

Lower Colorado River System Consumptive Uses and Losses Report

Recalculated 1971-2005

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.

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Abbreviations and Acronyms

CAP Central Arizona Project

CUL Consumptive Uses and Losses

CRSS Colorado River Simulation System

EIA Energy Information Administration

ET Evapotranspiration

GIS Geographic Information Systems

HUC Hydrologic Unit Code

LCRAS Lower Colorado River Annual Summary of

Evapotranspiration and Evaporation

M&I Municipal and Industrial

NASS National Agricultural Statistics Service

NDVI Normalized Difference Vegetation Index

NID National Inventory of Dams

NOAA National Oceanic and Atmospheric Administration

NRCS Natural Resources Conservation Service

PRISM Parameter-elevation Regressions on Independent Slopes

Model

Reclamation Bureau of Reclamation

SSEBop Operational Simplified Surface-Energy Balance

USACE United States Army Corps of Engineers

USDA United States Department of Agriculture

USGS United States Geological Survey

Water Accounting Report Colorado River Accounting and Water Use Report:

Arizona, California, and Nevada

Definitions

Colorado River Basin: Defined in the Colorado River Compact of 1922 as all the drainage area of the Colorado River System and all other territory within the United States of America to which waters of the Colorado River System shall be beneficially applied.

Colorado River System: Defined in the Colorado River Compact of 1922 as that portion of the Colorado River and its tributaries within the United States.

Colorado River Tributaries: Major rivers and associated watersheds that naturally drain into the Colorado River. For the purpose of this report "tributary water" is water that is sourced from the lower Colorado River System but not diverted from the mainstream of the Colorado River.

Consumptive Uses and Losses: A use or depletion of water due to human-caused activity, including interbasin transfers.

Effective Precipitation: Precipitation occurring during the growing season that is available to meet evapotranspiration (ET) requirements of crops.

Fullness Factor: A coefficient used to adjust a maximum reservoir surface area to an average annual reservoir surface area.

Incidental Use: Consumptive uses and losses resulting from phreatophyte growth in and along canals and laterals, evaporation from the canals and laterals, as well as other losses due to a canal's imperfect conveyance efficiency and losses during the irrigation of crops.

Lower Colorado River Basin: Defined in the Colorado River Compact of 1922 as 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 Colorado River System: 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.

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

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 1944 Water Treaty ¹ obligation.

¹ Referring to the *Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande Treaty between the United States of America and Mexico*, signed on February 3, 1944.

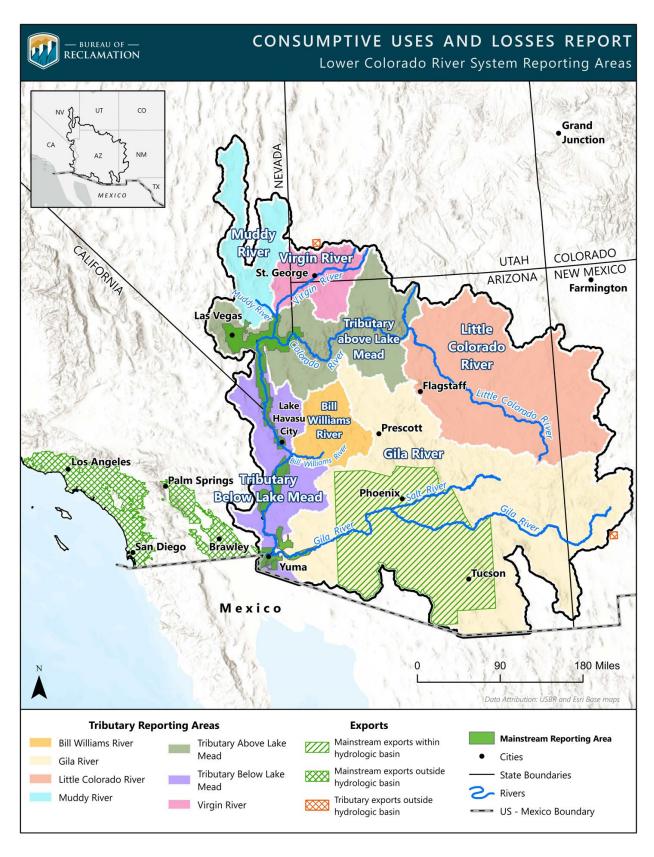


Figure 1: Lower Colorado River System Reporting Areas

Summary

The Colorado River Basin Project Act (Public Law 90-537) directs the Secretary of the Interior to report on the annual consumptive uses and losses of water from the Colorado River System after each successive five-year period starting on October 1, 1970.

In the lower Colorado River Basin, the Bureau of Reclamation produced reports on consumptive uses and losses data from 1971 – 2005. These previously published reports were found to have several methodological and data inconsistencies in the 2012 Colorado River Basin Water Supply and Demand Study. As a result, the Bureau of Reclamation committed to recalculating the data to improve the methodological and data consistency for that period.

This report presents the recalculated estimates of anthropogenic consumptive uses and losses from the lower Colorado River System for each calendar year from 1971 through 2005. Consumptive uses and losses data from the mainstream of the Colorado River are reported at the state scale (Arizona, California, and Nevada) and are further divided by major type of use (exports, irrigated agriculture, municipal and industrial other, or thermal electric power). Tributary data are reported at the state scale (Arizona, California, Nevada, New Mexico, Utah) and reporting area scale (Tributary Area Above Lake Mead, Tributary Area Below Lake Mead, Little Colorado River, Virgin River, Muddy River, Bill Williams River, and the Gila River) and are further divided by major type of use (reservoir evaporation, exports, irrigated agriculture, stockpond evaporation & livestock, municipal and industrial other, thermal electric power, and mineral resources). The report also includes data on evaporative losses from mainstream reservoirs, water delivered to Mexico and other water flowing to Mexico, irrigated acreage and population estimates.

The recalculated data in the tables of this report, as summarized in the **Data Summary** table, represent the Bureau of Reclamation's best efforts to create a consistent consumptive uses and losses record from 1971 – 2005 for the lower Colorado River System and supersedes the data contained in previously published reports.

Data Summary
Lower Colorado River System: Estimated Consumptive Uses and Losses¹
(1,000 acre-feet)

