19	91	97	52	38	31	120	210	213	240	44	64	90
20	89	92	56	38	31	83	237	252	332	46	68	84
21	85	86	56	41	32	31	238	202	331	46	73	83
22	86	85	56	41	31	31	684	176	292	47	80	84
23	87	84	57	38	30	31	327	146	261	46	82	76
24	82	89	62	37	27	32	666	158	260	43	88	78
25	86	85	64	37	27	30	345	133	223	39	87	86
26	94	77	60	34	28	31	326	122	203	39	92	88
27	92	67	56	32	30	31	455	113	180	43	95	94
28	89	60	53	32	31	33	289	165	159	45	94	96
29	85		47	31	33	32	255	147	142	47	93	93
30	80		51	31	28	32	239	132	133	49	93	91
31	80		48		25		154	125		55		93
Total	2981	2261	1913	1386	962	1743	5929	15809	4922	1890	2544	2890
Ac-ft	5913	4485	3794	2749	1908	3457	11760	31357	9763	3749	5046	5732

Total for year: 89,713 acre-feet

Drainage area.—4,010 sq. mi.

1999

SAN FRANCISCO RIVER AT CLIFTON, ARIZONA

Mean daily discharge, cubic feet per second

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	85	68	58	53	57	28	23	109	198	154	78	72
2	86	67	56	86	58	27	20	221	203	141	81	70
3	88	68	56	145	57	29	21	828	190	127	81	70
4	87	69	60	96	52	27	19	1090	170	116	77	72
5	87	70	60	86	51	27	25	3510	158	115	74	65
6	86	71	59	77	53	22	25	3250	138	108	75	65
7	82	70	58	73	50	20	20	1620	143	95	73	70
8	79	71	58	73	44	20	36	915	127	96	74	72
9	76	70	59	75	40	22	39	751	110	95	71	79
10	75	64	56	76	45	22	50	1430	110	91	71	79
11	73	71	56	75	45	18	110	1470	127	90	68	79
12	69	71	55	74	39	18	72	832	109	86	68	79
13	66	71	57	71	38	18	41	620	107	85	67	77
14	74	69	53	69	42	18	41	482	342	83	65	79
15	73	65	55	68	40	21	58	440	479	81	61	78
16	72	64	56	63	39	23	71	501	522	78	60	75
17	74	60	54	63	40	35	134	540	585	76	67	72
18	72	63	58	60	37	44	470	409	1010	78	78	71
19	71	63	64	64	32	43	470	302	662	79	77	71
20	65	63	60	66	32	43	355	323	571	80	76	70
21	70	61	58	66	35	72	391	305	435	79	77	69
22	70	62	56	66	37	71	385	253	341	78	75	69
23	70	60	50	66	36	49	260	238	299	78	76	68
24	69	61	51	65	35	40	213	214	272	78	79	66
25	68	63	50	61	30	37	151	189	285	75	78	74
26	67	64	52	66	31	33	142	223	272	74	77	74
27	65	63	57	64	30	32	221	214	237	76	77	74
28	65	63	56	60	36	32	348	225	209	80	75	73
29	66		53	58	36	31	278	252	183	75	72	73
30	65		54	57	36	26	142	209	166	75	72	73
31	65		50		37		106	203		75		72
Total	2280	1845	1735	2142	1270	948	4737	22168	8760	2797	2200	2250
Ac-ft	4522	3660	3441	4249	2519	1880	9396	43970	17375	5548	4364	4463

Total for year: 105,387 acre-feet

Drainage area.--2,766 square miles

1999

GILA RIVER AT HEAD OF SAFFORD VALLEY, NEAR SOLOMON, ARIZONA

Mean daily discharge, cubic feet per second

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	198	203	146	114	110	82	59	195	322	259	155	196
2	206	186	144	145	110	82	58	356	305	249	159	195
3	215	202	145	206	108	82	57	845	308	232	161	189
4	206	204	151	202	105	84	63	2500	282	213	164	186
5	207	211	157	184	100	84	61	4580	285	204	162	192
6	209	231	151	174	97	89	108	6120	266	196	165	191
7	202	216	147	167	96	86	73	4100	247	182	172	191
8	193	210	151	171	94	83	65	2240	242	170	175	192
9	182	207	151	165	92	84	82	1430	223	167	179	195
10	182	200	155	157	89	86	113	1550	209	162	177	199
11	181	217	155	163	91	88	173	2590	211	159	175	202
12	180	225	152	158	89	86	160	1800	201	159	172	202
13	179	229	153	152	85	93	106	1240	197	155	170	199
14	183	234	152	146	84	257	123	890	229	151	170	197
15	186	223	145	134	86	171	136	726	513	149	170	194
16	186	215	145	126	84	105	150	813	531	146	168	195
17	182	197	143	121	85	76	178	802	522	144	169	195
18	180	199	141	117	85	101	277	711	963	145	169	187
19	180	195	145	116	82	106	1030	590	903	143	167	184
20	176	182	148	115	77	127	532	575	769	146	165	180
21	171	172	145	114	73	96	576	550	650	145	167	178
22	171	165	143	113	73	125	1530	490	530	145	171	176
23	180	161	142	112	69	105	736	417	468	144	173	174
24	174	162	140	108	64	87	915	397	429	142	177	174
25	170	162	145	111	60	80	504	352	422	140	182	180
26	175	166	143	114	59	79	465	330	400	138	186	184
27	177	159	146	114	58	73	687	366	363	137	192	185
28	182	150	146	111	58	70	741	376	329	140	195	190
29	194		136	103	63	68	629	297	299	142	193	189
30	201		127	104	62	63	498	364	274	143	194	187
31	200		126		60		328	307		146		180
Total	5808	5483	4516	4137	2548	2898	11213	38899	11892	5093	5194	5858
Ac-ft	11520	10876	8957	8206	5054	5748	22241	77156	23588	10102	10302	11619

