

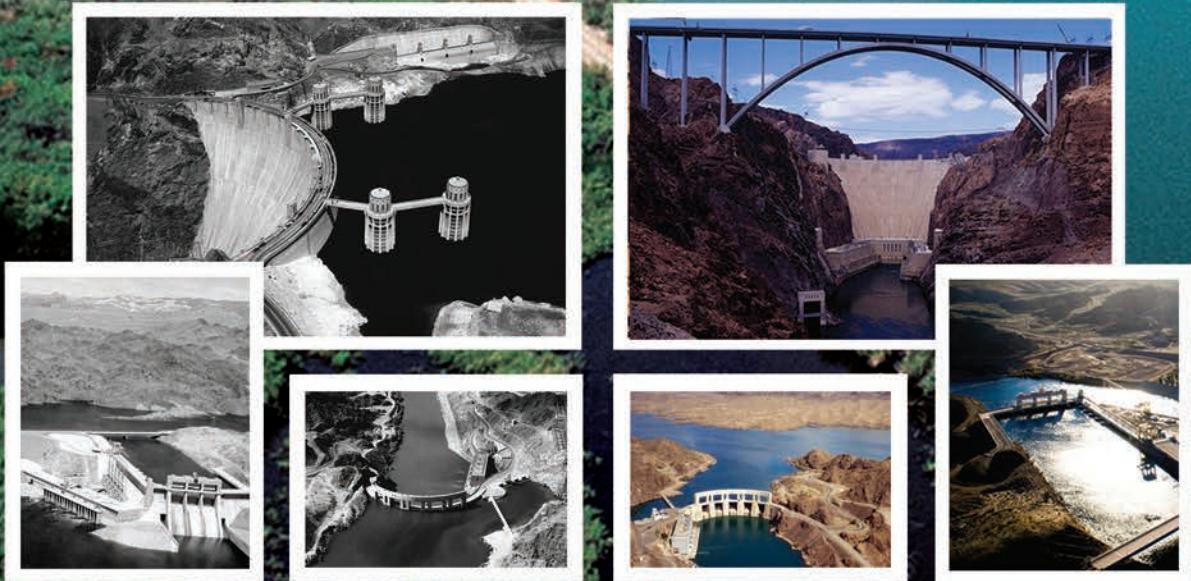


— BUREAU OF —
RECLAMATION

Calendar Year 2022

Colorado River Accounting and Water Use Report: Arizona, California, and Nevada

Interior Region 8: Lower Colorado Basin



Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Calendar Year 2022

Colorado River Accounting and

Water Use Report: Arizona,

California, and Nevada

Interior Region 8: Lower Colorado Basin



Boundary of Interior Region 8 Lower Colorado Basin



Southern Nevada
Water Authority

Nevada

Lake
Mead

Lake
Mohave

Lake
Havasu

Parker
Dam

Headgate
Rock Dam

Palo Verde
Diversion Dam

Palo Verde
Irrigation District

Colorado River
Indian Reservation

Imperial
Dam

Yuma
County
Water Users
Association

Wellton-Mohawk
I.D.D.

Morelos
Dam

All-American
Canal

El Centro

Brawley

Imperial
Irrigation
District

Yuma

Central Arizona Water
Conservation District

Gila River

Phoenix

Flagstaff

Verde River

8

10

17

93

40

15

95

101

5

1

10

25

50 Miles

Data on this and all following maps are being provided for information purposes only. Reclamation makes no warranty with respect to the accuracy of the data provided, and in no event will be liable for direct, indirect, consequential or incidental damages resulting from any inaccuracies in the data. The requestor should review and evaluate the data in order to determine its suitability of use for their activities.

U.S. Bureau of Reclamation
Boulder Canyon Operations Office
Water Accounting and Verification Group
April 2023 Source: USBR, ESRI

Major Water and
Irrigation Districts

Rivers

Major Canals and
Aqueducts

Major Roads

Urban Areas

Dams

United States - Mexico
Boundary



Table of Contents

Location Map.....	Frontispiece
Acronyms and Abbreviated Terms	1
Glossary.....	2
Table 1. Summary of Colorado River Accounting and Water Use Data.....	5
Table 2. Monthly Storage Contents of the Colorado River System Reservoirs	7
Compilation of Records in Accordance with Article V of the Consolidated Decree of the United States Supreme Court in <i>Arizona v California</i>, 547 U.S. 150 (2006).....	8
Article V(A): Records of Releases of Water Through Regulatory Structures Controlled by the United States.....	9
Table 3. Releases of Water Through Regulatory Structures Controlled by the United States..	10
Article V(B): Records of Diversions, Return Flows, and Consumptive Use.....	11
Table 4. State of Arizona	12
Table 5. State of California.....	21
Table 6. State of Nevada	25
Article V(C): Records for the Disposition of Water Ordered but not Diverted	27
Table 7. State of Arizona	28
Table 8. State of California.....	30
Article V(D): Records of Deliveries to Mexico in Satisfaction of Part III of the 1944 Treaty Requirements and Water Passing to Mexico in Excess of Treaty Requirements	31
Table 9. Deliveries to Mexico in Satisfaction of Treaty Requirements	32
Article V(E): Records of Diversions and Consumptive Use of Water from the Mainstream of the Gila and San Francisco Rivers for the Benefit of the Gila National Forest.....	34
Table 10. Diversions and Consumptive Use for the Benefit of the Gila National Forest.....	34
Information Provided in Addition to the Reporting Requirements of the Consolidated Decree	35
Summary of Water Availability and Use by State	36
Table 11. State Apportionments, Adjustments, and Total Consumptive Use	37
Interstate Water Banking Within the States of Arizona, California, and Nevada.....	39
Table 12. Colorado River Water Stored in one State Under 43 CFR Part 414 for the Benefit of Specific Entities in Another State.....	40
Inadvertent Overruns and Paybacks Within the States of Arizona, California, and Nevada.....	41
Table 13. State of Arizona.....	42

Table 14. State of California	43
Table 15. State of Nevada.....	44
Lower Colorado Water Supply Project.....	45
Table 16. Summary of Uses Offset by Pumpage from the Lower Colorado Water Supply Project.....	46
Transfers, Exchanges, and Water Made Available by Conservation	47
Table 17. State of Arizona.....	48
Table 18. State of California	49
Table 19. State of Nevada.....	51
Table 20. Bureau of Reclamation.....	52
Table 21. Exhibit B to the Colorado River Water Delivery Agreement.....	54
Intentionally Created Surplus.....	55
Table 22. Intentionally Created Surplus by State, Water User, and ICS Type.....	56
Drought Contingency/Binational Water Scarcity Contingency Plan Contributions.....	58
Table 23. U.S. Drought Contingency Plan Contribution by State, Water User, and DCP Contribution Type	59
Table 24. Mexico's Binational Water Scarcity Contingency Plan Contribution.....	60
Documents and Letters Significant to the Delivery of and Accounting for the Use of Colorado River Water in Calendar Year 2022.....	61
Maps Identifying the General Location of Lower Colorado River Water Users.....	68
Map Index	69
Map 1: Lake Mead Area Water Users	70
Map 2: Needles Area Water Users.....	71
Map 3: Blythe Area Water Users.....	72
Map 4: Cibola – Imperial Area Water Users	73
Map 5: Yuma Area Overview Water Users.....	74
Map 6: Yuma Area North Water Users.....	75
Map 7: Yuma Area South Water Users.....	76

Acronyms and Abbreviated Terms

AAC	All-American Canal	ICS	Intentionally Created Surplus
AACLP	All-American Canal Lining Project	IID	Imperial Irrigation District
ADP	Arizona diesel pump	IOPP	Inadvertent Overrun and Payback Policy
ADW	Arizona diesel well	ISG	Colorado River Interim Surplus
AEP	Arizona electric pump		Guidelines
AEW	Arizona electric well	IUS	Interstate Underground Storage credits
AF	acre-feet	LB DCP	Lower Basin Drought Contingency Plan
ALTSC	Accumulated Long-Term Storage Credit	LBOps	Lower Basin Drought Contingency Operations
AOP	Annual Operating Plan	LCR	Lower Colorado River
ASLD	Arizona State Land Department	LCWSP	Lower Colorado Water Supply Project
AWBA	Arizona Water Banking Authority	LHFO	Lake Havasu Field Office (BLM)
BLM	Bureau of Land Management	LLC	Limited Liability Company
BOY	beginning-of-year	LTSC	Long-Term Storage Credit
BWSCP	Binational Water Scarcity Contingency Plan	MSCP	Multi-Species Conservation Program
CAP	Central Arizona Project	MWD	The Metropolitan Water District of Southern California
CAWCD	Central Arizona Water Conservation District	MOD	Main Outlet Drain
CCLP	Coachella Canal Lining Project	MODE	Main Outlet Drain Extension
CDP	California diesel pump	MVIDD	Mohave Valley I.D.D.
CDW	California diesel well	M&I	Municipal and Industrial
CDEW	California diesel electric well	NWR	National Wildlife Refuge
CEP	California electric pump	NIB	Northerly International Boundary
CEW	California electric well	PSCP	Pilot System Conservation Program
CFR	Code of Federal Regulations	PPR	Present Perfected Right
CFS	cubic feet per second	PVER	Palo Verde Ecological Reserve
CRBC	Colorado River Board of California	PVID	Palo Verde Irrigation District
CRCN	Colorado River Commission of Nevada	QSA	Quantification Settlement Agreement
CRIT	Colorado River Indian Tribes	SARA	Settlement and Release Agreement
CRWDA	Colorado River Water Delivery Agreement	SIB	Southerly International Boundary
CU	consumptive use	SIRA	Storage and Interstate Release Agreement
CVWD	Coachella Valley Water District	SDCWA	San Diego County Water Authority
CY	calendar year	SLRSP	San Luis Rey Settlement Parties
DCP	Drought Contingency Plan	SNWA	Southern Nevada Water Authority
DPOC	Drainage Pump Outlet Channel	SCIA	System Conservation Implementation Agreement
ET	evapotranspiration	TCM	Thousand Cubic Meters
EOY	end-of-year	USGS	United States Geological Survey
FEIS	Final Environmental Impact Statement	YAO	Yuma Area Office (Reclamation)
FMYN	Fort McDowell Yavapai Nation	YDP	Yuma Desalting Plant
FYIR	Fort Yuma Indian Reservation	YFO	Yuma Field Office (BLM)
GGMC	Gila Gravity Main Canal	YID	Yuma Irrigation District
GRIC	Gila River Indian Community	YMIDD	Yuma Mesa Irrigation and Drainage District
ICUA	Intentionally Created Unused Apportionment	YPRD	Yuma Project Reservation Division
I.D.D.	Irrigation and Drainage District		
IBWC	International Boundary and Water Commission		

Glossary

Accumulated Long-Term Storage Credits (ALTSC): The cumulative amount of Long-Term Storage Credits in a storing entity's long-term storage account.

Bypass Drain: The 53-mile-long, concrete-lined drain, which extends from the end of the Main Outlet Drain Extension near Morelos Dam to the Ciénega de Santa Clara (Ciénega) in Mexico. The Bypass Drain, constructed to assist the United States in meeting its obligations under Minute 242 of the International Boundary and Water Commission, conveys pumped drainage from the Wellton-Mohawk Irrigation and Drainage District and the Yuma area to the Ciénega.

Colorado River Aquifer: The aquifer underlying the Colorado River mainstream consisting of permeable, partly saturated sediments and sedimentary rocks that are hydraulically connected to the Colorado River so that water can move between the Colorado River and the aquifer in response to withdrawal of water from the aquifer or differences in water-level elevations between the Colorado River and the aquifer.

Colorado River Basin: All of the drainage area of the Colorado River System and all other territory within the United States of America to which the waters of the Colorado River System shall be beneficially applied.

Colorado River System: That portion of the Colorado River and its tributaries within the United States.

Colorado River Water: Water in or withdrawn from the mainstream.

Consuming State: The Lower Division State in which Intentionally Created Unused Apportionment will be used.

Consumptive Use: Diversions from the mainstream of the Colorado River less such Return Flow thereto as is available for consumptive use in the United States or in satisfaction of the Mexican Treaty Obligation. Consumptive use from the mainstream within a Lower Division state includes water drawn from the mainstream by underground pumping.

Consolidated Decree: The Consolidated Decree of the United States Supreme Court in *Arizona v. California et al.* 547 U.S. 150 (2006).

Domestic Use: The use of water for household, stock, municipal, mining, milling, industrial, and other like purposes, but excluding the use of water for irrigation of crops or for the generation of electric power.

Drainage Pump Outlet Channel (DPOC): The DPOC drainage system consists of 24 wells which provide groundwater drainage for the agricultural lands of the South Gila Valley. When this drainage water is returned to the Colorado River by DPOC Nos. 1, 2, 3, and 4, it is part of the water delivered to Mexico above Morelos Dam in accordance with the 1944 Mexican Water Treaty.

Entitlement: An authorization to beneficially use Colorado River water pursuant to: (1) a right decreed by the Supreme Court, (2) a water delivery contract with the United States through the Secretary of the Interior, or (3) a Secretarial Reservation.

Intentionally Created Unused Apportionment (ICUA): Unused apportionment developed consistent with the laws of the Storing State which exists solely as a result of, and would not exist except for, implementing a Storage and Interstate Release Agreement.

Inadvertent Overrun: Colorado River water diverted, pumped or received by an entitlement holder within the Lower Division States that is in excess of the water user's entitlement or approved water order for that year.

Lee Ferry: The point in the mainstream of the Colorado River one mile below the mouth of the Paria River that divides the Upper and Lower Basins.

Live Storage: That part of the total reservoir capacity from which water can be withdrawn by gravity. This capacity is equal to the total capacity less the dead pool capacity and flood control space. Dead pool is the storage volume in a reservoir that cannot be drained by gravity through a dam's outlet works, spillway, or power plant intake structures and can only be pumped out.

Lower Basin: Those parts of the States of Arizona, California, Nevada, New Mexico, and Utah within and from which waters naturally drain into the Colorado River System below Lee Ferry, and also all parts of said States located without the drainage area of the Colorado River System which are now or shall hereafter be beneficially served by waters diverted from the System below Lee Ferry.

Lower Division States: The States of Arizona, California, and Nevada.

Long-Term Storage Credits (LTSC): Colorado River water that has been stored offstream pursuant to a Storage and Interstate Release Agreement and credited to a storer's long-term storage account for use in future years.

Main Outlet Drain (MOD): A channel that conveys pumped groundwater drainage from the Wellton-Mohawk Valley to the Gila River near the confluence with the Colorado River.

Main Outlet Drain Extension (MODE): A 12-mile-long channel extending from the Main Outlet Drain that conveys drainage from the Wellton-Mohawk Irrigation and Drainage District and Yuma area to points above or below Morelos Dam. Under certain conditions it includes discharge from the DPOCs and Yuma Mesa Conduit.

Mainstream: Mainstream means the main channel of the Colorado River downstream from Lee Ferry within the United States, including the reservoirs behind dams on the main channel, and Senator Wash Reservoir off the main channel.

Mexican Treaty Obligation: The United States' obligation under the Treaty Between the United States of America and Mexico, "Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande" (1944 Mexican Water Treaty), signed February 3, 1944, including supplements to and obligations associated with Minutes of the International Boundary and Water Commission adopted pursuant to the 1944 Mexican Water Treaty.

Offstream Storage: Storage in a surface reservoir off of the mainstream or in a groundwater aquifer. Offstream storage includes indirect recharge when Colorado River water is exchanged for groundwater that otherwise would have been pumped and consumed.

Pilot System Conservation Program: A pilot program for funding the creation of Colorado River system water through voluntary water conservation and reductions in use.

Protective and Regulatory Pumping Unit – 242 Well Field (Unit): A wellfield and delivery system located within a 5-mile-wide strip of land north of the United States/Mexico boundary in southwestern Arizona. The Unit currently consists of 21 wells which intercept part of the groundwater underflow moving southward into Mexico from the Yuma Mesa in the United States. The groundwater recovered by wells 2-14 of the Unit is collected in a conveyance system (the 242 Lateral) and is delivered to Mexico by the United States at the Southerly International Boundary as a portion of the Mexican Treaty Obligation. Beginning in 2021, the groundwater recovered by wells 15-22 of the Unit is collected in a conveyance system (the 242 Expansion Pipeline) and discharged to the Colorado River via the Yuma Mesa Conduit.

Regulatory Structures: Hoover Dam, Davis Dam, Parker Dam, Headgate Rock Dam, Palo Verde Diversion Dam, Imperial Dam, Laguna Dam, and all other dams and works on the mainstream controlled or operated by the United States regulating the flow of water in the mainstream or the diversion of water from the mainstream.

Return Flow: Mainstream water that has been diverted and which flows back to the Colorado River or the Colorado River Aquifer as measured or unmeasured flow and is available for use in the United States or in satisfaction of the Mexican Treaty Obligation.

Storage and Interstate Release Agreement (SIRA): An agreement consistent with 43 CFR Part 414 between the Secretary and authorized entities in two or more Lower Division States that addresses the details of: (1) Offstream storage of Colorado River water by a storing entity for future use within the Storing State; (2) Subsequent development of ICUA by the storing entity, consistent with the laws of the Storing State; (3) A request by the storing entity to the Secretary to release ICUA to the consuming entity; (4) Release of ICUA by the Secretary to the consuming entity; and (5) The inclusion of other entities that are determined by the Secretary and the storing entity and the consuming entity to be appropriate to the performance and enforcement of the agreement.

Storing State: A Lower Division State in which water is stored off the mainstream in accordance with a Storage and Interstate Release Agreement for future use in that State.

Unused Apportionment: Colorado River water within a Lower Division State's basic or surplus apportionment, or both, which is not otherwise put to beneficial consumptive use during that year within that State.

Upper Basin: Those parts of the States of Arizona, Colorado, New Mexico, Utah, and Wyoming within and from which waters naturally drain into the Colorado River System above Lee Ferry, and also all parts of said States located without the drainage area of the Colorado River System which are now or shall hereafter be beneficially served by waters diverted from the System above Lee Ferry.

Yuma Mesa Conduit: A 14.6 mile-long pipeline which collects water from multiple wellfields that are part of the overall groundwater recovery and river regulation program for the Yuma area. The groundwater recovered from these wellfields is collected into the conduit and may be discharged either to the Yuma Desalting Plant, the MODE, or the Colorado River via the Yuma Mesa Conduit Outlet, a discharge point approximately 6 miles upstream of Morelos Dam. With the 242 Expansion Pipeline becoming operational in 2021, discharges to the MODE are not anticipated to occur. Additionally, Yuma Mesa wells 6 through 13 now discharge to the Southerly International Boundary via the Yuma Mesa Conduit Extension Pipeline and 242 Lateral.

Table 1. Summary of Colorado River Accounting and Water Use Data, Calendar Year 2022. (All values are in acre-feet.)

Lower Division States Consumptive Use					TOTAL
Arizona					2,014,176
California					4,424,247
Nevada					223,670
Total Lower Division States Consumptive Use					6,662,093
Mexico¹					
Total Deliveries to Mexico in Satisfaction of Treaty Requirements					1,449,820
Creation of Mexico's Recoverable Water Savings					30,000
Creation of Mexico's Water Reserve					5,158
Delivery of Mexico's Water Reserve					(34,977)
Total to Mexico in Satisfaction of Treaty Requirements					1,450,000²
To Mexico in Excess of Treaty Requirements					8,945
Accountable Deliveries to Mexico					1,458,946
Water Bypassed Pursuant to IBWC Minute 242					140,840
Mexico's Recoverable Water Savings and Mexico's Water Reserve					BOY Balance
Mexico's Recoverable Water Savings					36,900
Mexico's Water Reserve					163,842
Interstate Water Banking					BOY Balance
Water Stored in Arizona by the AWBA for the Benefit of SNWA, NV					613,846
Water Stored in California by the MWD for the Benefit of SNWA, NV					330,225
Total Water Stored for the Benefit of SNWA, NV					944,071
Lower Colorado Water Supply Project Use⁵					Non-Federal
					9,880
					117
					9,997
Intentionally Created Surplus⁶					BOY Balance⁷
Arizona					684,201
California					1,357,085
Nevada					949,658
Total - Lower Division States					2,990,944
Drought Contingency/Binational Water Scarcity Contingency Plan Contributions¹¹					Required Contribution
					Total Contribution
Arizona					192,000
California					0
Nevada					8,000
Total - Lower Division States					200,000
Mexico's Binational Water Scarcity Contingency Plan Contribution¹³					30,000
					Contribution Deficiency¹²
					0
					0
					0

Note: A dash (-) indicates the column is not applicable.

Footnotes: See next page.

Table 1 Footnotes:

¹ Mexico's totals may differ from the sum of the displayed values due to rounding and conversion from TCM to AF.

² In accordance with Section III.A of IBWC [Minute 323](#), water delivery reductions to Mexico in the amount of 50,000 AF were applied to Mexico's 2022 annual allotment.

³ Reductions shown include system assessment and deliveries (as applicable). For additional information, see Table 9.

⁴ The net volume of water stored by the storing entity during the reporting year and available for delivery to the storing entity in a future year. For additional information, see Table 12.

⁵ Pumpage of the Lower Colorado Water Supply Project wellfield to offset certain Colorado River water uses in California. For additional information, see Table 16.

⁶ Values shown include System Efficiency ICS, Extraordinary Conservation ICS, DCP ICS, Binational ICS, Tributary Conservation ICS, and Imported ICS. For additional information, see Table 22.

⁷ BOY Balance reflects the amount shown as the "EOY Balance" in the 2021 *Colorado River Accounting and Water Use Report* as adjusted for any differences between provisional and verified 2021 ICS creation amounts.

⁸ ICS creation amounts are provisional until verified by Reclamation. The total annual Extraordinary Conservation ICS creation for 2022 remained within the 625,000 AF Extraordinary Conservation maximum limitation set forth in Section XI.G.3.B.4 of the [2007 Interim Guidelines](#). For additional information, see Table 22.

⁹ Reductions include system assessment (including evaporation assessment, as applicable), IOPP payback, and delivery. For additional information, see Table 22.

¹⁰ EOY Balances reflect sharing of ICS accumulation space pursuant to applicable agreements. For additional information, see Table 22.

¹¹ The DCP Contribution required during the reporting year in accordance with Section III.B of [Lower Basin Drought Contingency Operations](#) (LBOps), as summarized in LBOps Table 1, and Section III.E.4 of LBOps. For additional information, see Table 23.

¹² In accordance with Section III.E.4 of LBOps, a state's DCP Contribution Deficiency, if any, will be added to the state's required DCP Contribution for the subsequent year.

¹³ The Binational Water Scarcity Contingency Plan Contribution required during the reporting year in accordance with Section IV of IBWC Minute 323 and Section II of the [Joint Report of the Principal Engineers with the Implementing Details of the Binational Water Scarcity Contingency Plan in the Colorado River Basin](#) dated July 11, 2019.

Table 2. Monthly Storage Contents of the Colorado River System Reservoirs, Calendar Year 2022. (Values in thousand acre-feet except as noted.)^{1,2}

	2021 EOY Balance	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CHANGE
End of Month Live Storage														
Lake Powell	6,713	6,335	6,048	5,812	5,791	6,346	6,878	6,212	5,938	5,797	5,832	5,720	5,531	-1,183
Percentage of Lake Powell Live Storage ^{2,3}	27.6%	26.0%	24.9%	23.9%	23.8%	26.1%	28.3%	26.6%	25.5%	24.9%	25.0%	24.5%	23.7%	-3.9%
Lake Mead	8,915	8,970	8,946	8,536	8,026	7,517	7,187	7,041	7,275	7,328	7,417	7,187	7,313	-1,602
Percentage of Lake Mead Live Storage ⁴	34.1%	34.3%	34.2%	32.7%	30.7%	28.8%	27.5%	27.0%	27.9%	28.1%	28.4%	27.5%	28.0%	-6.1%
Total Live Storage - Lake Powell and Lake Mead	15,628	15,305	14,994	14,349	13,816	13,863	14,066	13,253	13,213	13,126	13,249	12,907	12,844	-2,784
Total Percent of Live Storage - Lake Powell and Lake Mead²	31.0%	30.3%	29.7%	28.4%	27.4%	27.5%	27.9%	26.8%	26.7%	26.6%	26.8%	26.1%	26.0%	-5.0%
Lake Mohave	1,573	1,661	1,663	1,693	1,701	1,708	1,712	1,725	1,695	1,595	1,454	1,623	1,617	44
Lake Havasu	567	550	551	580	563	593	586	596	583	579	564	563	562	-5
Reservoir Storage in the Lower Basin⁵	11,055	11,180	11,159	10,810	10,290	9,818	9,485	9,363	9,553	9,503	9,435	9,373	9,492	-1,563
Percentage of Live Storage in the Lower Basin⁶	38.7%	39.2%	39.1%	37.9%	36.0%	34.4%	33.2%	32.8%	33.5%	33.3%	33.0%	32.8%	33.2%	-5.5%
Lower Basin Storage plus Lake Powell⁷	17,768	17,515	17,208	16,622	16,080	16,164	16,363	15,575	15,491	15,300	15,267	15,094	15,023	-2,745
Percentage of Live Storage, Lower Basin plus Lake Powell^{2,8}	33.6%	33.1%	32.5%	31.4%	30.4%	30.6%	30.9%	30.0%	29.9%	29.5%	29.4%	29.1%	29.0%	-4.6%
Total System Live Storage⁹	22,096	21,813	21,479	20,924	20,449	20,508	20,887	20,086	19,904	19,549	19,407	19,173	19,019	-3,077
Percentage of Total System Live Storage^{2,10}	37.1%	36.6%	36.1%	35.1%	34.3%	34.5%	35.1%	34.3%	34.0%	33.4%	33.2%	32.8%	32.5%	-4.6%

Footnotes:

¹ Actual values may differ from the displayed values due to rounding and being displayed to the nearest thousand acre-feet.

² In 2022, Reclamation completed bathymetry updates for Lake Powell and Flaming Gorge reservoirs, resulting in mid-year updates to the storage capacities for these reservoirs. The "Percentage of Live Storage" values shown in this table reflect the following updates to Lake Powell and Flaming Gorge total live storage capacities: Lake Powell: 24,322,000 AF for the period January 1, 2022 through June 30, 2022; and 23,314,000 AF for the period July 1, 2022 through December 31, 2022. Flaming Gorge: 3,749,000 AF for the period January 1, 2022 through April 30, 2022; and 3,671,000 AF for the period May 1, 2022 through December 31, 2022.

³ Percentage of total live storage capacity available in Lake Powell. Incorporating the mid-year updates to Lake Powell's storage capacity as noted in Footnote 2, for the period January 1, 2022 through June 30, 2022, values are based on total live storage capacity of 24,322,000 AF; for the period July 1, 2022 through December 31, 2022, values are based on total live storage capacity of 23,314,000 AF.

⁴ Percentage of total live storage capacity available in Lake Mead. Based on total live storage capacity of 26,120,000 AF.

⁵ The sum of end-of-month storage in reservoirs Mead, Mohave, and Havasu.

⁶ The percentage of available live storage capacity held in the Lower Basin (Lakes Mead, Mohave and Havasu). Based on total live storage capacity of 28,549,000 AF.