			ARIZONA			CALIFORNIA			NEVADA		NEW MEXICO	UTAH			OWER RIVER SYSTEI	и	MEXICO			TOTAL ⁵
1972 1,089		River	Basin		River	Basin		River	Basin			Basin	River	Basin	Reservoir	Colorado	in Satisfaction of	Pursuant to	Excess of	Lower Colorado River System and Mexico
142 1,142 1,343 4,481 5,231 0 5,231 0 5,231 0 5 109 201 35 66 6,623 3,638 1,042 11,045 1,500 119 6 1,206 1976 1,125 1,124 1,144	1971	1,184	2,914	4,098	5,133	0	5,133	51	103	153	28	41	6,367	3,085	973	10,426	1,500	55	6	11,981
1976 1,198	1972	1,089	3,164	4,253	5,150	0	5,150	81	90	171	31	45	6,320	3,329	982	10,631	1,500	86	26	12,217
1976 1,230 3,889 4,919 4,994 0 4,994 0 1,99 249 33 61 6,226 3,522 1,075 1,123 1,100 215 12 12,238 1976 1,125 3,474 4,580 5,111 0 5,111 73 154 2,27 32 70 6,100 3,750 1,089 1,089 1,000 207 71 12,066 1978 1,115 3,474 4,580 5,111 0 5,111 73 154 2,27 32 70 6,100 3,750 1,089 10,899 1,200 207 71 12,066 1978 1,115 3,474 4,580 5,111 0 5,111 73 154 2,27 32 70 6,100 3,562 1,069 10,899 1,200 207 71 12,766 1,126	1973	1,142	3,339	4,481	5,231	0	5,231	93	86	179	33	50	6,466	3,507	1,072	11,045	1,500	119	5	12,664
1976 1,125 3,483 4,578 4,516 0 4,516 73 134 207 34 64 5,814 3,075 1,046 10,534 1,000 205 69 12,239 1977 1,105 3,247 4,412 4,419 0 4,420 71 137 208 34 75 5,000 3,542 965 10,143 1,100 162 44 11,125 1,125	1974	1,199	3,439	4,638	5,329	0	5,329	95	109	204	35	56	6,623	3,638	1,042	11,303	1,500	159	6	12,962
1976 1,106 3,474 4,880 5,011 0 6,011 73 144 227 32 70 6,180 3,542 965 1,089 1,500 207 71 12,086 1978 1,116 3,277 4,730 4,703 0 4,470 71 717 208 143 231 28 68 5,813 3,962 1,107 10,071 170 178 1,407 12,749 1980 1,077 3,840 4,818 4,842 0 4,682 92 170 262 33 68 5,813 4,818 1,109 11,090 11,090 163 3,814 1,109 1,109 1,109 1,100 163 3,814 1,109 1,100	1975	1,230	3,689	4,919	4,894	0	4,894	101	139	240	33	61	6,225	3,923	1,075	11,223	1,500	215	12	12,938
1978 1,115 3,287	1976	1,125	3,453	4,578	4,616	0	4,616	73	134	207	34	54	5,814	3,675	1,045	10,534	1,500	205	69	12,239
1978 1,021 3,714 4,738 4,703 0 4,703 98 143 231 28 68 5,813 3,062 1,107 10,871 1,700 176 1,4677 12,749 1980 1,077 3,404 4,918 4,442 0 4,642 12 170 262 33 48 90 6,062 4,169 11,049 11,049 1,700 155 5,341 12,033 1982 1,101 3,388 4,488 4,211 0 4,211 102 129 231 31 67 5,414 3,614 1,114 10,42 1,500 150 49 11,742 1983 3,811 3,371 4,449 4,688 0 4,688 101 170 271 30 78 5,177 3,665 1,109 10,273 1,700 170 12,600 12,401 1984 1,032 3,317 4,449 4,688 0 4,688 102 177 279 38 110 5,607 4,064 1,176 1,700 130 10,111 13,005 1986 1,107 3,742 4,849 4,688 0 4,688 102 177 279 38 110 5,607 4,064 1,176 1,170 1,170 130 10,111 13,005 1987 1,553 3,136 4,889 4,789 0 4,789 109 178 237 331 29 65 4,789 1,173 1,148 1,142 1,170 130 10,111 13,005 1988 2,020 2,724 4,744 5,041 0 5,041 153 179 331 33 86 7,214 3,022 1,188 11,303 1,500 138 6,001 13,003 1989 2,020 2,724 4,744 5,041 0 5,041 153 179 331 33 86 7,214 3,022 1,188 11,303 1,500 134 42 13,014 1989 2,020 2,724 4,744 5,041 0 5,041 153 179 331 33 86 7,214 3,022 1,188 11,303 1,500 134 42 13,014 1991 1,700 3,075 5,077 5,077 5,177 206 181 367 238 30 37 6,776 3,365 1,097 1,173 1,140 1,000 134 42 13,014 1992 2,770 3,166 5,537 5,268 0 5,277 237 186 343 32 116 5,007 7,440 3,300 1,650 1,170	1977	1,105	3,474	4,580	5,011	0	5,011	73	154	227	32	70	6,190	3,730	1,069	10,989	1,500	207	71	12,696
1880 1,077 3,840 4,918 4,942 0 4,642 92 170 262 33 98 5,812 4,139 1,088 11,049 1,700 155 5,941 12,093 1881 1,283 3,881 5,153 4,889 0 4,680 102 170 219 231 311 67 6,414 3,44 1,114 1,134 1,700 160 49 11,792 1883 4,143 3,860 4,591 4,770 0 4,170 87 172 259 30 88 5,197 3,981 1,139 10,273 1,700 170 12,480 12,443 1,144 1,145	1978	1,115	3,297	4,412	4,419	0	4,420	71	137	208	34	75	5,606	3,542	995	10,143	1,500	182	44	11,825
1881 1,263 3,881 5,153 4,889 0 4,889 0 4,680 110 163 273 34 80 6,682 4,168 1,119 11,349 1,700 148 343 13,198 1982 1,101 3,388 4,489 4,211 0 4,211 102 129 231 31 67 5,414 3,614 1,114 10,142 1,500 150 49 11,702 1984 1,032 3,317 4,349 4,583 0 4,583 101 170 271 30 86 5,197 3,595 1,109 10,241 1,700 126 13,443 12,249 1984 1,277 3,588 4,889 4,789 0 4,789 102 177 279 36 110 5,907 4,044 12,04 11,176 1,700 130 10,111 13,005 1986 1,277 3,588 4,889 4,789 0 4,789 109 178 287 32 105 6,044 3,867 1,173 1,180 1,700 10 69 2,947 12,861 1988 1,279 3,682 4,781 4,490 0 4,780 109 178 287 32 105 6,788 3,388 1,180 1,130 1,100 128 631 13,443 1989 2,000 2,724 4,744 5,041 0 5,417 153 179 331 33 86 7,391 2,916 1,138 1,130 1,500 134 42 13,141 1992 1,700 3,075 4,775 4,912 0 4,781 161 161 190 351 27 368 39 87 6,776 3,385 1,169 1,134 1,700 128 631 13,443 1993 2,078 3,084 3,084 3,094 3,094 3,094 3,641 1,162 1,1003 1,100 128 631 13,443 1994 1,700 3,075 4,775 4,912 0 5,127 167 182 336 39 87 6,776 3,385 1,169 1,1344 1,700 138 9 13,032 1994 2,077 3,196 5,274 5,147 0 5,147 298 181 387 28 107 7,430 3,513 1,089 12,032 1,500 141 21 1,2814 1992 2,778 3,698 5,147 4,481 161 161 190 351 27 111 3,085 3,080 1,081 1,141 1,170 1,170 1,181 1,181 1994 2,077 3,196 5,274 5,147 0 5,147 2,28 181 387 28 107 7,430 3,513 1,089 1,023 1,160 1,141 2 1,500 1,141 1,	1979	1,021	3,714	4,736	4,703	0	4,703	89	143	231	28	68	5,813	3,952	1,107	10,871	1,700	178	1,467	12,749
1982 1,101 3,388 4,488 4,211 0 4,211 102 129 231 31 67 5,414 3,614 1,114 10,142 1,500 150 49 11,792 1983 941 3,860 4,981 4,170 0 4,170 87 172 259 30 88 5,197 3,398 1,109 10,421 1,700 128 13,449 12,244 13,645 1,107 3,742 4,849 4,898 0 4,898 101 170 271 30 78 5,177 3,985 1,109 10,421 1,700 130 10,111 13,005 1386 1,107 3,742 4,849 4,898 0 4,725 112 205 317 33 120 6,646 3,857 1,173 1,1193 1,700 130 10,111 13,005 1387 1,227 3,898 1,159 1,173 1,193 1,700 110 9,114 13,005 1388 1,729 3,052 4,741 4,940 0 4,799 0 4,799 109 178 287 32 105 6,640 3,857 1,173 1,193 1,700 128 631 13,143 1389 2,000 2,244 4,744 5,127 0 5,641 153 179 331 33 86 7,241 3,022 1,158 11,393 1,500 139 90 13,032 1399 1,000 1390 1,000 1390 1,000	1980	1,077	3,840	4,918	4,642	0	4,642	92	170	262	33	96	5,812	4,139	1,098	11,049	1,700	155	5,341	12,903
1983 941 3,850 4,591 4,170 0 4,170 87 172 298 30 86 5,197 3,938 1,139 10,273 1,700 170 12,460 12,143 1984 1,032 3,317 4,349 4,683 0 4,683 101 170 271 30 78 5,717 3,565 1,109 10,421 1,700 130 10,111 13,005 1986 1,227 3,588 4,828 4,725 0 4,725 112 205 317 33 120 6,064 3,957 1,173 11,193 1,700 110 9,114 13,003 1987 1,553 3,136 4,889 4,769 0 4,769 109 178 287 32 105 6,460 3,451 1,152 11,063 1,700 98 2,947 12,861 1388 1,728 3,958 4,744 5,041 0 5,041 153 179 331 33 86 7,214 3,022 1,158 11,393 1,500 139 90 13,032 1990 2,066 2,818 4,744 5,041 0 5,041 153 179 331 33 86 7,214 3,022 1,158 11,393 1,500 139 90 13,032 1990 2,066 2,818 4,744 5,127 0 5,127 167 182 350 31 85 7,391 2,916 1,073 11,138 1,700 101 81 12,548 1992 1,740 3,292 5,032 4,461 0 4,461 161 190 351 27 111 6,362 3,620 965 10,047 1,500 101 81 12,548 1993 2,078 3,668 4,763 3,665 4,763 3,665 4,764 4,940 4,661 4,	1981	1,263	3,891	5,153	4,689	0	4,690	110	163	273	34	80	6,062	4,168	1,119	11,349	1,700	148	343	13,198
1984 1,032 3,317 4,349 4,583 0 4,583 101 170 271 30 78 5,717 3,595 1,109 10,421 1,700 128 13,843 12,246 1985 1,107 3,742 4,849 4,698 0 4,698 102 177 279 36 110 5,907 4,064 1,204 11,176 1,700 130 10,111 13,005 1987 1,553 3,136 4,889 4,799 0 4,799 109 178 287 32 105 6,460 3,451 1,152 11,063 1,700 188 2,947 12,861 1888 1,729 3,052 4,718 4,940 0 4,440 129 182 311 29 95 6,798 3,368 1,159 11,314 1,700 128 631 13,143 1,900 1990 1,942 1,940	1982	1,101	3,388	4,488	4,211	0	4,211	102	129	231	31	67	5,414	3,614	1,114	10,142	1,500	150	49	11,792
