

UNITED STATES
DEPARTMENT OF THE INTERIOR
James G. Watt, Secretary

BUREAU OF RECLAMATION
Robert N. Broadbent, Commissioner

LOWER COLORADO REGION
N. W. Plummer, Regional Director

COMPILATION OF RECORDS IN
ACCORDANCE WITH ARTICLE V OF THE
DECREE OF THE SUPREME COURT OF
THE UNITED STATES IN
ARIZONA v. CALIFORNIA DATED MARCH 9, 1964
CALENDAR YEAR 1980

Division of Water and Land Operations
Boulder City, Nevada

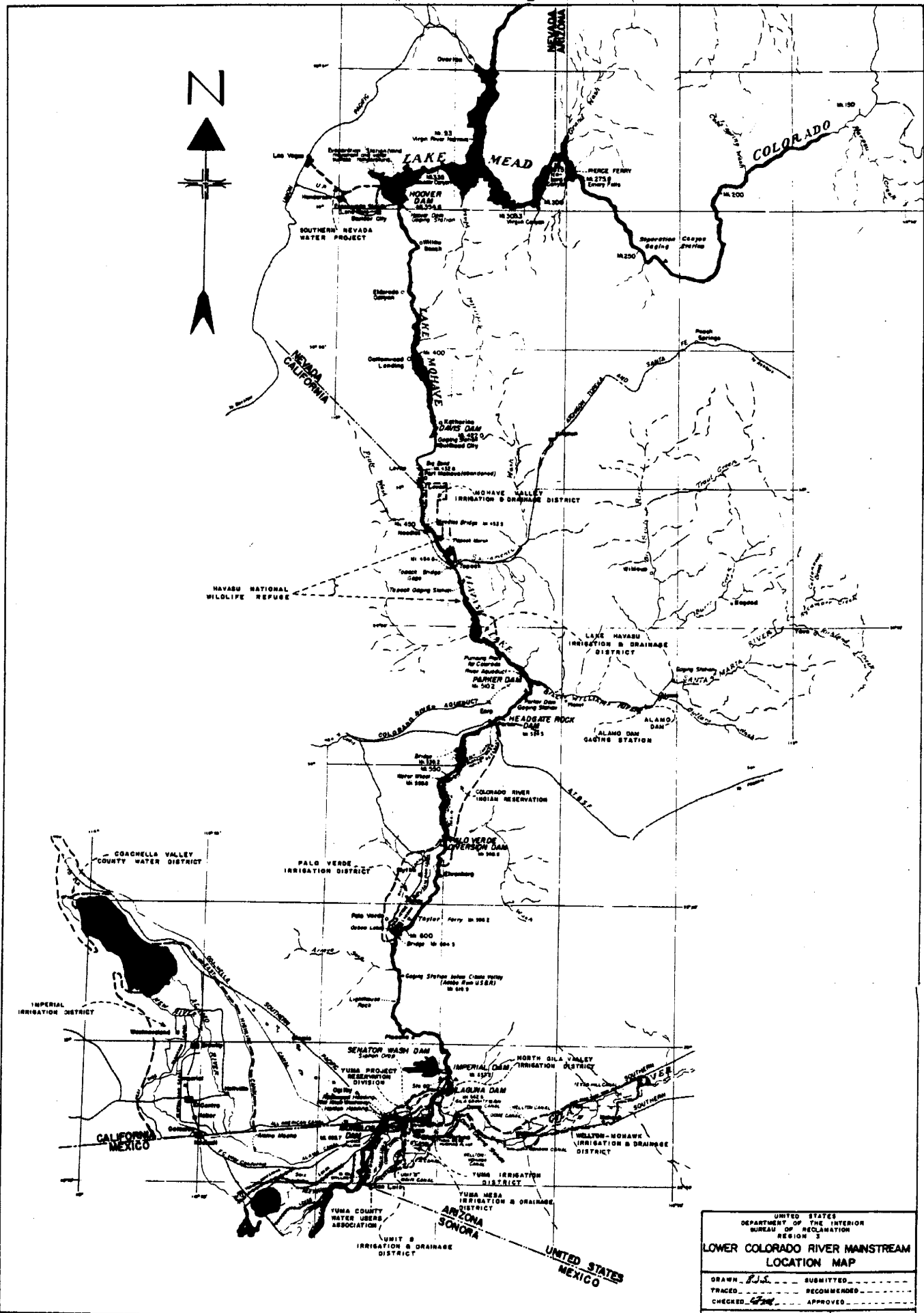
December 10, 1981

RECORDS OF RELEASES OF WATER THROUGH
REGULATORY STRUCTURES IN ACCORDANCE WITH
ARTICLE V(A) OF THE DECREE OF
THE SUPREME COURT OF THE UNITED STATES
IN ARIZONA v. CALIFORNIA DATED MARCH 9, 1964

CALENDAR YEAR 1980

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UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF RECLAMATION
 REGION 3
**LOWER COLORADO RIVER MAINSTREAM
 LOCATION MAP**
 DRAWN *R.J.S.* SUBMITTED _____
 TRACED _____ RECOMMENDED _____
 CHECKED *[Signature]* APPROVED _____
 BOULDER CITY, NEV. 9-20-71 423-300-937

The following tabulations for calendar year 1980 show final records of releases of water through regulatory structures controlled by the United States. At Hoover, Davis, Parker, Palo Verde, Imperial, and Laguna Dams, the records are furnished by the Geological Survey based on measurements at or below the structures.

The record of riverflow through Headgate Rock Dam was computed using the record of flow at the gaging station "Colorado River below Parker Dam, Arizona-California," and deducting from it the record of flow at the gaging station "Diversion for Colorado River Indian Reservation near Parker, Arizona." The diversions are made at Headgate Rock Dam.