⁷ The sum of end-of-month storage in Lake Powell (Upper Basin) and Lakes Mead, Mohave and Havasu (Lower Basin).

⁸ Percentage of total live storage capacity available in Lake Powell (Upper Basin) and Lakes Mead, Mohave, and Havasu (Lower Basin). Incorporating the mid-year updates to Lake Powell's storage capacity as noted in Footnote 2, for the period January 1, 2022 through June 30, 2022, values are based on total live storage capacity of 52,871,000 AF; for the period July 1, 2022 through December 31, 2022, values are based on total live storage capacity of 51,863,000 AF.

⁹ Total end-of-month system storage; includes Reclamation reservoirs in the Upper and Lower Basins of the Colorado River system.

¹⁰ The percentage of total end-of-month system storage. This includes the Upper Basin Lakes Powell, Navajo, Crystal, Morrow Point, Blue Mesa, Flaming Gorge, Fontenelle, and Lower Basin Lakes Mead, Mohave, and Havasu. Incorporating the mid-year updates to Lake Powell's and Flaming Gorge's storage capacity as noted in Footnote 2, for the period January 1, 2022 through April 30, 2022, values are based on total live storage capacity of 59,561,000 AF; for the period May 1, 2022 through June 30, 2022, values are based on total live storage capacity of 59,483,000 AF; and for the period July 1, 2022 through December 31, 2022, values are based on total live storage capacity of 58,475,000 AF.

COMPILATION OF RECORDS IN ACCORDANCE WITH ARTICLE V OF THE CONSOLIDATED DECREE OF THE UNITED STATES SUPREME COURT IN ARIZONA v. CALIFORNIA, 547 U.S. 150 (2006)

In accordance with Article V of the Consolidated Decree of the United States Supreme Court in *Arizona v. California et al.* 547 U.S. 150 (2006) (Consolidated Decree):

“The United States shall prepare and maintain, or provide for the preparation and maintenance of, and shall make available, annually and at such shorter intervals as the Secretary of the Interior shall deem necessary or advisable, for inspection by interested persons at all reasonable times and at a reasonable place or places, complete, detailed and accurate records of:

- (A) Releases of water through regulatory structures controlled by the United States;
- (B) Diversions of water from the mainstream, return flow of such water to the stream as is available for consumptive use in the United States or in satisfaction of the Mexican Treaty obligation, and consumptive use of such water. These quantities shall be stated separately as to each diverter from the mainstream, each point of diversion, and each of the States of Arizona, California and Nevada;

(C) Releases of mainstream water pursuant to orders therefor 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 rights decreed herein. These quantities shall be stated separately as to each diverter from the mainstream, each point of diversion, and each of the States of Arizona, California and Nevada;

(D) Deliveries to Mexico of water in satisfaction of the obligations of Part III of the Treaty of February 3, 1944, and, separately stated, water passing to Mexico in excess of treaty requirements;

(E) 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.”

This *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada* presents the records compiled pursuant to the Consolidated Decree for Calendar Year 2022. Copies of this and previous years' reports may be found on the Bureau of Reclamation's website at: <https://www.usbr.gov/lc/region/g4000/wtracct.html>.

ARTICLE V(A): RECORDS OF RELEASES OF WATER THROUGH REGULATORY STRUCTURES CONTROLLED BY THE UNITED STATES

In accordance with Article V(A) of the Consolidated Decree, Table 3 documents records of releases of Colorado River water through Glen Canyon, Hoover, Davis, Parker, Headgate Rock, Palo Verde Diversion, Imperial, and Laguna Dams. Records of releases through Glen Canyon, Hoover, Davis, and Parker Dams are provided by the Bureau of Reclamation.¹ Records of releases through Palo Verde Diversion, Imperial, and Laguna Dams are provided by the United States Geological Survey (USGS) and are based upon measurements at or downstream of the dams.

The record of river flow through Headgate Rock Dam is computed using the record of flow at USGS gaging station 09427520 "Colorado River below Parker Dam, AZ-CA" and deducting from it the record of flow at the USGS gaging station 09428500 "Colorado River Indian Reservation Main Canal near Parker, AZ" measured at Headgate Rock Dam.

The record of flow through Imperial Dam is computed as the sum of releases through the Dam, plus water delivered to Mittry Lake and the Laguna Division Conservation Area. Flow through the Dam does not include diversions into the All-American Canal and the Gila Gravity Main Canal.

¹ Beginning with this 2022 *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada*, the data shown for Davis and Parker Dams represents releases through the dam structures as measured by Reclamation; prior to this, the reported values represented the flow of the Colorado River below the dams as measured and reported by the USGS.

Table 3. Releases of Water Through Regulatory Structures Controlled by the United States, Calendar Year 2022. (Values are in acre-feet.)

STRUCTURE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Glen Canyon Dam	672,976	539,942	574,301	501,963	598,008	597,914	672,241	713,440	547,166	480,052	498,343	549,767	6,946,113
Hoover Dam	639,525	590,425	1,009,733	1,027,190	1,083,023	888,752	822,341	573,350	538,890	418,061	712,863	438,237	8,742,390
Davis Dam	522,790	554,826	931,495	975,213	1,041,084	841,864	769,598	574,845	616,748	542,191	515,661	436,129	8,322,444
Parker Dam	341,505	445,480	657,886	737,383	740,800	679,339	639,293	482,266	457,543	393,045	335,666	277,237	6,187,443
Headgate Rock Dam	320,135	408,490	612,136	682,583	677,440	615,929	582,053	451,347	419,423	368,225	314,146	253,297	5,705,204
Palo Verde Diversion Dam	254,500	349,900	544,100	598,800	607,900	537,600	491,800	378,500	320,500	299,000	247,500	184,700	4,814,800
Imperial Dam	24,220	17,870	18,430	16,500	27,780	24,410	23,290	20,020	21,200	25,419	16,580	21,600	257,319
GGMC Diversion for Mittry Lake	290	365	531	600	634	506	632	672	662	646	588	531	6,657
GGMC Diversion for Laguna Division Conservation Area	3,258	4,272	4,887	4,804	4,681	2,142	4,703	4,491	3,205	2,819	4,489	4,228	47,979
Sum of Imperial Dam, Mittry, and Laguna	27,768	22,507	23,848	21,904	33,095	27,058	28,625	25,183	25,067	28,884	21,657	26,359	311,955
Laguna Dam	27,360	22,850	25,019	23,290	34,440	32,270	27,220	23,400	22,800	24,900	20,360	22,950	306,859

ARTICLE V(B): RECORDS OF DIVERSIONS, RETURN FLOWS, AND CONSUMPTIVE USE

In accordance with Article V(B) of the Consolidated Decree, Tables 4 through 6 document the final records of diversions of water from the mainstream of the Colorado River, return flow to the mainstream, and the consumptive use of such water within the Lower Division States of Arizona, California, and Nevada.

The tabulations – based upon records furnished by the Bureau of Reclamation, the United States Geological Survey (USGS), the United States Section of the International Boundary and Water Commission, water users, and other agencies – document quantities of water drawn by surface diversion from the mainstream of the Colorado River, pumped directly from the mainstream, or pumped from wells in the Colorado River aquifer.

There are a number of smaller entities for which diversions are reported annually by either the USGS or by the water user; or estimated by Reclamation. For those diversions reported by the USGS, the USGS verifies the crops being grown and uses evapotranspiration methodologies to estimate the crop consumptive use; the USGS then applies irrigation efficiency coefficients to derive the estimated diversions.

For each water user, this tabulation reports the user's total diversion, measured return flow, estimated unmeasured return flow, and consumptive use. Unmeasured returns are generally computed by multiplying a water user's diversion by an unmeasured return flow factor.

No person or entity is entitled to divert or use Colorado River water without an entitlement. An entitlement is an authorization to beneficially use Colorado River water pursuant to:

(1) a right decreed by the Supreme Court, (2) a contract with the United States through the Secretary of the Interior, or (3) a Secretarial reservation of water. The listing of a use in this report should not be interpreted as an entitlement or an indication that the use is authorized.

For those water users whose diversions are made from the All-American Canal or the Gila Gravity Main Canal, diversions include each user's proportionate share of the total canal losses, which are added to the delivery taken by each user at its turnout from the canal. The portion of the canal loss which returns to the mainstream is provided to each water user as a return flow credit.

For the areas downstream of the Northerly International Boundary (NIB), Reclamation does not consider pumping of wells from the flood plain or the underlying aquifer to be a diversion of Colorado River water. This position² is based on the following: the groundwater can reasonably be assumed to be flowing towards Mexico and therefore, not to be flowing toward the river upstream of Mexico's point of diversion near NIB. As such, this water does not return to the Colorado River to be made available for consumptive use in the United States or in satisfaction of the Mexican Treaty Obligation. In accordance with this position, Reclamation discontinued reporting pumping from these wells beginning in 2004. If hydrologic conditions change, Reclamation will address the need to report pumping from these wells.

² *Summary Description of Accounting for Water Use in the Yuma Area Beginning with Calendar Year 2003*. Available on Reclamation's website at: <https://www.usbr.gov/lc/region/g4000/4200Rpts/YumaWtrAcct.pdf>.

Table 4. State of Arizona - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
TV Marble Canyon AZ, LLC (formerly Marble Canyon Company)														
Pumped from well	Diversion	1	1	1	1	1	2	1	1	1	1	1	0	12
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	1	1	1	1	0	0	0	0	4
	Consumptive Use	1	1	1	1	0	1	0	0	1	1	1	0	8
Lake Mead National Recreation Area														
National Park Service														
Pumped from well at Temple Bar	Diversion	3	2	6	4	12	3	8	3	6	6	4	4	61
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	3	2	6	4	12	3	8	3	6	6	4	4	61
Lake Mead National Recreation Area														
National Park Service														
Pumped from Lake Mohave - Katherine Landing	Diversion	15	13	17	17	18	15	18	19	19	21	17	18	207
Pumped from Lake Mohave - Willow Beach	Diversion	2	2	2	3	3	2	3	2	2	2	2	2	27
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	17	15	19	20	21	17	21	21	21	23	19	20	234
McAlister Family Trust														
Pumped from river and well	Diversion	0	0	1	1	1	1	1	1	1	1	1	1	10
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	1	0	0	0	0	0	0	0	1	1	3
	Consumptive Use	0	0	0	1	1	1	1	1	1	1	0	0	7
Bureau of Reclamation														
Davis Dam Diversion	Diversion	1	0	0	0	0	0	0	0	1	1	0	0	3
	Measured Returns	1	0	0	0	0	0	0	0	1	0	0	0	2
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	0	0	0	0	0	0	0	0	0	1	0	0	1
Bullhead City														
Pumped from wells	Diversion	666	605	711	843	867	965	896	928	849	806	811	658	9,605
Mohave County Parks, Lake Mohave diversion	Diversion	9	9	9	8	9	14	15	13	10	9	9	7	121
	Measured Returns	33	17	23	9	8	15	11	16	0	0	0	0	132
	Unmeasured Returns	223	203	238	281	289	323	301	310	283	269	271	219	3,210
	Consumptive Use	419	394	459	561	579	641	599	615	576	546	549	446	6,384
Mohave Water Conservation District														
Pumped from wells	Diversion	119	80	75	81	91	94	96	104	88	101	96	84	1,109
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	39	26	25	27	30	31	32	34	29	33	32	28	366
	Consumptive Use	80	54	50	54	61	63	64	70	59	68	64	56	743
Mohave Valley I.D.D.														
Pumped from wells and Topock Marsh Inlet for agriculture use	Diversion	873	510	1,512	1,820	1,552	1,446	1,333	945	847	666	323	375	12,202
Pumped from wells for domestic use	Diversion	315	336	435	446	536	564	571	525	510	462	369	281	5,350
Pumped from wells for domestic use - MCWA Subcontract	Diversion ¹	150	100	100	100	100	100	100	100	100	100	100	100	1,250
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	616	435	942	1,088	1,006	971	922	722	670	565	364	348	8,649
	Consumptive Use	722	511	1,105	1,278	1,182	1,139	1,082	848	787	663	428	408	10,153
Fort Mojave Indian Reservation														
Pumped from river for agriculture use	Diversion	4,162	4,867	6,165	8,398	8,845	8,533	8,179	5,454	6,710	5,918	2,689	2,973	72,893
Pumped from river and wells for domestic use	Diversion	351	174	199	312	454	369	489	565	425	311	209	242	4,100
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	2,076	2,319	2,927	4,007	4,278	4,095	3,987	2,769	3,282	2,865	1,333	1,479	35,417
	Consumptive Use	2,437	2,722	3,437	4,703	5,021	4,807	4,681	3,250	3,853	3,364	1,565	1,736	41,576

Table 4. State of Arizona - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Golden Shores Water Conservation District														
Pumped from wells	Diversion	23	27	29	35	40	48	41	45	52	41	22	28	431
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	8	9	10	11	13	16	13	15	17	14	7	9	142
	Consumptive Use	15	18	19	24	27	32	28	30	35	27	15	19	289
Havasu National Wildlife Refuge														
Firebreak Inlet Canal	Diversion	157	250	3,471	4,386	5,086	3,119	2,038	605	839	381	33	13	20,378
Farm Ditch	Diversion ²	5	6	737	1,015	1,188	518	325	58	112	21	0	0	3,985
Pumped from well	Diversion	10	11	15	17	20	25	27	26	20	17	12	12	212
	Measured Returns ³	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	151	235	3,716	4,768	5,539	3,223	2,103	606	854	369	40	22	21,626
	Consumptive Use	21	32	507	650	755	439	287	83	117	50	5	3	2,949
Crystal Beach Water Conservation District														
Pumped from wells	Diversion	7	7	8	9	11	11	11	11	10	10	9	8	112
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	2	2	3	3	4	4	4	4	3	4	3	3	39
	Consumptive Use	5	5	5	6	7	7	7	7	7	6	6	5	73
Lake Havasu City														
Pumped from wells	Diversion	792	840	1,001	1,024	1,235	1,287	1,412	1,188	1,317	992	976	827	12,891
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	301	319	381	389	469	489	537	452	500	377	371	314	4,899
	Consumptive Use	491	521	620	635	766	798	875	736	817	615	605	513	7,992
Arizona State Parks (Windsor Beach)														
Pumped from wells	Diversion	1	1	1	1	2	2	2	1	1	1	1	1	15
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	1	1	1	1	1	0	0	1	6
	Consumptive Use	1	1	1	1	1	1	1	0	0	1	1	0	9
Central Arizona Water Conservation District														
Pumped from Lake Havasu	Diversion	88,917	102,907	132,948	140,555	149,617	59,940	18,402	16,330	52,244	65,733	66,836	62,819	957,248
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	88,917	102,907	132,948	140,555	149,617	59,940	18,402	16,330	52,244	65,733	66,836	62,819	957,248
Hillcrest Water Company														
Pumped from wells	Diversion	3	4	3	3	2	2	4	3	1	1	1	1	28
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	1	2	1	1	1	1	1	1	1	0	0	0	10
	Consumptive Use	2	2	2	2	1	1	3	2	0	1	1	1	18
Springs Del Sol Domestic Water Improvement District														
Pumped from wells	Diversion	0	0	0	0	0	0	1	1	1	0	0	0	3
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	1	0	0	0	1
	Consumptive Use	0	0	0	0	0	0	1	1	0	0	0	0	2
Frontier Communications West Coast														
Pumped from well	Diversion	0	0	0	0	0	0	1	0	0	0	0	0	1
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	0	0	0	0	0	0	1	0	0	0	0	0	1
EPCOR Water Arizona, Inc.														
Pumped from wells - Contract Service Area No. 1	Diversion	71	66	71	68	75	76	86	85	81	84	76	77	916
Pumped from wells - Contract Service Area No. 2	Diversion	33	30	31	31	35	39	43	37	37	37	35	31	419
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	36	33	35	34	38	40	44	42	40	41	38	37	458
	Consumptive Use	68	63	67	65	72	75	85	80	78	80	73	71	877

Table 4. State of Arizona - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Town of Parker														
Pumped from wells	Diversion	45	37	45	53	67	67	57	61	46	68	38	38	622
	Measured Returns	19	18	18	18	18	18	18	19	19	18	19	18	220
	Unmeasured Returns	13	11	13	15	19	19	16	17	13	19	11	11	177
	Consumptive Use	13	8	14	20	30	30	23	25	14	31	8	9	225
Colorado River Indian Reservation														
Diversion at Headgate Rock Dam	Diversion	21,370	36,990	45,750	54,800	63,360	63,410	57,240	30,919	38,120	24,820	21,520	23,940	482,239
Pumped from river and wells	Diversion	111	96	115	136	162	183	146	150	122	165	103	93	1,582
	Measured Returns	15,727	18,155	20,688	22,168	23,643	14,674	17,621	16,342	11,732	10,824	9,789	11,672	193,035
	Unmeasured Returns	1,181	2,040	2,523	3,021	3,494	3,498	3,156	1,709	2,103	1,374	1,189	1,322	26,610
	Consumptive Use	4,573	16,891	22,654	29,747	36,385	45,421	36,609	13,018	24,407	12,787	10,645	11,039	264,176
GM Gabrych Family														
Pumped from river (AEP-9) and well (AEW-35)	Diversion	0	550	110	145	900	1,040	1,060	395	280	0	0	0	4,480
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	193	38	51	315	364	371	138	98	0	0	0	1,568
	Consumptive Use	0	357	72	94	585	676	689	257	182	0	0	0	2,912
Ehrenberg Improvement District														
Pumped from river	Diversion	35	22	29	36	50	50	55	35	31	35	26	24	428
	Measured Returns	3	1	3	2	2	2	3	3	2	3	2	2	28
	Unmeasured Returns	10	6	8	10	14	14	16	10	9	10	8	7	122
	Consumptive Use	22	15	18	24	34	34	36	22	20	22	16	15	278
B&F Investment, LLC														
Delivered by Ehrenberg Improvement District	Diversion	0	0	1	0	0	1	1	1	1	1	1	0	7
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	1	0	0	0	0	0	0	0	1	0	2
	Consumptive Use	0	0	0	0	0	1	1	1	1	1	0	0	5
North Baja Pipeline														
Pumped from river and wells	Diversion	18	19	26	24	34	44	36	41	12	13	24	17	308
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	6	7	9	9	12	16	13	14	4	4	8	6	108
	Consumptive Use	12	12	17	15	22	28	23	27	8	9	16	11	200
Cibola Valley I.D.D.														
Pumped from river for agriculture use	Diversion	319	416	755	897	788	1,131	1,303	744	771	225	49	10	7,408
Pumped from river for domestic use	Diversion	3	3	3	3	3	3	3	2	3	2	3	2	33
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	92	119	216	256	225	323	372	213	221	65	15	3	2,120
	Consumptive Use	230	300	542	644	566	811	934	533	553	162	37	9	5,321
Red River Land Company, LLC														
Pumped from river	Diversion	0	41	0	0	28	96	69	55	0	0	0	0	289
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	12	0	0	8	27	20	15	0	0	0	0	82
	Consumptive Use	0	29	0	0	20	69	49	40	0	0	0	0	207
Hopi Tribe														
Pumped from river	Diversion	140	132	592	135	655	1,031	928	548	110	0	0	0	4,271
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	40	38	169	38	187	294	265	156	31	0	0	0	1,218
	Consumptive Use	100	94	423	97	468	737	663	392	79	0	0	0	3,053
GSC Farm, LLC														
Pumped from river	Diversion	77	127	310	290	240	522	481	378	336	134	13	0	2,908
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	22	36	88	83	68	149	137	108	96	38	4	0	829
	Consumptive Use	55	91	222	207	172	373	344	270	240	96	9	0	2,079

Table 4. State of Arizona - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Arizona Game and Fish Commission														
Pumped from river	Diversion	0	12	14	472	546	317	198	414	620	175	0	70	2,838
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	4	4	134	156	90	56	118	177	50	0	20	809
	Consumptive Use	0	8	10	338	390	227	142	296	443	125	0	50	2,029
Cibola Island⁴														
Pumped from river	Diversion ⁵	45	59	107	128	112	161	185	106	110	32	7	1	1,053
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	13	17	30	36	32	46	53	30	32	9	2	0	300
	Consumptive Use	32	42	77	92	80	115	132	76	78	23	5	1	753
Cibola National Wildlife Refuge														
Pumped from river	Diversion	187	141	1,558	1,232	1,950	405	906	1,410	267	2,597	805	377	11,835
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	71	54	592	468	741	154	344	536	101	987	306	143	4,497
	Consumptive Use	116	87	966	764	1,209	251	562	874	166	1,610	499	234	7,338
Western Water, LLC														
Pumped from river	Diversion ⁵	3	5	7	10	12	12	11	10	9	5	3	3	90
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	1	2	2	3	3	3	3	3	3	1	1	1	26
	Consumptive Use	2	3	5	7	9	9	8	7	6	4	2	2	64
Cibola Sportsmans Club														
Pumped from river	Diversion ⁵	7	12	15	22	28	27	26	22	21	11	8	7	206
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	2	4	4	6	8	8	8	6	6	3	2	2	59
	Consumptive Use	5	8	11	16	20	19	18	16	15	8	6	5	147
Bishop Family Trust														
Pumped from river	Diversion ⁵	9	16	20	30	37	36	35	30	28	15	11	9	276
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	3	5	6	8	11	10	10	8	8	4	3	3	79
	Consumptive Use	6	11	14	22	26	26	25	22	20	11	8	6	197
Cathcart														
Pumped from river	Diversion ⁵	3	5	7	10	12	12	12	10	10	5	4	3	93
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	1	2	2	3	4	3	3	3	3	1	1	1	27
	Consumptive Use	2	3	5	7	8	9	9	7	7	4	3	2	66
Imperial National Wildlife Refuge														
Pumped from river	Diversion	190	294	278	260	448	406	692	426	421	257	226	577	4,475
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	72	112	106	99	170	154	263	162	160	98	86	219	1,701
	Consumptive Use	118	182	172	161	278	252	429	264	261	159	140	358	2,774
Bureau of Land Management														
Pumped from river and wells (Permittees, LHFO and YFO)	Diversion	55	51	75	966	107	37	274	147	97	39	133	22	2,003
Pumped from river (ADW-01) (leased by L. Pratt ⁴)	Diversion ⁶	0	0	0	0	0	0	0	0	0	0	0	0	0
Pumped from river (ADP-1) and well (AEW-14) (leased by M. Lee) ⁴	Diversion	0	21	11	0	23	35	4	17	31	25	8	19	194
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	19	25	31	338	45	25	97	57	45	23	49	15	769
	Consumptive Use	36	47	55	628	85	47	181	107	83	41	92	26	1,428
Martinez Lake Cabin Sites⁴														
Pumped from wells	Diversion	0	1	1	1	1	1	1	1	1	1	1	1	11
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	1	1	1	1	0	0	0	4
	Consumptive Use	0	1	1	1	1	0	0	0	0	1	1	1	7

Table 4. State of Arizona - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Fisher's Landing Water and Sewer, LLC														
Pumped from river and well	Diversion	1	1	1	1	1	1	1	0	1	1	0	1	10
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	1	1	0	0	1	0	0	3
	Consumptive Use	1	1	1	1	1	0	0	0	1	0	0	1	7
Shepard Water Company														
Pumped from well	Diversion	1	1	1	2	2	2	2	2	2	2	2	2	21
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	1	1	0	1	1	1	0	1	1	7
	Consumptive Use	1	1	1	1	1	2	1	1	1	2	1	1	14
U.S. Army Yuma Proving Grounds														
Diversion at Imperial Dam	Diversion	0	1	0	0	0	0	0	0	0	0	0	0	1
Pumped from wells	Diversion	18	10	20	13	65	65	38	86	31	13	12	14	385
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	18	11	20	13	65	65	38	86	31	13	12	14	386
JRJ Partners, LLC														
Pumped from river (AEP-1) and well (AEW-3)	Diversion	78	51	63	62	74	77	91	66	43	89	61	48	803
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	27	18	22	22	26	27	32	23	15	31	21	17	281
	Consumptive Use	51	33	41	40	48	50	59	43	28	58	40	31	522
Cha Cha, LLC														
Pumped from river (AEP-2/3) and wells (AEW-4/5, ADW-3)	Diversion	125	75	119	163	263	155	201	261	182	189	195	135	2,063
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	44	26	42	57	92	54	71	91	64	66	68	47	722
	Consumptive Use	81	49	77	106	171	101	130	170	118	123	127	88	1,341
Beattie Farms Southwest (Russell Youmans)														
Pumped from well (ADW-2)	Diversion	25	59	151	153	170	165	0	12	0	69	0	112	916
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	9	21	53	54	59	58	0	4	0	24	0	39	321
	Consumptive Use	16	38	98	99	111	107	0	8	0	45	0	73	595
Gila Monster Farms														
Diversion at Imperial Dam	Diversion	517	587	826	938	913	732	525	186	598	788	586	490	7,686
	Measured Returns	71	52	0	23	14	39	27	11	34	37	28	40	376
	Unmeasured Returns	196	223	314	356	347	278	200	71	227	299	223	186	2,920
	Consumptive Use	250	312	512	559	552	415	298	104	337	452	335	264	4,390
Wellton-Mohawk I.D.D.														
Diversion at Imperial Dam	Diversion	22,447	27,407	40,049	47,769	41,646	30,690	25,930	27,007	40,951	35,124	22,245	17,276	378,541
	GGMC Return	3,414	2,712	0	1,332	732	1,827	1,468	1,787	2,606	1,856	1,199	1,557	20,490
	Dome Return	528	469	579	553	691	660	447	430	323	376	332	426	5,814
	MOD Return ⁷	8,620	7,882	8,220	7,964	7,970	7,864	8,348	8,058	7,816	8,533	7,935	6,606	95,816
	Total Returns	12,562	11,063	8,799	9,849	9,393	10,351	10,263	10,275	10,745	10,765	9,466	8,589	122,120
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	9,885	16,344	31,250	37,920	32,253	20,339	15,667	16,732	30,206	24,359	12,779	8,687	256,421
City of Yuma														
Diversion at Imperial Dam via AAC	Diversion	1,288	1,175	1,400	1,464	1,627	1,914	1,876	1,676	1,464	1,304	1,216	1,152	17,556
Diversion at Imperial Dam via GGMC	Diversion	831	780	859	861	893	475	466	498	436	401	981	998	8,479
Pumped from river for Yuma East Wetlands	Diversion	26	26	38	39	39	30	34	53	43	34	26	26	414
	Measured Returns	1,021	873	834	825	850	809	821	883	794	776	809	893	10,188
	Unmeasured Returns	2	2	3	4	4	3	3	5	4	3	2	2	37
	Consumptive Use	1,122	1,106	1,460	1,535	1,705	1,607	1,552	1,339	1,145	960	1,412	1,281	16,224