1985 1,107 3,742 4,849 4,698 0 4,698 102 177 279 36 110 5,907 4,064 1,204 11,176 1,700 130 10,111 13,005 1986 1,227 3,598 4,826 4,725 0 4,725 112 205 317 33 120 6,064 3,857 1,173 11,193 1,700 110 9,114 13,003 1987 1,553 3,136 4,899 4,799 0 4,799 109 178 287 32 105 6,460 3,451 1,152 11,633 1,700 128 2,947 12,881 1988 1,729 3,552 4,781 4,940 0 4,940 129 152 311 29 95 6,789 3,588 1,159 11,314 1,700 128 631 13,143 1989 2,020 2,724 4,744 5,041 0 5,041 153 179 331 33 86 7,214 3,022 1,158 11,393 1,500 139 90 13,032 1990 2,026 2,618 4,714 5,127 0 5,127 167 182 350 31 85 7,391 2,916 1,073 11,390 1,500 134 42 13,014 1992 1,740 3,282 5,032 4,461 0 4,461 161 190 351 27 111 6,362 3,620 965 10,447 1,500 101 811 12,548 1993 2,078 3,004 5,083 4,753 0 4,754 206 181 387 28 107 7,430 3,513 1,898 12,032 1,500 124 26 13,666 1995 2,042 3,669 5,711 4,837 0 5,226 237 165 422 31 96 8,007 3,365 1,153 1,150	1983	941	3,650	4,591	4,170	0	4,170	87	172	259	30	86	5,197	3,938	1,139	10,273	1,700	170	12,460	12,143
1986 1,227 3,588 4,826 4,725 0 4,725 112 205 317 33 120 6,064 3,957 1,173 11,193 1,700 110 9,114 13,003 1987 1,553 3,136 4,689 4,799 0 4,799 109 178 287 32 1165 6,680 3,451 1,152 11,083 1,700 98 2,947 12,861 1988 1,729 3,052 4,781 4,940 0 4,840 129 182 311 29 95 6,788 3,588 1,158 11,343 1,700 128 631 13,443 1990 2,096 2,818 4,714 5,127 0 5,127 167 182 350 31 85 7,391 2,916 1,073 11,380 1,500 114 21 13,014 1991 1,700 3,075 4,712 0 5,127 167 182 350	1984	1,032	3,317	4,349	4,583	0	4,583	101	170	271	30	78	5,717	3,595	1,109	10,421	1,700	126	13,843	12,246
1987 1,553 3,136 4,889 4,789 0 4,789 109 178 287 32 105 6,460 3,451 1,152 11,063 1,700 98 2,947 12,861 1988 1,729 3,052 4,781 4,940 0 4,940 129 182 311 29 95 6,788 3,358 1,159 11,314 1,700 128 631 13,143 1989 2,020 2,724 4,744 5,041 0 5,041 153 179 331 33 86 7,214 3,022 1,158 11,383 1,500 139 90 13,032 1990 2,086 2,618 4,714 5,127 0 5,127 167 182 360 31 85 7,391 2,916 1,073 11,380 1,500 134 42 13,014 1991 1,700 3,075 4,775 4,912 0 4,912 164 172 336 30 87 6,776 3,365 1,032 11,173 1,500 141 21 12,814 1992 1,740 3,292 5,032 4,461 0 4,461 161 190 351 27 111 6,362 3,620 965 10,947 1,500 101 81 12,648 1998 2,078 3,046 5,083 4,783 0 4,754 180 189 369 29 108 7,012 3,330 1,061 11,402 1,500 61 3,893 12,983 1994 2,077 3,196 5,274 5,147 0 5,147 208 181 387 28 107 7,430 3,513 1,089 12,032 1,500 124 26 13,686 1995 2,042 3,689 5,711 4,837 0 4,837 201 185 386 32 116 7,080 4,003 1,081 12,163 1,500 126 212 13,789 1996 2,544 2,994 5,538 5,226 0 5,162 223 187 410 31 116 8,085 2,728 1,164 11,977 1,700 89 1,173 13,766 1998 2,400 2,740 5,160 4,983 0 4,983 0 4,983 2,17 197 414 34 116 7,560 3,086 1,163 11,801 1,700 114 3,018 13,834 1999 2,788 2,344 4,922 5,107 0 5,167 2,57 186 443 32 107 7,942 2,688 1,200 1,185 11,810 1,700 114 3,018 13,834 1999 2,788 2,344 4,922 5,107 0 5,167 2,57 186 443 32 107 7,942 2,688 1,200 1,185 11,810 1,700 114 3,018 13,834 1999 2,788 2,344 4,922 5,107 0 5,167 2,57 186 443 32 107 7,942 2,688 1,200 1,185 11,810 1,700 114 3,018 13,834 1999 2,788 2,344 4,922 5,107 0 5,169 2,99 187 477 33 99 8,000 2,461 1,185 11,836 1,700 114 3,018 13,834 1999 2,788 2,344 4,922 5,107 0 5,169 2,99 187 477 33 99 8,000 2,461 1,185 11,836 1,700 114 3,018 13,834 1999 2,788 2,344 4,922 5,107 0 5,169 2,99 187 477 33 99 8,000 2,461 1,185 11,836 1,700 114 3,018 13,834 1999 2,788 2,344 4,922 5,107 0 5,169 2,99 187 477 33 99 8,000 2,461 1,185 11,836 1,150 11,800 170 114 3,018 13,834 1999 2,788	1985	1,107	3,742	4,849	4,698	0	4,698	102	177	279	36	110	5,907	4,064	1,204	11,176	1,700	130	10,111	13,005
1988 1,729 3,052 4,781 4,940 0 4,940 129 182 311 29 95 6,798 3,358 1,159 11,314 1,700 128 631 13,143 1989 2,020 2,724 4,744 5,041 0 5,041 153 179 331 33 86 7,214 3,022 1,158 11,393 1,500 139 90 13,032 1,990 2,096 2,618 4,714 5,127 0 5,127 167 182 350 31 85 7,391 2,916 1,073 11,380 1,500 134 42 13,014 1,700 1,000	1986	1,227	3,598	4,826	4,725	0	4,725	112	205	317	33	120	6,064	3,957	1,173	11,193	1,700	110	9,114	13,003
1989 2,020 2,724 4,744 5,041 0 5,041 153 179 331 33 86 7,214 3,022 1,158 11,393 1,500 139 90 13,032 1990 2,066 2,618 4,714 5,127 0 5,127 167 182 350 31 85 7,391 2,916 1,073 11,380 1,500 134 42 13,014 1991 1,700 3,075 4,775 4,912 0 4,912 164 172 336 30 87 6,776 3,065 1,032 11,173 1,500 141 21 12,814 1992 1,740 3,292 5,032 4,461 0 4,461 161 190 351 27 111 6,362 3,620 965 10,947 1,500 101 81 12,548 1193 2,078 3,004 5,083 4,753 0 4,754 180 189 369 29 108 7,012 3,330 1,061 11,402 1,500 61 3,693 12,963 1994 2,077 3,196 5,274 5,147 0 5,147 206 181 387 28 107 7,430 3,513 1,089 12,032 1,500 124 26 13,666 1995 2,544 2,994 5,538 5,226 0 5,226 237 185 422 31 96 8,007 3,006 1,163 12,163 12,466 1,500 112 5 14,078 1999 2,584 2,994 5,586 5,266 0 5,226 237 185 422 31 96 8,007 3,006 1,163 12,466 1,500 112 5 14,078 1999 2,578 2,344 4,922 5,107 0 5,162 223 187 410 31 116 7,590 3,006 1,144 11,820 1,700 114 3,018 13,684 1999 2,578 2,344 4,922 5,107 0 5,107 257 188 443 32 107 7,942 2,668 1,200 11,811 1,700 79 1,194 13,589 2000 2,641 2,132 4,773 5,269 0 5,266 297 186 443 32 107 7,942 2,668 1,200 11,811 1,700 79 1,194 13,689 2000 2,641 2,132 4,773 5,269 0 5,276 3,25 191 516 31 99 8,400 2,451 1,185 11,836 1,700 107 337 13,643 2001 2,688 2,251 4,939 5,169 0 5,169 293 191 484 29 111 8,149 2,583 1,085 11,817 1,500 104 201 13,421 2003 2,888 2,251 4,894 5,169 0 5,169 293 191 484 29 111 8,149 2,583 1,085 11,817 1,500 104 201 13,421 2003 2,888 2,251 4,894 5,169 0 5,169 293 191 484 29 111 8,149 2,583 1,085 11,817 1,500 104 201 13,421 2003 2,888 2,251 4,894 5,576 0 5,276 3,25 191 516 31 99 8,400 2,343 1,045 11,790 1,500 102 21 23 13,412 2003 2,889 2,006 4,835 4,409 0 4,409 271 194 486 33 107 7,508 2,340 926 10,074 1,500 115 66 212,389 2004 2,802 2,202 4,824 5,276 0 5,276 325 191 516 31 194 486 33 107 7,508 2,340 926 10,074 1,500 115 62 12,389 2004 2,802 2,202 4,824 5,276 0 5,276 3,25 191 516 31 194 486 33 107 7,508 2,340 926 10,074 1,500 115 66 2 12,389 2004 2,802 2,802 2,006 4,835 4,409 0 4,409 271 194 486 33 104 7,768 2,340 926 10,074 1,500 1,	1987	1,553	3,136	4,689	4,799	0	4,799	109	178	287	32	105	6,460	3,451	1,152	11,063	1,700	98	2,947	12,861
1990 2,096 2,618 4,714 5,127 0 5,127 167 182 350 31 85 7,391 2,916 1,073 11,380 1,500 134 42 13,014 1991 1,700 3,075 4,775 4,912 0 4,912 164 172 336 30 87 6,776 3,365 1,032 11,173 1,500 141 21 12,814 1992 1,740 3,292 5,032 4,461 0 4,461 161 190 351 27 111 6,362 3,620 965 10,947 1,500 101 81 12,548 1993 2,078 3,004 5,032 4,761 180 189 389 29 108 7,012 3,330 1,061 11,402 1,500 61 3,693 12,683 1994 2,077 3,196 5,274 5,147 0 5,147 206 181 387 28	1988	1,729	3,052	4,781	4,940	0	4,940	129	182	311	29	95	6,798	3,358	1,159	11,314	1,700	128	631	13,143
1991 1,700 3,075 4,775 4,912 0 4,912 164 172 336 30 87 6,776 3,365 1,032 11,173 1,500 141 21 12,814 1992 1,740 3,292 5,032 4,461 0 4,461 161 190 351 27 111 6,622 3,620 965 10,947 1,500 101 81 12,548 1993 2,078 3,004 5,083 4,753 0 4,754 180 189 369 29 108 7,012 3,330 1,061 11,402 1,500 61 3,693 12,963 1994 2,077 3,196 5,274 5,147 0 5,147 206 181 387 28 107 7,430 3,513 1,089 12,032 1,500 141 24 26 13,666 1995 2,042 3,669 5,711 4,837 20 1,85 386	1989	2,020	2,724	4,744	5,041	0	5,041	153	179	331	33	86	7,214	3,022	1,158	11,393	1,500	139	90	13,032