RELEASE OF WATER THROUGH REGULATORY STRUCTURES
CONTROLLED BY THE UNITED STATES

(A)

CALENDAR YEAR 1960

(ACRE - FEET)

WATER USER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS
Hoover Dam	471,500	267,800	929,600	1,129,000	1,260,000	1,057,000	1,190,000	1,194,000	879,000	986,900	836,800	885,200	11,090,000
Davis Dam	360,000	346,000	982,000	1,246,000	1,022,000	1,239,000	1,220,000	1,233,000	997,700	930,700	847,900	799,000	11,250,000
Parker Dam	304,100	386,500	1,056,000	1,121,000	964,000	1,145,000	1,247,000	1,164,000	981,600	879,300	760,100	714,700	10,720,000
Headgate Rock Dam ^{1/}	300,700	369,900	1,010,000	1,051,000	911,800	1,071,000	1,155,000	1,078,000	911,900	840,900	739,200	688,900	10,130,000
Palo Verde Dam ^{2/}	274,900	310,700	855,100	906,300	769,000	901,200	972,500	913,000	798,800	752,700	678,000	624,300	8,756,000
Imperial Dam ^{3/}	23,460	24,200	62,950	101,800	82,930	97,380	130,000	92,240	82,780	80,530	102,200	143,300	1,024,000
Laguna Dam	24,320	26,310	61,500	99,730	83,180	96,020	126,800	96,760	83,900	82,060	108,400	143,400	1,032,000

^{1/} Colorado River below Parker Dam less diversions at Headgate Rock Dam.

^{2/} Measured through gates at Palo Verde Dam.

^{3/} Includes diversion to Mittry Lake.

RECORDS OF DIVERSIONS, RETURN FLOWS, AND CONSUMPTIVE USE
IN ACCORDANCE WITH ARTICLE V(B) OF THE DECREE OF
THE SUPREME COURT OF THE UNITED STATES IN
ARIZONA v. CALIFORNIA
DATED MARCH 9, 1964

CALENDAR YEAR 1980

The following tabulations for calendar year 1980 show final records of diversions of water from the mainstream of the Colorado River, return flow of such water to the mainstream and consumptive use of such water by water user agencies which have contracts with the United States. The records were furnished by the Geological Survey, International Boundary and Water Commission, Bureau of Indian Affairs, Bureau of Reclamation, National Park Service, Fish and Wildlife Service, and water user agencies. Diversions to All-American Canal and Gila Gravity Main Canal at Imperial Dam were assigned to each user based on deliveries to each user at its turnout from the canal and a prorated amount of the conveyance loss from the canal. The loss proration was based on the quantity delivered to each user and the length of the canal through which it was carried.

The tables also show estimates of water use by water users other than those which have contracts with the United States. Records of quantities of water pumped by permittees under the Lower Colorado River Land Use Program and by others are incomplete or not available. Consequently, estimates of pumpage from the mainstream, from both the river and the underground, are shown for each State. Pumping from the underground was considered from only those wells located in the flood plain of the Colorado River between the toes of the slopes on either side of the valley. Supplemental sheets are

enclosed which show the estimates of water pumped by each diverter between Davis Dam and the International Boundary.

The estimate of diversion by pumping during 1980 was made by two basic methods: (1) For most electric pumps, diversion was computed on a monthly basis from power records and a "kWh per acre-foot factor" that was determined by discharge measurement; (2) For pumps other than electric, a factor of 6 acre-feet per irrigated acre per year was used. Irrigated acres were determined by field inventory during the year made with the aid of aerial photographs and orthophotomaps which were taken during May - August 1976.

There are undetermined amounts of unmeasured return flow reaching the Colorado River by means of underground flow from aquifers underlying water user areas. A Task Force on Ground-Water Return Flows to the Lower Colorado River, consisting of State and Federal members, was organized during 1970 to provide advice and guidance to the Bureau of Reclamation and the Geological Survey which are jointly conducting a program to determine the location and amounts of such unmeasured return flows. These studies to determine unmeasured return flows are continuing, and when quantities are determined such amounts are anticipated to be credited to the affected users and States in making the consumptive use computations.

(18)
 DIVERSIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
 AND CONSUMPTIVE USE OF SUCH WATER
 CALENDAR YEAR 1980
 STATE OF ARIZONA

(ACRE FEET) Sheet 1 of 4

WATER USER	1980												TOTALS	
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER		
Lake Mead National Recreation Area Diversion from Lake Mohave	6	6	9	17	21	27	33	40	28	22	12	9	230	1/
Devils Dam and Government Camp Diversion at Devils Dam	7	7	10	19	23	29	35	43	31	24	13	10	251	1/
Mohave Water Conservation District Pumped from wells	2	2	2	3	3	5	4	5	5	4	3	3	41	1/
Mohave Valley Irrigation and Drainage District pumped from wells and Inlet channel to Havasu National Wildlife Refuge	495	669	1,677	3,323	3,138	3,391	4,295	4,061	2,664	1,451	940	654	26,758	1/
Fort Mohave Indian Reservation Pumped from river and wells in flood plain	90	350	1,027	1,654	1,039	1,817	2,182	2,066	1,345	686	0	284	12,569	1/
Havasu National Wildlife Refuge Pumped from well Inlet-NW-NE-1/4, Sec. 33, T. 9 N., R. 22 W., G&SR	1 916 0 917	2 1,186 0 1,188	5 4,863 0 4,668	10 3,549 0 3,559	10 4,389 0 4,399	10 4,958 0 4,968	13 4,280 0 4,293	13 7,122 0 7,135	8 4,149 0 4,157	4 1,737 0 1,741	3 1,564 0 1,587	2 862 0 884	81 39,615 0 39,696	
Lake Havasu Irrigation and Drainage District pumped from wells	39	371	501	675	849	959	1,080	1,132	962	868	657	530	8,982	
Graham Water Utilities, Inc. Pumped from wells	6	6	7	8	10	11	14	14	12	10	9	7	114	1/
Holiday Harbor Utilities, Inc. Pumped from wells	1	1	1	2	3	2	4	4	4	3	1	1	27	1/