Total for year: 205,369 acre-feet

Drainage area.—7,896 square miles

1999

GILA RIVER AT CALVA, ARIZONA

Mean daily discharge, cubic feet per second

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	167	145	57	39	33	10	3.7	118	111	266	86	122
2	183	127	55	50	32	11	0.5	89	75	228	88	123
3	189	112	54	49	31	10	0.2	110	90	205	85	122
4	192	99	55	49	29	8.3	0.7	362	101	188	89	119
5	195	96	55	47	26	8.4	12	585	88	217	93	132
6	199	92	55	47	27	9.9	23	1520	83	182	96	136
7	198	90	56	42	29	10	19	7540	86	150	98	136
8	201	87	57	39	29	11	14	5590	87	123	99	133
9	194	81	58	44	28	9.9	12	2190	76	117	104	129
10	189	78	56	40	24	8.2	14	713	81	111	103	131
11	183	75	57	39	23	7.3	51	938	71	103	103	132
12	178	72	56	41	27	6.8	50	1900	69	99	102	134
13	171	71	56	38	27	4.9	49	1600	68	99	101	138
14	168	71	55	40	24	4.3	45	1060	65	96	103	139
15	168	71	55	38	26	3.8	51	757	74	92	105	136
16	168	71	53	36	22	3.9	79	571	205	89	104	133
17	165	70	53	37	23	0.1	70	519	322	90	107	133
18	164	70	57	37	22	0.4	51	452	364	94	106	135
19	165	67	53	37	21	0.5	39	401	556	95	106	136
20	171	66	56	32	17	0.3	144	337	741	93	109	136
21	174	62	55	32	16	112	194	302	751	92	108	134
22	162	65	55	33	16	48	128	290	700	91	109	137
23	157	63	56	33	16	36	181	260	560	91	105	133
24	157	59	57	32	15	31	479	213	646	88	107	136
25	161	58	57	33	15	25	380	210	593	86	111	142
26	155	57	54	35	15	20	376	189	593	86	112	145
27	148	56	54	32	15	11	313	139	510	84	116	150
28	153	57	53	30	13	8.7	274	119	377	83	118	149
29	160		52	22	14	8.0	237	133	338	83	119	147
30	153		53	29	12	4.1	229	139	314	81	121	143
31	148		50		11		181	126		81		144
Total	5336	2188	1705	1132	678	432.8	3700.1	29472	8795	3683	3113	4195
Ac-ft	10584	4340	3382	2245	1345	858	7339	58458	17445	7305	6175	8321

Total for year: 127,797 acre-feet

Drainage area.—11,470 square miles

1999

SAN CARLOS RIVER NEAR PERIDOT, ARIZONA

Mean daily discharge, cubic feet per second

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	19	13	15	9	7.5	5.7	1.2	22	41	7.1	5.9	9.8
2	19	14	15	17	7.9	5.5	0.9	17	16	7.4	5.8	9.7
3	19	13	15	21	8.2	5.3	1.3	14	22	8.3	6.2	9.3
4	19	13	15	18	8.0	5.1	1.9	11	23	8.3	5.7	9.3
5	19	13	15	17	7.6	5.0	2.5	13	18	8.4	6.2	9.1
6	18	13	15	15	7.4	5.0	3.4	29	14	8.6	6.3	9.1
7	18	13	14	13	7.7	4.8	6.8	14	12	8.1	6.7	9.6
8	18	12	15	12	7.7	4.7	8.5	11	11.0	7.8	6.9	9.6
9	17	12	15	12	7.1	4.2	11	9.3	9.6	7.3	6.6	9.3
10	16	12	15	11	6.7	3.8	14	8.4	9.3	7.3	7.1	9.5
11	16	12	14	13	6.9	3.6	19	8.2	8.9	7.0	7.3	9.6
12	15	12	14	12	7.0	3.3	19	7.4	9.5	6.8	7.3	9.4
13	15	13	14	11	6.8	3.0	27	6.5	9.0	6.2	7.3	9.5
14	14	12	14	11	6.6	3.6	41	6.3	9.3	6.2	7.4	9.2
15	14	13	14	10	6.5	3.1	161	6.1	10	6.3	7.6	8.7
16	14	13	14	10	6.7	2.8	55	5.5	20	6.0	7.7	8.7
17	14	14	14	9.6	6.7	2.7	51	5.2	50	5.8	8	8.6
18	13	14	15	9.1	6.6	3.5	42	4.9	15	6.0	8.2	8.8
19	13	15	15	9.1	6.3	4.4	36	4.8	15	4.8	8.2	9.2
20	13	15	14	8.7	6.3	4.3	38	6.4	15	5.4	8.5	8.9
21	12	16	14	8.7	6.2	4.0	40	6.8	14	5.5	8.8	8.7
22	12	16	13	8.5	5.9	3.8	43	6.6	13	5.5	9	8.9
23	12	16	13	8.2	5.5	3.2	40	5.7	11	5.7	9.2	8.7
24	12	16	13	8.2	5.3	2.7	138	4.9	11	5.7	9.3	8.5
25	12	17	12	8.6	5.1	2.3	117	4.0	12	5.9	8.9	8.8
26	12	17	12	8.7	5.1	1.9	198	3.6	12	5.7	8.8	8.6
27	12	16	13	8.6	5.1	1.6	90	3.0	11	5.9	9.1	9
28	12	15	12	8.2	5.8	1.3	1100	13	10	6.1	9.3	8.6
29	11		12	7.7	7.2	1.2	58	155	9.0	6.3	9.3	9.4
30	10		12	7.3	7.0	0.9	51	20	8.9	6.1	9.6	9.8
31	10		11		6.5		44	67		6.0		9.8
Total	450	390	428	331.2	206.9	106.3	2459.5	499.6	449.5	203.5	232.2	283.7
Ac-ft	893	774	849	657	410	211	4878	991	892	404	461	563