1992 1,740 3,292 5,032 4,461 0 4,461 161 190 351 27 111 6,362 3,620 965 10,947 1,500 101 81 12,548 1993 2,078 3,004 5,083 4,753 0 4,754 180 189 369 29 108 7,012 3,330 1,061 11,402 1,500 61 3,693 12,963 1994 2,077 3,196 5,274 5,147 0 5,147 206 181 387 28 107 7,430 3,513 1,089 12,032 1,500 124 26 13,656 1995 2,042 3,669 5,711 4,837 201 185 386 32 116 7,080 4,003 1,081 12,163 1,500 112 5 14,078 1996 2,544 2,994 5,588 5,226 0 5,226 237 185 422 31	1990	2,096	2,618	4,714	5,127	0	5,127	167	182	350	31	85	7,391	2,916	1,073	11,380	1,500	134	42	13,014
1993 2,078 3,004 5,083 4,753 0 4,754 180 189 369 29 108 7,012 3,330 1,061 11,402 1,500 61 3,693 12,963 1994 2,077 3,196 5,274 5,147 0 5,147 206 181 387 28 107 7,430 3,513 1,089 12,032 1,500 124 26 13,656 1995 2,042 3,669 5,711 4,837 0 4,837 201 185 386 32 116 7,080 4,003 1,081 12,163 1,500 126 212 13,789 1996 2,544 2,994 5,538 5,226 0 5,226 237 185 422 31 96 8,007 3,306 1,153 12,466 1,500 112 5 14,078 1997 2,699 2,394 5,094 5,162 0 5,162 223 187 </td <td>1991</td> <td>1,700</td> <td>3,075</td> <td>4,775</td> <td>4,912</td> <td>0</td> <td>4,912</td> <td>164</td> <td>172</td> <td>336</td> <td>30</td> <td>87</td> <td>6,776</td> <td>3,365</td> <td>1,032</td> <td>11,173</td> <td>1,500</td> <td>141</td> <td>21</td> <td>12,814</td>	1991	1,700	3,075	4,775	4,912	0	4,912	164	172	336	30	87	6,776	3,365	1,032	11,173	1,500	141	21	12,814
1994 2,077 3,196 5,274 5,147 0 5,147 206 181 387 28 107 7,430 3,513 1,089 12,032 1,500 124 26 13,656 1995 2,042 3,669 5,711 4,837 0 4,837 201 185 386 32 116 7,080 4,003 1,081 12,163 1,500 126 212 13,789 1996 2,544 2,994 5,538 5,226 0 5,226 237 185 422 31 96 8,007 3,306 1,153 12,466 1,500 112 5 14,078 1997 2,699 2,394 5,162 0 5,162 223 187 410 31 116 8,085 2,728 1,164 11,977 1,700 89 1,173 13,666 1998 2,450 2,740 5,160 4,953 0 5,167 257 186 443 <td>1992</td> <td>1,740</td> <td>3,292</td> <td>5,032</td> <td>4,461</td> <td>0</td> <td>4,461</td> <td>161</td> <td>190</td> <td>351</td> <td>27</td> <td>111</td> <td>6,362</td> <td>3,620</td> <td>965</td> <td>10,947</td> <td>1,500</td> <td>101</td> <td>81</td> <td>12,548</td>	1992	1,740	3,292	5,032	4,461	0	4,461	161	190	351	27	111	6,362	3,620	965	10,947	1,500	101	81	12,548
1995 2,042 3,669 5,711 4,837 0 4,837 201 185 386 32 116 7,080 4,003 1,081 12,163 1,500 126 212 13,789 1996 2,544 2,994 5,538 5,226 0 5,226 237 185 422 31 96 8,007 3,306 1,153 12,466 1,500 112 5 14,078 1997 2,899 2,394 5,094 5,162 0 5,162 223 187 410 31 116 8,085 2,728 1,164 11,977 1,700 89 1,173 13,766 1998 2,420 2,740 5,160 4,953 0 4,953 217 197 414 34 116 7,590 3,086 1,144 11,820 1,700 114 3,018 13,689 2001 2,681 2,132 4,773 5,269 0 5,689 290 18	1993	2,078	3,004	5,083	4,753	0	4,754	180	189	369	29	108	7,012	3,330	1,061	11,402	1,500	61	3,693	12,963
1996 2,544 2,994 5,538 5,226 0 5,226 237 185 422 31 96 8,007 3,306 1,153 12,466 1,500 112 5 14,078 1997 2,899 2,394 5,094 5,162 0 5,162 223 187 410 31 116 8,085 2,728 1,164 11,977 1,700 89 1,173 13,766 1998 2,420 2,740 5,160 4,953 0 4,953 217 197 414 34 116 7,590 3,086 1,144 11,820 1,700 114 3,018 13,684 1999 2,578 2,344 4,922 5,107 0 5,107 257 186 443 32 107 7,942 2,668 1,200 11,811 1,700 79 1,194 13,569 2001 2,681 2,132 4,773 5,269 290 187 477 3	1994	2,077	3,196	5,274	5,147	0	5,147	206	181	387	28	107	7,430	3,513	1,089	12,032	1,500	124	26	13,656
1997 2,699 2,394 5,094 5,162 0 5,162 223 187 410 31 116 8,085 2,728 1,164 11,977 1,700 89 1,173 13,766 1998 2,420 2,740 5,160 4,953 0 4,953 217 197 414 34 116 7,590 3,086 1,144 11,820 1,700 114 3,018 13,634 1999 2,578 2,344 4,922 5,107 0 5,107 257 186 443 32 107 7,942 2,668 1,200 11,811 1,700 79 1,194 13,589 2000 2,641 2,132 4,773 5,269 290 187 477 33 99 8,200 2,451 1,185 1,300 10 337 19,643 2001 2,688 2,251 4,939 5,169 0 5,169 293 191 484 29 111<	1995	2,042	3,669	5,711	4,837	0	4,837	201	185	386	32	116	7,080	4,003	1,081	12,163	1,500	126	212	13,789
1998 2,420 2,740 5,160 4,953 0 4,953 217 197 414 34 116 7,590 3,086 1,144 11,820 1,700 114 3,018 13,634 1999 2,578 2,344 4,922 5,107 0 5,107 257 186 443 32 107 7,942 2,668 1,200 11,811 1,700 79 1,194 13,589 2000 2,641 2,132 4,773 5,269 0 5,269 290 187 477 33 99 8,200 2,451 1,836 1,700 107 337 13,643 2001 2,688 2,251 4,939 5,169 0 5,169 293 191 484 29 111 8,149 2,583 1,085 11,817 1,500 104 201 13,412 2002 2,802 2,022 4,824 5,276 0 5,276 325 191 516	1996	2,544	2,994	5,538	5,226	0	5,226	237	185	422	31	96	8,007	3,306	1,153	12,466	1,500	112	5	14,078
1999 2,578 2,344 4,922 5,107 0 5,107 257 186 443 32 107 7,942 2,668 1,200 11,811 1,700 79 1,194 13,589 2000 2,641 2,132 4,773 5,269 0 5,269 290 187 477 33 99 8,200 2,451 1,185 11,836 1,700 107 337 13,643 2001 2,688 2,251 4,939 5,169 0 5,169 293 191 484 29 111 8,149 2,583 1,085 11,817 1,500 104 201 13,421 2002 2,802 2,022 4,824 5,276 0 5,276 325 191 516 31 99 8,402 2,343 1,045 11,790 1,500 122 123 13,412 2003 2,829 2,006 4,835 4,409 0 4,409 271 194	1997	2,699	2,394	5,094	5,162	0	5,162	223	187	410	31	116	8,085	2,728	1,164	11,977	1,700	89	1,173	13,766
2000 2,641 2,132 4,773 5,269 0 5,269 290 187 477 33 99 8,200 2,451 1,185 11,836 1,700 107 337 13,643 2001 2,688 2,251 4,939 5,169 0 5,169 293 191 484 29 111 8,149 2,583 1,085 11,817 1,500 104 201 13,421 2002 2,802 2,022 4,824 5,276 0 5,276 325 191 516 31 99 8,402 2,343 1,045 11,790 1,500 122 123 13,412 2003 2,829 2,006 4,835 4,409 0 4,409 271 194 465 33 107 7,508 2,340 926 10,774 1,500 115 62 12,389 2004 2,783 1,971 4,755 4,316 0 4,316 267 191 <td>1998</td> <td>2,420</td> <td>2,740</td> <td>5,160</td> <td>4,953</td> <td>0</td> <td>4,953</td> <td>217</td> <td>197</td> <td>414</td> <td>34</td> <td>116</td> <td>7,590</td> <td>3,086</td> <td>1,144</td> <td>11,820</td> <td>1,700</td> <td>114</td> <td>3,018</td> <td>13,634</td>	1998	2,420	2,740	5,160	4,953	0	4,953	217	197	414	34	116	7,590	3,086	1,144	11,820	1,700	114	3,018	13,634
2001 2,688 2,251 4,939 5,169 0 5,169 293 191 484 29 111 8,149 2,583 1,085 11,817 1,500 104 201 13,421 2002 2,802 2,022 4,824 5,276 0 5,276 325 191 516 31 99 8,402 2,343 1,045 11,790 1,500 122 123 13,412 2003 2,829 2,006 4,835 4,409 0 4,409 271 194 465 33 107 7,508 2,340 926 10,774 1,500 115 62 12,389 2004 2,783 1,971 4,755 4,316 0 4,316 267 191 458 31 104 7,366 2,298 840 10,504 1,500 101 93 12,105	1999	2,578	2,344	4,922	5,107	0	5,107	257	186	443	32	107	7,942	2,668	1,200	11,811	1,700	79	1,194	13,589
2002 2,802 2,022 4,824 5,276 0 5,276 325 191 516 31 99 8,402 2,343 1,045 11,790 1,500 122 123 13,412 2003 2,829 2,006 4,835 4,409 0 4,409 271 194 465 33 107 7,508 2,340 926 10,774 1,500 115 62 12,389 2004 2,783 1,971 4,755 4,316 0 4,316 267 191 458 31 104 7,366 2,298 840 10,504 1,500 101 93 12,105	2000	2,641	2,132	4,773	5,269	0	5,269	290	187	477	33	99	8,200	2,451	1,185	11,836	1,700	107	337	13,643
2003 2,829 2,006 4,835 4,409 0 4,409 271 194 465 33 107 7,508 2,340 926 10,774 1,500 115 62 12,389 2004 2,783 1,971 4,755 4,316 0 4,316 267 191 458 31 104 7,366 2,298 840 10,504 1,500 101 93 12,105	2001	2,688	2,251	4,939	5,169	0	5,169	293	191	484	29	111	8,149	2,583	1,085	11,817	1,500	104	201	13,421
2004 2,783 1,971 4,755 4,316 0 4,316 267 191 458 31 104 7,366 2,298 840 10,504 1,500 101 93 12,105	2002	2,802	2,022	4,824	5,276	0	5,276	325	191	516	31	99	8,402	2,343	1,045	11,790	1,500	122	123	13,412
	2003	2,829	2,006	4,835	4,409	0	4,409	271	194	465	33	107	7,508	2,340	926	10,774	1,500	115	62	12,389
2005 2,427 2,593 5,020 4,329 0 4,329 277 191 468 31 123 7,033 2,938 866 10,837 1,500 108 116 12,446	2004	2,783	1,971	4,755	4,316	0	4,316	267	191	458	31	104	7,366	2,298	840	10,504	1,500	101	93	12,105
	2005	2,427	2,593	5,020	4,329	0	4,329	277	191	468	31	123	7,033	2,938	866	10,837	1,500	108	116	12,446