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DIVERSIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
AND CONSUMPTIVE USE OF SUCH WATER
CALENDAR YEAR 1980

STATE OF ARIZONA

(ACRE - FEET) Sheet 2 of 4

WATER USER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS
Town of Parker 1 well - Imperial , Sec. 7, T. 9 N., R. 19 W., G&SRM	45	40	48	68	99	123	154	148	106	98	64	52	1,045 ^{1/}
Colorado River Indian Reservation Diversion at Headgate Rock Dam Pumped from 2 wells in Parker SW Imperial , Sec. 2, T. 9 N., R. 21 W., G&SRM	3,392 9	16,584 9	45,839 9	69,883 9	52,140 9	74,034 9	91,876 10	85,893 10	69,686 9	36,420 9	20,886 9	25,756 9	594,389 110
1 well in Forton HW, Sec. 36, T. 8 N., R. 21 W., G&SRM 3 pumps SW Imperial , Sec. 14, T. 5 N., R. 22 W., G&SRM	1	1	2	2	2	2	2	2	2	2	2	1	21
3 pumps SW Imperial , Sec. 14, T. 5 N., R. 22 W., G&SRM	12	60	165	251	188	266	330	310	250	138	75	93	2,138
1 well Hatch Center SW Imperial , Sec. 14, T. 4 N., R. 22 W., G&SRM	62	304	841	1,282	956	1,358	1,685	1,575	1,278	705	382	472	10,900
Cibola National Wildlife Refuge Inlet Cibola Lake 3 pumps	15 12,382 -8,891	15 11,624 5,349	16 17,690 29,182	16 23,401 48,042	16 24,242 29,069	16 24,488 51,197	16 27,560 66,379	16 29,498 58,308	16 28,207 43,034	16 24,795 14,495	16 18,404 2,966	15 16,755 9,591	189 259,046 348,701
Outlet Cibola Lake	907	317	1,891	1,219	226	454	453	398	210	151	67	169	6,462 ^{1/}
Arizona Fish & Game Pump 1 Pump SW Imperial , Sec. 1, T. 2 S., R. 24 W., G&SRM	699	599	296	849	1,211	763	1,050	1,151	1,323	955	368	398	9,164 ^{1/}
Imperial National Wildlife Refuge 2 wells SW Imperial , Sec. 13, T. 5 S., R. 22 W., G&SRM	0	0	0	97	0	0	0	0	95	0	0	0	198
SW Imperial , Sec. 13, T. 5 S., R. 22 W., G&SRM	1,606	876	2,187	1,971	1,437	1,227	1,503	1,549	1,438	1,106	455	567	15,912
Yuma Proving Ground Diversion at Imperial Dam	143	115	61	174	249	156	216	236	272	196	80	82	1,980 ^{1/}
	0	0	2	3	0	0	5	0	3	0	0	1	14 ^{1/}
													337 ^{1/}

(VI)
 DIVERSIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
 AND CONSUMPTIVE USE OF SUCH WATER
 CALENDAR YEAR 1980
 STATE OF ARIZONA

ACRE FEET Sheet 3 of 4

WATER USER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS
North Gila Valley Irrigation District													
Diversion at Imperial Dam	2,087	2,717	3,043	4,242	3,116	3,585	4,924	4,523	4,213	4,359	4,051	2,195	43,055
Return	510	429	419	638	665	648	953	975	927	1,146	1,135	947	9,392
Consumptive Use	1,577	2,288	2,624	3,604	2,451	2,937	3,971	3,548	3,286	3,213	2,916	1,248	33,663
Warren Act Contractors													
Diversion at Imperial Dam	21	22	261	41	43	46	23	34	145	177	0	0	813
Return													
Consumptive Use													
Wellton-Mohawk Irrigation and Drainage District													
Diversion at Imperial Dam	9,933	22,843	27,510	31,922	28,775	35,300	47,054	45,119	34,588	21,397	19,207	17,516	341,166
Return	17,643	15,092	15,947	16,362	16,967	16,382	14,785	16,328	14,989	16,638	15,249	16,616	192,695
Consumptive Use	-7,710	7,751	11,563	15,560	11,768	19,295	32,269	28,737	19,599	4,759	3,958	902	148,471
Yuma Irrigation District													
Diversion at Imperial Dam	3,319	4,036	5,101	6,431	5,503	5,896	8,373	7,747	5,629	3,678	3,781	3,045	62,739
Return	677	653	765	1,179	1,146	1,432	2,298	1,604	1,761	867	744	726	13,854
Consumptive Use													
Yuma Mesa Irrigation and Drainage District													
Diversion at Imperial Dam	9,998	7,443	15,397	20,671	24,028	27,454	32,986	31,196	22,510	16,924	13,642	8,101	230,350
Return													
Consumptive Use													
Unit "B" Irrigation and Drainage District													
Diversion at Imperial Dam	1,621	1,084	2,418	3,168	3,282	3,893	4,837	4,664	3,622	3,060	1,961	1,912	35,522
Return													
Consumptive Use													
Returns from South Gila Valley													
City of Yuma	760	739	917	1,155	1,271	1,388	1,645	1,695	1,443	1,319	862	967	14,161
Diversion at Imperial	545	505	520	417	440	427	431	436	442	441	411	440	5,455
Consumptive Use	215	234	397	738	831	961	1,214	1,259	1,001	878	451	527	8,706
Yuma County Water Users Association													
Diversion at Imperial Dam	17,019	16,887	25,603	31,284	25,113	33,333	39,453	34,256	25,096	19,323	12,414	13,106	292,887
Return	739	592	657	591	714	562	706	657	778	800	606	608	8,010
Consumptive Use	6,869	6,346	8,052	8,558	9,051	9,172	9,290	9,858	8,862	8,796	8,662	7,877	101,392
Pumped from wells	10,889	11,133	18,208	23,317	16,776	24,723	30,869	25,055	17,012	11,328	4,358	5,837	199,505