Total for year: 11,983 acre-feet

Drainage area.--1,026 square miles

1999

GILA RIVER BELOW COOLIDGE DAM, ARIZONA

Mean daily discharge, cubic feet per second

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	67	82	230	243	230	1.6	0.3	206	222	104	1.3	1.1
2	67	115	244	169	220	2.0	0.3	93	203	104	1.3	1.2
3	68	134	253	80	220	2.3	0.3	18	158	104	1.3	154
4	68	134	330	60	220	2.4	0.3	116	192	104	1.3	248
5	39	134	378	24	220	2.6	0.3	199	174	144	1.3	249
6	25	134	377	2.5	220	2.4	0.3	306	135	159	1.3	250
7	25	149	378	2.7	220	2.2	0.3	397	128	140	1.3	250
8	25	151	378	3	220	1.7	0.3	400	128	140	1.3	232
9	25	148	398	42	220	1.3	0.3	404	98	144	1.3	223
10	25	148	404	90	235	1.1	0.3	429	98	130	1.3	223
11	24	148	400	97	243	0.9	0.3	448	91	122	1.3	223
12	55	149	400	128	246	0.8	0.3	449	84	122	1.3	224
13	71	150	400	150	248	0.6	0.3	450	78	120	1.1	225
14	85	151	399	149	248	0.4	1.1	451	76	115	1.1	224
15	95	153	399	148	265	0.4	0.3	453	76	109	1.1	225
16	95	154	397	148	275	0.4	0.3	453	76	109	1.1	227
17	96	155	388	148	275	0.4	0.3	453	108	109	1.1	211
18	96	156	380	148	325	0.4	0.3	453	128	109	1.1	203
19	96	158	380	168	346	0.4	0.3	432	128	109	1.1	204
20	96	188	372	189	345	0.3	0.3	376	128	109	1.1	205
21	96	204	368	194	344	0.3	0.3	325	129	109	1.1	161
22	97	197	366	213	347	0.3	0.3	312	128	41	1.1	122
23	87	211	381	249	349	0.3	38	311	129	4.2	1.1	120
24	81	225	391	260	348	0.3	142	311	130	3.7	1.1	117
25	81	224	389	262	346	0.3	152	311	130	3.7	1.1	117
26	81	226	388	263	346	0.3	152	304	111	3.6	1.1	118
27	81	227	346	264	356	0.3	176	222	102	2.9	1.1	118
28	81	228	325	265	198	0.3	206	176	102	2.8	1.1	118
29	81		296	265	54	0.3	167	257	102	2.8	1.1	118
30	82		273	257	33	0.3	216	230	104	2.8	1.1	42
31	82		254		14		205	222		2.8		1.7
Total	2173	4633	11062	4681.2	7776	27.6	1461.4	9967	3676	2585.3	35.4	5155
Ac-ft	4310	9190	21941	9285	15424	55	2899	19770	7291	5128	70	10225

Total for year: 105,588 acre-feet

Drainage area.—12,886 square miles

1999

NATURAL FLOW RELEASED AT COOLIDGE DAM

Mean daily discharge, cubic feet per second

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	67	82	72	48	41			140	152	104		
2	67	115	70	67	40			93	91	104		
3	68	125	69	70	39			18	112	104		131
4	68	112	70	60	37			116	124	104		128
5	39	109	70	24	34			199	106	144		141
6	25	105	70		34			306	97	159		145
7	25	103	70		37			397	98	140		146
8	25	99	72		37			400	98	131		143
9	25	93	73	42	35			404	86	124		138
10	25	90	71	51	31			429	90	118		141
11	24	87	71	52	30			448	80	110		142
12	55	84	70	53	34			449	79	106		143
13	71	84	70	49	34			450	77	105		148
14	85	83	69	51	31			451	74	102		148
15	95	84	69	48	33			453	76	98		145
16	95	84	67	46	29			453	76	95		142
17	96	84	67	47	30			453	108	96		142
18	96	84	72	46	29			453	128	100		144
19	96	82	68	46	27			406	128	100		145
20	96	81	70	41	23			343	128	98		145
21	96	78	69	41	22			309	129	98		143
22	97	81	68	42	22			297	128	41		122
23	87	79	69	41	22		38	266	129			120
24	81	75	70	40	20		142	218	130			117
25	81	75	69	42	20		152	214	130			117
26	81	74	66	44	20		152	193	111			118
27	81	72	67	41	20		176	142	102			118
28	81	72	65	38	19		206	132	102			118
29	81		64	30	21		167	257	102			118
30	82		65	36	19		216	159	104			42
31	82		61		14		205	193				
Total	2173	2476	2133	1236	884		1454	9241	3175	2381		3690
Ac-ft	4310	4911	4231	2452	1753		2884	18330	6298	4723		7319

Total for year: 57,211 acre-feet

1999

STORED WATER RELEASED AT COOLIDGE DAM

Mean daily discharge, cubic feet per second

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			158	195	189			66	70			
2			174	102	180				112			
3		9	184	10	181				46			23
4		22	260		183				68			120
5		25	308		186				68			108
6		29	307		186				38			105
7		46	308		183				30			104
8		52	306		183				30	9		89
9		55	325		185				12	20		85
10		58	333	39	204				8	12		82
11		61	329	45	213				11	12		81
12		65	330	75	212				5	16		81
13		66	330	101	214				1	15		77
14		68	330	98	217				2	13		76
15		69	330	100	232					11		80
16		70	330	102	246					14		85
17		71	321	101	245					13		69
18		72	308	102	296					9		59
19		76	312	122	319			26		9		59
20		107	302	148	322			33		11		60
21		126	299	153	322			16		11		18
22		116	298	171	325			15				
23		132	312	208	327			45				
24		150	321	220	328			93				
25		149	320	220	326			97				
26		152	322	219	326			111				
27		155	279	223	336			80				
28		156	260	227	179			44				
29			232	235	33							
30			208	221	14			71				
31			193					29				
Total		2157	8929	3437	6892			726	501	175		1461
Ac-ft		4278	17711	6817	13670			1440	994	347		2898