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Referring to Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande Treaty between the United States of America and Mexico, signed on February 3, 1944.

³ Water delivered to Mexico pursuant to their approved monthly schedule. May increase or decrease from the Treaty allotment of 1,500,000 acre-feet due to surplus or shortage conditions, and the creation and delivery of water deferred by Mexico and stored in Lake Mead.

⁴ Referring to water bypassed pursuant to *Minute Number 242*, Permanent and Definitive Solution to the International Problem of the Salinity of the Colorado River (Minute 242), signed on August 30, 1973. Prior to implementation of Minute No. 242, bypassed volumes were made pursuant to *Minute No. 216 Recommendations on the Colorado River Waters Going to Mexico*, signed on July 14, 1972 in 1973 and 1974. Starting in 1975 volumes were bypassed pursuant to Minute 242.

⁵ Does not include volumes in column "To Mexico in Excess of Treaty".

Introduction

The Colorado River System includes portions of seven states: Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming. It represents about one-fifteenth of the total area of the United States.

The Colorado River Basin Project Act (Public Law 90-537) requires reports on the annual consumptive uses and losses (CUL) of water from the Colorado River System after each successive five-year period starting on October 1970. This report recalculates estimates of annual anthropogenic CUL of water from the lower Colorado River System for the years 1971 through 2005. CUL data for the same period pertaining to the upper Colorado River System can be found in separate reports.² The values presented in this report are recalculated from previously published reports and were produced because of the following three commitments made by the Bureau of Reclamation (Reclamation) in Appendix C11 of the *Colorado River Basin Water Supply and Demand Study* (Reclamation, 2012):³

- 1) To resolve and correct the methodological and data inconsistencies in Reclamation's CUL Reports pertaining to all of the Lower Basin tributaries, in collaboration with the Colorado River Basin States.
- 2) To develop natural flows for the Little Colorado, Virgin, and Bill Williams rivers and to modify the Colorado River Simulation System (CRSS) to use natural flows for those tributaries.
- 3) To explore the feasibility and necessity of computing natural flows for the Gila River Basin and adding that tributary to CRSS.

For computation of natural flows, as necessitated by commitments 2 and 3 above, CUL data are required at a United States Geological Survey (USGS) defined eight-digit hydrologic unit code (HUC8) spatial scale and a monthly temporal scale. However, consistent with past reports, only the annual values are reported at the state scale and a Reclamation-defined reporting area scale within the tables of this report.⁴

To facilitate development of the recalculated dataset, previously published reports and data were reviewed to identify where improvements could be made. During this process methodological inconsistencies and errors in the computation of historical CUL data were addressed. **Table 1: Summary of Recalculation Methods** identifies, at a simplified level, the type of use category, source data used in the recalculation effort, and highlights the changes in methodologies used in the recalculated report compared to previously published reports. The recalculated data in this report represent a complete revision of the previously published CUL data.

² Available at: https://www.usbr.gov/uc/envdocs/plans.html and https://www.usbr.gov/uc/DocLibrary/reports.html.

³ Available at: https://www.usbr.gov/lc/region/programs/crbstudy.html.

⁴ Information on hydrologic units is available at: https://water.usgs.gov/GIS/huc.html. Data at the HUC8 scale as well as the Lower Colorado River System 1971-2015 Consumptive Uses and Losses Methods Manual (1971-2015 LC CUL Methods Manual) are available at https://www.usbr.gov/lc/region/g4000/wtracct.html.

The Consumptive Uses and Losses Report is distinct from the annual *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada* (Water Accounting Report). The Water Accounting Report contains the official record of 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 1944 Water Treaty obligation, and consumptive use of such water for each year since 1964. The Water Accounting Report is mandated by Article V of the Consolidated Decree of the United States Supreme Court in *Arizona* v. *California et al.* 547 U.S. 150 (2006). Historical data contained within the Water Accounting Report were incorporated into the CUL dataset, with slight revisions, where applicable. It is important to note that the two reports have different legal authorities and serve different purposes. The Water Accounting Report is concerned with diversions and consumptive uses from the mainstream, and the CUL Report is concerned with all anthropogenic uses and losses of water in the entire Colorado River System, which includes both mainstream and tributary areas.

Nothing in this report is intended to interpret the provisions of the Colorado River Compact (45 Stat. 1057), the Upper Colorado River Basin Compact (63 Stat. 31), the 1944 Mexican Water Treaty (Treaty Series 994; 59 Stat. 1219), the decree entered by the Supreme Court of the United States in *Arizona* v. *California*, et al. (376 U.S. 340), as consolidated, (547 U.S. 150) the Boulder Canyon Project Act (45 Stat. 1057), the Boulder Canyon Project Adjustment Act (54 Stat. 774; 43 U.S.C. 618a), the Colorado River Storage Project Act, (70 Stat. 105; 43 U.S.C. 620), or the Colorado River Basin Project Act (82 Stat. 885; 43 U.S.C.1501).

Methodologies for producing recalculated CUL data are introduced below and additional details regarding methodologies are included in the 1971-2015 LC CUL Methods Manual. Recalculated CUL data are reported as either mainstream or tributary water use, which are combined for total annual lower Colorado River System water use. These annual totals and mainstream data in the lower Colorado River System are reported by state and water use category. Tributary CUL data are reported by state, reporting area, and water use category. In addition to mainstream and tributary consumptive uses and losses data, data on water delivered to Mexico and other water flowing to Mexico, estimated lower Colorado River System population data, and tributary area irrigated acreage data are contained within the tables of this report.

⁵ Available at: https://www.usbr.gov/lc/region/g4000/wtracct.html.

Table 1: Summary of Recalculation Methods

Category	Source Data	Recalculation Methods	Change from Previous Methods
Mainstream Consumptive Use (All use categories)	Water accounting data from annual Reclamation Water Accounting Reports	Historical data adapted to fit CUL reporting requirements and for temporal consistency	Unmeasured returns applied at the user level for the period 1971-2002. Injected and pumped groundwater considered
Mainstream and Tributary Reservoir Evaporation	Reservoir data from various federal and state agencies, precipitation data from PRISM Climate Group, pan evaporation rates from NOAA	Varied depending on reservoir. All reservoirs reported as net evaporation (gross evaporation – precipitation).	Updated reservoir and precipitation data and applied methodology consistently
Tributary Exports	Diversion data from the USGS	Historical data adapted to fit CUL reporting requirements	Corrected errors and applied methodology consistently
Tributary Stockpond Evaporation	Surface area estimates from Reclamation CUL Reports and USDA NRCS data, precipitation data from PRISM Climate Group, pan evaporation rates from NOAA	Surface area multiplied by pan evaporation rates less precipitation to estimate CUL. Data adapted to fit CUL reporting requirements	Updated precipitation data, fit data to CUL reporting scale, and applied methodology consistently
Tributary Livestock	Livestock numbers from USDA NASS Agricultural Census and Agricultural Statistics Bulletins, water use coefficients from Reclamation CUL Reports and USGS	Data on animal totals multiplied by water use rates to estimate CUL	Improved county disaggregation, added horses, ponies, mules, burros, donkeys, goats and dairy cattle, revised water use coefficients, added a seasonality adjustment
Tributary Thermal Electric Power	Powerplant generation data from EIA reports, water use coefficients from USGS reports	Power generation data multiplied by water use coefficient to estimate CUL	EIA data and USGS coefficients used throughout. Corrected errors and applied methodology consistently across entire timeframe
Tributary Mineral Resources	Water use data for mining activities from USGS Report and values from previous CUL Reports	Data used as reported by the USGS or from previous CUL Reports	Updated values for 1985-2005 using USGS Report
Tributary Municipal and Industrial Other	Population data from U.S. Census data, per capita water use coefficients estimated from USGS data	Population multiplied by a per capita water use coefficient for specific areas to estimate CUL	Updated population and per capita use rate with recent data and applied methodology consistently
Tributary Irrigated Agriculture and Irrigated Acreage	NDVI and SSEBop imagery from the USGS	Determined field status, aggregated ET for all irrigated fields using the SSEBop method to estimate CUL	Independent annual acreage calculations and irrigation status determination. SSEBop method used for CUL calculations

Mainstream Reporting Area

Consumptive use of water from the main channel of the Colorado River below Lee Ferry, AZ within the United States, also referred to as the mainstream, is reported separately from tributary consumptive use. Mainstream consumptive use is reported at the state level, and mainstream reservoir evaporation is reported at the system level and not assigned a specific state user. The extent of the mainstream reporting area is based on contract service areas and is included in **Figure 1: Lower Colorado River System Reporting Areas**. The extent changes slightly depending on if the water is being used for agricultural purposes or municipal and industrial purposes. For example, specific areas around Yuma, AZ use mainstream water for irrigated agriculture and tributary water for municipal and industrial purposes. However, generally the boundary is consistent across water use categories.

In addition to mainstream use, data on water delivered to Mexico and other water flowing to Mexico are included in the mainstream tables. These data are sourced directly from the Water Accounting Report for each year and are not assigned a use category.

Mainstream Consumptive Use

Consumptive use values for the mainstream were estimated from Reclamation's Water Accounting Report for each year of the recalculation effort (Reclamation, 1971 - 2005). The Water Accounting Report contains data on the consumptive use⁶ by each water user but does not describe type of use. Type of use (export outside system, export within system, irrigated agriculture, municipal and industrial (M&I) other, or thermal electric power) was assigned for each water user within the Water Accounting Report based on their predominate type of use. Unmeasured returns, or mainstream water that was diverted but returned to the Colorado River, were not reported for individual water users until the 2003 Water Accounting Report. To create a consistent record, unmeasured return flows were retroactively applied to the 1971-2002 data in the Water Accounting Report. Corrections to the Water Accounting Report data were incorporated into the CUL dataset, and the data were checked to confirm compliance with the CUL Report's definition of consumptive uses and losses. In all, the incorporation of unmeasured return flow estimates for 1971-2002, the incorporation of corrected data, and the differing definitions of consumptive use, result in slight differences in values between the CUL Report and the Water Accounting Reports.

Mainstream Reservoir Evaporation

Mainstream reservoir evaporation is reported separately from mainstream consumptive use and is not assigned a specific state user. Mainstream reservoirs include Lake Mead, Lake Mohave, Lake Havasu, Senator Wash, and several smaller diversion dams located on the mainstream (Headgate Rock, Palo Verde, Imperial, Laguna, and Morelos). Net evaporation from the open

⁶ As defined in the Water Accounting Report.

water surface areas of reservoirs is considered a consumptive use in the CUL Report due to the increased surface area subject to evaporative losses created by impounding water behind a dam.