Table 4. State of Arizona - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
U.S. Marine Corps Air Station Yuma														
Diversion at Imperial Dam	Diversion	76	59	82	105	115	118	128	109	102	100	75	53	1,122
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	76	59	82	105	115	118	128	109	102	100	75	53	1,122
Union Pacific Railroad														
Diversion at Imperial Dam	Diversion	4	4	4	4	4	4	4	4	4	4	4	4	48
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	1	1	1	2	2	2	2	2	2	2	1	1	19
	Consumptive Use	3	3	3	2	2	2	2	2	2	2	3	3	29
University of Arizona														
Diversion at Imperial Dam	Diversion	38	41	61	61	78	72	67	94	88	54	57	30	741
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	38	41	61	61	78	72	67	94	88	54	57	30	741
Yuma Union High School District														
Delivery at East Main Canal	Diversion	7	9	9	12	19	23	18	15	16	7	5	3	143
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	2	2	2	3	5	6	5	4	4	2	1	1	37
	Consumptive Use	5	7	7	9	14	17	13	11	12	5	4	2	106
Desert Lawn Memorial Park														
Delivered by the City of Yuma	Diversion	1	3	2	3	5	6	6	6	4	4	3	2	45
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	1	1	1	2	2	2	2	1	1	1	1	15
	Consumptive Use	1	2	1	2	3	4	4	4	3	3	2	1	30
North Gila Valley Irrigation District														
Diversion at Imperial Dam	Diversion	2,305	2,714	3,632	3,949	4,708	4,609	3,818	2,759	3,138	3,556	3,203	2,411	40,802
Pumped from river	Diversion	14	1	19	44	48	55	21	77	0	39	5	9	332
	Measured Returns	1,752	1,896	2,181	2,437	2,658	2,582	2,509	2,035	2,122	2,479	2,301	1,991	26,943
	Unmeasured Returns	321	372	505	556	662	650	530	405	430	501	441	333	5,706
	Consumptive Use	246	447	965	1,000	1,436	1,432	800	396	586	615	466	96	8,485
Yuma Irrigation District														
Diversion at Imperial Dam	Diversion ⁸	4,085	4,947	6,608	8,166	7,991	4,908	3,313	4,967	5,769	6,438	4,797	3,536	65,525
Pumped from wells	Diversion	18	29	107	195	185	168	102	80	93	88	101	33	1,199
	Measured Returns	1,548	1,512	1,188	1,684	1,585	1,297	935	1,387	1,513	1,532	1,127	1,154	16,462
	Unmeasured Returns	874	1,060	1,430	1,781	1,741	1,081	727	1,075	1,249	1,390	1,043	760	14,211
	Consumptive Use	1,681	2,404	4,097	4,896	4,850	2,698	1,753	2,585	3,100	3,604	2,728	1,655	36,051
Yuma Mesa I.D.D.														
Diversion at Imperial Dam	Diversion	10,305	12,225	14,890	17,277	21,297	22,442	25,730	23,269	19,360	12,925	10,492	10,214	200,426
	Measured Returns ⁹	7,083	7,029	6,454	7,276	6,236	6,821	7,495	7,138	6,105	2,840	4,290	6,269	75,036
	Unmeasured Returns	1,649	1,956	2,382	2,764	3,408	3,591	4,117	3,723	3,098	2,068	1,679	1,634	32,069
	Consumptive Use	1,573	3,240	6,054	7,237	11,653	12,030	14,118	12,408	10,157	8,017	4,523	2,311	93,321
Unit B I.D.D.														
Diversion at Imperial Dam	Diversion	1,249	1,300	1,896	2,294	2,789	2,989	3,616	3,605	2,648	2,126	1,709	1,267	27,488
	Measured Returns ⁹	1,137	1,128	1,139	1,255	1,077	1,126	1,252	1,215	1,012	490	747	1,042	12,620
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	112	172	757	1,039	1,712	1,863	2,364	2,390	1,636	1,636	962	225	14,868

Table 4. State of Arizona - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Arizona State Land Department														
Pumped from river and wells for agriculture use	Diversion	297	313	401	488	498	617	503	476	475	553	518	281	5,420
Pumped from wells for agricultural use - Ott Lease No. 01-2241 ⁴	Diversion ⁵	58	60	114	129	162	190	149	162	98	83	55	40	1,300
Pumped from river and wells for domestic use	Diversion	5	5	7	7	6	8	7	7	5	5	4	5	71
	Measured Returns	13	9	0	4	2	7	5	2	6	6	5	7	66
	Unmeasured Returns	126	133	182	218	233	286	231	225	203	225	202	114	2,378
	Consumptive Use	221	236	340	402	431	522	423	418	369	410	370	205	4,347
Ott Family														
Delivered via GGMC	Diversion	18	21	39	32	96	33	0	35	15	12	18	6	325
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	6	7	14	11	34	12	0	12	5	4	7	2	114
	Consumptive Use	12	14	25	21	62	21	0	23	10	8	11	4	211
Ogram Boys Enterprises, Inc.														
Delivered via GGMC	Diversion	9	33	57	147	231	19	0	108	86	46	57	31	824
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	3	12	20	51	81	6	0	38	30	16	20	11	288
	Consumptive Use	6	21	37	96	150	13	0	70	56	30	37	20	536
Fort Yuma Indian Reservation														
Pumped from river for Yuma East Wetlands	Diversion	17	18	96	137	249	210	69	151	178	120	18	18	1,281
Pumped from river for agriculture use (Cha Cha Farms)	Diversion	5	4	4	5	4	12	7	8	7	5	4	5	70
Surface delivery to Ranch 5	Diversion	38	54	110	150	145	82	87	73	112	76	62	48	1,037
Pumped from wells for domestic use	Diversion ¹⁰	3	2	2	3	3	3	4	2	2	2	2	2	30
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	23	28	78	107	147	114	60	86	109	74	31	26	883
	Consumptive Use	40	50	134	188	254	193	107	148	190	129	55	47	1,535
Armon Curtis														
Pumped from river (AEP-4)	Diversion	0	8	25	27	8	0	0	0	14	69	14	12	177
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	3	9	9	3	0	0	0	5	24	5	4	62
	Consumptive Use	0	5	16	18	5	0	0	0	9	45	9	8	115
Yuma County Water Users' Association														
Diversion at Imperial Dam	Diversion	20,393	25,201	39,045	46,432	35,488	25,238	25,296	23,942	25,695	34,109	30,583	21,458	352,880
Pumped from wells	Diversion	213	238	123	117	71	265	225	185	179	239	220	225	2,300
	Measured Returns	7,608	7,750	8,071	8,314	8,132	6,885	6,424	6,487	8,259	10,497	10,985	9,696	99,108
	Unmeasured Returns	433	534	823	978	747	536	536	507	543	721	647	455	7,460
	Consumptive Use	12,565	17,155	30,274	37,257	26,680	18,082	18,561	17,133	17,072	23,130	19,171	11,532	248,612
R. Griffin ⁴														
Pumped from river (ADP-3,4)	Diversion ⁶	1	1	1	2	2	2	3	3	2	2	1	1	21
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	1	1	1	1	1	1	1	0	0	7
	Consumptive Use	1	1	1	1	1	1	2	2	1	1	1	1	14
Power ⁴														
Pumped from river (ADP-3,4)	Diversion ⁶	7	8	12	13	15	19	20	20	15	13	9	9	160
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	2	3	4	5	5	7	7	7	5	5	3	3	56
	Consumptive Use	5	5	8	8	10	12	13	13	10	8	6	6	104
Cocopah Indian Tribe (PPR No. 7)														
Pumped from river (ADP-3,4)	Diversion ⁶	18	23	31	33	41	50	54	52	41	34	24	24	425
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	6	8	11	12	14	17	19	18	14	12	9	9	149
	Consumptive Use	12	15	20	21	27	33	35	34	27	22	15	15	276

Table 4. State of Arizona - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Griffin Ranches (PPR No. 7)														
Pumped from river (ADP-3,4)	Diversion ⁶	8	9	13	14	17	21	22	22	17	14	10	10	177
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	3	3	4	5	6	7	8	8	6	5	4	3	62
	Consumptive Use	5	6	9	9	11	14	14	14	11	9	6	7	115
Milton Phillips (PPR No.7)														
Pumped from river (ADP-3,4)	Diversion ⁶	3	4	5	5	6	8	9	8	7	5	4	4	68
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	1	1	2	2	2	3	3	3	2	2	2	1	24
	Consumptive Use	2	3	3	3	4	5	6	5	5	3	2	3	44
Griffin Family Ltd. Partnership (PPR No. 7)														
Pumped from river (ADP-3,4)	Diversion ⁶	2	2	3	3	4	5	6	5	4	4	3	3	44
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	1	1	1	1	1	2	2	2	1	1	1	1	15
	Consumptive Use	1	1	2	2	3	3	4	3	3	3	2	2	29
Cocopah Indian Reservation														
Diversion at Imperial Dam	Diversion	0	76	52	26	41	48	68	24	41	55	12	38	481
Pumped from river and wells	Diversion ^{6,11}	73	92	125	134	164	201	219	210	165	138	98	96	1,715
	Measured Returns	0	3	2	1	2	2	2	1	2	2	1	2	20
	Unmeasured Returns	25	57	60	54	70	85	98	80	70	66	37	46	748
	Consumptive Use	48	108	115	105	133	162	187	153	134	125	72	86	1,428
Bureau of Reclamation's Yuma Area Office														
Pumped from wells	Diversion	11	1	0	0	30	0	15	1	0	0	18	1	77
	Measured Returns	1	0	0	0	9	0	0	0	0	0	5	1	16
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	10	1	0	0	21	0	15	1	0	0	13	0	61
Arizona Public Service Company														
Pumped from well	Diversion	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	0	0	0	0	0	0	0	0	0	0	0	0	0
Gary Pasquinelli														
Pumped from river (ADP-5)	Diversion	10	10	64	95	0	0	0	0	40	42	37	28	326
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	4	3	22	33	0	0	0	0	14	15	13	10	114
	Consumptive Use	6	7	42	62	0	0	0	0	26	27	24	18	212
Pumped from the South Gila Wells (DPOCs)														
	Measured Returns ¹²	0	0	395	0	960	0	0	0	0	0	1,122	3,794	6,271
	Unmeasured Returns	0	0	-395	0	-960	0	0	0	0	0	-1,122	-3,794	-6,271
	Consumptive Use	0	0	0	0	0	0	0	0	0	0	0	0	0
Arizona Totals														
	Diversion	183,951	227,586	308,543	350,402	359,576	242,933	190,576	153,298	207,902	203,329	173,161	153,936	2,755,193
	Measured Returns	48,579	49,506	49,400	53,865	53,629	44,628	47,386	45,814	42,346	40,269	39,574	41,376	556,372
	Unmeasured Returns	8,757	10,745	18,106	22,275	24,874	21,222	19,806	14,654	14,895	12,782	8,608	7,921	184,645
	Consumptive Use	126,615	167,335	241,037	274,262	281,073	177,083	123,384	92,830	150,661	150,278	124,979	104,639	2,014,176

Footnotes:

¹ Diversion amount includes pumpage by MVIDD for domestic use pursuant to Subcontract No. 09-101, as amended, between MCWA and MVIDD.

² Diversion values are normally positive. Should negative diversion values occur, water is flowing from the canal to the river.

³ The South Dike is the point of measured return flow for the Refuge and meter readings will normally indicate a positive flow of water from the Refuge into the river. If the flow reverses and water flows into the Refuge instead, a negative value will be recorded; when this occurs, this is considered a diversion.

Footnotes continued on next page.

Table 4 Footnotes: Continued from previous page.

⁴ Value(s) shown includes Colorado River water use by a user that may not presently hold an entitlement to Colorado River water or use that may be outside current contract parameters. This use is under review by Reclamation and ADWR.

⁵ Calculated by Reclamation based on irrigated acreage, crop ET, and irrigation efficiency.

⁶ Calculated by the USGS using field crop verification and ET methodologies. A description of this methodology ([USGS Diversion Estimate Methodology for Non-metered Irrigation](#)) is included in the Significant Documents.

⁷ MOD return flow credit is the measured flow at Station 0+00. When comparing this return value to the "Water Bypassed Pursuant to IBWC Minute 242" value in Table 9, differences can result due to a combination of transmission loss, DPOC and Yuma Mesa Conduit discharge into the MODE, MODE water that has been desalinated, and MODE water discharged to the river. During periods of sustained flow in the Gila River this measurement may include both Colorado River and Gila River water. At such times Reclamation will determine how best to differentiate return flows from the two sources.

⁸ Diversion does not include water delivered to users (Ott Family, Ogram Boys' Enterprises, and some ASLD lands) located outside of YID's boundaries.

⁹ YMIDD receives 85 percent of the return flows from the Yuma Mesa Conduit Outlet and the 242 Lateral discharged at the Southerly International Boundary (SIB); Unit B receives the remaining 15 percent.

Yuma Mesa Conduit Outlet Flows (AF) = 29,092

242 Lateral Flows Discharged at SIB (AF) = 41,312

¹⁰ Diversion is an estimate of the amount of domestic water required by FYIR, AZ.

¹¹ Diversion amounts include pumpage from wells (AEW-15, 16) and the Cocopah Bend R.V. Park well.

¹² Until comprehensive modeling of the Yuma area to determine how unmeasured returns are affected by pumping of the DPOC wellfield is complete, this pumpage is added to Arizona's measured returns and subtracted from Arizona's unmeasured returns.

Table 5. State of California - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Fort Mojave Indian Reservation														
Pumped from river and well for agriculture use	Diversion	654	953	1,278	1,281	1,610	1,533	1,359	1,155	952	915	616	99	12,405
Pumped from wells for domestic use	Diversion	2	2	3	2	3	4	4	4	4	5	3	2	38
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	303	441	592	593	745	710	630	535	442	425	286	47	5,749
	Consumptive Use	353	514	689	690	868	827	733	624	514	495	333	54	6,694
City of Needles														
Pumped from wells	Diversion	137	124	159	168	200	220	222	188	197	173	116	105	2,009
	Measured Returns	45	38	41	43	44	42	45	45	45	49	46	45	528
	Unmeasured Returns	31	27	31	39	28	36	27	17	38	41	7	37	359
	Consumptive Use ¹	61	59	87	86	128	142	150	126	114	83	63	23	1,122
Southern California Gas Company														
Pumped from wells	Diversion	0	0	1	1	2	6	7	7	9	1	0	0	34
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use ²	0	0	1	1	2	6	7	7	9	1	0	0	34
Pacific Gas and Electric Company														
Pumped from wells	Diversion	9	11	15	16	19	24	26	25	19	16	12	11	203
	Measured Returns	5	6	9	10	12	14	16	15	12	10	7	7	123
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use ²	4	5	6	6	7	10	10	10	7	6	5	4	80
Havasu Water Company														
Pumped from wells	Diversion	2	1	1	1	1	1	2	2	2	2	2	1	18
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	1	0	0	0	1	0	1	1	1	1	1	1	7
	Consumptive Use ²	1	1	1	1	0	1	1	1	1	1	1	1	11
Vista Del Lago														
Pumped from wells	Diversion	2	3	2	1	1	2	2	2	2	2	1	1	21
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	1	1	1	0	0	1	1	1	1	1	0	0	8
	Consumptive Use ²	1	2	1	1	1	1	1	1	1	1	1	1	13
Non-Federal Subcontractors to the LCWSP														
Pumped from wells	Diversion	8	10	13	14	17	21	23	22	18	15	10	10	181
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use ²	8	10	13	14	17	21	23	22	18	15	10	10	181
PPR No. 30 (Stephenson)														
Pumped from wells	Diversion ³	1	1	1	2	2	2	3	3	2	2	1	1	21
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	1	1	1	1	1	1	1	1	1	1	10
	Consumptive Use	1	1	0	1	1	1	2	2	1	1	0	0	11
PPR No. 38 (Andrade)														
Pumped from wells	Diversion ³	1	2	2	2	3	4	4	4	3	3	2	2	32
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	1	1	1	1	2	2	2	1	1	1	1	14
	Consumptive Use	1	1	1	1	2	2	2	2	2	2	1	1	18
PPR No. 40 (Cooper)														
Pumped from wells	Diversion ³	0	1	1	1	1	1	1	1	1	1	1	0	10
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	1	1	1	1	0	0	0	4
	Consumptive Use	0	1	1	1	1	0	0	0	0	1	1	0	6

Table 5. State of California - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Chemehuevi Indian Reservation														
Pumped from river for agricultural use	Diversion	9	10	11	13	16	18	18	16	12	10	11	4	148
Pumped from river and wells for domestic use	Diversion	11	10	10	15	16	17	21	17	18	14	12	13	174
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	9	9	10	13	15	16	18	15	14	11	11	8	149
	Consumptive Use	11	11	11	15	17	19	21	18	16	13	12	9	173
The Metropolitan Water District of Southern California														
Pumped from Lake Havasu	Diversion	96,387	4,283	97,272	100,237	106,294	103,050	106,259	105,020	102,137	106,376	102,114	100,111	1,129,540
	Measured Returns	224	165	215	190	184	183	200	200	216	223	216	187	2,403
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	96,163	4,118	97,057	100,047	106,110	102,867	106,059	104,820	101,921	106,153	101,898	99,924	1,127,137
Bureau of Reclamation - Parker Dam and Government Camp														
Diversion at Parker Dam	Diversion	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use ²	0	0	0	0	0	0	0	0	0	0	0	0	0
Colorado River Indian Reservation														
Pumped from river and wells (agriculture)	Diversion	111	138	188	203	248	301	329	316	248	208	148	145	2,583
Pumped from wells for Big River Development	Diversion	24	25	26	29	36	38	55	57	40	34	30	26	420
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	56	68	89	97	119	141	160	156	120	101	74	71	1,252
	Consumptive Use	79	95	125	135	165	198	224	217	168	141	104	100	1,751
Palo Verde Irrigation District														
Diversion at Palo Verde Dam	Diversion	34,830	45,850	63,790	74,090	91,700	95,130	98,360	75,790	77,530	52,120	39,150	33,990	782,330
Pumped from river	Diversion ^{4,5}	79	98	134	145	178	215	235	226	178	149	106	104	1,847
	Measured Returns	26,267	24,043	28,072	32,143	36,682	35,457	39,859	37,168	31,982	35,167	30,285	30,065	387,190
	Unmeasured Returns ⁶	2,581	4,857	4,950	6,029	6,808	7,471	7,214	6,558	7,260	4,709	2,689	2,704	63,830
	Consumptive Use	6,061	17,048	30,902	36,063	48,388	52,417	51,522	32,290	38,466	12,393	6,282	1,325	333,157
PPR No. 31 (Mendivil) (formerly Lake Enterprises)														
Pumped from river and wells	Diversion	0	0	1	0	0	1	0	0	0	0	0	0	2
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	1	0	0	0	0	0	0	0	0	0	1
	Consumptive Use	0	0	0	0	0	1	0	0	0	0	0	0	1
Bureau of Land Management														
Pumped from wells (Permittees, LHFO and YFO)	Diversion	10	10	11	13	21	4	25	4	25	11	11	14	159
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	2	3	3	4	5	1	7	1	6	3	3	4	42
	Consumptive Use ²	8	7	8	9	16	3	18	3	19	8	8	10	117
Yuma Project Reservation Division														
Indian Unit														
Diversion at Imperial Dam	Diversion	2,326	3,016	5,991	7,871	6,056	2,044	1,035	2,030	3,328	3,812	4,007	2,581	44,097
Pumped from wells for domestic use	Diversion	40	37	50	54	59	75	78	55	59	50	41	39	637
	Measured Returns	87	121	192	289	232	76	37	94	133	119	159	120	1,659
	Unmeasured Returns	395	510	1,009	1,323	1,021	354	186	348	566	645	676	438	7,471
Bard Unit														
Diversion at Imperial Dam	Diversion	1,809	2,343	5,277	5,021	3,777	3,034	2,105	2,352	2,958	3,979	3,522	2,548	38,725
	Measured Returns	36	53	89	98	77	58	35	57	61	65	75	65	769
	Unmeasured Returns	302	391	881	839	631	507	352	393	494	664	588	426	6,468
Unassigned Yuma Project Reservation Division Measured Returns ⁷		2,402	1,991	2,372	2,591	2,989	1,970	1,558	1,780	1,743	2,196	2,094	2,152	25,838
Total Yuma Project Reservation Division Consumptive Use ⁸		953	2,330	6,775	7,806	4,942	2,188	1,050	1,765	3,348	4,152	3,978	1,967	41,254

Table 5. State of California - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
Fort Yuma Indian Reservation															
Ranch 1	Pumped from well and river (CEW-2; CDP-3)	Diversion ⁵	25	31	43	46	57	69	75	72	57	47	34	33	589
Ranch 2 Parcel 3	Pumped from well and river (CEW-2; CDP-4)	Diversion ⁵	15	19	26	28	34	42	45	44	34	29	21	20	357
Ranch 3	Pumped from well and river (CEW-2; CDP-5)	Diversion ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0
Ranch 4	Pumped from well and river (CEW-1,15; CDP-1,2)	Diversion ⁵	50	62	85	92	112	136	148	143	112	94	67	65	1,166
Ranch 5	Diverted from the AAC	Diversion	67	96	197	267	257	146	155	131	198	134	110	86	1,844
Ranch 7	Pumped from well and river (CEW-1,15; CDP-1,2)	Diversion ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0
Ranch 15	Pumped from well (CEW-14)	Diversion ⁵	10	13	17	18	23	27	30	29	23	19	13	13	235
Ranch 17	Pumped from river (CDP-6,7)	Diversion ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum of Diversions for the FYIR Ranches in California	Diversion	167	221	368	451	483	420	453	419	424	323	245	217	4,191	
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Unmeasured Returns	75	99	165	202	215	188	202	188	189	144	109	97	1,873	
	Consumptive Use	92	122	203	249	268	232	251	231	235	179	136	120	2,318	
Yuma Island California⁹															
Arizona State Land Department Trust Lands	Diversion ⁵	200	246	336	366	445	538	590	578	454	379	263	259	4,654	
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Unmeasured Returns	90	109	150	163	198	239	264	257	205	170	119	116	2,080	
	Consumptive Use	110	137	186	203	247	299	326	321	249	209	144	143	2,574	
City of Winterhaven															
Pumped from well	Diversion	6	5	6	5	5	8	6	6	5	5	5	4	66	
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Unmeasured Returns	2	2	2	2	2	2	2	2	2	2	1	1	22	
	Consumptive Use	4	3	4	3	3	6	4	4	3	3	4	3	44	
Imperial Irrigation District															
Diversion at Imperial Dam	Diversion	125,484	173,712	268,163	302,782	326,101	290,967	258,839	211,687	169,125	190,311	163,413	132,451	2,613,035	
	Measured Returns	7,273	10,905	13,001	17,009	18,947	16,438	12,188	14,583	10,060	9,153	10,048	9,596	149,201	
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0	
Delivery from Warren H. Brock Reservoir	Consumptive Use ¹⁰	12,308	8,150	8,382	11,689	3,761	10,576	8,969	10,090	11,205	9,166	6,387	12,647	113,330	
Total IID Consumptive Use	Total Consumptive Use	130,519	170,957	263,544	297,462	310,915	285,105	255,620	207,194	170,270	190,324	159,752	135,502	2,577,164	
Coachella Valley Water District															
Diversion at Imperial Dam	Diversion	21,456	21,579	27,890	30,528	35,380	37,513	39,277	38,792	29,854	25,348	24,421	18,552	350,590	
	Measured Returns	1,244	1,355	1,352	1,715	2,056	2,119	1,849	2,672	1,776	1,219	1,502	1,344	20,203	
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Consumptive Use	20,212	20,224	26,538	28,813	33,324	35,394	37,428	36,120	28,078	24,129	22,919	17,208	330,387	
California Totals															
	Diversion	283,765	252,691	471,000	523,312	572,674	535,191	509,338	438,778	387,604	384,264	338,263	291,290	4,988,170	
	Measured Returns	37,583	38,677	45,343	54,088	61,223	56,357	55,787	56,614	46,028	48,201	44,432	43,581	587,914	
	Unmeasured Returns	3,848	6,518	7,886	9,306	9,790	9,670	9,068	8,476	9,341	6,919	4,566	3,951	89,339	
	Consumptive Use	254,642	215,646	426,153	471,607	505,422	479,740	453,452	383,778	343,440	338,310	295,652	256,405	4,424,247	

Footnotes: See next page.

Table 5 Footnotes:

¹ In years when the City of Needles' consumptive use exceeds its 1,223 AF PPR entitlement, as adjusted for water conserved under the PSCP, such use is offset by pumping from the LCWSP. For additional details, see Table 16.

² Tabulated consumptive use is offset by pumping from the LCWSP. For additional details, see Table 16.

³ Diversion amount includes diversions reported by individual landowners and estimated diversions for all other landowners within the PPR.

⁴ Water pumped from the river for delivery to non-canal lands served by PVID upstream of Palo Verde Diversion Dam.

⁵ Calculated by the USGS using field crop verification and ET methodologies. A description of this methodology ([USGS Diversion Estimate Methodology for Non-metered Irrigation](#)) is included in the Significant Documents. Points of diversion for the Yuma Island in CA are AEP-02, AEP-03, AEW-04, AEW-05, ADW-03, CEP-01, CEP-02, CDW-02, CDW-05, CDW-07, CDW-08, CEW-07, CEW-09, CEW-12, CEW-13. See the [maps showing the locations of the wells and river pumps reported by the USGS](#) in the Significant Documents.

⁶ Unmeasured returns from PVID reflect cropping and irrigation practices in place during 2022 on the Palo Verde Ecological Reserve (PVER), Dennis Underwood Conservation Area, and PVER South units of the Lower Colorado River Multi-Species Conservation Program.

⁷ Unassigned measured returns include drainage from the Indian Unit and the Bard Unit in the Reservation Division, but excludes seepage from the AAC.

⁸ Calculated as the sum of diversions (83,459 AF) minus the sum of measured returns (2,428 AF), unmeasured returns (13,939 AF) and unassigned measured returns (25,838 AF).

⁹ Values shown are by users that may not presently hold an entitlement to Colorado River water. Pursuant to Section III.B of the [Settlement Agreement](#) dated February 14, 2005, in *Arizona v. California*, and as documented in an [exchange of letters between MWD and Reclamation](#), MWD has annually elected to extend the deadline for the United States to take final agency action regarding whether consumptive use of Colorado River water on the Yuma Island should be charged to Priority 2 under the California Seven Party Agreement of August 18, 1931 or otherwise.

¹⁰ Colorado River water captured in the Warren H. Brock Reservoir and delivered to IID as consumptive use. Flow measurement is made at the Brock Reservoir outlet channel, Station 2198+00.