Total for year: 48,155 acre-feet

1999

GILA RIVER AT KELVIN, ARIZONA

Mean daily discharge, cubic feet per second

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	130	118	244	291	244	58	1.9	225	451	56	10	12
2	130	119	243	304	223	42	2.7	216	742	57	9.4	12
3	130	129	252	252	211	29	3.5	164	370	56	9.2	13
4	130	149	262	182	211	25	4.6	94	280	61	9.1	20
5	125	154	335	163	208	21	5.5	92	247	69	8.9	124
6	115	155	397	170	206	19	6.1	190	220	70	9.0	157
7	85	156	408	146	204	17	7.3	688	191	112	8.9	175
8	80	166	422	118	204	15	8.0	517	148	96	8.7	185
9	75	171	412	105	203	13	7.8	385	116	96	8.7	175
10	72	169	432	92	202	12	9.1	440	103	95	8.7	176
11	71	170	435	97	215	10	52	741	93	86	8.7	180
12	70	171	426	125	226	8.9	17	684	84	82	8.5	183
13	70	172	424	134	230	7.9	33	530	87	95	8.5	190
14	93	174	422	159	233	6.7	45	461	89	103	8.5	194
15	102	175	416	159	233	5.7	252	483	88	98	8.5	196
16	116	178	412	154	250	4.6	494	478	88	88	8.5	199
17	120	179	410	153	262	3.8	135	531	87	82	8.6	201
18	121	179	404	150	270	3.6	55	536	88	78	8.8	189
19	121	178	395	145	313	3.2	78	498	96	75	8.8	182
20	121	177	392	153	339	2.8	110	485	88	70	9.0	183
21	122	191	380	170	346	2.5	70	454	91	65	9.3	185
22	122	209	374	176	346	2.1	45	365	111	61	9.7	156
23	123	209	371	188	350	1.9	80	360	143	50	9.8	116
24	121	220	387	223	353	1.6	130	366	119	29	10	113
25	116	234	393	242	353	1.3	220	344	114	23	11	109
26	116	238	394	242	354	1.1	248	359	119	19	11	108
27	116	242	396	242	354	1.0	210	357	114	17	12	110
28	116	243	352	240	355	0.9	555	490	100	15	12	112
29	117		330	240	239	0.7	1020	598	91	14	12	114
30	117		301	241	128	0.7	582	585	57	12	12	118
31	118		277		84		246	517		11		108
Total	3381	5025	11498	5456	7949	322	4733.5	13233	4815	1941	285.8	4295
Ac-ft	6706	9967	22806	10822	15767	639	9389	26248	9551	3850	567	8519

Total for year: 124,831 acre-feet

Drainage area.—18,011 sq. mi. of which 5,125 sq. mi. is below Coolidge Dam

1999

OPERATION OF SAN CARLOS RESERVOIR

Quantities in acre-feet

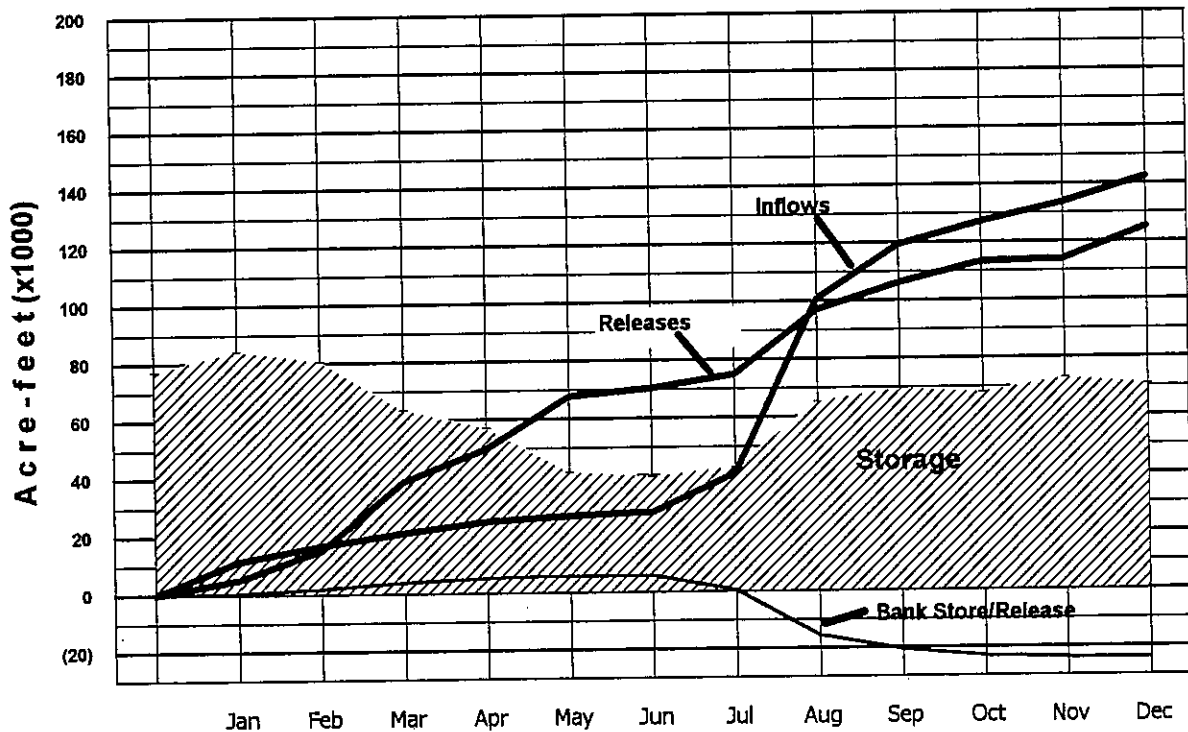
1999 Month	Storage			Inflow				Releases			Bank	
	Beginning Storage	Ending Storage	Gain or Loss	Calva	Peridot	Rain	Total	Gila River below Coolidge Dam	Evapor- ation	Total	Storage	Release
January	77340	84430	7090	10584	893	56	11533	4310	688	4998		-555
February	84430	80700	-3730	4340	774	46	5160	9190	1007	10197		-1307
March	80700	63480	-17220	3382	849	88	4319	21941	1588	23529		-1990
April	63480	57090	-6390	2245	657	687	3589	9285	1831	11116		-1137
May	57090	41650	-15440	1345	410		1755	15424	2422	17846		-651
June	41650	39910	-1740	858	211		1069	55	2533	2588	221	
July	39910	43190	3280	7339	4878	952	13169	2899	1828	4727	5162	
August	43190	65380	22190	58458	991	625	60074	19770	2194	21964	15920	
September	65380	69770	4390	17445	892	321	18658	7291	2052	9343	4925	
October	69770	68230	-1540	7305	404		7709	5128	1710	6838	2411	
November	68230	73050	4820	6175	461		6636	70	1012	1082	734	
December	73050	70760	-2290	8321	563		8884	10225	738	10963	211	
Totals			-6580	127797	11983	2775	142555	105588	19603	125191	29584	-5640