Net Evaporation = (Evaporation – Precipitation) * Surface Area

Data sources to determine net evaporation varied depending on the reservoir. Large mainstream reservoirs (Mead, Mohave, and Havasu) have monthly evaporation coefficients and surface area measurements based on area-capacity tables provided by Reclamation's Lower Colorado River Operations Group. Evaporation estimates for the open water areas behind diversion dams used static surface area values under the assumption that their surface areas were relatively constant throughout the year. Therefore, for the diversion dams, surface area measurements were used alongside a pan evaporation model (Farnsworth et al., 1982) to estimate evaporation. Use of the Farnsworth et al. pan evaporation model is consistent with past CUL reporting methodologies. Monthly precipitation values were sourced from the Parameter-elevation Regressions on Independent Slopes Model (PRISM) model published by Oregon State University (Oregon State University, various dates). Where required, missing data were estimated using averages, nearest values, or straight-line interpolations.

Tributary Reporting Areas

Consistent with past CUL Reports, mainstream and tributary water uses are reported separately, however, they are combined when reporting total lower Colorado River System water use. While mainstream water use is reported at the state level, tributary water use is reported at the reporting area and state level. In addition to the mainstream, the lower Colorado River System was divided into seven reporting areas based on major tributaries of the Colorado River; and when applicable the reporting areas were divided by state. For the purpose of this report, the Wilcox Playa HUC8 (15050201), a closed basin in Arizona, and the Animas Valley HUC8 (15040003), a closed basin mostly in New Mexico, were not included as part of the lower Colorado River System. The CUL Report Boundary, reporting areas, and state delineations are reflected in **Figure 1**. Reporting areas include: Tributary Area Above Lake Mead, Tributary Area Below Lake Mead, Little Colorado River, Virgin River, Muddy River, Bill Williams River, and the Gila River. Areas that are beneficially served by waters diverted from the lower Colorado River System are also included in the map. The waters delivered to these areas are recorded as exports and are not assigned a more specific water use category.

⁷ Only states with portions in the lower Colorado River Basin are included in this report. Those states include Arizona, California, Nevada, New Mexico, and Utah.

Tributary Area Above Lake Mead (Arizona, Nevada, Utah)

The Colorado River runs through the Grand Canyon in this reporting area before reaching Lake Mead. The rugged terrain and scarce water availability result in limited water use in this area away from the mainstream of the Colorado River. There are limited irrigated acres in the area with most of the irrigated lands around Kanab Creek in Arizona and Utah. Cities in the Las Vegas, NV vicinity are the leading users of tributary water and supplement their mainstream water supply with tributary water sources.

Tributary Area Below Lake Mead (Arizona, California, Nevada)

Similar to the Tributary Area Above Lake Mead, water use away from the Colorado River mainstream is limited by the availability of water and the rugged terrain. Most of the irrigated lands in this area are located east of the Town of Quartzite, around Desert Wells, AZ. Most of the population centers in this reporting area are along the Colorado River, including, Lake Havasu City, AZ, Yuma, AZ, and Blythe, CA; with Kingman, AZ and Quartzite, AZ both located off of the mainstream. Mineral resources have historically been a large water use category in the area. Water use by California in this reporting area is small and reflects the limited rural populations living away from the mainstream.

Gila River (Arizona, New Mexico)

The Gila River is the largest tributary to the Colorado River in the lower Colorado River System. The drainage area extends from the Continental Divide in New Mexico to the river's mouth near Yuma, AZ. Elevations in the basin range from nearly 12,000 feet in the eastern mountains to about 150 feet at the mouth. Nearly three-fourths of the population of the lower Colorado River System reside in the Gila River Basin and the majority of the population is concentrated in the metropolitan areas of Phoenix and Tucson in Arizona. The majority of the agricultural development in the lower Colorado River System is located in the Gila River Basin. This development is concentrated in the central area of Maricopa and Pinal Counties.

Little Colorado River (Arizona, New Mexico)

The Little Colorado River reporting area occupies a large part of northern Arizona and a portion of west-central New Mexico. Agriculture is concentrated along the Little Colorado River in the upper reaches of the River and around Snowflake, AZ. Irrigated acreage in the Little Colorado River System is subject to variation because of frequent water shortages and inadequate storage facilities. Population is predominately rural with principal cities including Flagstaff, Winslow, and Holbrook in Arizona, and Gallup and Zuni Pueblo in New Mexico. In addition to irrigated agriculture and municipal and industrial other, thermal electric power is a large water use category in the area.

Bill Williams River (Arizona)

The Bill Williams River is formed by the confluence of the Big Sandy and Santa Maria Rivers above Alamo Dam in Arizona. The limited development in the basin is dominated by copper mining at the unincorporated town of Bagdad, AZ, and irrigation in the eastern portion of the basin. The basin is sparsely populated.

Virgin River (Arizona, Nevada, Utah)

The Virgin River originates in western Kane County, UT. It flows southwesterly through the southwestern corner of Utah and the northwestern corner of Arizona and empties into the northern extremity of the Overton Arm of Lake Mead in Nevada. The major irrigated areas are located around St. George, UT, Hurricane, UT, and Mesquite, NV, as well as the East Fork of the Virgin River near Glendale, UT. Small, irrigated areas are scattered throughout. Population is predominately rural with St. George, UT, being the principal city in the basin.

Muddy River (Nevada)

The Muddy River originates from natural springs in northern Clark County, NV and flows southeasterly about 30 miles and terminates at the northwestern extremity of the Overton Arm of Lake Mead near Overton, NV. The entire basin is sparsely populated with irrigated lands concentrated within the Pahranagat Valley, along Meadow Valley Wash, and along the Muddy River, all in Nevada.

Tributary Consumptive Uses and Losses Categories

In addition to the categories of use on the mainstream (exports, irrigated agriculture, municipal and industrial other, and thermal electric power) there are additional categories of use defined in the tributaries including: tributary reservoir evaporation; stockpond evaporation & livestock; and mineral resources. The categories are described below as well as a brief introduction to the methodology used to calculate CUL values for each tributary category. A detailed review of the methodologies for producing CUL data is included in the 1971-2015 LC CUL Methods Manual.

Reservoir Evaporation

Tributary reservoir evaporation includes all reservoirs in tributary areas. These reservoirs were calculated as larger measured reservoirs and smaller unmeasured reservoirs, each with a distinct methodology; and then combined and reported as 'reservoir evaporation' in the tributary tables.

Measured Reservoir Evaporation

Measured reservoirs are reservoirs that have daily, weekly, or monthly evaporation, surface area, or elevation measurements. Measurements were provided by the operator of the dam impounding the reservoir or publicly available data. 8

The process for calculating net evaporation depended on the available data. If net evaporation data were available from the operator, those data were used. When only gross evaporation data were provided, precipitation values were taken from the PRISM model to calculate net evaporation. When only surface area measurements were provided, evaporation rate values were sourced from the Farnsworth et al. pan evaporation model and precipitation values were sourced from the PRISM model. The location of the dam was used when referencing data from the pan evaporation model and the PRISM model.

Unmeasured Reservoir Evaporation

Unmeasured reservoirs are tributary reservoirs that do not have daily, weekly, or monthly evaporation, surface area, or elevation measurements. These reservoirs are often much smaller than measured reservoirs. The list of unmeasured reservoirs was gathered using the National Inventory of Dams (NID) published by the U.S. Army Corps of Engineers (USACE) (USACE, 2018). Static reservoir surface areas are included in the NID data for some locations and were used when available. The reported NID surface areas were reduced by a fullness factor depending on the use type assigned by the NID. For example, hydro-electric and water supply reservoirs were assigned a 0.75 fullness factor because those remain full for a larger portion of the year, while flood control and grade stabilization dams were assigned a 0.05 fullness factor because they are more likely to be maintained near empty. When surface area was not reported in the NID, surface area was estimated using the National Hydrologic Database (USGS, 2020) and imagery. The NID provided the construction date of each dam, which was used to determine the applicable dates of inclusion for each reservoir.

Net evaporation for each unmeasured reservoir was calculated by estimating gross evaporation from the Farnsworth et al. pan evaporation model and subtracting precipitation using the PRISM model.

Exports

The exports category includes within system exports (i.e. water that is moved from one reporting area to another, but remains within the lower Colorado River System) and outside system exports (water that is removed from the lower Colorado River System). Imported water is recorded in the "exports" category, but it is shown as a negative consumptive use in the reporting area it is exported to. As an example, water diverted from the mainstream and delivered via the CAP

⁸ Measurements were sourced from the Army Corps of Engineers (Alamo Dam, Painted Rock Dam), the Central Arizona Project (CAP) (CAP canal surface area, New Waddell Dam), the Salt River Project (Theodore Roosevelt Dam, Horse Mesa Dam, Mormon Flat Dam, Bartlett Dam, Stewart Mountain Dam, Horseshoe Dam), and the USGS (C.C. Cragin (Blue Ridge) Dam, Coolidge Dam).

canal is considered a mainstream export (positive consumptive use) and a tributary import (negative consumptive use) to the Gila River Reporting Area. Tributary exports are primarily small diversions in rural locations, and as such, the records were inconsistent. For example, for a diversion from a tributary to the Santa Clara River in Utah, the USGS gage was removed in 1995, however diversions were ongoing. The continued export volumes had to be estimated. Where data were missing, values were generated using averages, nearest values, or straight-line interpolations.

Stockpond Evaporation

Evaporation from stockponds is a minor use of water across the lower Colorado River System. Similar to reservoir evaporation, stockpond consumptive use is calculated as net evaporation (gross evaporation – precipitation). The available data for stockponds' surface area were published by the United States Department of Agriculture (USDA) Soil Conservation Service (Soil Conservation Service, 1975). Use of the USDA Soil Conservation Service data is consistent with past CUL reporting methodologies and no additional data sources were identified. The surface area values were distributed from the reporting area scale to the HUC8 scale. Average evaporation for each HUC8 was calculated using values from the Farnsworth et al. pan evaporation model and average precipitation was calculated using data from the PRISM model. Net stockpond evaporation for each HUC8 was calculated using the resultant surface area, evaporation, and precipitation values.