(VIB)
 DIVERSIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
 AND CONSUMPTIVE USE OF SUCH WATER
 CALENDAR YEAR 1980
 STATE OF ARIZONA

WATER USER	(ACRE FEET) Sheet 1 of 4												
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS 1/
Wayne Burgees 2 pumps, 1 well SW _{1/4} SW _{1/4} Sec. 34, T. 4 N., R. 22 W., G&SRM	18	37	197	136	674	174	585	718	453	428	175	5	3,600 2/
Arkellian Farms 2 pumps SE _{1/4} SW _{1/4} Sec. 16, T. 1 N., R. 23 W., G&SRM													2,526
Sprawl (A. Towery) 1 pump SE _{1/4} SW _{1/4} Sec. 21, T. 1 N., R. 23 W., G&SRM													3,180
Cibola Valley Irrigation & Drainage Dist. 3 pumps SW _{1/4} SW _{1/4} Sec. 20, T. 1 N., R. 23 W., G&SRM	1,365	1,092	578	1,660	2,367	1,489	2,052	2,250	2,587	1,870	758	778	18,846 2/
Swan, Ron 2 pumps SW _{1/4} SW _{1/4} Sec. 2, T. 15 N., R. 24 W., G&SRM													240
Bishop, Louis 2 pumps NW _{1/4} SW _{1/4} Sec. 31, T. 1 S., R. 23 W., G&SRM													960
ELM Permittees Davis Dam to Imperial Dam													75
Subtotals - Davis Dam to Imperial Dam	1,383	1,129	775	1,796	3,041	1,663	2,637	2,968	3,040	2,298	933	783	22,446
Pratt, Loren 1 well SW _{1/4} SW _{1/4} Sec. 14, T. 7 S., R. 22 W., G&SRM	430	351	241	559	946	517	820	983	945	715	290	244	6,981
1 pump SE _{1/4} SW _{1/4} Sec. 14, T. 7 S., R. 22 W., G&SRM													228
													222

500

DIVERIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
AND CONSUMPTIVE USE OF SUCH WATER
CALENDAR YEAR 1980
STATE OF ARIZONA

V(8)

WATER USER	(ACRE - FEET) Sheet 2 of 4												TOTALS 1/
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	
Dulin, Arlin 1 well SW ¹ NE ⁴ SE ⁴ , Sec. 8, T. 8 S., R. 22 W., G&SRM	23	4	52	106	44	98	195	286	292	185	7	0	1,252 2/
Diversions													
Dulin, Arlin 1 well SE ¹ SW ¹ SW ⁴ , Sec. 7, T. 8 S., R. 22 W., G&SRM	0	0	0	212	15	137	218	263	282	65	0	0	1,192 2/
Diversions													
Sturges, Steve 9 wells Sec. 18, T. 8 S., R. 21 W., and Sec. 's 13 & 14, T. 8 S., R. 22 W., G&SRM	916	1,280	1,819	2,755	1,604	2,617	2,196	2,524	1,304	1,512	1,314	1,010	20,851 2/
Diversions													
Yovelman, R. 1 well NW ¹ SW ¹ SW ⁴ , Sec. 17, T. 8 S., R. 22 W., G&SRM													720
Diversions													
Auza, Pete 1 well SE ¹ NW ¹ SW ⁴ , Sec. 18, T. 8 S., R. 22 W., G&SRM	0	104	52	217	122	29	281	176	175	215	153	0	1,524 2/
Diversions													
1 pump SE ¹ SE ¹ NE ¹ , Sec. 24, T. 8 S., R. 23 W., G&SRM													1,590
Diversions													
1 well SE ¹ SE ¹ SE ⁴ , Sec. 18, T. 8 S., R. 22 W., G&SRM													1,590
Diversions													
Ott, Judd 1 well NW ¹ NE ¹ NW ⁴ , Sec. 30, T. 8 S., R. 22 W., G&SRM	21	27	17	42	38	62	112	106	120	56	1	19	621 2/
Diversions													
1 well SE ¹ SW ¹ SW ⁴ , Sec. 19, T. 8 S., R. 22 W., G&SRM	36	36	26	33	25	37	76	72	59	35	21	42	498 2/
Diversions													
Cameron Brothers 1 well SE ¹ NE ¹ SW ⁴ , Sec. 24, T. 8 S., R. 22 W., G&SRM	123	62	99	95	129	102	162	214	122	14	68	73	1,263 2/
Diversions													
Harp, R. 1 well SE ¹ NE ¹ NE ⁴ , Sec. 13, T. 8 S., R. 23 W., G&SRM													1,458
Diversions													

DIVERSIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
AND CONSUMPTIVE USE OF SUCH WATER
CALENDAR YEAR 1980
STATE OF ARIZONA

(VIB)