1999

MASS DIAGRAM OF OPERATION OF SAN CARLOS RESERVOIR

In Acre-feet

Month	Storage		Inflow		Releases		Accumulated Bank		Monthly Bank Result
	Contents End of Month	Contents Gain or Loss	Including Rain	Including Evaporation	Storage	Release	Net Result		
Begin	77,340								
JAN	84,430	7090	11,533	4,998		555	555	-555	
FEB	80,700	-3730	16,693	15,195		1862	1862	-1307	
MAR	63,480	-17220	21,012	38,724		3852	3852	-1990	
APR	57,090	-6390	24,601	49,840		4989	4989	-1137	
MAY	41,850	-15440	26,356	67,686		5640	5640	-651	
JUN	39,910	-1740	27,425	70,274	-221		5419	221	
JUL	43,190	3280	40,594	75,001	-5162		257	5162	
AUG	65,380	22190	100,668	96,965	-16141		-15663	15920	
SEP	69,770	4390	119,326	106,308	-10087		-20588	4925	
OCT	68,230	-1540	127,035	113,146	-18552		-22999	2411	
NOV	73,050	4820	133,671	114,228	-10821		-23733	734	
DEC	70,760	-2290	142,555	125,191	-18763		-23944	211	
Graph:	STORAGE		INFLOW	RELEASES	BANK STOR/REL				



1999

WATER SURFACE ELEVATIONS, SAN CARLOS RESERVOIR

Elevation in feet

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2429.93	2431.65	2430.63	2426.22	2424.30	2419.69	2419.07	2420.19	2426.73	2427.96	2427.55	2428.86
2	2429.98	2431.68	2430.57	2426.28	2424.21	2419.65	2419.07	2420.18	2426.68	2427.99	2427.57	2428.94
3	2430.06	2431.68	2430.46	2426.30	2424.05	2419.64	2419.07	2420.16	2426.67	2428.00	2427.60	2428.89
4	2430.11	2431.65	2430.31	2426.32	2423.94	2419.59	2419.05	2420.18	2426.63	2428.02	2427.63	2428.83
5	2430.21	2431.70	2430.18	2426.34	2423.84	2419.57	2419.04	2420.24	2426.56	2428.02	2427.69	2428.72
6	2430.31	2431.69	2430.06	2426.40	2423.75	2419.57	2419.00	2420.59	2426.51	2427.99	2427.76	2428.69
7	2430.40	2431.68	2429.88	2426.37	2423.64	2419.55	2419.04	2421.47	2426.48	2427.95	2427.82	2428.61
8	2430.53	2431.65	2429.81	2426.43	2423.48	2419.51	2419.02	2423.51	2426.42	2427.93	2427.86	2428.53
9	2430.59	2431.64	2429.66	2426.40	2423.36	2419.49	2419.02	2424.74	2426.34	2427.87	2427.90	2428.49
10	2430.72	2431.58	2429.50	2426.42	2423.21	2419.48	2419.02	2425.41	2426.31	2427.82	2427.94	2428.44
11	2430.84	2431.54	2429.30	2426.38	2423.07	2419.46	2419.03	2425.85	2426.26	2427.77	2427.99	2428.40
12	2430.89	2431.48	2429.16	2426.27	2422.96	2419.45	2418.99	2426.21	2426.25	2427.73	2428.05	2428.33
13	2430.92	2431.45	2429.00	2426.25	2422.71	2419.44	2418.95	2426.75	2426.19	2427.68	2428.08	2428.27
14	2430.95	2431.44	2428.82	2426.20	2422.62	2419.43	2419.15	2427.06	2426.13	2427.64	2428.13	2428.23
15	2430.97	2431.39	2428.65	2426.15	2422.42	2419.41	2419.19	2427.22	2426.20	2427.59	2428.16	2428.19
16	2431.00	2431.35	2428.49	2426.10	2422.29	2419.40	2419.21	2427.31	2426.22	2427.53	2428.22	2428.14
17	2431.05	2431.32	2428.34	2426.01	2422.19	2419.38	2419.21	2427.31	2426.21	2427.48	2428.30	2428.09
18	2431.09	2431.33	2428.19	2425.97	2421.97	2419.38	2419.25	2427.30	2426.31	2427.43	2428.33	2428.05
19	2431.12	2431.27	2428.02	2425.85	2421.74	2419.36	2419.25	2427.26	2426.42	2427.53	2428.35	2428.01
20	2431.20	2431.26	2427.87	2425.74	2421.52	2419.34	2419.25	2427.26	2426.63	2427.55	2428.42	2427.98
21	2431.22	2431.22	2427.73	2425.66	2421.25	2419.31	2419.29	2427.24	2426.87	2427.35	2428.46	2427.97
22	2431.24	2431.13	2427.58	2425.53	2421.08	2419.31	2419.36	2427.22	2427.08	2427.27	2428.47	2427.97
23	2431.27	2431.03	2427.36	2425.38	2420.84	2419.28	2419.40	2427.16	2427.27	2427.32	2428.48	2427.96
24	2431.33	2430.94	2427.21	2425.27	2420.63	2419.27	2419.40	2427.06	2427.39	2427.38	2428.55	2427.98
25	2431.40	2430.90	2427.04	2425.16	2420.43	2419.24	2419.50	2426.99	2427.52	2427.40	2428.56	2427.97
26	2431.42	2430.84	2426.85	2425.04	2420.23	2419.22	2419.66	2426.91	2427.65	2427.43	2428.59	2428.00
27	2431.47	2430.77	2426.74	2424.93	2419.96	2419.20	2419.78	2426.84	2427.74	2427.47	2428.62	2428.01
28	2431.51	2430.73	2426.61	2424.79	2419.80	2419.17	2420.04	2426.84	2427.81	2427.49	2428.70	2428.02
29	2431.55		2426.50	2424.58	2419.77	2419.14	2420.19	2426.80	2427.87	2427.51	2428.73	2428.03
30	2431.58		2426.37	2424.43	2419.72	2419.12	2420.20	2426.72	2427.93	2427.51	2428.79	2428.08
31	2431.63		2426.23		2419.70		2420.20	2426.75		2427.52		2428.19