Table 6. State of Nevada - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Bureau of Reclamation														
Hoover Dam Diversion	Diversion	3	4	4	5	4	5	5	5	4	5	5	5	54
	Measured Returns	1	1	2	2	2	1	2	1	1	2	2	2	19
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	2	3	2	3	2	4	3	4	3	3	3	3	35
Robert B. Griffith Water Project														
Pumped from Lake Mead	Diversion ¹	28,933	26,988	35,849	34,398	42,555	47,190	50,960	46,474	41,830	36,800	28,585	28,711	449,273
Lake Mead National Recreation Area														
National Park Service														
Pumped from Lake Mead	Diversion	24	24	26	28	35	36	35	30	26	31	19	21	335
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	24	24	26	28	35	36	35	30	26	31	19	21	335
Basic Water Company														
Pumped from Lake Mead	Diversion ²	315	341	358	399	336	217	0	0	0	0	0	0	1,966
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	315	341	358	399	336	217	0	0	0	0	0	0	1,966
City of Henderson														
Pumped from Lake Mead	Diversion ²	965	985	943	1,024	1,111	647	0	0	0	0	0	0	5,675
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	965	985	943	1,024	1,111	647	0	0	0	0	0	0	5,675
Nevada Department of Wildlife														
Pumped from Lake Mead	Diversion	36	0	0	0	0	0	0	0	0	0	0	0	36
	Measured Returns	36	0	0	0	0	0	0	0	0	0	0	0	36
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	0	0	0	0	0	0	0	0	0	0	0	0	0
Pacific Coast Building Products														
Pumped from Lake Mead	Diversion	61	55	64	84	87	83	55	113	70	92	80	72	916
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	61	55	64	84	87	83	55	113	70	92	80	72	916
Las Vegas Wash Return Flow	Returns ³	19,655	18,246	20,144	19,057	19,496	18,522	20,528	21,678	19,983	20,523	20,325	20,822	238,979
Lake Mead National Recreation Area														
National Park Service														
Pumped from Lake Mohave - Cottonwood Cove	Diversion	13	12	17	14	15	13	15	12	14	12	10	11	158
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	13	12	17	14	15	13	15	12	14	12	10	11	158
Big Bend Water District														
Pumped from river	Diversion	220	211	228	251	283	298	331	307	290	272	234	220	3,145
	Measured Returns	121	116	138	131	154	142	167	152	145	142	137	129	1,674
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	99	95	90	120	129	156	164	155	145	130	97	91	1,471
SNWA - Big Bend Conservation Area														
Pumped from wells	Diversion	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 6. State of Nevada - Records of Diversion, Returns, and Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

WATER USER		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Fort Mojave Indian Reservation														
Pumped from river for agriculture use	Diversion	76	143	244	431	405	337	433	218	264	171	149	0	2,871
Pumped from wells for domestic use	Diversion	58	46	79	119	147	120	152	171	150	115	102	79	1,338
	Measured Returns	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unmeasured Returns	44	62	107	182	182	151	193	128	137	94	83	26	1,389
	Consumptive Use	90	127	216	368	370	306	392	261	277	192	168	53	2,820
Nevada Totals														
	Diversion	30,704	28,809	37,812	36,753	44,978	48,946	51,986	47,330	42,648	37,498	29,184	29,119	465,767
	Measured Returns	19,813	18,363	20,284	19,190	19,652	18,665	20,697	21,831	20,129	20,667	20,464	20,953	240,708
	Unmeasured Returns	44	62	107	182	182	151	193	128	137	94	83	26	1,389
	Consumptive Use	10,847	10,384	17,421	17,381	25,144	30,130	31,096	25,371	22,382	16,737	8,637	8,140	223,670

Nevada Colorado River Storage in Local Aquifer ⁴		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Las Vegas Valley Water District	BOY Balance													345,112
	Injected	0	0	0	0	0	0	0	0	0	0	0	0	0
	Withdrawn	0	0	0	0	0	0	0	54	307	242	115	79	797
	EOY Balance													344,315
City of North Las Vegas	BOY Balance													11,843
	Injected	0	0	0	0	0	0	0	0	0	0	0	0	0
	Withdrawn	0	0	0	0	0	0	0	0	0	0	0	0	0
	EOY Balance													11,843
Total	BOY Cumulative Injected Storage													356,955
	Total Current Year Injection													0
	Total Current Year Withdrawals													797
	EOY Cumulative Injected Storage													356,158

Footnotes:

¹ Diversion does not include deliveries by Boulder City to Lake Mead National Recreation Area/National Park Service.

² Basic Water Company (BWC) stopped diverting water from Lake Mead in June 2022, due to Lake Mead's elevation falling below BWC's intake. BWC's last water delivery was on July 1, 2022.

³ Estimated return based on [historical use method](#) adopted by the Task Force on Unmeasured Return Flows on August 28, 1984, and revised as noted in the [Reclamation letter to SNWA and CRCN dated December 5, 2007](#).

⁴ Colorado River water injected into groundwater storage is accounted for as a consumptive use in the year in which it is diverted from the Colorado River. Water withdrawn from storage is not accounted for as a consumptive use in the year in which it is withdrawn, but because it originated as Colorado River water it is credited as a return flow.

ARTICLE V(C): RECORDS FOR THE DISPOSITION OF WATER ORDERED BUT NOT DIVERTED

In accordance with Article V(C) of the Consolidated Decree, Tables 7 and 8 document records of releases of mainstream water pursuant to orders therefor but not diverted by the party ordering the same, and the quantity of such water delivered to Mexico in satisfaction of the 1944 Mexican Water Treaty (Treaty) or diverted by others in satisfaction of decreed rights.

Tabulations provided herewith document quantities of water passing to Mexico in excess of Treaty requirements and quantities captured in storage.

Water ordered but not diverted is the difference between the approved daily order and the mean daily delivery on the day the diversion was made. Daily orders are provided to the Bureau of Reclamation in advance of the delivery date by the amount of time required for water to travel between the storage location and the user's point of diversion from the mainstream.

To the extent possible, water ordered but not diverted was delivered to other diverters in satisfaction of their water rights. Any remaining water ordered but not diverted was distributed between delivery to storage, delivery to Mexico in satisfaction of Treaty requirements, and to Mexico in excess of Treaty requirements.

The water users listed in this tabulation are major water users from whom Reclamation receives a daily water order and, with the exception of the Central Arizona Water Conservation District and The Metropolitan Water District of Southern California, are those that divert their water downstream of Parker Dam. Currently, no daily orders are received from water users in Nevada, therefore Reclamation has not created a tabulation for Nevada water users. In addition, the storage capacity of Lake Mead is large enough relative to Nevada's daily diversions from the reservoir that any water ordered but not diverted would be retained for future use and would not pass to Mexico in excess of Treaty requirements.

The "Passing to Mexico in Excess of Treaty" values displayed in this section of the report reflect the sum of the daily amounts of water passing to Mexico in excess of the daily Treaty amount, according to the International Boundary and Water Commission's (IBWC) schedule, resulting from water that had been ordered but not diverted. The "To Mexico in Excess of Treaty" values displayed in Table 9 reflect all water under/over delivered to Mexico according to IBWC's schedule. The information provided in Tables 7 and 8 is unrelated to information provided in Table 9 and comparisons between the tabulations should not be made.

Table 7. State of Arizona - Disposition of Water Ordered but not Diverted, Calendar Year 2022. (Values are in acre-feet.)

WATER USER	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Central Arizona Water Conservation District - Diversion at Lake Havasu													
Ordered but not Diverted ¹	3,194	4,018	517	294	1,034	1,772	326	0	3,172	2,978	1,902	3,458	22,665
Delivered to Mexico in Satisfaction of Treaty													
Diverted by Others													
Delivered to Storage ²	3,194	4,018	517	294	1,034	1,772	326	0	3,172	2,978	1,902	3,458	22,665
Passing to Mexico in Excess of Treaty													
Colorado River Indian Reservation - Diversion at Headgate Rock Dam													
Ordered but not Diverted ¹	2,255	2,489	3,207	2,727	3,640	4,491	2,999	797	1,543	2,003	3,184	4,620	33,956
Delivered to Mexico in Satisfaction of Treaty	681	108	524	387	790	552	899	115	181	273	648	1,918	7,076
Diverted by Others	1,393	2,307	2,517	2,259	2,595	3,715	1,952	618	1,196	1,463	2,326	1,808	24,149
Delivered to Storage ³	124	68	144	67	228	217	96	41	112	111	168	833	2,209
Passing to Mexico in Excess of Treaty	57	6	22	15	26	7	52	22	54	156	41	61	522
North Gila Valley Irrigation District - Diversion at Imperial Dam													
Ordered but not Diverted ¹	194	520	322	559	894	299	806	160	255	506	220	168	4,903
Delivered to Mexico in Satisfaction of Treaty	50	21	62	46	202	28	94	28	22	56	18	71	699
Diverted by Others	111	472	246	469	657	264	670	127	201	310	186	46	3,759
Delivered to Storage ³	28	26	10	44	26	7	15	2	31	96	16	50	350
Passing to Mexico in Excess of Treaty	4	1	4	0	9	1	27	3	1	44	0	1	95
Gila Monster Farms - Diversion at Imperial Dam													
Ordered but not Diverted ¹	104	98	95	94	214	44	80	119	18	88	128	210	1,291
Delivered to Mexico in Satisfaction of Treaty	50	13	15	1	63	10	15	16	5	16	10	57	270
Diverted by Others	48	79	75	93	143	32	60	98	12	48	115	113	914
Delivered to Storage ³	5	5	5	0	7	2	4	5	1	14	3	38	89
Passing to Mexico in Excess of Treaty	1	1	1	0	1	1	1	0	0	10	0	2	19
Wellton-Mohawk I.D.D. - Diversion at Imperial Dam													
Ordered but not Diverted ¹	613	748	761	297	1,132	349	2,861	380	315	1,232	1,115	2,785	12,587
Delivered to Mexico in Satisfaction of Treaty	333	9	87	0	83	44	824	0	251	440	153	1,071	3,295
Diverted by Others	202	739	568	296	877	303	1,721	287	15	471	897	958	7,334
Delivered to Storage ³	44	0	95	1	172	1	214	93	49	92	57	716	1,533
Passing to Mexico in Excess of Treaty	35	1	10	0	1	0	101	0	0	229	8	41	425
Yuma Irrigation District - Diversion at Imperial Dam													
Ordered but not Diverted ¹	0	0	236	88	148	151	58	108	0	112	90	157	1,148
Delivered to Mexico in Satisfaction of Treaty	0	0	66	23	47	74	11	31	0	86	1	113	450
Diverted by Others	0	0	159	64	67	62	44	74	0	20	89	24	603
Delivered to Storage ³	0	0	9	1	34	16	0	3	0	3	0	19	85
Passing to Mexico in Excess of Treaty	0	0	2	0	1	0	2	0	0	3	0	2	10
Yuma Mesa I.D.D. - Diversion at Imperial Dam													
Ordered but not Diverted ¹	1,454	1,092	2,866	2,032	1,389	577	513	1,519	2,664	2,810	2,246	1,656	20,819
Delivered to Mexico in Satisfaction of Treaty	273	24	701	160	425	135	195	193	469	1,021	186	565	4,345
Diverted by Others	1,089	1,052	1,949	1,825	799	409	284	1,307	1,845	1,656	1,483	563	14,260
Delivered to Storage ³	86	15	187	45	153	30	19	15	242	134	521	503	1,950
Passing to Mexico in Excess of Treaty	6	0	30	2	12	4	15	4	109	0	56	25	264

Table 7. State of Arizona - Disposition of Water Ordered but not Diverted, Calendar Year 2022. (Values are in acre-feet.)

WATER USER	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Unit B I.D.D. - Diversion at Imperial Dam													
Ordered but not Diverted ¹	181	534	506	733	608	236	144	392	919	946	466	263	5,928
Delivered to Mexico in Satisfaction of Treaty	43	6	101	96	83	39	35	20	16	233	78	36	786
Diverted by Others	124	508	375	576	499	190	97	366	794	689	325	169	4,710
Delivered to Storage ³	14	20	25	58	22	5	1	5	108	6	59	58	382
Passing to Mexico in Excess of Treaty	0	0	6	3	4	1	11	1	1	18	4	0	50
Yuma County Water Users' Association - Diversion at Imperial Dam													
Ordered but not Diverted ¹	5,285	1,477	2,209	182	3,342	1,009	925	1,963	2,247	4,285	1,447	3,859	28,231
Delivered to Mexico in Satisfaction of Treaty	1,738	62	995	0	1,210	475	507	228	510	590	165	677	7,156
Diverted by Others	2,942	1,379	1,082	182	1,874	448	299	1,594	1,307	3,476	1,183	2,040	17,805
Delivered to Storage ³	471	36	48	0	248	81	54	89	421	65	99	1,139	2,752
Passing to Mexico in Excess of Treaty	134	0	85	0	10	6	65	53	8	153	0	4	518
Arizona Totals													
Ordered but not Diverted ¹	13,280	10,976	10,719	7,007	12,400	8,928	8,712	5,438	11,134	14,960	10,797	17,176	131,528
Delivered to Mexico in Satisfaction of Treaty	3,166	244	2,550	713	2,903	1,357	2,580	631	1,454	2,714	1,258	4,507	24,077
Diverted by Others	5,909	6,535	6,971	5,763	7,510	5,421	5,127	4,471	5,370	8,132	6,604	5,721	73,534
Delivered to Storage ^{2,3}	3,967	4,188	1,038	510	1,924	2,130	729	253	4,136	3,500	2,826	6,813	32,015
Passing to Mexico in Excess of Treaty	238	9	160	21	63	20	276	83	173	613	110	136	1,902

Footnotes:

¹ Due to converting daily cfs values to monthly AF totals and rounding to the nearest whole number, the sum of the disposition of water volumes may not equal the Ordered but not Diverted volume.

² Water not diverted by the Central Arizona Project remains in Lake Havasu.

³ Delivered to temporary storage in Senator Wash and Brock Reservoirs.

Table 8. State of California - Disposition of Water Ordered but not Diverted, Calendar Year 2022. (Values are in acre-feet.)

WATER USER	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
The Metropolitan Water District of Southern California -													
Diversion at Lake Havasu													
Ordered but not Diverted ¹	784	415	2,637	2,048	248	655	60	13	266	0	871	2,372	10,369
Delivered to Mexico in Satisfaction of Treaty													
Diverted by Others													
Delivered to Storage ²	784	415	2,637	2,048	248	655	60	13	266	0	871	2,372	10,369
Passing to Mexico in Excess of Treaty													
Palo Verde Irrigation District - Diversion at Palo Verde Diversion Dam													
Ordered but not Diverted ¹	680	728	1,450	972	1,587	2,130	1,785	1,759	1,329	720	649	63	13,853
Delivered to Mexico in Satisfaction of Treaty	273	140	304	185	286	273	363	512	368	147	152	0	3,003
Diverted by Others	312	565	1,083	664	1,281	1,569	1,238	1,159	602	513	437	63	9,485
Delivered to Storage ³	70	18	22	112	13	284	127	83	358	5	52	0	1,145
Passing to Mexico in Excess of Treaty	25	5	41	11	7	4	57	5	1	56	8	0	219
Yuma Project Reservation Division - Diversion at Imperial Dam													
Ordered but not Diverted ¹	3,393	1,627	450	252	2,851	1,575	1,490	1,164	1,195	1,820	1,980	2,736	20,533
Delivered to Mexico in Satisfaction of Treaty	1,076	58	169	15	1,194	194	236	163	105	474	385	825	4,894
Diverted by Others	2,034	1,534	232	230	1,404	1,352	1,195	977	881	1,041	1,411	1,195	13,487
Delivered to Storage ³	210	33	19	7	229	22	29	22	203	30	152	696	1,654
Passing to Mexico in Excess of Treaty	73	2	29	0	24	6	30	2	5	274	31	21	498
Imperial Irrigation District - Diversion at Imperial Dam													
Ordered but not Diverted ¹	17,396	7,040	16,232	11,909	8,076	8,036	13,396	10,418	15,735	14,841	7,105	21,798	151,981
Delivered to Mexico in Satisfaction of Treaty	8,961	2,481	5,413	2,521	4,639	2,696	7,470	3,586	5,227	7,405	2,056	9,704	62,159
Diverted by Others	7,150	4,099	8,887	8,836	2,974	4,666	4,389	6,310	7,280	3,619	4,253	7,632	70,094
Delivered to Storage ³	984	373	1,709	511	361	601	1,334	388	2,853	1,252	632	4,290	15,288
Passing to Mexico in Excess of Treaty	301	87	223	41	101	73	203	134	376	2,565	164	171	4,439
Coachella Valley Water District - Diversion at Imperial Dam													
Ordered but not Diverted ¹	476	471	186	1,353	405	325	477	119	1,152	267	7	769	6,005
Delivered to Mexico in Satisfaction of Treaty	207	0	20	195	113	0	134	23	134	114	3	205	1,148
Diverted by Others	208	453	164	1,088	288	325	299	96	943	25	2	239	4,129
Delivered to Storage ³	52	18	1	41	4	0	23	0	53	11	1	317	520
Passing to Mexico in Excess of Treaty	9	0	1	29	0	0	21	0	22	117	1	8	208
California Totals													
Ordered but not Diverted ¹	22,730	10,280	20,955	16,534	13,166	12,721	17,208	13,474	19,677	17,648	10,611	27,738	202,741
Delivered to Mexico in Satisfaction of Treaty	10,518	2,678	5,907	2,916	6,232	3,164	8,203	4,284	5,835	8,140	2,595	10,734	71,205
Diverted by Others	9,704	6,651	10,366	10,817	5,946	7,912	7,120	8,542	9,707	5,197	6,104	9,128	97,195
Delivered to Storage ^{2,3}	2,099	857	4,388	2,720	856	1,562	1,573	507	3,732	1,299	1,709	7,675	28,977
Passing to Mexico in Excess of Treaty	408	94	294	81	133	83	311	140	404	3,012	204	200	5,364

Footnotes:

¹ Due to converting daily cfs values to monthly AF totals and rounding to the nearest whole number, the sum of the disposition of water volumes may not equal the Ordered but not Diverted volume.

² Water not diverted by The Metropolitan Water District of Southern California remains in Lake Havasu.

³ Delivered to temporary storage in Senator Wash and Brock Reservoirs.

ARTICLE V(D): RECORDS OF DELIVERIES TO MEXICO IN SATISFACTION OF PART III OF THE 1944 TREATY REQUIREMENTS AND WATER PASSING TO MEXICO IN EXCESS OF TREATY REQUIREMENTS

In accordance with Article V(D) of the Consolidated Decree, Table 9 documents the records of deliveries to Mexico of water in satisfaction of the obligations of Part III of the “Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande” (1944 Mexican Water Treaty (Treaty)), signed February 3, 1944 and water passing to Mexico in excess of Treaty requirements.

The tabulations, based upon records furnished by the United States Section of the International Boundary and Water Commission (IBWC), show the quantities of water delivered to Mexico at the Northerly International Boundary, the Southerly International Boundary, the Limitrophe (including discharges via the Diversion Channel), and emergency deliveries to the City of Tijuana (as applicable), pursuant to Articles 10 and 15 of the 1944 Mexican Water Treaty and related Minutes of the IBWC; and the quantities of water passing to Mexico in excess of Treaty requirements. Table 9 also shows the quantities of water used for the creation of Mexico’s Water Reserve, delivered from Mexico’s Water Reserve, and used for the creation of Mexico’s Recoverable Water Savings as a contribution to the Binational Water Scarcity Contingency Plan pursuant to IBWC Minute 323.

Minutes incorporated into the tabulations include:

- 1) Minute 242 – Permanent and Definitive Solution to the International Problem of the Salinity of the Colorado River, signed August 30, 1973.
- 2) Minute 318 – Adjustment of Delivery Schedules for Water Allotted to Mexico for the Years 2010 through 2013 as a Result of Infrastructure Damage in Irrigation District 014, Rio Colorado, Caused by the April 2010 Earthquake in the Mexicali Valley, Baja California, signed December 17, 2010.
- 3) Minute 319 – Interim International Cooperative Measures in the Colorado River Basin Through 2017 and Extension of Minute 318 Cooperative Measures to Address the Continued Effects of the April 2010 Earthquake in the Mexicali Valley, Baja California, signed November 20, 2012.
- 4) Minute 322 – Extension of the Temporary Emergency Delivery of Colorado River Water for Use in Tijuana, Baja California, signed January 19, 2017.
- 5) Minute 323 – Extension of Cooperative Measures and Adoption of a Binational Water Scarcity Contingency Plan in the Colorado River Basin, signed September 21, 2017.
- 6) Minute 327 – Emergency Deliveries of Colorado River Waters for Use in the City of Tijuana, Baja California, signed January 28, 2022.

**Table 9. Deliveries to Mexico in Satisfaction of Part III of the 1944 Mexican Water Treaty and Water Passing to Mexico in Excess of Treaty Requirements, Calendar Year 2022.
(Values are in acre-feet.)**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Colorado River at the Northerly International Boundary¹	104,550	117,284	158,926	150,646	127,300	133,927	133,338	104,851	94,099	55,707	75,824	74,094	1,330,544
Deliveries to Mexico in Satisfaction of Treaty Requirements													
Delivery at the Limitrophe ²	665	396	378	233	303	315	219	258	459	638	821	699	5,384
Diversion for Delivery at Tijuana ³	0	0	0	0	0	0	0	702	685	0	711	675	2,772
Delivery at Southerly International Boundary	9,163	9,466	10,418	9,883	9,797	8,514	8,704	8,669	9,789	10,896	11,275	11,216	117,788
Diversion Channel Discharge ⁴	110	315	209	710	348	205	219	161	0	0	0	0	2,278
Delivery to Mexico at the Northerly International Boundary ⁵	104,278	116,913	158,799	150,348	126,924	133,718	133,138	104,307	92,464	51,437	75,487	73,785	1,321,598
Total Deliveries to Mexico in Satisfaction of Treaty Requirements	114,216	127,090	169,804	161,174	137,371	142,752	142,279	114,097	103,397	62,971	88,294	86,375	1,449,820
Creation of Mexico's Recoverable Water Savings ⁶	0	0	0	0	0	0	0	0	9,770	20,230	0	0	30,000
Creation of Mexico's Water Reserve ⁷	263	0	0	0	0	0	0	0	1,500	0	1,580	1,816	5,158
Delivery of Mexico's Water Reserve ⁸	0	0	0	0	(7,355)	(11,207)	(7,915)	(5,744)	(2,756)	0	0	0	(34,977)
Total To Mexico in Satisfaction of Treaty Requirements ⁹	114,479	127,090	169,804	161,174	130,016	131,545	134,364	108,353	111,911	83,201	89,874	88,191	1,450,000
To Mexico in Excess of Treaty¹⁰	272	371	127	298	375	208	200	543	1,634	4,270	337	309	8,945
Accountable Deliveries to Mexico¹¹	114,750	127,461	169,930	161,472	130,392	131,753	134,565	108,896	113,545	87,471	90,211	88,500	1,458,946
Water Bypassed Pursuant to IBWC Minute 242	13,755	12,179	12,395	11,739	9,273	11,462	12,737	11,763	12,113	15,036	10,942	7,448	140,840
Volumes of Water in Mexico's Recoverable Water Savings and Mexico's Water Reserve¹²													
BOY Balance													36,900
Creation													30,000
Delivery													0
System Assessment ¹³													(3,000)
EOY Balance (Available for Future Delivery)													63,900
													134,023

Note: Annual totals may differ from the sum of the displayed monthly values due to rounding and conversion from TCM to AF.

Footnotes:

¹ Total flow in the river at the NIB as reported by IBWC; includes water passing to Mexico in excess of [Treaty](#) requirements.

² Wasteway deliveries to the river Limitrophe via the Cooper, 11 Mile, and 21 Mile lateral wasteways in satisfaction of the Treaty requirements.

³ Temporary emergency delivery of Colorado River water for the City of Tijuana is diverted at Lake Havasu by MWD and delivered via the Colorado River Aqueduct, MWD's, SDCWA's and Otay Water District's distribution systems pursuant to IBWC [Minute 322](#), applicable through January 19, 2022 and IBWC [Minute 327](#), applicable through January 27, 2027.

⁴ The Diversion Channel delivers water from the SIB confluence structure to the river Limitrophe or to the Bypass Drain. Consistent with a [2001 Memorandum of Understanding](#) between Reclamation and the U.S. Section of the IBWC and Section VI.B of IBWC [Minute 323](#), during the months of September through December (Mexico's four critical months) water is discharged to the Bypass Drain and is not charged to the Treaty. During the months of January through August water is discharged to the river Limitrophe and is charged to the Treaty.

⁵ That portion of the flows at NIB necessary to meet the total scheduled delivery to Mexico. Includes deliveries from Mexico's Water Reserve.

⁶ Water deferred by Mexico pursuant to Section IV of IBWC Minute 323 and Section IV.A.1 of the [Joint Report of the Principal Engineers with the Implementing Details of the Binational Water Scarcity Contingency Plan in the Colorado River Basin](#) dated July 11, 2019 (2019 Joint Report) and applied towards Mexico's Binational Water Scarcity Contingency Plan Contribution.

⁷ Water deferred by Mexico pursuant to Section V of IBWC Minute 323. Mexico's Water Reserve includes Emergency Storage, Revolving Account, and Intentionally Created Mexican Allocation.

⁸ Delivery from Mexico's Water Reserve pursuant to Section V.E.13 of IBWC Minute 323. Pursuant to Sections VII.A and VIII.B of IBWC Minute 323 and the [Joint Report of the Principal Engineers with the Operational Provisions Applicable to Water for the Environment Stipulated in Minute 323](#) dated December 16, 2021 (2021 Joint Report), this water was delivered for environmental purposes within Mexico and was applied towards the United States' government environmental water commitment, thereby fulfilling that commitment.

Footnotes continued on next page.

Table 9 Footnotes: Continued from previous page.

⁹ In accordance with Section III.A of IBWC Minute 323, water delivery reductions to Mexico in the amount of 50,000 AF were applied to Mexico's 2022 annual allotment.

¹⁰ Water passing to Mexico in excess of Mexico's monthly schedule. Calculated as the sum of daily differences between actual flows to Mexico and Mexico's total schedule.

¹¹ "Accountable Deliveries" are calculated as: Colorado River at NIB + Delivery at the Limitrophe + Diversion for Delivery at Tijuana + Delivery at SIB + Diversion Channel Discharge + Creation of Mexico's Water Reserve + Creation of Mexico's Recoverable Water Savings - Delivery of Mexico's Water Reserve. It includes water passing to Mexico in excess of Mexico's daily schedule. It does not include water bypassed pursuant to IBWC Minute 242 or water discharged to the river Limitrophe via the diversion channel during Mexico's four critical months.

¹² The volume of water in Mexico's Recoverable Water Savings and Mexico's Water Reserve, as documented in the [exchange of letters](#) between the United States Section of the IBWC and Reclamation.

¹³ In accordance with Sections IV.B.1 and IV.B.2 of the 2019 Joint Report, through December 31, 2026 a one-time 10 percent assessment on creation of water in Mexico's Recoverable Water Savings and Mexico's Water Reserve shall be applied at the end of the year instead of the annual 3 percent evaporation losses stipulated in Section V.E.5 of IBWC Minute 323. In accordance with Section H.2 of the 2021 Joint Report, the 10 percent assessment on Mexico's Water Reserve shall be applied on the net volume created in Mexico's Water Reserve. Consistent with Section H.2 of the 2021 Joint Report, no system assessment was applied to Mexico's Water Reserve in 2022.

ARTICLE V(E): RECORDS OF DIVERSIONS AND CONSUMPTIVE USE OF WATER FROM THE MAINSTREAM OF THE GILA AND SAN FRANCISCO RIVERS FOR THE BENEFIT OF THE GILA NATIONAL FOREST

Table 10. Diversions and Consumptive Use for the Benefit of the Gila National Forest, Calendar Year 2022.¹ (Values are in acre-feet.)