(ACRE - FEET) Sheet 3 of 4

WATER USER	(ACRE - FEET)												TOTALS 1/
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	
Vukasovich 1 well SE 1/4 SW 1/4, Sec. 24, T. 8 S., R. 22 W., G&SRM	0	0	0	2	0	0	22	11	11	0	1	1	48 2/
Diversion													
1 well SW 1/4 SE 1/4, Sec. 24, T. 8 S., R. 22 W., G&SRM	31	22	24	45	64	63	62	44	42	41	38	12	488 2/
Diversion													
Sunkist of Yuma 1 well NE 1/4 SE 1/4, Sec. 23, T. 8 S., R. 23 W., G&SRM	0	4	3	0	2	9	10	9	6	2	3	3	51 2/
Diversion													
Yucca Power Plant 1 well NE 1/4 SW 1/4, Sec. 36, T. 16 S., R. 21 E., SEM													843
Diversion													
Munnaley (G. Russell) 1 well NE 1/4 SW 1/4, Sec. 28, T. 16 S., R. 22 E., SEM	5	59	41	46	70	2	8	11	10	52	24	32	360 2/
Diversion													
Power, Bill 1 pump SW 1/4 NE 1/4, Sec. 30, T. 16 S., R. 22 E., SEM													1,980
Diversion													
Power, R.E. (P. Power) 1 pump SW 1/4 NE 1/4, Sec. 30, T. 16 S., R. 22 E., SEM													1,920
Diversion													
Hall, Ansil 1 pump NW 1/4 NW 1/4, Sec. 33, T. 16 S., R. 21 E., SEM													480
Diversion													
Arizona Subtotals Imperial Dam to Northerly International Arizona Totals	1,155 453	1,598 626	2,133 836	3,553 1,392	2,113 828	3,156 1,237	3,342 1,310	3,716 1,456	2,383 934	2,177 853	1,630 639	1,192 467	28,146 11,931
Diversion 2/ Diversion 1/													
Diversion	3,421	3,704	3,985	7,300	6,928	6,573	8,109	9,063	7,302	6,043	3,492	2,686	68,606

DIVERSIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
AND CONSUMPTIVE USE OF SUCH WATER
CALENDAR YEAR 1980
STATE OF CALIFORNIA

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(ACRE - FEET) Sheet 2 of 2

WATER USER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS
Returns from Yuma Project Reservation Division Returns	1,659	1,580	2,697	1,724	2,300	2,748	3,043	2,754	2,238	2,584	2,530	2,466	28,323
Imperial Irrigation District Diversion at Imperial Dam	122,274	84,770	269,671	348,545	270,006	269,965	319,777	339,150	293,787	228,967	154,119	144,748	2,845,779 ^{1/}
Coachella Valley Water District Diversion at Imperial Dam	24,426	21,501	32,164	51,568	51,386	59,837	68,728	69,803	55,340	46,777	23,712	21,072	531,791 ^{1/}
City of Winterhaven 1 well S&S&M, Sec. 27, T. 16, S., R. 22 E., SEM													128 ^{3/} ^{1/}
Other Users pumping from Colorado River and wells in flood plain Nevada-California state-line to International Boundary	161	945	1,982	2,726	1,723	2,703	3,380	4,967	3,284	1,848	452	276	24,447
California Totals	239,821 31,673 208,148	199,807 34,040 165,767	440,721 37,119 403,602	588,603 44,591 544,012	511,876 48,807 463,069	528,070 45,961 482,119	607,598 48,495 559,103	623,568 51,621 571,947	512,742 49,828 462,914	418,137 48,559 369,578	299,716 41,825 257,891	275,937 38,719 237,218	5,246,724 ^{5/} 521,228 4,725,496 ^{5/}

NOTE: The term "Consumptive Use" in this tabulation means measured diversions including underground pumping, less measured return flow and less current estimated unmeasured return flow to river.

^{1/} No surface returns.

^{2/} Returns unassigned include unknown quantities of drainage from the Indian Unit and the Bard Unit in the Reservation Division but exclude seepage from the All-American Canal.

^{3/} Monthly distribution not available.

^{4/} Details on California Supplemental Sheets 1-3.

^{5/} The total is 128 acre-feet greater than the sum of monthly totals because of nonavailable monthly distribution of diversion by City of Winterhaven.

^{6/} Calculated from monthly power records and power-discharge measurement where available, and where power-discharge measurements were not available calculated from average power-discharge rate.

^{7/} Estimate based on measured regulatory reservoirs seepage returns less an estimated amount of phreatophyte use.

^{8/} Total of items for which monthly distribution is not shown. Distributed according to monthly distribution of other users in immediate area.

DIVERSIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
AND CONSUMPTIVE USE OF SUCH WATER
CALENDAR YEAR 1980
STATE OF CALIFORNIA

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(ACRE - FEET) Sheet 1 of 3

WATER USER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS 1/
Soto Brothers 1 well SW ¹ NE ⁴ SE ⁴ , Sec. 36, T. 11 N., R. 21 E., SEM													840
Deason, Richard (Tri-State) 1 well NW ¹ NE ⁴ NE ⁴ , Sec. 31, T. 11 N., R. 22 E., SEM													1,200
1 well SE ¹ NE ⁴ SW ⁴ , Sec. 36, T. 11 N., R. 21 E., SEM													720
1 well SE ¹ NE ⁴ NE ⁴ , Sec. 31, T. 11 N., R. 21 E., SEM													960
R. L. Lyle 1 well SE ¹ NE ⁴ NE ⁴ , Sec. 16, T. 1 S., R. 24 E., SEM													108
BIM Permittees Subtotals - Davis Dam to Imperial Dam	25	148	310	427	270	423	529	778	514	290	71	43	3,828
Cole (R. Land) 1 well SW ¹ SE ⁴ SE ⁴ , Sec. 35, T. 15 S., R. 23 E., SEM													636
Berryman 1 well NW ¹ SW ⁴ NE ⁴ , Sec. 2, T. 16 S., R. 23 E., SEM	0	8	0	71	38	32	24	32	41	8	11	0	265 2/
Duke (P. Power) 1 pump NW ¹ SW ⁴ SW ⁴ , Sec. 14, T. 16 S., R. 23 E., SEM													1,992
H. Mitchell 1 well SE ¹ SE ⁴ NE ⁴ , Sec. 22, T. 16 S., R. 23 E., SEM	0	0	30	28	33	43	60	43	141	104	0	0	482 2/
Perez, F. (Slade) 1 well NE ¹ SE ⁴ SW ⁴ , Sec. 6, T. 8 S., R. 22 W., CASRM	0	6	288	2	26	208	193	292	124	26	2	0	1,167 2/
Barrett (R. Harp) 1 well SE ¹ SW ⁴ SW ⁴ , Sec. 6, T. 8 S., R. 22 W., CASRM													858
Spencer, M. 1 well SW ¹ NE ⁴ SW ⁴ , Sec. 9, T. 16 S., R. 23 E., SEM	0	0	130	0	0	69	120	128	64	0	0	0	511 2/

DIVERSIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
AND CONSUMPTIVE USE OF SUCH WATER
CALENDAR YEAR 1980
STATE OF CALIFORNIA

(VBI)

(ACRE FEET) Sheet 2 of 3

WATER USER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS 1/
Martin, M. (A. Dees)													
1 pump													
NE ^{1/4} SW ^{1/4} Sec. 1, T. 8 S., R. 23 W., G&SRM	0	164	0	0	0	68	0	128	64	0	0	0	511 2/
1 pump													
SE ^{1/4} NE ^{1/4} SW ^{1/4} Sec. 1, T. 8 S., R. 23 W., G&SRM	0	0	0	532	0	0	0	605	0	0	0	0	1,137 2/
Schaffer, F. (R. Harp)													
1 well													
SW ^{1/4} SE ^{1/4} NE ^{1/4} Sec. 2, T. 8 S., R. 23 W., G&SRM	0	116	80	2	148	225	133	0	0	0	7	5	716 2/
Coley, M.													
1 well													
SE ^{1/4} SE ^{1/4} SW ^{1/4} Sec. 18, T. 16 S., R. 23 E., SEM	0	0	1	0	55	21	65	72	89	38	0	0	341 2/
Taylor Brothers													
1 well													
NE ^{1/4} SE ^{1/4} SE ^{1/4} Sec. 2, T. 8 S., R. 23 W., G&SRM	0	0	121	21	63	65	184	211	232	3	1	0	901 2/
Wilson (R. Harp)													
1 well													
NE ^{1/4} NE ^{1/4} SW ^{1/4} Sec. 12, T. 8 S., R. 23 W., G&SRM	30	14	71	6	82	74	115	145	93	50	14	11	705 2/
Easterday, Anne													
1 well													
SW ^{1/4} SW ^{1/4} SE ^{1/4} Sec. 1, T. 8 S., R. 23 W., G&SRM	0	0	0	154	0	82	52	183	114	0	0	0	585 2/
Dees, John													
1 well													
SE ^{1/4} NE ^{1/4} SE ^{1/4} Sec. 1, T. 8 S., R. 23 W., G&SRM	41	143	97	110	182	238	269	300	395	232	23	72	2,102 2/
Evans, E. (R. Harp)													
1 well													
SE ^{1/4} NE ^{1/4} WE ^{1/4} Sec. 12, T. 8 S., R. 23 W., G&SRM	2	0	0	25	0	58	79	101	45	40	2	3	355 2/
Harp, P.													
1 well													
SW ^{1/4} NE ^{1/4} SE ^{1/4} Sec. 12, T. 8 S., R. 23 W., G&SRM													882
Easterday, Kenneth													
1 well													
NE ^{1/4} SE ^{1/4} SW ^{1/4} Sec. 12, T. 8 S., R. 23 W., G&SRM	34	7	89	191	94	194	250	328	119	85	99	56	1,546 2/
Smith, F. (P. Power)													
1 well													
NE ^{1/4} SW ^{1/4} SE ^{1/4} Sec. 11, T. 8 S., R. 23 W., G&SRM	0	170	77	464	191	382	428	572	444	227	114	5	3,074 2/

DIVERSIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
AND CONSUMPTIVE USE OF SUCH WATER
CALENDAR YEAR 1980
STATE OF CALIFORNIA

(VIB)

(ACRE- FEET) Sheet 3 of 3

WATER USER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS 1/
Musgrave (Barkley Co.)													
1 well													
NE 1/4 SW 1/4, Sec. 19, T. 16 S., R. 23 E., S8M	0	0	0	0	30	20	38	39	35	11	0	0	173 2/
Hutcherson (Slade)													
1 pump													
SE 1/4 SW 1/4, Sec. 27, T. 16 S., R. 22 E., S8M	0	0	40	0	16	15	43	36	12	0	0	0	162 2/
Slade, W.													
1 pump													
SW 1/4 SW 1/4, Sec. 29, T. 16 S., R. 22 E., S8M	0	0	20	26	0	0	71	43	26	0	0	0	186 2/
Hudson, C. A.													
1 pump													
NE 1/4 SW 1/4, Sec. 29, T. 16 S., R. 22 E., S8M	0	0	274	180	187	3	123	7	119	254	0	0	1,147 2/
Cloud													
1 well													
NW 1/4 NW 1/4, Sec. 29, T. 29 S., R. 22 G., S8M	0	0	0	0	0	0	0	136	68	127	0	0	331 2/
Subtotals - Imperial Dam to Boundary	107	628	1,318	1,812	1,145	1,797	2,247	3,302	2,183	1,228	300	184	16,251
	29	169	354	487	308	483	604	887	587	330	81	49	4,368
Total California	161	945	1,982	2,726	1,723	2,703	3,380	4,967	3,284	1,848	452	276	24,447

1/ Calculated by assuming an annual diversion of 6 acre-feet per irrigated acre unless otherwise noted.
 2/ Calculated from monthly power records and power-discharge measurements where available, and where power discharge measurements were not available calculated from average power-discharge rate.
 3/ Total of items which monthly distribution is shown.
 4/ Total of items for which monthly distribution is not shown. Distributed according to monthly distribution of other users in immediate area.

DIVERIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
AND CONSUMPTIVE USE OF SUCH WATER

CALENDAR YEAR 1980

STATE OF NEVADA

V(B)

(ACRE - FEET) Sheet 2 of 2

WATER USER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS
Ramelli, Helen Lot No. 3, Sec. 13, T. 32 S., R. 66 E., MDB&M													2 4/ 2/
Southern California Edison Company Diversion at Pumping Plant in Sec. 24, T. 32 S., R. 66 E., MDB&M	647	501	600	1,215	1,079	1,188	1,052	971	1,208	316	781	605	10,163 2/
Wiebke, Armin T. Lot No. 1, Sec. 33, T. 32 S., R. 66 E., MDB&M (except W. 500' and E. 650')													7 4/ 2/
Portenier, Warren E. W ¹ / ₂ , Lot No. 1, Sec. 33, T. 32 S., R. 66 E., MDB&M													42 4/ 2/
Welles, John C. 1 pump E ² / ₂ , Lot No. 2, Sec. 33, T. 32 S., R. 66 E., MDB&M													8 4/ 2/
Knight, John B. 1 pump W ² / ₂ , Lot No. 2, Sec. 33, T. 32 S., R. 66 E., MDB&M													5 4/ 2/
LAS VEGAS WASH RETURN FLOWS	3,940	3,111	4,151	3,559	3,472	3,310	3,491	3,597	3,590	3,671	3,522	3,528	42,942
Nevada Totals	7,990 4,302 3,688	7,107 3,449 3,658	7,037 4,507 2,530	11,307 3,919 7,388	13,204 3,860 9,344	14,370 3,685 10,685	15,565 3,873 11,692	15,890 3,974 11,916	13,952 3,954 9,998	12,795 4,034 8,761	10,826 3,881 6,945	9,976 3,908 6,068	140,083 5/ 47,346 92,737 5/

NOTE: The term "Consumptive Use" in this tabulation means measured diversion including underground pumping less measured return flow and less unmeasured return flow to the river.

1/ Delivered through the facilities of the Southern Nevada Water Project.

2/ No surface return.

3/ Delivered through the facilities of Basic Management, Inc.

4/ Reports annually.

5/ The monthly totals do not add to the annual total because of the nonavailability of monthly values footnoted 4/.

6/ Estimate based on the percentage of Colorado River water used in the Las Vegas Valley.

DIVERSIONS FROM MAINSTREAM — AVAILABLE RETURN FLOW
 AND CONSUMPTIVE USE OF SUCH WATER
 CALENDAR YEAR 1989
 STATE OF NEVADA

(18)

(ACRE - FEET)

REVISION
WATER USER

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS
LAS VEGAS WASH RETURN FLOW	3,741	3,394	3,769	2,708	2,079	2,799	2,670	3,040	3,246	3,381	3,125	3,408	37,360
Nevada Totals	5,865	5,643	6,385	9,520	11,479	13,264	15,629	14,715	14,711	13,746	10,664	8,845	130,532 5/
Diversion	4,131	3,739	4,152	3,045	2,462	3,156	3,028	3,395	3,591	3,729	3,488	3,783	41,699
Return	1,734	1,904	2,233	6,475	9,017	10,108	12,601	11,320	11,120	10,017	7,176	5,125	88,833 5/
Consumptive Use													

5/ The monthly totals do not add to the annual total because of the nonavailability of monthly values footnoted 4/.

6/ Estimate based on the percentage of Colorado River water used in the Las Vegas Valley.

RECORDS OF RELEASES OF MAINSTREAM WATER PURSUANT TO
ORDERS BUT NOT DIVERTED BY PARTY ORDERING SAME
AND QUANTITY OF SUCH WATER DELIVERED TO MEXICO IN
SATISFACTION OF MEXICAN TREATY OR DIVERTED BY OTHERS
IN ACCORDANCE WITH ARTICLE V(C) OF THE
DECREE OF THE SUPREME COURT OF
THE UNITED STATES IN
ARIZONA v. CALIFORNIA DATED MARCH 9, 1964

CALENDAR YEAR 1980

The following tabulations for calendar year 1980 show records of releases of mainstream water pursuant to orders therefore but not diverted by the party ordering the same, and the quantity of such water delivered to Mexico in satisfaction of the Mexican Treaty or diverted by others in satisfaction of decreed rights. Also shown are quantities of such rejected water delivered to Mexico in excess of Treaty requirements and quantities delivered to storage. The quantities delivered to storage were available to release for future use.

Water ordered but not diverted was analyzed daily for each diverter as the positive difference between the finally approved daily order and the mean daily delivery requested on the day the diversion was made. The monthly quantities shown on the tabulations are the sum of the daily positive quantities. Final approval of daily orders was given in advance of the delivery date by the amount of traveltime involved in conveying the water from the storage point to the diversion point on the mainstream. To the extent possible "water ordered but not diverted" was delivered to others in satisfaction of their rights. The quantities of such deliveries are shown on the tabulation.

Deliveries of water to Mexico in satisfaction of the Mexican Treaty were scheduled based on Mexico's daily orders. Releases from storage were scheduled in sufficient quantities which, when added to return

flows, would meet Mexico's daily orders. Deliveries of water to Mexico in satisfaction of the Treaty, therefore, were considered to have been made entirely from releases from storage and from return flows scheduled for that purpose and not from water ordered but not diverted by other Colorado River water users. Therefore, the tabulations show no "water ordered but not diverted" as being delivered to Mexico in satisfaction of the Treaty.