1999

WATER SURFACE AREAS, SAN CARLOS RESERVOIR

Area in acres

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3946	4222	4066	3627	3465	3046	2967	3103	3671	3776	3741	3853
2	3950	4227	4052	3629	3456	3042	2963	3102	3669	3778	3742	3859
3	3957	4229	4039	3632	3445	3040	2963	3101	3666	3780	3745	3861
4	3968	4227	4017	3634	3433	3036	2961	3101	3664	3781	3747	3855
5	3980	4229	3995	3636	3424	3030	2960	3104	3659	3782	3751	3848
6	3997	4232	3973	3639	3416	3029	2956	3123	3654	3781	3757	3842
7	4013	4230	3951	3641	3407	3028	2956	3175	3650	3778	3762	3837
8	4031	4227	3941	3642	3395	3024	2957	3302	3648	3775	3767	3830
9	4046	4224	3932	3644	3383	3020	2956	3445	3640	3772	3770	3825
10	4062	4218	3917	3643	3371	3019	2956	3527	3636	3768	3774	3821
11	4082	4209	3902	3642	3359	3016	2957	3575	3632	3763	3778	3817
12	4096	4201	3887	3636	3348	3014	2954	3609	3629	3759	3782	3812
13	4103	4194	3874	3629	3333	3013	2949	3648	3626	3755	3786	3806
14	4108	4191	3860	3627	3318	3012	2960	3686	3620	3751	3790	3802
15	4111	4186	3845	3622	3305	3009	2976	3706	3621	3748	3794	3799
16	4116	4178	3830	3618	3291	3007	2980	3717	3625	3742	3797	3795
17	4123	4173	3817	3612	3281	3005	2981	3721	3626	3738	3803	3791
18	4129	4172	3804	3606	3266	3003	2984	3721	3629	3733	3808	3786
19	4136	4167	3790	3599	3247	3002	2987	3717	3639	3735	3810	3783
20	4142	4162	3776	3589	3228	3000	2987	3716	3653	3741	3814	3780
21	4152	4157	3763	3581	3207	2997	2989	3716	3672	3733	3819	3778
22	4155	4147	3751	3572	3187	2994	2997	3714	3692	3721	3821	3778
23	4160	4131	3734	3560	3169	2993	3003	3710	3709	3720	3822	3778
24	4167	4116	3719	3549	3150	2990	3006	3703	3722	3724	3825	3778
25	4178	4104	3705	3539	3132	2988	3013	3696	3733	3727	3829	3778
26	4185	4096	3690	3529	3115	2984	3030	3690	3742	3730	3830	3779
27	4191	4087	3676	3519	3096	2981	3049	3683	3754	3733	3833	3781
28	4197	4077	3666	3508	3070	2979	3074	3680	3761	3735	3837	3782
29	4204		3655	3493	3058	2975	3097	3678	3767	3737	3843	3783
30	4211		3645	3478	3053	2971	3103	3673	3772	3738	3846	3785
31	4218		3633		3047		3103	3671		3739		3793