WATER SOURCE		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Gila River	Diversion	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	0	0	0	0	0	0	0	0	0	0	0	0	0
San Francisco River	Diversion	0	0	0	0	0	0	0	0	0	0	0	0	0
	Consumptive Use	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	Total Diversion	0												
	Total Consumptive Use	0												

¹These data are provided annually by the New Mexico Interstate Stream Commission.

INFORMATION PROVIDED IN ADDITION TO THE REPORTING REQUIREMENTS OF THE CONSOLIDATED DECREE

The information contained in the following sections of this report is supplemental to the records required by Article V of the Consolidated Decree of the United States Supreme Court in *Arizona v. California et al.* 547 U.S. 150 (2006) (Consolidated Decree). This information provides a more extensive record of activities relating to federal management of the Colorado River. In concise tabulations specific to various agreements, policies, rules, or Records of Decision, this information is intended to help the reader correlate the records found in the Article V portion of this report with the various agreements. The penultimate section contains a list of documents significant to the actions taken by the Bureau of Reclamation, the Lower Division States, and the water user agencies for the calendar year documented in this report. The final section of this report contains a series of maps showing the general location of the water users tabulated in this report.

SUMMARY OF WATER AVAILABILITY AND USE BY STATE

The Secretary of the Interior (Secretary) makes Colorado River water available to the Lower Division States in accordance with Article II of the Consolidated Decree.

Under Article II, the Secretary apportions water to the states under shortage, normal, or surplus conditions. In accordance with Article II(B)(6), if, in any one year, water apportioned to one state is not used by that state, the Secretary may release such unused water for use in the other states.

The amount of Colorado River water available for use in a state is impacted by various agreements and policies. Examples of these agreements and policies include storage and interstate release agreements, the *Colorado River Water Delivery Agreement*, the *Inadvertent Overrun and Payback Policy* (IOPP), system conservation agreements, the *Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead*, and the *Lower Basin Drought Contingency Plan Agreement*, including the *Lower Basin Drought Contingency Operations*.

Table 11 documents the amount of Colorado River water made available to each Lower Division State under Article II of the Consolidated Decree – calculated as the state's basic

apportionment, as adjusted for actions including, but not limited to, required reductions to the state's Colorado River basic apportionment due to a Shortage Condition, water released pursuant to Article II(B)(6) of the Consolidated Decree, paybacks made by users within the state in accordance with the IOPP, conservation created pursuant to executed system conservation agreements, water left in Lake Mead to meet a required Drought Contingency Plan Contribution, and creation and/or delivery of Intentionally Created Surplus – and the total consumptive use within a state. In those years when a given program shows activity a line will be included within the table denoting the activity and the volume of water involved. Otherwise, the line is omitted.

The table demonstrates whether the consumptive use results in an underrun or overrun of the amount of Colorado River water available to each Lower Division State for the calendar year covered by this report.

Table 11. State Apportionments, Adjustments, and Total Consumptive Use, Calendar Year 2022. (Values are in acre-feet.)

STATE	ADJUSTMENTS	ACTUAL USE
Arizona	Basic Apportionment ¹	2,800,000
	Reduction for Shortage ²	(320,000)
	DCP Contribution ³	(192,000)
	System Conservation Water - Pilot System Conservation Program ⁴	(132)
	System Conservation Water - CAP Subcontractors ^{5,6}	(87,794)
	System Conservation Water - CRIT ⁷	(50,000)
	System Conservation Water - CRIT ^{5,8}	(4,685)
	System Conservation Water - FMYN ^{5,9}	(13,933)
	System Conservation Water - GRIC ^{5,10}	(58,837)
	System Conservation Water - MVIDD ^{5,11}	(9,531)
	System Conservation Water - Reclamation ^{5,12}	(14,665)
	System Conservation Water - YMIDD ^{5,13}	(8,523)
	ICS Creation (GRIC) ¹⁴	(78,565)
	Delivery of ICS (CAWCD)	52,841
	<hr/>	<hr/>
	Total Available Colorado River Water ¹⁵	2,014,176
	<hr/>	<hr/>
	Total Consumptive Use ^{16,17}	2,014,176
	<hr/>	<hr/>
	State Underrun or (Overrun)	0
	Unused AZ Apportionment Left in Lake Mead	0
	Net State Underrun or (Overrun)	0
California	Basic Apportionment ¹	4,400,000
	DCP Contribution ¹⁸	0
	System Conservation Water - Pilot System Conservation Program ⁴	(141)
	System Conservation Water - CVWD ^{19,20}	(9,083)
	System Conservation Water - IID ^{19,21}	(25,000)
	System Conservation Water - PVID/MWD Fallowing Program ^{19,22}	(52,921)
	ICS Delivery (MWD)	111,392
	<hr/>	<hr/>
	Total Available Colorado River Water ¹⁵	4,424,247
	<hr/>	<hr/>
	Total Consumptive Use ^{16,23}	4,424,247
	<hr/>	<hr/>
	State Underrun or (Overrun)	0
	Unused CA Apportionment Left in Lake Mead	0
	Net State Underrun or (Overrun)	0
Nevada	Basic Apportionment ¹	300,000
	Reduction for Shortage ²	(13,000)
	DCP Contribution (SNWA) ²⁴	(8,000)
	ICS Creation (SNWA) ¹⁴	(55,330)
	<hr/>	<hr/>
	Total Available Colorado River Water ¹⁵	223,670
	<hr/>	<hr/>
	Total Consumptive Use ¹⁶	223,670
	<hr/>	<hr/>
	State Underrun or (Overrun)	0
	Unused NV Apportionment Left in Lake Mead	0
	Net State Underrun or (Overrun)	0

Footnotes: See next page.

Table 11 Footnotes:

¹ The state's Colorado River basic apportionment as described in Article II(B)(1) of the [Consolidated Decree](#).

² The required reduction to the state's Colorado River basic apportionment pursuant to Section XI.G.2.D.1.a of the [2007 Interim Guidelines](#).

³ In accordance with Section III.B.1.a of [Lower Basin Drought Contingency Operations](#) (LBOps) and as summarized in LBOps Table 1, the state of Arizona was required to make a DCP Contribution in the amount of 192,000 AF in 2022. In accordance with the [Agreement Regarding Lower Basin Drought Contingency Plan Obligations](#), the required DCP Contribution was made by CAWCD through the creation of EC ICS and simultaneous conversion to DCP ICS (57,061 AF) and through the creation of Non-ICS Water (134,939 AF). CAWCD's EC ICS creation amount is provisional until verified by Reclamation. For additional information, see Tables 22 and 23.

⁴ The aggregate amount of water conserved in each state, in 2022, pursuant to individual System Conservation Implementation Agreements (SCIA) between Reclamation and water users participating in the Pilot System Conservation Program. In accordance with the SCIA, this System Conservation Water remained in Colorado River reservoirs in the Lower Basin to benefit system storage. For additional information, see Tables 17 and 18.

⁵ In accordance with the applicable conservation agreement, Section 3.b of the [Lower Basin Drought Contingency Plan Agreement](#) (LB DCP Agreement), and Section II.3.e of the [Agreement Regarding Lower Basin Drought Contingency Plan Obligations](#), this System Conservation Water remained in Colorado River reservoirs in the Lower Basin to benefit system storage. For additional information, see Tables 17 and 20.

⁶ System Conservation Water created by certain CAP Subcontractors pursuant to executed [Compensated Conservation Agreements](#) dated May 10, 2022 and October 3, 2022.

⁷ System Conservation Water created by CRIT pursuant to the [Agreement Among the United States of America, Through the Department of the Interior, Bureau of Reclamation, the State of Arizona, Through the Arizona Department of Water Resources, the Central Arizona Water Conservation District, and the Colorado River Indian Tribes to Fund the Creation of Colorado River System Water Through Voluntary Water Conservation and Reductions in use During Calendar Years 2020-2022](#) dated July 26, 2019. This System Conservation Water remained in Colorado River reservoirs in the Lower Basin to benefit system storage.

⁸ System Conservation Water created by CRIT pursuant to [Agreement No. 22-XX-30-W0729](#) dated July 21, 2022.

⁹ System Conservation Water created by FMYN pursuant to [SCIA No. 20-XX-30-W0688](#) dated September 11, 2020.

¹⁰ System Conservation Water created by GRIC pursuant to [SCIA No. 22-XX-30-W0724](#) dated December 15, 2021 (50,937 AF) and [SCIA No. 23-XX-30-W0748](#) dated December 15, 2022 (7,900 AF).

¹¹ System Conservation Water created by MVIDD pursuant to [Agreement No. 22-XX-30-W0725](#) dated May 10, 2022.

¹² System Conservation Water created by additional pumping from the 242 Well Field Expansion pursuant to [Letter Agreement No. 16-XX-30-W0603, Revision No. 1](#) dated May 7, 2021.

¹³ System Conservation Water created by YMIDD pursuant to [Agreement No. 22-XX-30-W0728](#) dated July 5, 2022.

¹⁴ The amount of EC ICS created by the water user during the reporting year. EC ICS creation by SNWA has been verified by Reclamation. EC ICS creation by CAWCD and GRIC is provisional until verified by Reclamation. For additional information, see Table 22.

¹⁵ The total amount of Colorado River water available for use by the state during the reporting year.

¹⁶ The total consumptive use of Colorado River water within the state as tabulated in the Article V(B) section of this report.

¹⁷ Value shown includes 1,849 AF of consumptive use by users that may not presently hold an entitlement to Colorado River water or use that may be outside current contract parameters. This use is under review by Reclamation and ADWR.

¹⁸ In accordance with Section III.B.3 of LBOps and as summarized in LBOps Table 1, the state of California was not required to make a DCP Contribution in 2022.

¹⁹ In accordance with the applicable conservation agreement, Section 3.b of the LB DCP Agreement, this System Conservation Water remained in Colorado River reservoirs in the Lower Basin to benefit system storage. For additional information, see Tables 18 and 20.

²⁰ System Conservation Water created by CVWD pursuant to [Agreement No. 23-XX-30-W0749](#) dated December 5, 2022.

²¹ For informational purposes: By [letter dated April 25, 2023](#), IID notified Reclamation that, in 2022, IID provisionally created 38,365 AF of extraordinary conservation in excess of its [CRWDA](#) water transfer obligations, of which 25,000 AF of qualified conserved water remained in Lake Mead as System Conservation Water pursuant to [Agreement No. 23-XX-30-W0775](#) dated May 10, 2023; the remaining 13,365 AF was stored with MWD as qualified conserved water in accordance with the IID-MWD [Settlement and Release Agreement](#) dated September 16, 2021.

²² System Conservation Water created by the PVID/MWD Forbearance and Fallowing Program pursuant to [Funding Agreement No. 21-XX-30-W0714](#) dated August 12, 2021.

²³ Value shown includes 2,574 AF of consumptive use on the Yuma Island by users that may not presently hold an entitlement to Colorado River water. Pursuant to Section III.B of the [Settlement Agreement](#) dated February 14, 2005, in *Arizona v. California*, and as documented in an [exchange of letters between MWD and Reclamation](#), MWD has annually elected to extend the deadline for the United States to take final agency action regarding whether consumptive use of Colorado River water on the Yuma Island should be charged to Priority 2 under the California Seven Party Agreement of August 18, 1931 or otherwise. For additional information, see Table 5.

²⁴ In accordance with Section III.B.2.a of LBOps and as summarized in LBOps Table 1, the state of Nevada was required to make a DCP Contribution in the total amount of 8,000 AF in 2022. The required DCP Contribution was made by SNWA through the creation of EC ICS and simultaneous conversion to DCP ICS. For additional information, see Tables 22 and 23.

INTERSTATE WATER BANKING WITHIN THE STATES OF ARIZONA, CALIFORNIA, AND NEVADA

On November 1, 1999, the Secretary of the Interior (Secretary) adopted Federal regulations, codified at 43 CFR Part 414, establishing a procedural framework for carrying out an interstate water banking program. The rule provided for authorized parties to enter into agreements whereby Colorado River water may be stored off-stream in one state for future benefit of consuming entities in another state.

The primary mechanism through which these transactions may occur is a Storage and Interstate Release Agreement (SIRA), which permits authorized entities in the Lower Division States to store Colorado River water off-stream, develop Intentionally Created Unused Apportionment (ICUA) in a future year, and make the ICUA available to the Secretary for release for use in another Lower Division State. These SIRAs provide structure and guidance, in accordance with Article II(B)(6) of the Consolidated Decree, for the actions the Secretary will take in releasing Colorado River water to a specific entity in order to implement the interstate contractual distribution of water under the interstate water banking program.

Two SIRAs have been implemented under 43 CFR Part 414. The first SIRA was entered into on December 18, 2002, among the Bureau of Reclamation, on behalf of the Secretary, the Arizona Water Banking Authority (AWBA), the Southern Nevada Water Authority (SNWA), and the Colorado River Commission of Nevada (CRCN). This SIRA provides for the storage, by AWBA, of either the State of Arizona's basic or surplus apportionment or the State of Nevada's unused basic or surplus apportionment for the benefit of SNWA.

In 2001, AWBA, SNWA, and CRCN executed an Agreement for Interstate Water Banking, amended January 1, 2005, April 1, 2009, and May 20, 2013, specifying the interstate banking relationship among those parties. This agreement establishes the terms and conditions for the off-stream storage of Colorado River water in Arizona and the establishment of Long-Term Storage Credits (LTSC) for the benefit

of SNWA. Under the AWBA/SNWA/CRCN interstate banking agreement, Colorado River water diverted and banked in Arizona is accounted as consumptively used by Arizona in the year it is diverted and, as a result, LTSCs are created for SNWA. When LTSCs are recovered, SNWA will divert Colorado River water in exchange for the Central Arizona Water Conservation District's (CAWCD) use of the LTSCs pursuant to the SIRA. The Secretary will release ICUA created by AWBA, via CAWCD's forbearance to SNWA, in that same year pursuant to Article II(B)(6) of the Consolidated Decree. ICUA used by SNWA is in addition to Nevada's basic apportionment and is accounted as consumptive use of Colorado River water in Nevada for that year.

The second SIRA was entered into on October 27, 2004, among Reclamation, on behalf of the Secretary, The Metropolitan Water District of Southern California (MWD), SNWA, and CRCN. This SIRA provides for the storage, by MWD, of the State of Nevada's unused basic or surplus apportionment for the benefit of SNWA.

In 2004, MWD, SNWA, and CRCN, executed an Operational Agreement, amended August 2009, October 2012, and October 2015, specifying the interstate banking relationship among those parties, and providing the terms and conditions under which MWD will store Nevada unused basic apportionment for the benefit of SNWA. When SNWA requests delivery of this water, MWD will develop ICUA by reducing its diversion of Colorado River water. The ICUA developed by MWD through its reduced diversion of Colorado River water will be released by the Secretary for use by SNWA.

Table 12 documents the Accumulated Long-Term Storage Credits (ALTSC) verified by AWBA and MWD, provisional LTSC accrued during the past year, LTSCs recovered during the past year, and ALTSC held for an entity with a SIRA.

Table 12. Colorado River Water Stored in one State Under 43 CFR Part 414 for the Benefit of Specific Entities in Another State (Interstate Water Banking), Calendar Year 2022. (Values are in acre-feet.)

	BOY Balance	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
NEVADA														
Water diverted and stored in AZ by AWBA for the benefit of SNWA														
Verified ALTSC ¹														
	613,846													
Accrued LTSC in 2022 ²		0	0	0	0	0	0	0	0	0	0	0	0	0
Verified LTSC in 2022 ³		0	0	0	0	0	0	0	0	0	0	0	0	0
ICUA Developed in 2022 ⁴		0	0	0	0	0	0	0	0	0	0	0	0	0
Total ALTSC ⁵		613,846	613,846	613,846	613,846	613,846	613,846	613,846	613,846	613,846	613,846	613,846	613,846	613,846
Water diverted and stored in CA by MWD for the benefit of SNWA														
Verified ALTSC ^{1,6}														
	330,225													
Diverted in 2022 ⁶		0	0	0	0	0	0	0	0	0	0	0	0	0
Verified LTSC in 2022 ⁶		0	0	0	0	0	0	0	0	0	0	0	0	0
ICUA Developed in 2022 ^{4,6}		0	0	0	0	0	0	0	0	0	0	0	0	0
Total ALTSC ⁶		330,225	330,225	330,225	330,225	330,225	330,225	330,225	330,225	330,225	330,225	330,225	330,225	330,225
TOTAL														
Water stored for the benefit of SNWA during the calendar year		0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Balance of Water Stored for SNWA within AZ and CA ⁷		944,071	944,071	944,071	944,071	944,071	944,071	944,071	944,071	944,071	944,071	944,071	944,071	944,071

Footnotes:

¹ ALTSCs are LTSCs verified by the banking entity and available for recovery by a specific entity with a valid SIRA. The amount of ICUA developed cannot exceed verified LTSCs. "BOY Balance" values shown above may differ from the previous year's end-of-year "Total ALTSC" due to differences between provisional and verified accounting of LTSCs. For additional information see the "[Interstate Water Banking](#)" section in the Significant Documents.

² Provisional LTSCs accrued during the reporting year for the benefit of a specific consuming entity in Nevada with a valid SIRA. Provisional LTSCs represent the amount of water diverted from the river and transported to the storage facility. Provisional LTSCs that have not been verified by AWBA or MWD are not eligible for certification and recovery. Accruals of LTSCs in Arizona for the benefit of consuming entities in Nevada and California are limited to 200,000 AF annually.

³ The provisional amount of LTSC's credited to SNWA's Interstate Account during the reporting year after incorporating the estimated losses and mandatory cut to the aquifer. The values displayed are provisional until verified by AWBA.

⁴ ICUA developed by AWBA or MWD during the reporting year. AWBA or MWD have certified this amount to be available and the Secretary has released it to a specific entity with a valid SIRA. The ALTSCs are certified by AWBA or MWD when ICUA is requested, and prior to its release by the Secretary. Total recovery of ALTSCs from AWBA cannot exceed 100,000 AF annually, due to a limitation defined under Arizona state law. When water is released from storage, Arizona or MWD will be required to reduce its consumptive use through the development of ICUA in an amount equal to Nevada's requested release. Nevada will be allowed to utilize the unused apportionment in an amount equal to the ICUA made available.

⁵ ALTSCs are the cumulative monthly sum of verified or estimated LTSCs.

⁶ In 2004, MWD, SNWA, and the Secretary entered into a SIRA to allow MWD to divert and store water for the benefit of SNWA. When storage occurs, it must be Nevada unused apportionment, which will require Nevada to reduce its consumptive use by an amount equal to the total storage. When water is released from storage, MWD will be required to reduce its consumptive use through the development of ICUA in an amount equal to Nevada's requested release and Nevada will be allowed to utilize the unused apportionment in an amount equal to the ICUA made available by MWD.

⁷ This cumulative balance includes both the BOY ALTSC balance as verified by AWBA and MWD and the verified LTSCs placed into storage during the reporting year.

INADVERTENT OVERRUNS AND PAYBACKS WITHIN THE STATES OF ARIZONA, CALIFORNIA, AND NEVADA

On October 10, 2003, the Secretary of the Interior (Secretary) executed the *Colorado River Water Delivery Agreement* authorizing the *Inadvertent Overrun and Payback Policy* (IOPP). The policy is set forth in the *Record of Decision, Colorado River Water Delivery Agreement, Implementation Agreement, Inadvertent Overrun and Payback Policy, and Related Federal Actions, Final Environmental Impact Statement*, published in the *Federal Register* at 69 Fed. Reg. 12202 (March 15, 2004). Effective January 1, 2004, the IOPP, which applies only to Colorado River water users in the Lower Division States, defines inadvertent overruns, establishes procedures to account for inadvertent overruns, and sets forth the requirements for payback of inadvertent overruns to the Colorado River system.

For various reasons, a user may inadvertently divert, pump, receive or consumptively use Colorado River water in an amount that exceeds that to which the user is entitled for that year as provided in annual water orders approved pursuant to the user's water delivery contract, decreed water right, or Secretarial reservation (inadvertent overrun). If water is diverted, pumped or received inadvertently in excess of approved orders, and sources of unused Colorado River water are not available to accommodate adjustment of water orders, the IOPP governs the payback.

In accordance with the IOPP, paybacks are required to commence in the calendar year that immediately follows the release date of the final Water Accounting Report that reports the overrun. Section 2.6 of the IOPP sets forth the number of years within which an overrun must be paid back and the minimum payback required for each year. Overruns are not allowed in a year for which the Secretary has determined a Shortage Condition.

The tabulations in Tables 13 through 15 document information associated with inadvertent overruns and paybacks, as applicable, for each individual water user, including:

- 1) The beginning-of-year overrun account balance.
- 2) The amount of overrun incurred in the reporting year.
- 3) The amount of validated paybacks made to the Colorado River system in the reporting year.
- 4) The amount of unused apportionment that was applied to offset the overrun pursuant to the *Lower Colorado Region Policy for Apportioned but Unused Water*.
- 5) The end-of-year overrun balance.

Table 13. State of Arizona - Overruns, Paybacks, and Overrun Account Balances, Calendar Year 2022. (Values are in acre-feet.)

WATER USER	DETAILS	DIVERSION	CONSUMPTIVE USE	APPROVAL	AVAILABLE ENTITLEMENT
No overruns or paybacks occurred within the State of Arizona in the reporting year.					

Table 14. State of California - Overruns, Paybacks, and Overrun Account Balances, Calendar Year 2022. (Values are in acre-feet.)

WATER USER	DETAILS	DIVERSION	CONSUMPTIVE USE	APPROVAL	AVAILABLE ENTITLEMENT
No overruns or paybacks occurred within the State of California in the reporting year.					

Table 15. State of Nevada - Overruns, Paybacks, and Overrun Account Balances, Calendar Year 2022. (Values are in acre-feet.)

WATER USER	DETAILS	DIVERSION	CONSUMPTIVE USE	APPROVAL	AVAILABLE ENTITLEMENT
No overruns or paybacks occurred within the State of Nevada in the reporting year.					

LOWER COLORADO WATER SUPPLY PROJECT

The Lower Colorado Water Supply Act (Act), Public Law 99-655, November 14, 1986, authorized the Secretary of the Interior (Secretary) to construct, operate, and maintain the Lower Colorado Water Supply Project (LCWSP). Pursuant to the Act, the Secretary is authorized to enter into exchange contracts and contracts for the care, operation, and maintenance of all or any part of the project works, subject to such rules and regulations as the Secretary may prescribe. Reclamation assumed the care, operation, and maintenance of the LCWSP in 2013.

Any contracts executed by the Secretary to recover the costs of the LCWSP must be with persons, or Federal or non-Federal governmental entities whose lands or interests in lands are located adjacent to the Colorado River in the State of California who do not hold rights to Colorado River water or whose rights are insufficient to meet their present or anticipated future domestic, municipal, industrial, and recreational needs, as determined by the Secretary. Water for agricultural use is not authorized under the Act.

The Act authorized construction of wells with a total annual capacity of 10,000 acre-feet. Stage I of the LCWSP consists of two wells located south of the All-American Canal (AAC) in Imperial County having a total design capacity of 5,000 acre-feet. The wells, which became operational as of August 1, 2003, pump groundwater and discharge it into the AAC for use by the Imperial Irrigation District (IID). IID then forbears the use of an equal amount of Colorado River water.

In September 1992, the Bureau of Reclamation entered into a contract to supply LCWSP water to the City of Needles (Needles) in annual amounts up to 3,500 acre-feet of the initial capacity. Pursuant to that contract, Needles enters into subcontracts for delivery of LCWSP water to non-Federal water users in San Bernardino, Riverside, and Imperial Counties. The Colorado River Board of California (CRBC) receives and reviews applications for LCWSP

subcontracts and makes recommendations to Reclamation. Reclamation reviews CRBC's recommendations and refers approved applicants to Needles for execution of subcontracts.

In September 1998, the Bureau of Land Management (BLM) was allocated 1,150 acre-feet of Stage I capacity for consumptive use on BLM administered lands in California located adjacent to the Colorado River. In December 2004, a Reclamation determination reserved an additional 350 acre-feet of Stage I capacity of the LCWSP for use by Reclamation facilities in California on land adjacent to the Colorado River. With that determination, the estimated 5,000 acre-feet per year of Stage I capacity was completely allocated.

The Act, as amended in 2005 by Public Law 109-103, authorized the Secretary to enter into agreements for the design and construction of the remaining stages of the LCWSP. Additionally, it authorized contracts with persons or entities holding water delivery contracts under Section 5 of the Boulder Canyon Project Act of 1928 for municipal and industrial uses within the State of California. On March 26, 2007, Reclamation entered into a contract with Needles and The Metropolitan Water District of Southern California (MWD), allowing MWD to receive as much unused LCWSP water as available. MWD is depositing certain monies in a Water Quality Maintenance Trust Fund (Trust Fund) to provide for the long-term viability of the LCWSP or its replacement.

In 2010, development began for Stage II of the LCWSP to provide the remaining authorized capacity of up to 5,000 acre-feet per year. In 2013, following the initial planning and environmental compliance phase, Needles and Reclamation entered into a design, acquisition, and construction agreement, funded by the Trust Fund. Two new wells were constructed in 2017. LCWSP-3 and LCWSP-4 began well-development pumping in December 2017 and November 2017, respectively. The LCWSP began producing the entire 10,000 acre-feet of LCWSP water in 2018.

Table 16. Summary of Uses Offset by Pumpage from the Lower Colorado Water Supply Project, Calendar Year 2022. (Values are in acre-feet.)

		TOTAL
LCWSP Wellfield Pumpage¹		9,997
Federal LCWSP Contractors²		
BLM	Consumptive Use	117
Bureau of Reclamation - Parker Dam and Government Camp	Consumptive Use	0
	Total Federal Contractors' Consumptive Use	117
Non-Federal LCWSP Contractors³		
City of Needles	Consumptive Use	40
Needles' Subcontractors		
Southern California Gas Company	Consumptive Use	34
Pacific Gas & Electric Company	Consumptive Use	80
Havasu Water Company	Consumptive Use	11
Vista del Lago	Consumptive Use	13
Needles' Other Subcontractors	Consumptive Use	181
	Needles' and Subcontractors' Consumptive Use	359
LCWSP Water Available to MWD⁴		9,521
	Total Non-Federal Contractors' Consumptive Use	9,880

Footnotes:

¹ Non-Colorado River water pumped from the LCWSP wellfield and discharged into the AAC for delivery to IID. In accordance with the *Contract Among the United States, Imperial Irrigation District, and Coachella Valley Water District for Exchange of Water from The Lower Colorado Water Supply Project Well Field for Colorado River Water*, as amended, IID forbears the consumptive use of an equivalent amount of Colorado River, up to a maximum of 10,000 AF per year, to make such water available, via exchange, to the LCWSP beneficiaries.

² Total LCWSP Federal contractors' consumptive use. Colorado River water used was exchanged for LCWSP water.

³ Total LCWSP Non-Federal consumptive use by the City of Needles and its subcontractors. Colorado River water used was exchanged for LCWSP water.