To date, no orders are received for diversions from the Colorado River in Nevada so no sheet is included in Nevada. The storage capacity of Lake Mead is so large in relation to the present daily diversions from the reservoir by Nevada that any "water ordered but not diverted" would be retained for future use and would have no significant effect on scheduling of daily operations of the reservoir.

RELEASES OF MAINSTREAM WATER PURSUANT TO ORDERS
BUT NOT DIVERTED BY PARTY ORDERING SAME
V(C)

AND
QUANTITY OF SUCH WATER DELIVERED TO MEXICO IN SATISFACTION OF MEXICAN TREATY OR DIVERTED BY OTHERS
CALENDAR YEAR 1980
STATE OF ARIZONA

(ACRE - FEET) Sheet 3 of 3

WATER USER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS
Arizona Totals	11,157	15,269	9,788	9,173	13,471	5,284	8,083	10,789	10,057	11,433	8,853	10,548	123,910
Ordered but not Diverted Delivered to Mexico in Satisfaction of Treaty	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivered by Others	1,442	2,463	2,278	1,972	4,579	1,790	3,272	3,273	2,811	2,532	1,930	3,362	31,704
Delivered to Storage ^{1/}	6,599	9,230	7,202	4,869	6,524	3,494	4,811	7,516	7,246	8,901	6,928	7,186	80,906
Delivered to Mexico in Excess of Treaty	2,716	3,576	308	2,332	2,368	0	0	0	0	0	0	0	11,300

^{1/} No ordered received.
^{2/} Available for future use.

RELEASES OF MAINSTREAM WATER PURSUANT TO ORDERS
BUT NOT DIVERTED BY PARTY ORDERING SAME
VIC

AND
QUANTITY OF SUCH WATER DELIVERED TO MEXICO IN SATISFACTION OF MEXICAN TREATY OR DIVERTED BY OTHERS
CALENDAR YEAR 1980
STATE OF CALIFORNIA

WATER USER	(ACRE - FEET) Sheet 2 of 2												
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS
Coachella Valley Water District Diversions at Imperial Dam	1,111	6,665	555	0	2,222	0	278	2,777	555	0	793	397	15,353
Ordered but not Diverted Delivered to Mexico in Satisfaction of Treaty	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted by Others	405	2,128	278	0	67	0	278	1,444	16	0	186	26	4,828
Delivered to Storage $\frac{1}{2}$	434	3,408	49	0	808	0	0	1,333	539	0	607	371	7,549
Delivered to Mexico in Excess of Treaty	272	1,129	228	0	1,347	0	0	0	0	0	0	0	2,976
California Totals	25,988	21,901	20,876	10,180	15,957	1,215	3,612	6,474	2,100	2,012	4,545	1,653	116,513
Ordered but not Diverted Delivered to Mexico in Satisfaction of Treaty	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted by Others	1,377	2,516	1,938	2,131	2,642	309	2,301	3,104	892	1,103	1,061	857	20,231
Delivered to Storage $\frac{1}{2}$	14,461	8,312	9,699	1,494	4,376	906	1,311	3,370	1,208	909	3,484	796	50,326
Delivered to Mexico in Excess of Treaty	10,150	11,073	9,239	6,555	8,939	0	0	0	0	0	0	0	45,956

$\frac{1}{2}$ Available for future use.

RECORDS OF DELIVERIES TO MEXICO OF WATER
IN SATISFACTION OF THE TREATY OF FEBRUARY 3, 1944,
AND WATER PASSING TO MEXICO IN EXCESS OF
TREATY REQUIREMENTS IN ACCORDANCE WITH
ARTICLE V(D) OF THE DECREE OF
THE SUPREME COURT OF THE UNITED STATES
IN ARIZONA v. CALIFORNIA DATED MARCH 9, 1964

CALENDAR YEAR 1980

DELIVERIES TO MEXICO IN SATISFACTION OF PART III OF 1944 TREATY
AND
WATER PASSING TO MEXICO IN EXCESS OF TREATY REQUIREMENTS

V(D)

CALENDAR YEAR 1980

(ACRE - FEET)

WATER USER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTALS
Deliveries to Mexico in Satisfaction of Treaty	55,370	108,473	204,931	225,067	116,652	163,798	218,337	248,457	93,507	62,259	60,309	142,840	1,700,000 ^{2/}
Passing to Mexico in Excess of Treaty requirements	244,001	181,712	471,526	483,091	583,427	519,242	463,880	449,160	574,277	675,850	586,411	417,251	5,649,828 ^{1/3/}

Deliveries to Mexico in Satisfaction of Treaty

Passing to Mexico in Excess of Treaty requirements

^{1/} Includes 194,630 acre-feet delivered pursuant to Minute 242.
^{2/} Includes 200,000 acre-feet scheduled under Paragraph (E), Article 15, of the 1944 Treaty with Mexico.
^{3/} Includes Painted Rock flood control releases and anticipatory flood control releases from Hoover Dam.

RECORDS OF DIVERSIONS OF WATER FROM THE
MAINSTREAM OF THE GILA AND SAN FRANCISCO RIVERS
AND THE CONSUMPTIVE USE OF SUCH WATER, FOR THE BENEFIT
OF THE GILA NATIONAL FOREST IN ACCORDANCE WITH
ARTICLE V(E) OF THE DECREE OF
THE SUPREME COURT OF THE UNITED STATES IN
ARIZONA v. CALIFORNIA DATED MARCH 9, 1964

CALENDAR YEAR 1980

DIVERSIONS OF WATER FROM MAINSTREAM OF GILA AND SAN FRANCISCO RIVERS
 AND
 CONSUMPTIVE USE OF SUCH WATER FOR BENEFIT OF THE GILA NATIONAL FOREST
 CALENDAR YEAR 1980
 V(E)

WATER USER	(ACRE - FEET)												TOTALS		
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER			
Gila River														0	0
San Francisco River														0	0
														0	0