1999

AVAILABLE STORED WATER, SAN CARLOS RESERVOIR

Storage in acre-feet

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	77490	84520	80290	63440	56640	41620	39760	43160	65300	69880	68340	73320
2	77690	84640	80050	63660	56330	41500	39760	43130	65120	70000	68420	73630
3	78010	84640	79610	63730	55780	41470	39760	43080	65080	70040	68530	73820
4	78210	84520	79000	63810	55400	41320	39700	43130	64940	70110	68640	73200
5	78600	84730	78480	63880	55060	41260	39670	43320	64680	70110	68870	72780
6	79000	84690	78010	64100	54750	41260	39550	44410	64500	70000	69130	72660
7	79360	84640	77300	63990	54380	41200	39670	47200	64390	69850	69360	72360
8	79890	84520	77020	64210	53840	41070	39610	53940	64170	69770	69510	72050
9	80130	84480	76430	64100	53430	41010	39610	58170	63880	69540	69660	71900
10	80660	84220	75800	64170	52920	40980	39610	60540	63770	69360	69810	71710
11	81150	84050	75020	64020	52450	40920	39640	62110	63590	69170	70000	71560
12	81350	83800	74480	63620	52080	40890	39520	63410	63560	69020	70220	71290
13	81480	83680	73860	63550	51250	40860	39400	65380	63340	68830	70340	71060
14	81600	83630	73160	63370	50950	40830	40000	66520	63120	68680	70530	70910
15	81680	83420	72510	63190	50520	40770	40110	67110	63370	68490	70640	70760
16	81810	83260	71900	63010	49860	40740	40170	67450	63440	68270	70870	70570
17	82010	83130	71330	62680	49470	40680	40170	67820	63410	68080	71170	70380
18	82180	83170	70760	62540	48820	40680	40290	67780	63770	67900	71290	70220
19	82300	82920	70110	62110	48070	40620	40290	67260	64170	68270	71360	70070
20	82630	82880	69540	61710	47360	40560	40290	67260	64940	68340	71630	69920
21	82720	82720	69020	61430	46500	40560	40380	67190	65820	67600	71780	69920
22	82800	82340	68460	60960	45950	40470	40590	67110	66590	67300	71820	69920
23	82920	81930	67630	60430	45190	40470	40740	66890	67300	67480	71860	69960
24	83170	81560	67080	60040	44530	40380	40740	66520	67750	67710	72130	69960
25	83470	81400	66450	59650	43900	40260	41040	66260	68230	67780	72170	69920
26	83550	81150	65750	59230	43280	40200	41530	65970	68720	67900	72280	70040
27	83760	80860	65340	58840	42450	40140	41890	65710	69060	68040	72400	70070
28	83930	80700	64860	58350	41960	40060	42690	65710	69320	68120	72700	70110
29	84100		64460	57610	41860	39960	43160	65560	69540	68190	72520	70150
30	84220		63990	57090	41710	39910	43190	65270	69770	68190	73050	70340
31	84430		63480		41650		43190	65380		68230		70760

1999

DAILY EVAPORATION, SAN CARLOS RESERVOIR

Acre-feet

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	21	28	56	78	60	84	107	78	58	53	38	41
2	28	24	59	15	42	87	117	72	73	73	31	35
3	26	26	52	31	63	74	45	74	55	62	45	40
4	19	25	54	44	69	95	46	67	77	62	29	34
5	21	12	46	11	66	67	77	61	77	60	29	12
6	15	20	47	32	83	66	40	51	76	53	35	35
7	29	27	50	49	74	69	57	47	84	94	52	18
8	13	35	35	66	66	81	42	65	59	79	44	13
9	18	28	33	47	93	95	52	65	106	51	48	28
10	15	28	43	58	98	86	74	77	54	55	41	21
11	15	42	45	46	80	80	52	51	73	61	8	24
12	15	32	62	59	79	80	67	82	80	63	54	26
13	30	52	74	68	73	77	71	95	80	54	41	22
14	17	41	26	47	85	79	49	94	71	54	27	26
15	20	34	44	74	93	83	52	65	71	59	30	33
16	17	49	50	69	93	75	37	59	41	68	31	18
17	25	25	31	66	79	76	63	87	59	72	26	16
18	24	67	29	69	73	72	20	85	55	57	38	21
19	34	12	44	68	82	68	34	61	51	38	36	24
20	2	48	48	74	91	91	72	52	48	37	6	30
21	30	40	59	90	79	84	70	94	62	45	54	29
22	45	47	61	95	86	97	62	76	61	61	42	22
23	31	49	66	88	89	89	41	84	59	45	38	27
24	18	34	62	70	80	89	47	45	50	48	28	25
25	20	32	58	59	77	91	50	96	91	17	25	21
26	8	60	54	56	78	89	72	82	58	56	35	24
27	52	40	51	69	79	83	64	79	76	36	19	25
28	23	50	57	79	74	107	73	55	80	48	26	13
29	12		62	96	63	115	54	70	96	45	17	2
30	37		57	58	95	104	59	68	71	60	39	17
31	8		73		80		62	57		44		16
Total	688	1007	1588	1831	2422	2533	1828	2194	2052	1710	1012	738

Total for year: 19,603 acre-feet

1999

DAILY RAINFALL, SAN CARLOS RESERVOIR

Acre-feet

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2				538								
3				61					61			
4				6								
5		35		82			17					
6		11					27	36				
7							86					
8			82				7	36				
9												
10								50				
11							62					
12												
13												
14							10					
15							429		157			
16							62		54			
17			6					28	6			
18							5					
19												
20								28	21			
21								198				
22							7					
23							15		22			
24												
25								22				
26	56											
27							28					
28							197	117				
29								110				
30												
31												
Total	56	46	88	687			952	625	321			

Total for year: 2,775 acre-feet

1999

RAINFALL AT COOLIDGE DAM

Elevation approximately 2,550 feet

inches

1999 DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2				1.78								
3				0.20					0.20			
4				0.02								
5		0.10		0.27			0.07					
6		0.03					0.11	0.14				
7							0.35					
8			0.25				0.03	0.13				
9												
10								0.17				
11							0.25					
12												
13												
14							0.04					
15							1.73		0.52			
16							0.25		0.18			
17			0.02					0.09	0.02			
18							0.02					
19												
20								0.09	0.07			
21								0.64				
22							0.03					
23							0.06		0.07			
24												
25								0.07				
26	0.16											
27							0.11					
28							0.77	0.38				
29								0.36				
30												
31												
Total	0.16	0.13	0.27	2.27	0.00	0.00	3.82	2.07	1.06	0.00	0.00	0.00