⁴ Total amount of water pumped from the wellfield, up to a maximum of 10,000 AF, less consumptive use of LCWSP water by Federal and Non-Federal LCWSP contractors.

TRANSFERS, EXCHANGES, AND WATER MADE AVAILABLE BY CONSERVATION

Colorado River water apportioned to the Lower Division States has been further apportioned among the states of Arizona, California, and Nevada and is generally committed to specific persons or entities on a permanent basis. Increasing water demands within the Lower Division States must be met through a combination of conservation, transfers, exchanges, or new water sources which augment the limited supply of Colorado River water.

On October 10, 2003, the Secretary of the Interior entered into the *Colorado River Water Delivery Agreement* (CRWDA) with Imperial Irrigation District, Coachella Valley Water District, The Metropolitan Water District of Southern California, and the San Diego County Water Authority to resolve longstanding disputes regarding the priority, use, and transfer of Colorado River water within California. The CRWDA recognizes a variety of water transfers, exchanges, and conservation programs which alter the delivery of certain Colorado River water for up to 75 years.

Concurrent with the CRWDA, the California agencies entered into the Quantification Settlement Agreement, including a series of supplemental agreements, which collectively implement many provisions of the CRWDA through water transfers, water exchanges, and water conservation measures. Data as a result of the implementation of these agreements are documented in this section.

Tables 17 through 19 entitled “State of [State] Transfers, Exchanges and Water Made Available by Extraordinary Conservation, Calendar Year 2022” tabulate these transactions, as applicable, reported within Arizona, California, and Nevada.

For California, the tabulation documents, among other things, water conserved and transferred in accordance with the CRWDA, as well as other water conserved pursuant to specified agreements.

For Arizona and California, the tabulation includes System Conservation Water created in 2022 pursuant to specific system conservation agreements. This System Conservation Water remained in Lake Mead to benefit system storage.

Table 20 entitled “Bureau of Reclamation – Water Made Available by Conservation, Calendar Year 2022” documents water made available by the Bureau of Reclamation through various conservation efforts, including water discharged to the Colorado River as a result of the operation of the Yuma Desalting Plant, water conserved by Warren H. Brock Reservoir, and Colorado River System Water conserved from projects addressing Section 3.b of the *Lower Basin Drought Contingency Plan Agreement*.

Table 21 entitled “Exhibit B to the Colorado River Water Delivery Agreement” is reproduced from the CRWDA for convenient reference.

Table 17. State of Arizona - Transfers, Exchanges, and Water Made Available by Extraordinary Conservation, Calendar Year 2022. (Values are in acre-feet.)

PROGRAM OR PARTICIPATING AGENCIES	TOTAL
Pilot System Conservation Program¹	132
City of Bullhead City ²	132
Arizona Lower Basin Drought Contingency Plan Agreement - System Conservation	50,000
Colorado River Indian Tribes ³	50,000
Additional System Conservation Agreements Implemented in Arizona⁴	197,968
Central Arizona Project Subcontractors ⁵	87,794
Colorado River Indian Tribes ⁶	4,685
Fort McDowell Yavapai Nation ⁷	13,933
Gila River Indian Community ⁸	58,837
Mohave Valley Irrigation and Drainage District ⁹	9,531
Reclamation - 242 Well Field Expansion (Additional Pumping Amount) ¹⁰	14,665
Yuma Mesa Irrigation and Drainage District ¹¹	8,523

Footnotes:

¹ Water conserved from projects implemented pursuant to System Conservation Implementation Agreements (SCIA) executed in accordance with the July 30, 2014 [Agreement Among The United States of America, Through The Department of the Interior, Bureau of Reclamation, The Central Arizona Water Conservation District, The Metropolitan Water District of Southern California, Denver Water, and The Southern Nevada Water Authority, For A Pilot Program for Funding the Creation of Colorado River System Water Through Voluntary Water Conservation and Reductions in Use](#), as amended. Water conserved from projects implemented under the Pilot System Conservation Program (PSCP) is for the sole purpose of increasing storage levels in Lake Mead and Lake Powell and will not accrue to the benefit or use of any individual water user.

² Reclamation and the City of Bullhead City (City) entered into [SCIA No. 15-XX-30-W0587](#) dated September 15, 2015, as amended, under the PSCP in which the City agreed to construct wastewater injection wells to recover and inject into the Colorado River aquifer effluent that would otherwise be lost by evaporation and dedicate a portion of this water as System Conservation Water. In accordance with the SCIA and Letter Agreement No. 15-XX-30-W0588 dated August 20, 2015 between Reclamation and the Central Arizona Water Conservation District, this System Conservation Water remained in Colorado River reservoirs in the Lower Basin to benefit system storage.

³ System Conservation Water created by CRIT pursuant to the [Agreement Among the United States of America, Through the Department of the Interior, Bureau of Reclamation, the State of Arizona, Through the Arizona Department of Water Resources, the Central Arizona Water Conservation District, and the Colorado River Indian Tribes to Fund the Creation of Colorado River System Water Through Voluntary Water Conservation and Reductions in use During Calendar Years 2020-2022](#) dated July 26, 2019 (Conservation Agreement). In accordance with the Conservation Agreement, this System Conservation Water remained in Colorado River reservoirs in the Lower Basin to benefit system storage.

⁴ In accordance with the applicable conservation agreement, Section 3.b of the [Lower Basin Drought Contingency Plan Agreement](#) dated May 20, 2019 (LB DCP Agreement), and Section II.3.e of the [Agreement Regarding Lower Basin Drought Contingency Plan Obligations](#), this System Conservation Water remained in Colorado River reservoirs in the Lower Basin to benefit system storage. In accordance with the agreements, the Bureau of Reclamation applied all or a portion of this water toward addressing Section 3.b of the LB DCP Agreement. For additional information, see Table 20.

⁵ System Conservation Water created by certain CAP Subcontractors pursuant to executed [Compensated Conservation Agreements](#) dated May 10, 2022 and October 3, 2022.

⁶ System Conservation Water created by CRIT pursuant to [Agreement No. 22-XX-30-W0729](#) dated July 21, 2022.

⁷ System Conservation Water created by the FMYN pursuant to [SCIA No. 20-XX-30-W0688](#) dated September 11, 2020.

⁸ System Conservation Water created by GRIC pursuant to [SCIA No. 22-XX-30-W0724](#) dated December 15, 2021 (50,937 AF) and [SCIA No. 23-XX-30-W0748](#) dated December 15, 2022 (7,900 AF).

⁹ System Conservation Water created by MVIDD pursuant to [Agreement No. 22-XX-30-W0725](#) dated May 10, 2022.

¹⁰ System Conservation Water created by additional pumping from the 242 Well Field Expansion pursuant to [Letter Agreement No. 16-XX-30-W0603, Revision No. 1](#) dated May 7, 2021.

¹¹ System Conservation Water created by YMIDD pursuant to [Agreement No. 22-XX-30-W0728](#) dated July 5, 2022.

Table 18. State of California - Transfers, Exchanges, and Water Made Available by Extraordinary Conservation, Calendar Year 2022. (Values are in acre-feet.)

PROGRAM OR PARTICIPATING AGENCIES	TOTAL
IID Conservation	496,565
1988 IID/MWD Water Conservation Agreement/1989 Approval Agreement (105,000 AF Total Conservation) ¹	
MWD's Use of Conserved Water	90,000
CVWD's Use of Conserved Water ²	15,000
1998 IID/SDCWA Water Conservation Agreement (Transfer to SDCWA) ³	202,500
2003 IID/CVWD Conserved Water Agreement (Intra-Priority 3 Transfer to CVWD) ⁴	83,000
All-American Canal Lining Project (67,700 AF Total Conservation) ⁵	
SDCWA Exchange with MWD	56,200
Supplemental Water Delivered to the SLRSP	11,500
Qualified Conserved Water Stored with MWD ⁶	13,365
System Conservation Water ^{7,8}	25,000
CVWD Conservation	39,933
Coachella Canal Lining Project (30,850 Total Conservation) ⁹	
SDCWA Exchange with MWD	21,500
Supplemental Water Delivered to the SLRSP	4,500
Used by CVWD for Environmental Mitigation ¹⁰	4,850
System Conservation Water ^{7,11}	9,083
Total MWD Exchange with SDCWA¹²	280,200
PVID/MWD Forbearance and Fallowing Program¹³	82,657
Conserved Water Made Available to MWD ¹⁴	29,736
System Conservation Water ^{7,15}	52,921
MWD/Bard Water District Land Management and Seasonal Fallowing Program¹⁶	2,709
MWD/Quechan Indian Tribe Pilot Seasonal Land Fallowing Program¹⁷	225
Pilot System Conservation Program (PSCP)¹⁸	141
City of Needles ¹⁹	141

Note: Additional transfers and water exchange obligations may be found in Table 21, Exhibit B to the CRWDA.

Footnotes:

¹ Water conserved by IID and made available to MWD in accordance with the 1988 *Agreement for the Implementation of a Water Conservation Program and Use of Conserved Water* (1988 IID/MWD Water Conservation Agreement), as amended, the 1989 Approval Agreement, as amended, and the December 17, 2014 letter agreement between MWD and IID, as referenced in Columns 4 and 19 of Exhibit B to the CRWDA.

² The volume shown above represents the estimated annual amount delivered to CVWD by MWD in accordance with Section 13 of the [Second Amendment to Delivery and Exchange Agreement between Metropolitan and Coachella for 35,000 Acre-Feet](#) dated December 11, 2019 and Letter Agreement No. 21-XX-30-W0710 between Reclamation and CVWD.

³ Water conserved by IID for transfer to SDCWA in accordance with the 1998 IID/SDCWA Water Transfer Agreement, as amended, as referenced in Column 5, Exhibit B to the CRWDA.

⁴ Water conserved by IID and made available to CVWD in accordance with the 2003 IID/CVWD Acquisition Agreement to meet the IID/CVWD Intra-priority 3 Transfer obligation as referenced in Column 8, Exhibit B to the CRWDA.

Footnotes continued on next page.

Table 18 Footnotes: Continued from previous page.

⁵ The [Secretarial Determination of water conserved by lining certain reaches of the AAC](#) was issued in December 2009. Conserved water was distributed in accordance with the Allocation Agreement among the United States, MWD, CVWD, IID, SDCWA, and the SLRSP, dated October 10, 2003 and Public Law 100-675, as amended, as referenced in Column 6 of Exhibit B to the CRWDA.

⁶ For informational purposes, in accordance with the IID-MWD [Settlement and Release Agreement](#) dated September 16, 2021, IID and MWD reported that IID stored 13,365 AF of qualified conserved water with MWD during 2022.

⁷ In accordance with the applicable conservation agreement, Section 3.b of the [Lower Basin Drought Contingency Plan Agreement](#) dated May 20, 2019 (LB DCP Agreement), this System Conservation Water remained in Colorado River reservoirs in the Lower Basin to benefit system storage. For additional information, see Table 20.

⁸ System Conservation Water created by IID pursuant to [Agreement No. 23-XX-30-W0775](#) dated May 10, 2023.

⁹ The [Secretarial Determination of water conserved by the CCLP](#) was issued in January 2008. Conserved water was distributed in accordance with the Allocation Agreement among the United States, MWD, CVWD, IID, SDCWA, and the SLRSP, dated October 10, 2003, Public Law 100-675, as amended, and Exhibit B to the Settlement Agreement between CVWD and SDCWA, dated October 30, 2007, as referenced in Column 15 of Exhibit B to the CRWDA.

¹⁰ The final amount of environmental mitigation water used by CVWD as reported in CVWD's [letter dated January 24, 2023](#).

¹¹ System Conservation Water created by CVWD pursuant to [Agreement No. 23-XX-30-W0749](#) dated December 5, 2022.

¹² The amount shown represents water exchanged between MWD and SDCWA in the reporting year. This is the sum of: Transfer to SDCWA (202,500 AF), All-American Canal Lining Project - SDCWA Exchange with MWD (56,200 AF), and Coachella Canal Lining Project - SDCWA Exchange with MWD (21,500 AF).

¹³ PVID's annual reduction in agricultural consumptive use of Colorado River water through land fallowing, as reflected in Table 8 of the report titled [Calendar Year 2022 Fallowed Land Verification Report, PVID/MWD Forbearance and Fallowing Program](#) dated May 11, 2023. This value represents the estimated reduction in PVID's agricultural consumptive use as a result of fallowing 17,533 acres from January through July and 19,476 acres from August through December in the reporting year.

¹⁴ The volume of conserved water generated by the PVID/MWD Forbearance and Fallowing Program made available to MWD during the reporting year.

¹⁵ The volume of conserved water generated by the PVID/MWD Forbearance and Fallowing Program that was used to create System Conservation Water pursuant to [Funding Agreement No. 21-XX-30-W0714](#) dated August 12, 2021.

¹⁶ Bard Water District's seasonal reduction in consumptive use of Colorado River water through land fallowing. This value represents the estimated reduction in Bard Water District's consumptive use as a result of fallowing 1,425.69 acres from April 1 through July 31 in the reporting year.

¹⁷ The Quechan Indian Tribe's seasonal reduction in consumptive use of Colorado River water through land fallowing. This value represents the estimated reduction in the Quechan Indian Tribe's consumptive use as a result of fallowing 67.9 acres from April 1 through July 31 and 50.4 acres from April 15 to August 15 in the reporting year.

¹⁸ Water conserved from projects implemented pursuant to System Conservation Implementation Agreements (SCIA) executed in accordance with the July 30, 2014 [Agreement Among The United States of America Through The Department of the Interior, Bureau of Reclamation, The Central Arizona Water Conservation District, The Metropolitan Water District of Southern California, Denver Water, and The Southern Nevada Water Authority, For A Pilot Program for Funding the Creation of Colorado River System Water Through Voluntary Water Conservation and Reductions in Use](#), as amended. Water conserved from projects implemented under the PSCP is for the sole purpose of increasing storage levels in Lake Mead and Lake Powell and will not accrue to the benefit or use of any individual water user.

¹⁹ Reclamation and the City of Needles (Needles) entered into [SCIA No. 15-XX-30-W0596](#) dated April 15, 2016 under the PSCP in which Needles agreed to implement water conservation measures on the Rivers Edge Golf Course to create System Conservation Water. In accordance with the SCIA, this System Conservation Water remained in Colorado River reservoirs in the Lower Basin to benefit system storage.

Table 19. State of Nevada - Transfers, Exchanges, and Water Made Available by Extraordinary Conservation, Calendar Year 2022. (Values are in acre-feet.)

PROGRAM OR PARTICIPATING AGENCIES	TOTAL
No transfers, exchanges, or water made available by extraordinary conservation were made by Nevada during the reporting year.	

Table 20. Bureau of Reclamation - Water Made Available by Conservation, Calendar Year 2022. (Values are in acre-feet.)

PROGRAM OR PARTICIPATING AGENCIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Warren H. Brock Reservoir Conservation ^{1,2}	3,393	287	3,890	6,416	5,385	0	3,410	779	4,496	3,328	0	5,242	36,626
Yuma Desalting Plant Discharge to the Colorado River ³	8	21	23	20	14	1	0	13	17	23	17	22	179
Pilot System Conservation Program ⁴													273
LB DCP Agreement - Development of Colorado River System Water ⁵													212,986
Central Arizona Project Subcontractors ⁶													57,614
Colorado River Indian Tribes ⁷													4,685
Fort McDowell Yavapai Nation ⁸													13,933
Gila River Indian Community ⁹													58,837
Mohave Valley Irrigation and Drainage District ¹⁰													1,430
Reclamation - 242 Well Field Expansion (Additional Pumping Amount) ¹¹													14,665
Yuma Mesa Irrigation and Drainage District ¹²													1,278
Coachella Valley Water District ¹³													9,083
Imperial Irrigation District ¹⁴													25,000
PVID/MWD Forbearance and Fallowing Program ¹⁵													26,461

Footnotes:

¹ Colorado River water conserved by Warren H. Brock Reservoir in the reporting year, as documented in the [Memorandum: Brock Reservoir Conservation Estimation for Calendar Year 2022](#).

² Funding and construction of Brock Reservoir was made in accordance with Contract No. 07-XX-30-W05165 among Reclamation, CRCN, SNWA, MWD, and CAWCD. In exchange for funding and based proportionally on the amount of funding provided, SNWA received 400,000 AF of System Efficiency ICS, and MWD and CAWCD each received 100,000 AF of System Efficiency ICS. Brock Reservoir System Efficiency ICS balances may be seen in Table 22.

³ Water created by operation of the Yuma Desalting Plant and discharged to the Colorado River.

⁴ System Conservation Water created from projects implemented pursuant to System Conservation Implementation Agreements (SCIA) executed in accordance with the July 30, 2014 [Agreement Among The United States of America, Through The Department of the Interior, Bureau of Reclamation, The Central Arizona Water Conservation District, The Metropolitan Water District of Southern California, Denver Water, and The Southern Nevada Water Authority, For A Pilot Program for Funding the Creation of Colorado River System Water Through Voluntary Water Conservation and Reductions in Use](#), as amended. Water conserved from projects implemented under the PSCP is for the sole purpose of increasing storage levels in Lake Mead and Lake Powell and did not accrue to the benefit or use of any individual water user. (Volume shown is the total amount of System Conservation Water created in the reporting year from projects implemented in Arizona and California. For additional information, see Tables 17 and 18.)

⁵ In accordance with the applicable conservation agreement, Section 3.b of the [Lower Basin Drought Contingency Plan Agreement](#) dated May 20, 2019 (LB DCP Agreement), and, as applicable, Section II.3.e of the [Agreement Regarding Lower Basin Drought Contingency Plan Obligations](#), this System Conservation Water remained in Colorado River reservoirs in the Lower Basin to benefit system storage. The values shown above reflect the proportionate share of the project conservation amounts for which Reclamation provided funding. Unless otherwise noted in the footnotes, Reclamation was the sole funder for the agreement. For additional information, see Tables 17 and 18.

⁶ As referenced in Table 17, a total of 87,794 AF of System Conservation Water was created by certain CAP Subcontractors pursuant to executed [Compensated Conservation Agreements](#) dated May 10, 2022 and October 3, 2022. In accordance with the *Project Funding Agreement No. 1* dated May 9, 2022, Reclamation applied 15 percent (5,326 AF) of the System Conservation Water created pursuant to the Compensated Conservation Agreements entered May 10, 2022 (35,506 AF) towards addressing Section 3.b of the LB DCP Agreement. In accordance with the Compensated Conservation Agreements entered October 3, 2022, Reclamation applied 100 percent of the System Conservation Water created pursuant to the Compensated Conservation Agreements entered October 3, 2022 (52,288 AF) towards addressing Section 3.b of the LB DCP Agreement.

⁷ System Conservation Water created by CRIT pursuant to [Agreement No. 22-XX-30-W0729](#) dated July 21, 2022.

⁸ System Conservation Water created by FMYN pursuant to [SCIA No. 20-XX-30-W0688](#) dated September 11, 2020.

Footnotes continued on next page.

Table 20 Footnotes: Continued from previous page.

⁹ System Conservation Water created by GRIC pursuant to [SCIA No. 22-XX-30-W0724](#) dated December 15, 2021 (50,937 AF) and [SCIA No. 23-XX-30-W0748](#) dated December 15, 2022 (7,900 AF).

¹⁰ As referenced in Table 17, a total of 9,531 AF of System Conservation Water was created by MVIDD pursuant to [Agreement No. 22-XX-30-W0725](#) dated May 10, 2022. In accordance with the *Project Funding Agreement No. 2*, Reclamation applied 15 percent (1,430 AF) of the System Conservation Water created towards addressing Section 3.b of the LB DCP Agreement.

¹¹ System Conservation Water created by additional pumping from the 242 Well Field Expansion pursuant to [Letter Agreement No. 16-XX-30-W0603, Revision No. 1](#) dated May 7, 2021.

¹² As referenced in Table 17, a total of 8,523 AF of System Conservation Water was created by YMIDD pursuant to [Agreement No. 22-XX-30-W0728](#) dated July 5, 2022. In accordance with the *Project Funding Agreement No. 3*, Reclamation applied 15 percent (1,278 AF) of the System Conservation Water created towards addressing Section 3.b of the LB DCP Agreement.

¹³ System Conservation Water created by CVWD pursuant to [Agreement No. 23-XX-30-W0749](#) dated December 5, 2022.

¹⁴ System Conservation Water created by IID pursuant to [Agreement No. 23-XX-30-W0775](#) dated May 10, 2023.

¹⁵ As referenced in Table 18, 52,921 AF of conserved water generated by the PVID/MWD Forbearance and Fallowing Program were used to create System Conservation Water pursuant to [Funding Agreement No. 21-XX-30-W0714](#) dated August 12, 2021 (Funding Agreement). In accordance with Section 5.3 of the Funding Agreement, Reclamation applied 50 percent (26,461 AF) of the System Conservation Water created towards addressing Section 3.b of the LB DCP Agreement.

Table 21. Exhibit B to the Colorado River Water Delivery Agreement.

		EXHIBIT B QUANTIFICATION AND TRANSFERS ¹ In Thousands of Acre-feet																						
Column:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
		IID Priority 3a															CVWD Priority 3a							
		Reductions															Additions							
		IID Priority 3a															CVWD Net Consumptive Use Amount (sum of columns 14 - 17 plus columns 18 + 19)							
Calendar Year		2 ^{Priority 1, 2 and 3b}		3 ^{IID Reduction: MWD 1988}															Total Priority 1-3 Use Plus PPR Consumptive Use (sum of columns 2+13+20 plus 11+16)		12 ^{ISG Benchmarks}		12 ^{Annual Targets}	
1	2003	420	IID Priority 3a Quantified Amount	3 ^{IID Reduction: SDCWA Transfer}	4 ^{IID Reduction: AAC Lining IID}	5 ^{IID Reduction: SDCWA & SLR}	6 ^{IID Reduction: SDCWA Mitigation Transfer IID/CVWD}	7 ^{Intra-Priority 3 Transfer with Salton Sea Restoration}	8 ^{IID Reduction: MWD}	9 ^{IID Reduction: Conditional ISG Backfill}	10 ^{IID Reduction: Misc. PPRs}	11 ^{IID Reduction: Total Amount (sum of columns 4 through 11)}	12 ^{IID Net Consumptive Use Amount (difference between column 3 and column 12)}	13	14	15	16	17	18	19	20	21	22	23
2	2004	420	3,100	110	10	0	5	0	0	0	11.5	136.5	2,963.5	330	0	3	3	0	20	347	3,745.0	3,740	3,740	
3	2005	420	3,100	110	20	0	10	0	0	0	11.5	151.5	2,948.5	330	0	3	3	0	20	347	3,730.0	3,707	3,707	
4	2006	420	3,100	110	30	0	15	0	0	0	11.5	166.5	2,933.5	330	0	3	3	0	20	347	3,715.0	3,674	3,674	
5	2007	420	3,100	110	40	0	20	0	0	9	11.5	190.5	2,909.5	330	26	3	29	0	20	321	3,665.0	3,640	3,640	
6	2008	420	3,100	110	50	0	25	0	0	0	11.5	196.5	2,903.5	330	26	3	29	0	20	321	3,659.0	3,603	3,603	
7	2009	420	3,100	110	60	67.7	30	8	40	0	11.5	327.2	2,772.8	330	26	3	29	8	20	329	3,536.3	3,530	3,530	
8	2010	420	3,100	110	70	67.7	35	12	60	0	11.5	366.2	2,733.8	330	26	3	29	12	20	333	3,501.3	3,510	3,510	
9	2011	420	3,100	110	80	67.7	40	16	80	0	11.5	405.2	2,694.8	330	26	3	29	16	20	337	3,466.3	3,490	3,490	
10	2012	420	3,100	110	90	67.7	45	21	100	0	11.5	445.2	2,664.8	330	26	3	29	21	20	342	3,431.3	3,470	3,470	
11	2013	420	3,100	110	100	67.7	70	26	100	0	11.5	485.2	2,614.8	330	26	3	29	26	20	347	3,396.3	3,462	3,462	
12	2014	420	3,100	110	100	67.7	90	31	100	0	11.5	510.2	2,589.8	330	26	3	29	31	20	352	3,376.3	3,455	3,455	
13	2015	420	3,100	110	100	67.7	110	36	100	0	11.5	535.2	2,564.8	330	26	3	29	36	20	357	3,356.3	3,448	3,448	
14	2016	420	3,100	110	100	67.7	130	41	100	0	11.5	560.2	2,539.8	330	26	3	29	41	20	362	3,336.3	3,440	3,440	
15	2017	420	3,100	110	100	67.7	150	45	91	0	11.5	575.2	2,524.8	330	26	3	29	45	20	366	3,325.3			
16	2018	420	3,100	110	130	67.7	0	63	0	0	11.5	382.2	2,717.8	330	26	3	29	63	20	384	3,536.3			
17	2019	420	3,100	110	160	67.7	0	68	0	0	11.5	417.2	2,682.8	330	26	3	29	68	20	389	3,506.3			
18	2020	420	3,100	110	193	67.7	0	73	0	0	11.5	454.7	2,645.3	330	26	3	29	73	20	394	3,473.8			
19	2021	420	3,100	110	205	67.7	0	78	0	0	11.5	472.2	2,627.8	330	26	3	29	78	20	399	3,461.3			
20	2022	420	3,100	110	203	67.7	0	83	0	0	11.5	474.7	2,625.3	330	26	3	29	83	20	404	3,463.8			
21	2023	420	3,100	110	200	67.7	0	88	0	0	11.5	477.2	2,622.8	330	26	3	29	88	20	409	3,466.3			
22	2024	420	3,100	110	200	67.7	0	93	0	0	11.5	482.2	2,617.8	330	26	3	29	93	20	414	3,466.3			
23	2025	420	3,100	110	200	67.7	0	98	0	0	11.5	487.2	2,612.8	330	26	3	29	98	20	419	3,466.3			
24	2026	420	3,100	110	200	67.7	0	103	0	0	11.5	492.2	2,607.8	330	26	3	29	103	20	424	3,466.3			
25	2027	420	3,100	110	200	67.7	0	103	0	0	11.5	492.2	2,607.8	330	26	3	29	103	20	424	3,466.3			
26	2028	420	3,100	110	200	67.7	0	103	0	0	11.5	492.2	2,607.8	330	26	3	29	103	20	424	3,466.3			
	2029-2037	420	3,100	110	200	67.7	0	103	0	0	11.5	492.2	2,607.8	330	26	3	29	103	20	424	3,466.3			
	2038-2047 ¹³	420	3,100	110	200	67.7	0	103	0	0	11.5	492.2	2,607.8	330	26	3	29	103	20	424	3,466.3			
	2048-2077 ¹⁴	420	3,100	110	200	67.7	0	100	0	0	11.5	489.2	2,610.8	330	26	3	29	100	20	421	3,466.3			

1 Exhibit B is independent of increases and reductions as allowed under the Inadvertent Overrun and Payback Policy.

2 Any higher use covered by MWD, any lesser use will produce water for MWD and help satisfy ISG Benchmarks and Annual Targets.