Livestock

The livestock category includes water used for watering, feedlots, dairy operations, and other onfarm needs. Livestock included in the CUL analysis are beef cattle, dairy cattle, sheep, hogs, horses, ponies, mules, burros, donkeys, and goats. Livestock consumptive use was calculated using a per-animal water use coefficient (gallons of water per day) multiplied by the number of livestock. The number of livestock was derived from the USDA National Agricultural Statistics Service (NASS) Agricultural Census (USDA, 1969-2017). Missing values were interpolated between reported values. Livestock water use coefficients are similar to coefficients used in previous CUL Reports and were slightly updated after review of USGS reports (Lovelace et al., 2005). Adjustments to the coefficients were made for seasonality which reflects increased water use during calving periods and pre-weening season; and for climate, where hotter climates were assigned a slightly higher coefficient. Coefficients specific to dairy cattle, goats, horses, ponies, mules, burros, and donkeys were added for the recalculation effort.

Thermal Electric Power

Consumptive uses and losses for the thermal electric power category includes any water consumptively used for electricity generation. This does not include evaporative losses from reservoirs behind hydroelectric dams. Power plant details and generation records were found in documents published by the U.S. Energy Information Administration (EIA) (EIA, 2019). In

addition to the EIA reports, the USGS publishes coefficients (gallons/kilowatt-hour) that can be used to convert generation values to water use (Diehl et al., 2013 and Harris et al., various years). The coefficients and generation values were used to calculate consumptive use for each power plant in the lower Colorado River System for the full period of record.

Mineral Resources

Consumptive uses and losses data for mineral resources includes all water used for mining related activities. The USGS published data on water used for mining every five years from 1985 to 2010 at the HUC8 scale (Maupin et al., 2018 and Ivahnenko et al., 2018) and were used as reported. Previously published CUL values were used prior to 1985.

Municipal and Industrial Other

The M&I Other water use category is the consumptive use of municipal and industrial water exclusive of mineral resources and thermal electric power. M&I Other consumptive use was computed by using a per-capita consumptive water use rate or coefficient developed using USGS data from 1985 - 2010 (Maupin et al., 2018 and Ivahnenko et al., 2018) multiplied by population values from the U.S. Census Bureau (U.S. Census Bureau, 2022 and Manson et al., 2022). 9

To produce the per-capita water use rate USGS data were categorized as withdrawals, wastewater, and wastewater reuse for public, commercial, and industrial activities. The formula used to derive a per capita consumptive use coefficient was:

$$\frac{withdrawals - wastewater + wastewater reuse}{USGS reported population} = Per Capita CU Coefficient$$

The per-capita consumptive use coefficients were calculated at the HUC8 scale. Unique coefficients were calculated for HUC8s around the Phoenix, AZ area, the Tucson, AZ area, and the St. George, UT area. All other HUC8s were considered 'rural' HUC8s and were assigned the 'rural' coefficient. Water use coefficients were interpolated between years and the nearest value was used when outside the date range of available coefficients. U.S. Census population data were compiled at the HUC8 scale for the full period of record. Tributary populations within each HUC8 were multiplied by the coefficients for their given HUC8 (Phoenix, Tucson, St. George, or rural) for each year to estimate tributary M&I Other water use.

While Las Vegas, NV and the surrounding cities are supplied mainstream water, these areas use groundwater (tributary water) in addition to mainstream Colorado River water. These areas were excluded from the tributary M&I Other calculations. Instead, M&I Other tributary water use by

⁹ The per capita consumptive use coefficient was based on available records from the USGS and used the population reported by the USGS to calculate the coefficient. U.S. Census population data were used in the final CUL calculation due to the availability and accuracy of the data over the full period of the report.

the Las Vegas, NV area was estimated using data from the Colorado River Commission of Nevada, the Nevada Division of Water Resources (State of Nevada, 2019), the Las Vegas Valley Water District (Las Vegas Valley Water District, 2021) and reports from the City of North Las Vegas (City of North Las Vegas, 2021). This groundwater use is reported as tributary consumptive use and is in addition to the mainstream consumptive use in the same location.

Irrigated Agriculture and Irrigated Acreage

Estimates of irrigated agriculture consumptive use were made by 1) developing an agricultural field border Geographic Information Systems (GIS) layer, 2) determining the irrigation status of each field for each year, and 3) calculating the ET of each field using Operational Simplified Surface Energy Balance (SSEBop) (Senay et al., 2013) data provided by the USGS. ¹⁰ ET values were then summed by HUC8, reporting area, and state for irrigated fields.

A GIS layer of agricultural fields was created for each year using satellite images of maximum monthly and yearly Normalized Difference Vegetation Index (NDVI) data and higher resolution National Agriculture Imagery Program imagery, if available.

Irrigation status of each field was initially determined using a logistic regression equation based on known fallowed fields in the mainstream from 2000-2015 as part of Reclamation's Lower Colorado River Annual Summary of Evapotranspiration and Evaporation program (LCRAS). These equations were then applied to the CUL reporting area for a given year. Equations from 2008-2015 were used as an initial classification for previous years, followed by a manual quality assurance and verification process. During the quality assurance process, each field's NDVI data were checked against the model prediction to verify the field status. Additionally, each irrigated field was classified as being either flood or pivot irrigated based on the shape of the field.

The average ET within each field for each month, as determined from the SSEBop images, was multiplied by the acreage for each field to arrive at a consumptive use for the month.

Incidental use factors, which account for irrigation efficiency, were applied to each field and varied depending on their method of irrigation and year. ET was then summed to the HUC8, reporting area, and state scale.

¹⁰ ET values provided by the USGS subtracted effective precipitation from the gross ET values.

New Mexico – Gila River

New Mexico reports consumptive use values for areas that drain to the Gila River within New Mexico. ¹¹ The reported values from New Mexico were used where available and missing data were derived using averages, nearest values, or straight-line interpolations. Because New Mexico's report does not include irrigation using water rights granted in the 1935 Globe Decree, that consumptive use was added separately. ¹² Areas located in New Mexico that drain to the Little Colorado River were calculated using the same methodology as the rest of the lower Colorado River System.

¹¹ This includes the New Mexico portion of the Upper Gila (15040001), Upper Gila – Mangas (15040002), San Francisco (15040004), and San Simon (15040006) subbasins.

¹² Referring to the *Globe Equity No. 59: In the District Court of the United States, in and for the District of Arizona, the United States of America Vs. Gila Valley Irrigation District, Et Al.* Decree entered June 29, 1935. This data is reflected in the Upper Gila – Mangas HUC8 (15040002).

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Data Tables

Lower Colorado River System Colorado River Mainstream Estimated Reservoir Evaporation 1971-2005

Net Evaporation											
Year	Mead	Mohave	Havasu	Senator Wash	Diversion Dams ²	TOTAL					
1971	669.1	141.3	134.7	2.0	26.3	973.4					
1972	686.3	139.3	128.9	1.8	25.6	981.9					
1973	777.4	134.4	132.3	1.9	25.9	1,071.9					
1974	744.2	136.5	133.3	1.7	26.4	1,042.1					
1975	770.8	140.3	135.7	2.1	26.3	1,075.2					
1976	756.7	132.4	129.1	2.0	25.1	1,045.3					
1977	769.9	138.6	132.6	1.9	25.8	1,068.8					
1978	726.8	121.5	119.5	1.9	24.8	994.5					
1979	820.2	131.1	127.6	2.2	25.4	1,106.5					
1980	820.1	128.7	121.3	2.1	25.9	1,098.1					
1981	823.9	136.4	130.6	2.3	26.1	1,119.3					
1982	828.3	129.4	128.4	2.3	25.5	1,113.9					
1983	863.7	125.3	122.3	2.1	25.2	1,138.6					
1984	825.9	129.0	127.6	1.9	24.9	1,109.3					
1985	905.1	141.6	129.7	1.9	25.8	1,204.1					
1986	883.9	133.9	127.1	2.0	25.7	1,172.6					
1987	854.1	135.1	134.6	2.0	25.8	1,151.6					
1988	865.4	134.2	131.0	1.8	26.3	1,158.7					
1989	847.7	145.2	136.3	2.1	26.4	1,157.7					
1990	775.9	136.5	132.5	2.2	26.2	1,073.3					
1991	740.7	133.3	129.9	2.2	25.7	1,031.8					
1992	694.8	124.7	119.5	1.9	24.2	965.1					
1993	783.4	125.1	125.6	1.8	25.1	1,061.0					
1994	789.9	139.2	131.7	1.9	25.9	1,088.6					
1995	783.4	138.4	130.9	1.8	26.2	1,080.7					
1996	840.3	145.9	137.5	2.0	26.9	1,152.6					
1997	867.1	139.7	130.3	1.7	25.3	1,164.1					
1998	859.0	131.8	125.0	2.0	25.9	1,143.7					
1999	893.1	143.2	135.2	2.1	26.4	1,200.0					
2000	876.3	143.7	136.3	1.8	26.5	1,184.6					
2001	784.6	140.5	132.4	1.8	25.9	1,085.2					
2002	731.3	149.1	135.2	2.1	27.0	1,044.7					
2003	628.1	139.6	130.5	1.8	26.1	926.1					
2004	555.5	133.9	123.3	1.7	25.5	839.9					
2005	585.3	131.5	120.8	2.1	25.8	865.5					
AVERAGE	783.7	135.7	129.7	2.0	25.8	1,076.9					

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes Headgate Rock, Palo Verde, Imperial, Laguna, and Morelos dams.