Note: T-Trace

Total for year: 9.78 inches

1956 - 1999

MONTHLY RAINFALL AT COOLIDGE DAM

Inches

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1956	2.20	0.82		0.47		0.11	1.51	1.36		0.60		0.09	7.16
1957	3.90	0.60	1.16	0.30	0.74	0.42	1.65	1.64	0.07	4.28	1.01	0.66	16.43
1958		3.26	4.18	1.12	0.02	0.67	1.38	1.38	1.91	2.25	1.03	0.11	17.31
1959	0.42	1.25		0.19		0.31	2.98	3.20		3.76	0.67	3.42	16.20
1960	2.66	1.16	0.28	0.03	0.76		0.92	0.51	1.19	2.83	0.36	0.97	11.67
1961	1.21	0.08	0.83				1.14	2.79	0.81	1.07	1.13	3.04	12.10
1962	1.71	0.82	0.98			0.27	1.75	0.34	2.23	0.91	0.91	1.88	11.80
1963	1.87	3.02	0.70	0.48			0.27	4.27	0.56	0.77	1.09	0.19	13.22
1964	0.27		0.96	0.22			4.10	2.75	2.57	0.58	1.13	1.26	13.84
1965	2.34	2.18	1.12	1.13		0.53	1.35	1.67	0.71	0.15	3.25	8.53	22.96
1966	1.11	1.99	0.37	T		0.73	2.21	5.51	3.32	0.88	0.63	1.14	17.89
1967	0.43	0.21	1.31	0.51	0.66	0.14	4.68	1.74	1.01	0.81	1.05	6.44	18.99
1968	1.05	2.36	1.69	0.21	0.22	T	0.31	2.50	0.01	0.24	1.78	2.64	13.01
1969	1.66	0.68	0.81	0.06	0.93	T	0.65	2.41	1.45	0.58	2.49	0.84	12.56
1970	0.02	0.28	3.91	0.50	0.01	T	0.62	1.76	3.03	0.31	0.21	0.63	11.28
1971	0.29	0.88	0.17	0.32			1.85	3.05	1.15	4.24	0.68	2.41	15.04
1972	0.05				0.31	1.30	0.85	1.69	2.07	5.96	1.16	1.91	15.30
1973	0.44	2.54	3.71	0.03	1.42	0.62	1.73	0.24	0.03		0.93		11.69
1974	2.00	0.11	0.95	0.11			1.17	1.21	1.69	2.63	0.37	0.56	10.80
1975	0.70	1.42	2.48	1.24	T		2.65	0.72	2.68	0.06	1.44	0.91	14.30
1976	0.20	2.08	0.42	1.85	0.98		1.14	2.28	1.77	1.14	0.49	0.01	12.36
1977	1.79	0.08	1.22	0.14	0.13	0.11	1.94	1.80	0.83	2.89	0.31	0.75	11.99
1978	4.12	2.59	3.29	0.33	0.78	0.25	2.13	1.04	0.87	1.83	5.40	6.18	28.81
1979	4.59	1.76	2.15	0.61	0.96	1.50	0.57	1.88	0.13	0.29	0.39	1.16	15.99
1980	4.02	4.69	2.08	0.05	0.03		0.77	1.33	1.14	0.59	0.29	0.28	15.27
1981	1.39	0.96	3.09	0.33	0.33	0.02	2.50	0.37	0.45	0.27	1.56		11.27
1982	2.68	2.15	1.92	0.04	0.63		2.68	2.05	1.49		1.84	2.75	18.23
1983	2.36	1.93	4.68	0.36	0.04		0.69	4.26	3.46	5.42	1.97	2.19	27.36
1984	0.69			0.80		0.10	2.56	1.29	0.98	1.38	1.47	5.06	14.33
1985	2.52	1.39	1.22	0.94	T	0.03	0.49	2.65	2.90	0.66	2.97	0.26	16.03
1986	0.19	2.44	4.06	0.22	T	0.31	1.98	2.59	1.29	1.64	1.24	2.89	18.85
1987	1.55	2.21	1.03	0.21	0.30	T	0.69	1.93	1.48	0.56	1.45	1.96	13.37
1988	1.21	0.76		2.60		0.36	2.93	5.16	0.81	0.81	1.00	0.50	16.14
1989	2.36	0.20	1.03		0.10		2.15	3.14	0.05	1.60	T	0.55	11.18
1990	0.80	1.54	0.91	0.56	0.10	0.14	2.26	4.66	1.21	0.87	0.84	4.77	18.66
1991	1.28	1.00	5.03			0.15	0.36	0.98	2.10	0.45	1.45	2.76	15.56
1992	2.24	3.26	2.69	0.27	2.67	0.30	1.64	4.06	1.45	0.98	0.10	6.17	25.83
1993	10.57	3.90	1.50		2.11		0.52	2.51	0.75	1.49	1.74	0.85	25.94
1994	0.12	3.17	1.79	0.48	0.74	0.03	0.63	1.82	2.55	1.55	2.39	2.10	17.37
1995	4.22	1.88	1.94	0.69	0.49			2.52	1.25		0.88	0.74	14.61
1996	0.04	2.82	0.78	0.16		0.74	2.35	1.37	2.98	0.31	1.02		12.57
1997	3.21	2.38	0.35	0.25	0.39	0.12	0.42	1.56	1.54	1.25	1.24	3.25	15.96
1998	0.71	4.73	2.05	0.46		0.13	1.62	2.75	0.31	1.66	1.48	0.63	16.53
1999	0.16	0.13	0.27	2.27	0.00	0.00	3.82	2.07	1.06	0.00	0.00	0.00	9.78

Note: T-Trace

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