3 IID/MWD 1988 Conservation Program conserves up to 110,000 AFY and the amount is based upon periodic verification. Of amount conserved, up to 20,000 AFY to CVWD (column 19), which does not count toward ISG Benchmarks and Annual Targets, and remainder to MWD.

4 Ramp-up amounts may vary based upon construction progress, and final amounts will be determined by the Secretary pursuant to the Allocation Agreement.

5 Any amount identified in Exhibit B for mitigation purposes will only be from non-Colorado River sources and these amounts may be provided by exchange for Colorado River water.

6 Water would be transferred to MWD subject to satisfaction of certain conditions and to appropriate federal approvals. For informational purposes only, these transfers may also be subject to state approvals. Schedules are subject to adjustments with mutual consent. After 2006, these quantities will count toward the ISG Benchmarks (column 22) and Annual Targets (column 23) only if and to the extent that water is transferred into the Colorado River Aqueduct for use by MWD and/or SDCWA.

7 MWD can acquire if CVWD declines the water. Any water obtained by MWD will be counted as additional agricultural reduction to help satisfy the ISG Benchmarks and Annual Targets. MWD will provide CVWD 50,000 AFY of the 100,000 AFY starting in year 46.

8 IID has agreed to provide transfer amounts to meet the minimum ISG benchmarks, not to exceed a cumulative total of 145,000 AF. Maximum transfer amounts are 25,000 AF in 2006, 50,000 AF plus the unused amount from 2006 in 2009, and 70,000 AF plus the unused amounts from 2006 and 2009 in 2012. In addition to the maximum transfer amounts IID has also committed that no more than 72,500 AF of reduced inflow to the Salton Sea would result from these additional transfers.

9 Up to the amount shown, as agreed upon reduction to IID or CVWD to cover collectively the sum of individual Miscellaneous PPRs, federal reserved rights and decreed rights. This is a reduction that counts towards ISG Benchmarks and Annual Targets.

10 For purposes of Subparagraph 8(b)(2)(i) and (ii) and 8(c)(1) and (4) the Secretary will take into account: (i) the satisfaction of necessary conditions to certain transfers (columns 7 and 9) not within IID's control; (ii) the amounts of conserved water as determined, where such amounts may vary (columns 4, 6, 9 and 10); and (iii) with respect to column 7, reductions by IID will be considered in determining IID's compliance regardless of whether the conserved water is diverted into the Colorado River Aqueduct.

11 For purposes of Subparagraph 8(c)(1) and (4) the Secretary will take into account: (i) the satisfaction of necessary conditions to certain transfers (columns 15 and 16) not within CVWD's control; and (ii) the amounts of conserved water as determined, where such amounts may vary (column 15).

12 All consumptive use of priorities 1 through 3 plus 14,500 AF of PPRs must be within 25,000 AF of the amount stated.

13 Assumes SDCWA does not elect termination in year 35.

14 Assumes SDCWA and IID mutually consent to renewal term of 30 years.

Notes:

Substitute transfers can be made provided the total volume of water to be transferred remains equal or greater than amounts shown consistent with applicable federal approvals.

The shaded columns represent amounts of water that may vary.

INTENTIONALLY CREATED SURPLUS

In 2006, the Bureau of Reclamation entered into letter agreements with the Imperial Irrigation District and The Metropolitan Water District of Southern California to implement a demonstration program for the development of Intentionally Created Surplus (ICS). In this program, ICS refers to a quantity of surplus water the Secretary may make available for release under Article II(B)(2) of the Consolidated Decree. The demonstration program covered calendars years 2006 – 2007 and required that ICS be created through extraordinary conservation measures.

On December 13, 2007, the Secretary of the Interior signed the *Record of Decision, Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead* (2007 Interim Guidelines). Beginning in 2008, the creation of ICS is governed by the 2007 Interim Guidelines. Section XI.G.3 of the 2007 Interim Guidelines sets forth the policies and guidelines concerning the implementation of ICS, including the categories, creation, delivery, and accounting of ICS.

On May 20, 2019, the *Lower Basin Drought Contingency Plan Agreement* (LB DCP Agreement) was executed. Exhibit 1 to the LB DCP Agreement, the *Lower Basin Drought Contingency Operations* (LBOps), supplemented the policies and guidelines that govern the implementation of ICS.

ICS may be created using a variety of approved measures within the four established ICS categories: Extraordinary Conservation ICS, Tributary Conservation ICS, System Efficiency ICS, and Imported ICS. Additionally, Binational ICS may be credited to a water user pursuant to agreements executed under Minutes 319 and 323. The 2007 Interim Guidelines and LBOps set forth limitations as to the maximum quantities of ICS that may be created during each year, delivered in a year, and accumulated in a water user's ICS account.

The Secretary is responsible for approving plans for the creation of ICS (including any modifications to such plans) and for verifying and accounting for ICS creation and delivery.

The following conditions apply to ICS:

- 1) In accordance with Section IV.2 of LBOps, there shall be a one-time deduction of 10 percent, as may be reduced pursuant to the Replenishment Incentive of Section IV.A.3 of LBOps, from the amount of Extraordinary Conservation, Tributary or Imported ICS created which is dedicated to system storage to provide a collective storage benefit for Colorado River water users. Through December 31, 2026, these volumes shall not be subject to any further assessments for system or evaporation losses.¹
- 2) If the Secretary releases Flood Control Surplus water, Extraordinary Conservation ICS accumulated in ICS accounts is reduced by the amount of the Flood Control Surplus on an acre-foot for acre-foot basis until no Extraordinary Conservation ICS remains.
- 3) If a water user has an overrun payback obligation, the water user must repay the obligation in full before it can request or receive delivery of ICS.

Table 22 documents information associated with ICS for each individual water user, including:

- 1) The beginning of year ICS account balance.
- 2) The amount of ICS created in the reporting year.
- 3) The amount of ICS delivered in the reporting year.
- 4) The end of year ICS account balance, after applying any applicable reductions.

¹ In accordance with Section I of LBOps, California contractors that are not parties to the LB DCP Agreement shall not be subject to the provisions of LBOps but shall instead remain subject to all of the applicable terms and conditions of the 2007 Interim Guidelines including, but not limited to, a one-time deduction of 5 percent from the amount of ICS created and an annual evaporation loss of 3 percent to the end-of-year balance of Extraordinary Conservation ICS beginning in the year after creation. In accordance with Section XI.G.3.B.7 of the 2007 Interim Guidelines, no evaporation losses shall be assessed during a Year in which the Secretary has determined a Shortage Condition.

Table 22. Intentionally Created Surplus by State, Water User, and ICS Type, Calendar Year 2022. (Values are in acre-feet.)

State/ Water User	ICS Type	BOY Balance ¹	Conversion of Existing ICS to DCP ICS		Creation/ Simultaneous Conversion of ICS to DCP ICS		System Assessment ³	IOPP Payback ⁴	Delivery	EOY Balance
			Creation ²	System Assessment ³						
Arizona										
CAWCD	Extraordinary Conservation	279,426	0	57,061	(57,061)	0	0	0	(52,841)	226,585
	DCP ICS ⁵	43,875	0	-	57,061	(5,706)	0	0	0	95,230
	Binational ICS ⁶	32,841	0	0	0	-	0	0	0	32,841
	System Efficiency - Warren H. Brock	100,000	-	0	0	-	0	0	0	100,000
	System Efficiency - YDP Pilot Run	3,050	-	0	0	-	0	0	0	3,050
									Total CAWCD:	457,706
CRIT	Extraordinary Conservation	9,009	-	0	-	0	0	0	0	9,009
GRIC	Extraordinary Conservation ⁷	216,000	-	78,565	-	(7,857)	0	0	0	286,708
									Total Arizona ICS:	753,423
									Total Arizona ICS Subject to ICS Accumulation Limit: ⁸	650,373
California										
MWD	Extraordinary Conservation ⁹	1,152,004	-	0	-	0	0	(111,392)	1,040,612	
	DCP ICS ⁵	0	-	-	-	-	-	-	0	
	Binational ICS ⁶	32,842	-	0	-	-	0	0	32,842	
	System Efficiency - Warren H. Brock	65,000	-	0	-	-	0	0	65,000	
	System Efficiency - YDP Pilot Run	24,397	-	0	-	-	0	0	24,397	
									Total MWD:	1,162,851
IID	Extraordinary Conservation	50,000	-	0	-	0	0	0	0	50,000
	Binational ICS ⁶	32,842	-	0	-	-	0	0	0	32,842
									Total IID:	82,842
									Total California ICS:	1,245,693
									Total California ICS Subject to ICS Accumulation Limit: ⁸	1,156,296
Nevada										
SNWA	Tributary Conservation	-	-	35,678	-	(3,568)	0	0	0	32,110
	Imported - Coyote Spring Valley	-	-	0	-	0	0	0	0	0
	Extraordinary Conservation ¹⁰	506,566	0	63,330	(8,000)	(5,533)	0	0	0	556,363
	DCP ICS ⁵	7,200	0	-	8,000	(800)	0	0	0	14,400
	Binational ICS ⁶	32,842	0	0	0	-	0	0	0	32,842
	System Efficiency - Warren H. Brock	400,000	-	0	-	-	0	0	0	400,000
	System Efficiency - YDP Pilot Run	3,050	-	0	-	-	0	0	0	3,050
									Total Nevada ICS:	1,038,765
									Total Nevada ICS Subject to ICS Accumulation Limit:	⁸ 603,605
									Total ICS stored in Lake Mead: EOY 2022	3,037,881
									Total ICS Subject to ICS Accumulation Limit: EOY 2022 ⁸	2,410,274

Note: A dash (-) indicates the column is not applicable.

Footnotes: See next page.

Table 22 Footnotes:

¹ Reflects the amount shown as the "EOY Balance" in the 2021 *Colorado River Accounting and Water Use Report* as adjusted for: (1) any differences between provisional and verified 2021 ICS creation amounts, and (2) the conversion of Tributary Conservation ICS to Extraordinary Conservation ICS at the beginning of 2022 in accordance with Section XI.G.3.A.2 of the [2007 Interim Guidelines](#).

² The amount of ICS created by the water user during the reporting year. The Extraordinary Conservation ICS creation amount for SNWA has been verified by Reclamation. CAWCD and GRIC's Extraordinary Conservation ICS creation and SNWA's Tributary Conservation ICS creation amounts are provisional until verified by Reclamation. The total annual Extraordinary Conservation ICS creation for 2022 remained within the 625,000 AF Extraordinary Conservation maximum limitation set forth in Section XI.G.3.B.4 of the 2007 Interim Guidelines. Tributary Conservation ICS, Imported ICS, System Efficiency ICS, and Binational ICS creation amounts are not subject to the 625,000 AF annual limitation. In 2022, Extraordinary Conservation ICS created by Nevada and Arizona was used to meet required DCP Contributions. For additional information see Table 23.

³ In accordance with Section IV.A.2 of [Lower Basin Drought Contingency Operations](#) (LBOps), there shall be a one-time deduction of 10 percent of any Extraordinary Conservation, Tributary Conservation, or Imported ICS created, as may be reduced pursuant to the Replenishment Incentive of Section IV.A.3 of LBOps. Through December 31, 2026, these volumes shall not be subject to any further assessments for system or evaporation losses. In accordance with Section I of LBOps, California contractors that are not parties to the [Lower Basin Drought Contingency Plan Agreement](#) shall not be subject to the provisions of LBOps but shall instead remain subject to all of the applicable terms and conditions of the 2007 Interim Guidelines. Therefore, in accordance with Section XI.G.3.B.2 and Section XI.G.3.B.7 of the 2007 Interim Guidelines, respectively, IID's ICS creation amount is subject to a 5 percent system assessment in the year of creation and a 3 percent evaporation loss, which is applied annually to IID's Extraordinary Conservation ICS EOY balance beginning in the year after the ICS is created and continuing until no Extraordinary Conservation ICS remains in Lake Mead. In accordance with Section XI.G.3.B.7 of the 2007 Interim Guidelines, no evaporation losses shall be assessed during a Year in which the Secretary has determined a Shortage Condition.

⁴ In accordance with Section XI.G.3.C.7 of the 2007 Interim Guidelines, if a contractor has an overrun payback obligation, the contractor must repay the overrun payback obligation in full before requesting or receiving delivery of ICS. If a contractor requests to use its ICS credits to pay back an overrun, the contractor's ICS account(s) shall be reduced by the amount of the payback prior to calculating the evaporation loss and the remaining ICS credits available to the contractor.

⁵ DCP ICS is ICS converted from Extraordinary Conservation ICS, Binational ICS, or System Efficiency ICS as set forth in LBOps.

⁶ The amount of Binational ICS in the water user's account pursuant to the 2012 Contributed Funds Agreement dated November 20, 2012 (Agreement No. 12-XX-30-W0565), as modified by Section 4.6 of the Interim Operating Agreement for Implementation of Minute 323 dated September 21, 2017 (2017 Interim Operating Agreement); and the 2017 Contributed Funds Agreement (Agreement No. 17-XX-30-W0625) dated September 21, 2017.

⁷ In accordance with the [Agreement Between the United States of America and the Gila River Indian Community for the Creation of Intentionally Created Surplus for Firming](#) (Agreement No. 22-XX-30-W0723) dated December 15, 2021, GRIC agreed to conserve 78,565 AF in Lake Mead prior to December 31, 2022, through the creation of Extraordinary Conservation ICS, for the exclusive use of the United States to fulfill its firming obligation as required by the Arizona Water Settlements Act of 2004. After incorporating the 10 percent system assessment of 7,857 AF, 70,708 AF remain in GRIC's Extraordinary Conservation ICS EOY Balance for the United States' firming obligation. When added to the water provided by GRIC for the United States' firming obligation in 2019 pursuant to [Agreement Between the United States of America and the Gila River Indian Community for the Creation of Intentionally Created Surplus for Firming](#) (Agreement No. 19-XX-30-W0657) dated May 20, 2019, the total amount of water available for the United States' firming obligation is 160,708 AF. In accordance with Section 7.1 of the agreements, Reclamation shall not request, and GRIC shall not order, delivery of this Extraordinary Conservation ICS for firming any time before December 31, 2026.

⁸ In accordance with Section IV.C of LBOps, the maximum total amount of Extraordinary Conservation ICS, Binational ICS, and DCP ICS that may be accumulated in all ICS Accounts, at any time, is limited to the following: (1) 1,700,000 AF for California; (2) 500,000 AF for Nevada; and (3) 500,000 AF for Arizona, as may be modified by agreements to share ICS accumulation space. In accordance with the [DCP Contributions and ICS Accumulation Limits Sharing Agreement](#) dated September 12, 2019, California made available 50,000 AF and Nevada made available 50,000 AF of their respective ICS accumulation space to Arizona. In accordance with [Agreement for Additional Interim Sharing of Intentionally Created Surplus Accumulation Limits](#) dated June 7, 2021, California made available a total of 50,373 AF of ICS accumulation space to Arizona and a total of 153,605 AF of accumulation space available to Nevada.

⁹ For informational purposes, the EOY Balance reflects 13,365 AF of qualified conserved water created by IID in 2022 and stored pursuant to the IID-MWD [Settlement and Release Agreement](#) dated September 16, 2021.

¹⁰ BOY Balance includes: (1) the 2021 Extraordinary Conservation ICS EOY Balance (474,699 AF) + (2) the verified 2021 EOY Balance of Tributary Conservation ICS (31,867 AF), which was converted to Extraordinary Conservation ICS at the beginning of 2022. The verified amount of Tributary Conservation ICS created by SNWA in 2021 is 35,408 AF. After applying the 10 percent reduction for system assessment, the verified 2021 Tributary Conservation ICS EOY Balance is 31,867 AF. In accordance with Section XI.G.3.A.2 of the 2007 Interim Guidelines, this amount was converted to Extraordinary Conservation ICS at the beginning of 2022.

DROUGHT CONTINGENCY/BINATIONAL WATER SCARCITY CONTINGENCY PLAN CONTRIBUTIONS

On May 20, 2019, the *Lower Basin Drought Contingency Plan Agreement* (LB DCP Agreement) was executed pursuant to Public Law No. 116-14. The LB DCP Agreement was designed to further address the historic drought and dry conditions that have been observed in the Colorado River Basin since 2000.

Based on the actual operating experience gained after the adoption of the *Record of Decision, Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead* dated December 13, 2007 (2007 Interim Guidelines) and emerging scientific information regarding the increasing variability and anticipated decline in Colorado River reservoir levels, additional measures were needed to reduce the risk of Lakes Powell and Mead declining to critical elevations should drought and low runoff conditions continue.

Within the LB DCP Agreement, each of the Lower Basin States agreed to reduce their demand of mainstream Colorado River water through DCP Contributions which are in addition to the shortage reductions outlined in the 2007 Interim Guidelines. Section III and Table 1 of Exhibit 1 to the LB DCP Agreement, the *Lower Basin Drought Contingency Operations* (LBOps), contains the annual DCP Contributions that are to be made by each state at specified Lake Mead elevations. Section II of the LBOps, defines the following methods that may be used to meet a DCP Contribution:

- Conversion of existing Extraordinary Conservation Intentionally Created Surplus (ICS) to DCP ICS.
- Conversion of Extraordinary Conservation, System Efficiency, or Binational ICS created after the effective date of the LBOps to DCP ICS.
- Simultaneous creation and conversion of Extraordinary Conservation, System Efficiency, or Binational ICS to DCP ICS.
- Creation of Non-ICS Water (often commonly referred to as creation of “system water”).

Table 23 documents the annual DCP Contribution that was required for each Lower Basin state for the reporting year, the method(s) used to meet the DCP Contribution, and any DCP Contribution Deficiency.

Prior to adoption of the LB DCP Agreement, in September 2017, the United States and Mexico signed Minute 323¹ to extend continued cooperative efforts on the Colorado River. Sharing a common vision with the United States on the need for additional measures to avoid reaching critical reservoir elevations at Lake Mead, Mexico agreed to adopt a Binational Water Scarcity Contingency Plan (BWSCP); however, the effectiveness of the BWSCP was contingent on adoption of the DCP in the United States. Similar to the LB DCP Agreement, the BWSCP provides for Mexico to make water savings contributions at specified Lake Mead elevations² which could be recovered at later date when reservoir conditions improve. The implementing details of the BWSCP are contained in the *Joint Report of the Principal Engineers with the Implementing Details of the Binational Water Scarcity Contingency Plan in the Colorado River Basin* dated July 11, 2019 (2019 Joint Report).

Annual contributions by Mexico are made pursuant to Section IV of Minute 323 and Section II of the 2019 Joint Report consistent with Mexico’s BWSCP. Pursuant to Section IV.A.1 of the 2019 Joint Report, Mexico may make its BWSCP Contribution from the following methods:

- By means of a downward adjustment to the schedule for annual delivery of Mexico of its Article 10(a) allotment under the 1944 Mexican Water Treaty.
- By converting Mexico’s Water Reserve to Mexico’s Recoverable Water Savings.
- A combination of the above.

Table 24 documents Mexico’s annual BWSCP Contribution that was required during the reporting year and the method(s) used to meet the Contribution.

¹Extension of Cooperative Measures and Adoption of a Binational Water Scarcity Contingency Plan in the Colorado River Basin.

²Referred to as “Mexico’s Recoverable Water Savings”.

Table 23. U.S. Drought Contingency Plan Contributions by State, Water User, and DCP Contribution Type, Calendar Year 2022.
(Values are in acre-feet.)

State/ Water User	Required DCP Contribution ¹	Creation/ Simultaneous			Total DCP Contribution	DCP Contribution Deficiency ²
		Conversion of Existing ICS to DCP ICS	Conversion of ICS to DCP ICS	Creation of Non-ICS Water		
Arizona	192,000					
CAWCD ³	0	57,061	134,939	192,000	0	
California	0					
	0	0	0	0	0	0
Nevada	8,000					
SNWA	0	8,000	0	8,000	0	

Footnotes:

¹ The DCP Contribution required during the reporting year in accordance with Section III.B of [Lower Basin Drought Contingency Operations](#) (LBOps), as summarized in LBOps Table 1, and Section III.E.4 of LBOps.

² In accordance with Section III.E.4 of LBOps, a state's DCP Contribution Deficiency, if any, will be added to the state's required DCP Contribution for 2023.

³ The required 2022 DCP Contribution of 192,000 AF was made by CAWCD in accordance with the [Agreement Regarding Lower Basin Drought Contingency Plan Obligations](#). CAWCD's EC ICS creation amount that was simultaneously converted to DCP ICS is provisional until verified by Reclamation.

Table 24. Mexico's Binational Water Scarcity Contingency Plan Contribution, Calendar Year 2022 (Values are in acre-feet.)

	Required BWSCP Contribution ¹	Conversion of Mexico's Water Reserve to Mexico's Recoverable Water Savings	Downward Adjustment to Mexico's Colorado River Water Delivery Schedule ²	Total BWSCP Contribution
Mexico	30,000	0	30,000	30,000

Footnotes:

¹ The Binational Water Scarcity Contingency Plan Contribution required during the reporting year in accordance with Section IV of IBWC [Minute 323](#) and Section II of the [Joint Report of the Principal Engineers with the Implementing Details of the Binational Water Scarcity Contingency Plan in the Colorado River Basin](#) dated July 11, 2019 (2019 Joint Report).

² As documented in Table 9 and the [exchange of letters](#) between the United States Section of the IBWC and Reclamation, Mexico met its required BWSCP Contribution through a downward adjustment to its 2022 Colorado River water delivery schedule for the creation of Mexico's Recoverable Water Savings.

DOCUMENTS AND LETTERS SIGNIFICANT TO THE DELIVERY OF AND ACCOUNTING FOR THE USE OF COLORADO RIVER WATER IN CALENDAR YEAR 2022

The table below includes agreements, letters, regulations and operating plans that impacted Reclamation's delivery of Colorado River water during calendar year 2022. These documents may be retrieved by clicking on the item in the electronic version of the report which is available on Reclamation's website: <https://www.usbr.gov/lc/region/g4000/wtracct.html>. Acronyms used below are defined on the page of this report entitled, "Acronyms and Abbreviated Terms."

RECORDS OF DECISION	
1.	The Record of Decision for Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead dated December 13, 2007. This document provides the framework used by the Secretary of the Interior for shortage, coordinated operation of Lake Powell and Lake Mead, and to encourage conservation, plan for shortages, implement closer coordination of operations of Lake Powell and Lake Mead, and preserve flexibility to deal with further challenges.
2.	The Record of Decision for the Colorado River Water Delivery Agreement: Implementation Agreement, Inadvertent Overrun and Payback Policy, and Related Federal Actions Final Environmental Impact Statement dated October 10, 2003. The Water Delivery Agreement provides certainty regarding water entitlements that are necessary for continued effective implementation of the Secretary's responsibilities as Water Master on the lower Colorado River.

REPORTS	
3.	2022 Annual Operating Plan for Colorado River Reservoirs.

INTERIM DETERMINATIONS	
4.	The Secretary's Interim Determination for the amount of water conserved and the amount of water made available for allocation as a result of the Coachella Canal Lining Project, dated January 31, 2008.
5.	The Secretary's Interim Determination for the amount of water conserved and the amount of water made available for allocation as a result of the All-American Canal Lining Project, dated December 4, 2009.

DOCUMENTS AND LETTERS SIGNIFICANT TO THE DELIVERY OF AND ACCOUNTING FOR THE USE OF COLORADO RIVER WATER IN CALENDAR YEAR 2022

WATER ACCOUNTING	
6.	The Consolidated Decree of the United States Supreme Court in <i>Arizona v. California et al.</i> , 547 US 150 (2006).
7.	USGS Diversion Estimate Methodology for Non-metered Irrigation.
8.	Maps showing the locations of the wells and river pumps reported by the USGS.
9.	Procedure for Determining Return Flow Credits to Nevada from Las Vegas Wash, adopted by the Task Force on Unmeasured Return Flows on August 28, 1984.
10.	Reclamation letter to SNWA and CRCN dated December 5, 2007 regarding Las Vegas Valley Return Flow Credit Methodology.
11.	IID-MWD Settlement and Release Agreement dated September 16, 2021.
12.	IID's letter to Reclamation dated April 25, 2023 regarding excess extraordinary conservation created by IID in calendar year 2022.
13.	Settlement Agreement in <i>Arizona v. California</i> by and Among the Quechan Indian Tribe of the Fort Yuma Indian Reservation, the United States of America, The Metropolitan Water District of Southern California, Coachella Valley Water District, and the State of California dated February 14, 2005.
14.	Letters exchanged between MWD and Reclamation regarding the election, by MWD, to extend the deadline for the United States to take final agency action regarding whether consumptive use of Colorado River water on the Yuma Island should be charged to Priority 2 under the California Seven Party Agreement of August 18, 1931 or otherwise.

UNITED STATES-MEXICO 1944 WATER TREATY	
15.	Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande signed February 3, 1944.
16.	Minute 242 – Permanent and Definitive Solution to the International Problem of the Salinity of the Colorado River.
17.	Minute 318 – Adjustment of Delivery Schedules for Water Allotted to Mexico for the Years 2010 Through 2013 as a Result of Infrastructure Damage in Irrigation District 014, Rio Colorado, Caused by the April 2010 Earthquake in the Mexicali Valley, Baja California.

DOCUMENTS AND LETTERS SIGNIFICANT TO THE DELIVERY OF AND ACCOUNTING FOR THE USE OF COLORADO RIVER WATER IN CALENDAR YEAR 2022

UNITED STATES-MEXICO 1944 WATER TREATY	
18.	Minute 319 – Interim International Cooperative Measures in the Colorado River Basin Through 2017 and Extension of Minute 318 Cooperative Measures to Address the Continued Effects of the April 2010 Earthquake in the Mexicali Valley, Baja California.
19.	Minute 322 – Extension of the Temporary Emergency Delivery of Colorado River Water for use in Tijuana, Baja California.
20.	Minute 323 – Extension of Cooperative Measures and Adoption of a Binational Water Scarcity Contingency Plan in the Colorado River Basin.
21.	Minute 327 – Emergency Deliveries of Colorado River Waters for use in the City of Tijuana, Baja California.
22.	2001 Memorandum of Understanding between Reclamation and the U.S. Section of the IBWC regarding deliveries at SIB.
23.	Joint Report of the Principal Engineers with the Implementing Details of the Binational Water Scarcity Contingency Plan in the Colorado River Basin dated July 11, 2019.
24.	Joint Report of the Principal Engineers with the Operational Provisions Applicable to Water for the Environment Stipulated in Minute 323 dated December 16, 2021.
25.	Letters exchanged between the U.S. Section of the IBWC and Reclamation regarding the accounting of the volumes of Colorado River water in Mexico's Water Reserve and Mexico's Recoverable Water Savings through calendar year 2022.

INTERSTATE WATER BANKING	
26.	43 CFR Part 414: Offstream Storage of Colorado River Water and Development and Release of Intentionally Created Unused Apportionment in the Lower Division States; Final Rule.
27.	Documents related to Colorado River water diverted and stored in Arizona by AWBA for the benefit of SNWA.
28.	Documents related to Colorado River water diverted and stored in California by MWD for the benefit of SNWA.

DOCUMENTS AND LETTERS SIGNIFICANT TO THE DELIVERY OF AND ACCOUNTING FOR THE USE OF COLORADO RIVER WATER IN CALENDAR YEAR 2022

INADVERTENT OVERRUN AND PAYBACK POLICY	
29.	Inadvertent Overrun and Payback Policy dated October 10, 2003.
SYSTEM CONSERVATION	
30.	Agreement Among The United States of America, Through The Department of the Interior, Bureau of Reclamation, The Central Arizona Water Conservation District, The Metropolitan Water District of Southern California, Denver Water, and The Southern Nevada Water Authority, for a Pilot Program for Funding the Creation of Colorado River System Water through Voluntary Water Conservation and Reductions in Use dated July 30, 2014, including Amendment Nos. 1, 2 and 3 (Agreement No. 14-XX-30-W0574).
31.	System Conservation Implementation Agreement No. 15-XX-30-W0587 Between Reclamation and City of Bullhead City, Arizona to Implement a Pilot System Conservation Program dated September 15, 2015.
32.	System Conservation Implementation Agreement No. 15-XX-30-W0596 Between Reclamation and the City of Needles to Implement a Pilot System Conservation Program dated April 15, 2016.
33.	Agreement Among the United States of America, Through the Department of the Interior, Bureau of Reclamation, the State of Arizona, Through the Arizona Department of Water Resources, the Central Arizona Water Conservation District, and the Colorado River Indian Tribes to Fund the Creation of Colorado River System Water Through Voluntary Water Conservation and Reductions in use During Calendar Years 2020-2022 dated July 26, 2019.
34.	Compensated Conservation Agreements with Central Arizona Project (CAP) Subcontractors for the Conservation of CAP Water dated May 10, 2022 and October 3, 2022.
35.	Agreement No. 22-XX-30-W0729 Between the United States Bureau of Reclamation and the Colorado River Indian Tribes dated July 21, 2022.
36.	System Conservation Implementation Agreement No. 20-XX-30-W0688 Between the United States Bureau of Reclamation and the Fort McDowell Yavapai Nation dated September 11, 2020.

DOCUMENTS AND LETTERS SIGNIFICANT TO THE DELIVERY OF AND ACCOUNTING FOR THE USE OF COLORADO RIVER WATER IN CALENDAR YEAR 2022

SYSTEM CONSERVATION	
37.	System Conservation Implementation Agreement No. 22-XX-30-W0724 Between the United States Bureau of Reclamation and the Gila River Indian Community dated December 15, 2021.
38.	System Conservation Implementation Agreement No. 23-XX-30-W0748 Between the United States Bureau of Reclamation and the Gila River Indian Community dated December 15, 2022.
39.	Agreement No. 22-XX-30-W0725 Among the State of Arizona, Acting Through the Arizona Department of Water Resources, the Central Arizona Water Conservation District, the United States, Acting through the Department of Interior, Bureau of Reclamation and the Mohave Valley Irrigation and Drainage District for the Conservation of Colorado River Water dated May 10, 2022.
40.	Letter Agreement No. 16-XX-30-W0603, Revision No. 1 Between the Bureau of Reclamation and the Central Arizona Water Conservation District Regarding Additional Pumping From the Protective and Regulatory Pumping Unit – 242 Well Field dated May 7, 2021.
41.	Agreement No. 22-XX-30-W0728 Among the State of Arizona, Acting Through the Arizona Department of Water Resources, the Central Arizona Water Conservation District, the United States, Acting through the Department of Interior, Bureau of Reclamation and the Yuma Mesa Irrigation and Drainage District for the Conservation of Colorado River Water dated July 5, 2022.
42.	Agreement No. 23-XX-30-W0749 Between the United States, Acting through the Department of Interior, Bureau of Reclamation and the Coachella Valley Water District for the Conservation of Colorado River Water dated December 5, 2022.
43.	Agreement No. 23-XX-30-W0775 Between the United States, Acting through the Department of Interior, Bureau of Reclamation and the Imperial Irrigation District for the Conservation of Colorado River Water dated May 10, 2023.
44.	Funding Agreement No. 21-XX-30-W0714 Among the United States of America, Through the Department of Interior, Bureau of Reclamation, the Central Arizona Water Conservation District, the Metropolitan Water District of Southern California, and the Southern Nevada Water Authority for the Creation of Colorado River System Water dated August 12, 2021.
45.	Calendar Year 2022 Fallowed Land Verification Report PVID/MWD Forbearance and Fallowing Program dated May 11, 2023.
46.	Memorandum: Brock Reservoir Conservation Estimation for Calendar Year 2022.

**DOCUMENTS AND LETTERS SIGNIFICANT TO THE DELIVERY OF
AND ACCOUNTING FOR THE USE OF COLORADO RIVER WATER IN CALENDAR YEAR 2022**

COLORADO RIVER WATER DELIVERY AGREEMENT	
47.	Colorado River Water Delivery Agreement dated October 10, 2013.
48.	Second Amendment to Delivery and Exchange Agreement between MWD and CVWD for 35,000 Acre-Feet dated December 11, 2019.
49.	CVWD's letter to Reclamation dated January 24, 2023 providing the final amount of environmental mitigation water used in calendar year 2022 for the CCLP.

INTENTIONALLY CREATED SURPLUS	
50.	DCP Contributions and ICS Accumulation Limits Sharing Agreement dated September 12, 2019.
51.	Agreement for Additional Interim Sharing of Intentionally Created Surplus Accumulation Limits executed June 7, 2021.
52.	Joint letter from ADWR, CRCN, SNWA, and MWD to Reclamation dated October 4, 2021 regarding 2022 Intentionally Created Surplus Creation Limits Flexibility Notification.
53.	Joint letter from ADWR, CRCN, SNWA, and MWD to Reclamation dated May 27, 2022 regarding Coordination of 2021 Intentionally Created Surplus Accumulation Capacity and Sharing.
54.	Joint letter from ADWR, CRCN, SNWA, and MWD to Reclamation dated February 9, 2023 regarding Coordination of 2022 Intentionally Created Surplus Accumulation Capacity and Sharing.
55.	Letter from ADWR to Reclamation dated March 10, 2023 regarding Sharing of Intentionally Created Surplus Creation Accumulation Limit California and Nevada in 2022.
56.	Joint letter from ADWR, CRCN, SNWA, and MWD dated May 9, 2023 regarding sharing of 2022 Intentionally Created Surplus Creation Capacity for Arizona ICS Creators.
57.	2007 California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus (California ICS Agreement) dated December 13, 2007.
58.	Agreement between the United States of America and the Gila River Indian Community for the Creation of Intentionally Created Surplus for Firming (Agreement No. 19-XX-30-W0657) dated May 20, 2019.
59.	Agreement between the United States of America and the Gila River Indian Community for the Creation of Intentionally Created Surplus for Firming (Agreement No. 22-XX-30-W0723) dated December 15, 2021.

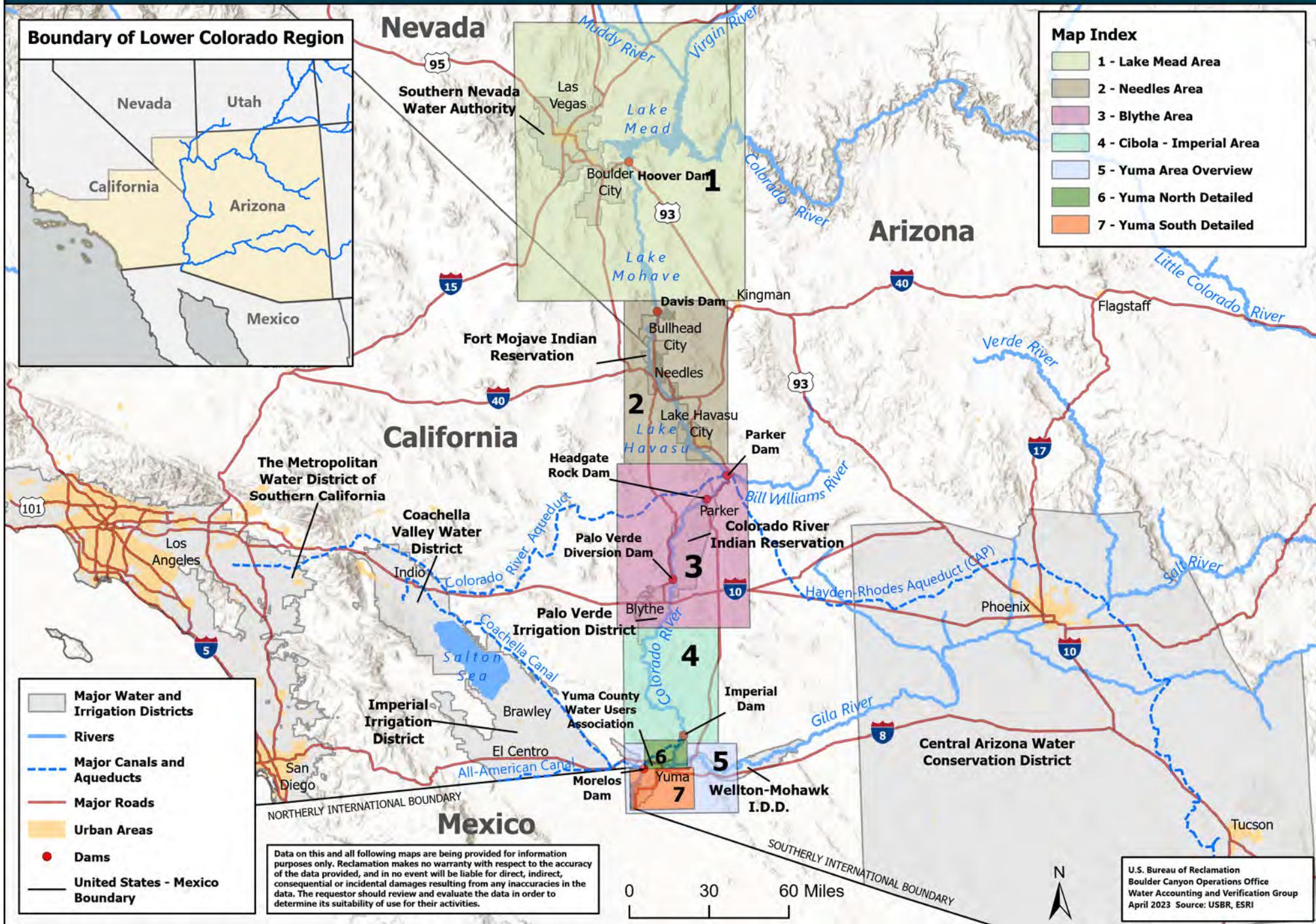
**DOCUMENTS AND LETTERS SIGNIFICANT TO THE DELIVERY OF
AND ACCOUNTING FOR THE USE OF COLORADO RIVER WATER IN CALENDAR YEAR 2022**

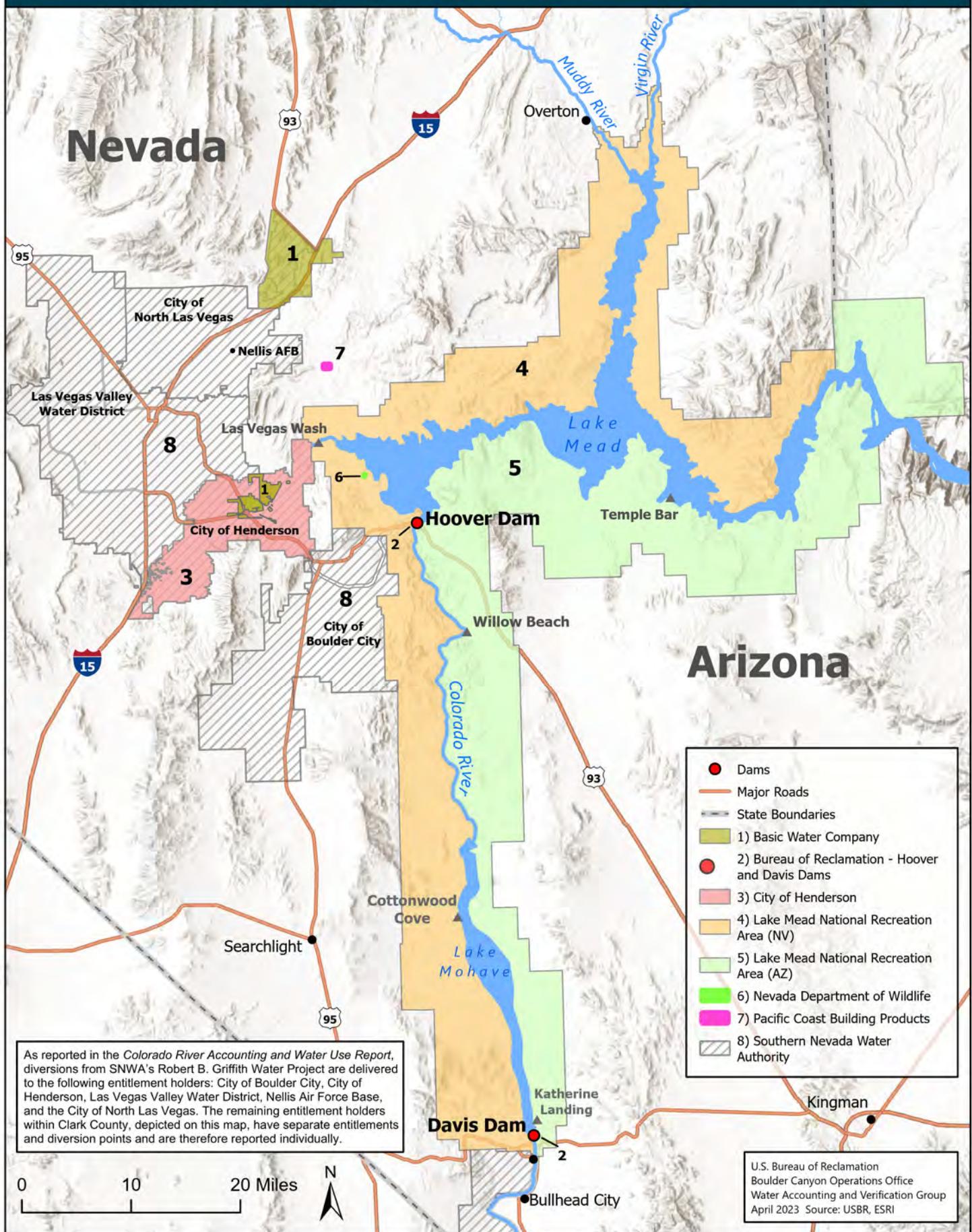
INTENTIONALLY CREATED SURPLUS	
60.	Documents related to the creation, delivery, and accounting of the Central Arizona Water Conservation District's ICS.
61.	Documents related to the creation, delivery, and accounting of the Gila River Indian Community's ICS.
62.	Documents related to the creation, delivery, and accounting of the Imperial Irrigation District's ICS.
63.	Documents related to the creation, delivery, and accounting of The Metropolitan Water District of Southern California's ICS.
64.	Documents related to the creation, delivery, and accounting of the Southern Nevada Water Authority's ICS.

LOWER BASIN DROUGHT CONTINGENCY PLAN	
65.	Lower Basin Drought Contingency Plan Agreement dated May 20, 2019.
66.	Lower Basin Drought Contingency Operations.
67.	Agreement Regarding Lower Basin Drought Contingency Obligations between Reclamation and CAWCD dated May 20, 2019.

Boundary of Interior Region 8 Lower Colorado Basin







As reported in the *Colorado River Accounting and Water Use Report*, diversions from SNWA's Robert B. Griffith Water Project are delivered to the following entitlement holders: City of Boulder City, City of Henderson, Las Vegas Valley Water District, Nellis Air Force Base, and the City of North Las Vegas. The remaining entitlement holders within Clark County, depicted on this map, have separate entitlements and diversion points and are therefore reported individually.

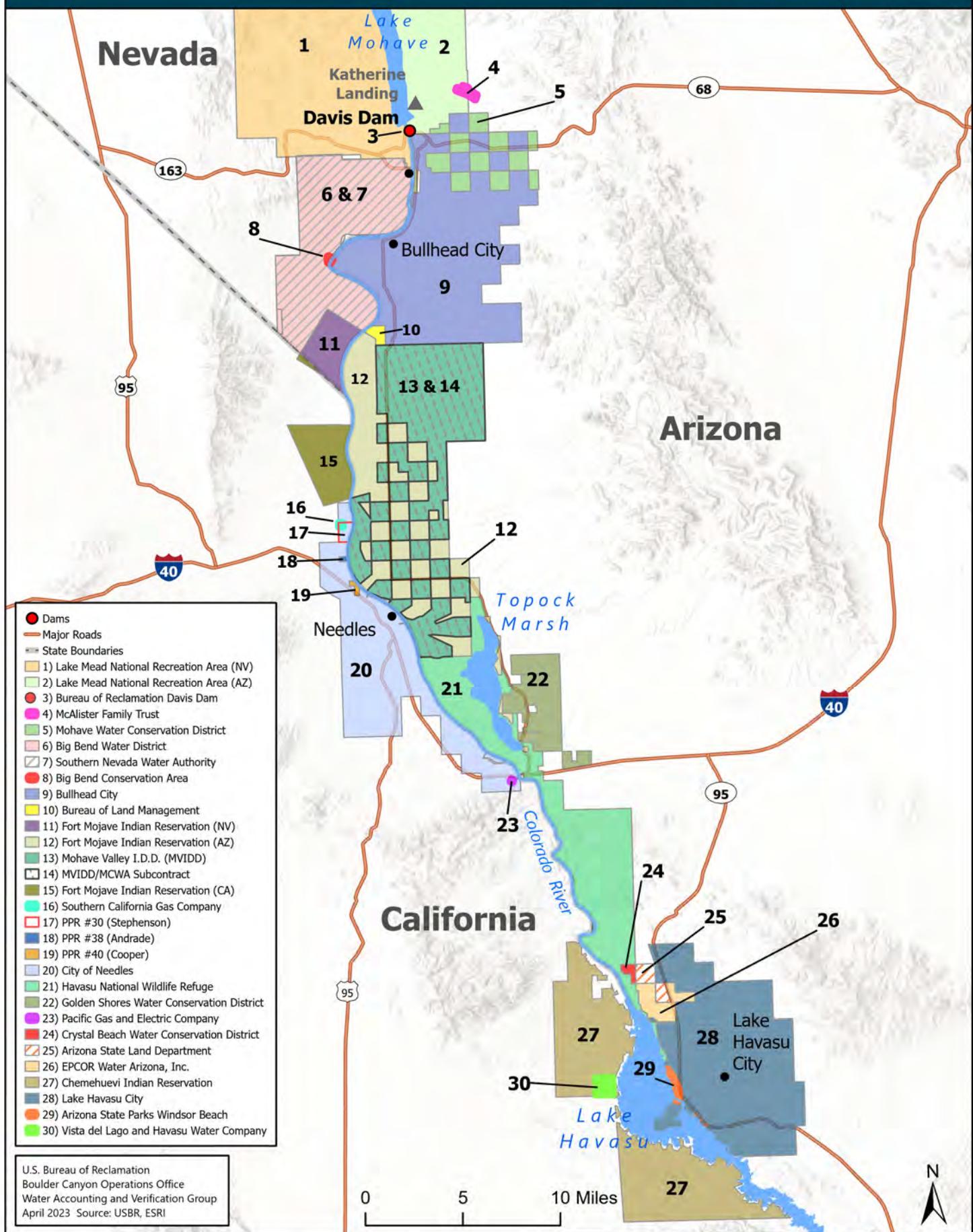
0 10 20 Miles

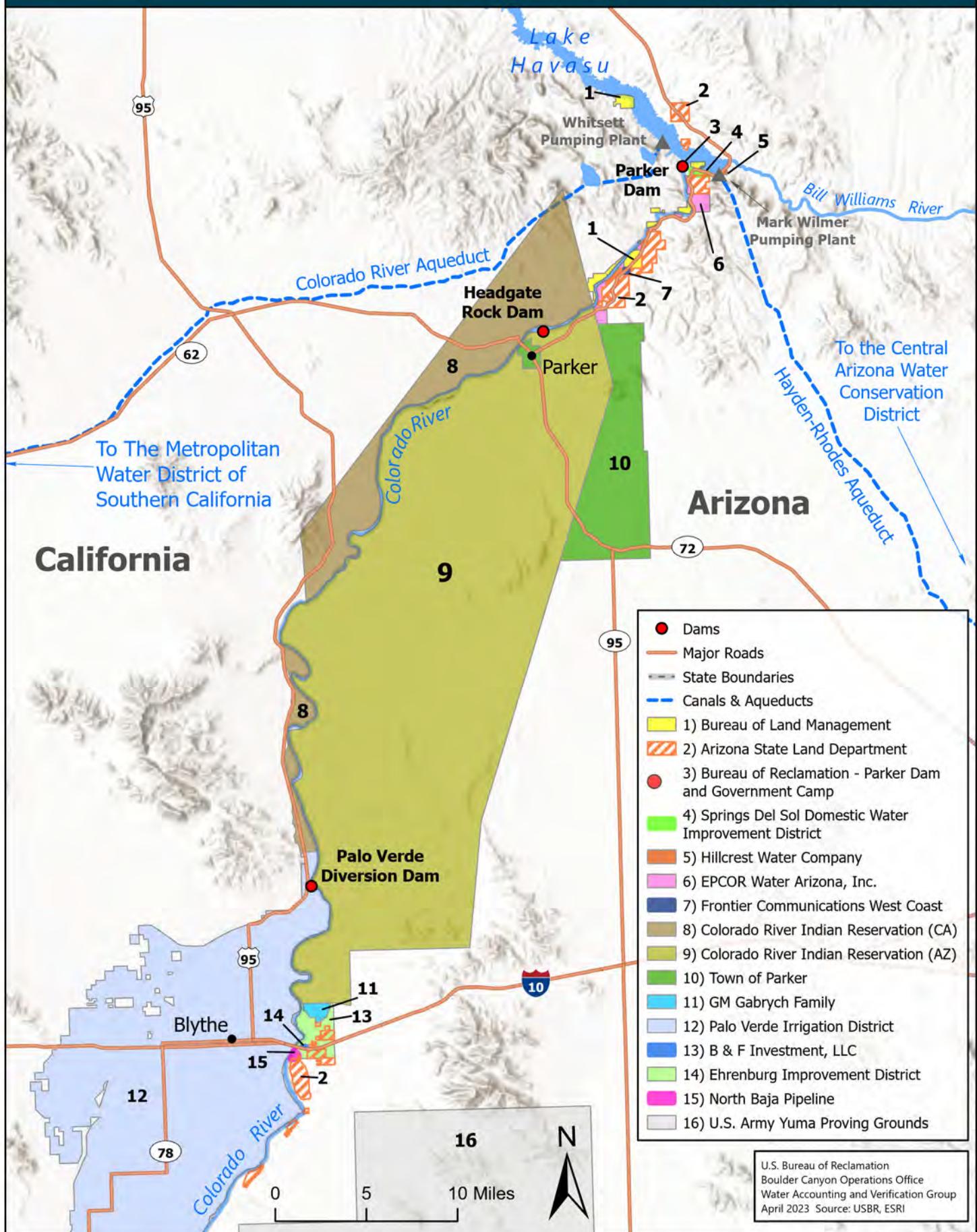




LOWER COLORADO RIVER WATER ACCOUNTING REPORT

Map 2 - Needles Area Water Users

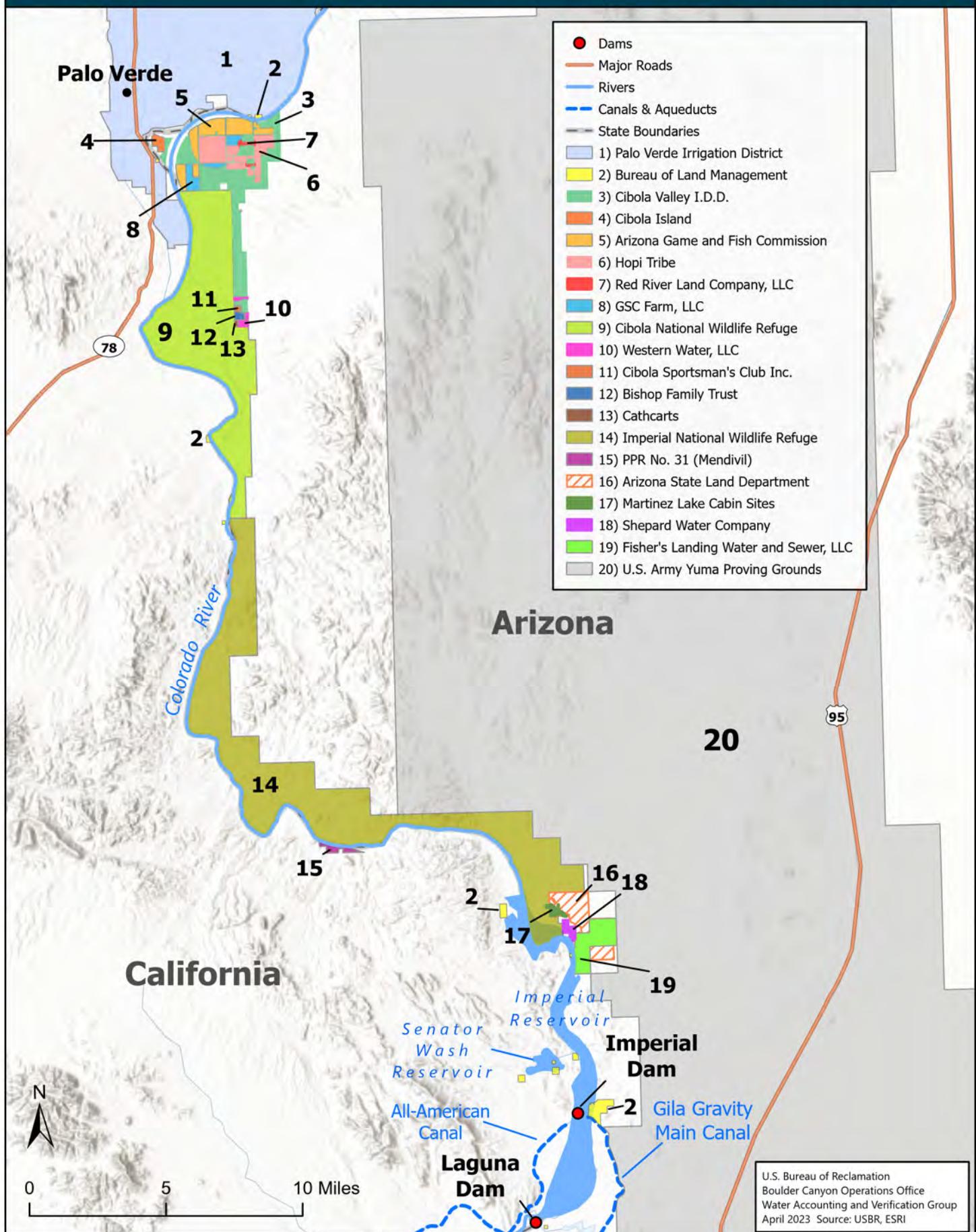






LOWER COLORADO RIVER WATER ACCOUNTING REPORT

Map 4 - Cibola - Imperial Area Water Users



California