Lower Colorado River System Estimated Total Water Use by States and Types of Use¹ 1971-1975

				Agriculture			Municipal	I	Export ⁵		,000 4010-1001)	
Year	State	Reservoir Evaporation ^{2,3}	Irrigated Agriculture	Stockpond Evaporation & Livestock ³	Agriculture Subtotal	Mineral Resources ³	Thermal Electric Power	Other ⁴	Municipal and Industrial Other Subtotal	Outside System	Within System	TOTAL ^{2,5}
	Arizona	199.2	3,478.7	39.5	3,518.2	65.0	9.3	304.9	379.3	0.0	1.3	4,098.0
	California	0.0	477.6	0.0	477.6	0.0	0.0	4.6	4.6	4,650.6	0.0	5,132.9
1971	Nevada	4.4	54.9	1.1	56.1	1.5	8.4	84.1	94.0	0.0	(1.3)	153.1
1971	New Mexico		11.9	2.7	14.6	4.8	0.4	6.8	11.6	0.5	0.0	28.2
	Utah	1.6	30.8	0.7	31.4	0.0	0.0	6.0	6.0	1.5	0.0	40.5
	TOTAL	206.7	4,054.0	43.9	4,098.0	71.4	17.8	406.4	495.5	4,652.5	0.0	9,452.7
	Arizona	176.0	3,627.6	38.9	3,666.6	73.4	10.4	323.8	407.6	0.0	2.6	4,252.8
	California	0.0	456.0	0.0	456.0	0.0	0.0	4.6	4.6	4,689.4	0.0	5,150.0
	Nevada	4.4	60.8	1.2	61.9	1.6	14.3	90.9	106.7	0.0	(2.6)	170.5
1972	New Mexico		11.9	2.6	14.5	6.9	0.0	7.0	13.9	0.8	0.0	30.6
	Utah	1.7	34.1	0.7	34.7	0.0	0.0	6.3	6.3	2.2	0.0	44.8
	TOTAL	183.5	4,190.4	43.4	4,233.8	81.9	24.7	432.6	539.2	4,692.3	0.0	9,648.8
	Arizona	297.6	3,714.8	39.8	3,754.6	75.3	10.7	340.7	426.7	0.0	2.4	4,481.4
	California	0.0	485.6	0.0	485.6	0.0	0.0	4.8	4.8	4,740.4	0.0	5,230.8
1973	Nevada	4.3	61.6	1.2	62.8	1.6	15.0	97.4	114.0	0.0	(2.4)	178.6
	New Mexico	1.7	12.4	2.8	15.2	7.6	0.0	7.1	14.7	0.9	0.0	32.5
	Utah	1.5	34.5	0.6	35.2	0.0	0.0	6.7	6.7	6.4	0.0	49.7
	TOTAL	305.2	4,308.9	44.4	4,353.3	84.5	25.7	456.7	566.9	4,747.6	0.0	9,973.1
	Arizona	249.1	3,910.0	39.7	3,949.7	70.5	10.0	355.8	436.3	0.0	2.7	4,637.8
	California	0.0	472.0	0.0	472.0	0.0	0.0	4.5	4.5	4,852.6	0.0	5,329.1
1974	Nevada	4.5	78.7	1.2	79.9	3.1	15.9	102.9	121.9	0.0	(2.7)	203.7
	New Mexico	1.6	14.4	2.9	17.2	7.9	0.0	7.3	15.2	0.9	0.0	34.9
	Utah	1.8	45.3	0.7	45.9	0.0	0.0	7.2	7.2	0.6	0.0	55.5
	TOTAL	257.0	4,520.3	44.5	4,564.8	81.4	25.9	477.7	585.0	4,854.1	0.0	10,261.0
	Arizona	224.5	4,219.6	40.3	4,259.8	64.8	7.1	360.3	432.3	0.0	2.4	4,919.0
	California	0.0	469.3	0.0	469.3	0.0	0.0	4.6	4.6	4,420.5	0.0	4,894.4
1975	Nevada	4.5	84.3	1.2	85.5	3.7	16.7	132.2	152.5	0.0	(2.4)	240.1
	New Mexico	1.4	13.9	2.8	16.7	6.8	0.0	7.6	14.4	0.7	0.0	33.3
	Utah	1.7	48.5	0.7	49.1	0.0	0.0	7.5	7.5	3.1	0.0	61.4
	TOTAL	232.0	4,835.6	44.9	4,880.5	75.3	23.8	512.1	611.2	4,424.2	0.0	10,148.0

¹ Includes mainstream and tributary uses. Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes measured and unmeasured tributary reservoirs. Excludes reservoir evaporation from Colorado River mainstream reservoirs listed in Table LC-1.

³ Includes only tributary values.

⁴ Includes rural, urban, and other industrial uses.

⁵ Does not include water delivered to Mexico and other water flowing to Mexico.

Lower Colorado River System Estimated Total Water Use by States and Types of Use¹ 1976-1980

				Agriculture			Municipal	I	Export ⁵			
Year	State	Reservoir Evaporation ^{2,3}	Irrigated Agriculture	Stockpond Evaporation & Livestock ³	Agriculture Subtotal	Mineral Resources ³	Thermal Electric Power	Other ⁴	Municipal and Industrial Other Subtotal	Outside System	Within System	TOTAL ^{2,5}
	Arizona	200.9	3,877.9	40.2	3,918.0	79.3	7.1	369.5	455.9	0.0	2.9	4,577.7
	California	0.0	419.3	0.0	419.3	0.0	0.0	4.4	4.4	4,192.6	0.0	4,616.3
1976	Nevada	4.3	80.7	1.1	81.8	2.6	17.7	103.3	123.6	0.0	(2.9)	206.8
	New Mexico	1.7	15.0	3.0	18.0	5.4	0.0	8.0	13.3	0.8	0.0	33.8
	Utah	1.8	42.5	0.7	43.2	0.0	0.0	7.9	7.9	1.4	0.0	54.3
	TOTAL	208.6	4,435.3	45.0	4,480.3	87.2	24.8	493.1	605.1	4,194.9	0.0	9,488.8
	Arizona	164.1	3,908.0	40.6	3,948.5	71.5	8.9	383.7	464.1	0.0	2.8	4,579.6
	California	0.0	449.2	0.0	449.2	0.0	0.0	4.6	4.6	4,557.6	0.0	5,011.4
1977	Nevada	4.5	98.8	1.1	99.9	3.9	18.3	103.5	125.6	0.0	(2.8)	227.1
1911	New Mexico	1.6	13.3	2.9	16.2	5.5	0.0	8.2	13.7	8.0	0.0	32.2
	Utah	1.8	58.8	0.7	59.4	0.0	0.0	8.4	8.4	0.3	0.0	69.9
	TOTAL	172.0	4,528.0	45.2	4,573.2	80.9	27.2	508.4	616.4	4,558.7	0.0	9,920.3
	Arizona	248.6	3,638.2	37.4	3,675.6	75.0	10.8	399.8	485.6	0.0	2.1	4,411.9
	California	0.0	439.0	0.0	439.0	0.0	0.0	3.9	3.9	3,976.5	0.0	4,419.5
1978	Nevada	4.1	82.0	1.0	83.0	4.1	12.8	106.2	123.1	0.0	(2.1)	208.2
	New Mexico	1.4	14.8	2.8	17.6	5.5	0.0	8.4	13.9	0.8	0.0	33.6
	Utah	1.2	55.7	0.5	56.2	0.0	0.0	9.0	9.0	8.6	0.0	74.9
	TOTAL	255.2	4,229.7	41.7	4,271.4	84.6	23.6	527.3	635.6	3,985.9	0.0	9,148.1
	Arizona	446.6	3,739.5	40.2	3,779.6	79.8	12.1	415.0	507.0	0.0	2.4	4,735.6
	California	0.0	476.9	0.0	476.9	0.0	0.0	2.1	2.1	4,223.7	0.0	4,702.7
1979	Nevada	4.7	83.6	1.1	84.7	2.9	15.9	125.5	144.3	0.0	(2.4)	231.3
	New Mexico	1.5	8.4	2.9	11.3	5.5	0.0	8.6	14.2	0.8	0.0	27.8
	Utah	1.7	51.1	0.6	51.7	0.0	0.0	9.7	9.7	4.4	0.0	67.5
	TOTAL	454.5	4,359.5	44.8	4,404.3	88.3	28.0	560.9	677.1	4,228.9	0.0	9,764.8
	Arizona	408.3	3,960.2	39.2	3,999.5	65.3	13.9	428.4	507.6	0.0	2.5	4,917.9
	California	0.0	444.2	0.0	444.2	0.0	0.0	2.9	2.9	4,194.7	0.0	4,641.8
1980	Nevada	4.8	113.5	1.1	114.6	2.5	14.0	128.7	145.1	0.0	(2.5)	262.0
	New Mexico	1.7	12.9	3.2	16.1	5.6	0.0	8.8	14.4	8.0	0.0	33.0
	Utah	1.3	78.9	0.6	79.5	0.0	0.0	10.4	10.4	4.8	0.0	95.9
	TOTAL	416.2	4,609.8	44.1	4,653.8	73.3	27.9	579.2	680.4	4,200.3	0.0	9,950.7

¹ Includes mainstream and tributary uses. Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes measured and unmeasured tributary reservoirs. Excludes reservoir evaporation from Colorado River mainstream reservoirs listed in Table LC-1.

³ Includes only tributary values.

⁴ Includes rural, urban, and other industrial uses.

⁵ Does not include water delivered to Mexico and other water flowing to Mexico.

Lower Colorado River System Estimated Total Water Use by States and Types of Use¹ 1981-1985

				Agriculture			Municipal	Export ⁵				
Year	State	Reservoir Evaporation ^{2,3}	Irrigated Agriculture	Stockpond Evaporation & Livestock ³	Agriculture Subtotal	Mineral Resources ³	Thermal Electric Power	Other ⁴	Municipal and Industrial Other Subtotal	Outside System	Within System	TOTAL ^{2,5}
	Arizona	245.8	4,340.1	39.6	4,379.7	61.1	20.6	443.0	524.8	0.0	2.8	5,153.1
	California	0.0	535.5	0.0	535.5	0.0	0.0	3.2	3.2	4,150.9	0.0	4,689.6
1981	Nevada	4.9	105.2	1.1	106.3	3.5	17.9	142.6	164.0	0.0	(2.8)	272.5
	New Mexico	1.6	12.8	2.9	15.7	7.2	0.0	8.9	16.1	1.0	0.0	34.3
	Utah	1.6	65.7	0.6	66.4	0.0	0.0	11.1	11.1	1.4	0.0	80.4
	TOTAL	253.9	5,059.3	44.3	5,103.6	71.9	38.5	608.8	719.1	4,153.2	0.0	10,229.9
	Arizona	201.6	3,693.6	37.7	3,731.3	78.9	19.9	453.0	551.8	0.0	3.3	4,488.0
	California	0.0	473.9	0.0	473.9	0.0	0.0	3.6	3.6	3,733.4	0.0	4,210.8
1982	Nevada	4.7	80.3	1.1	81.4	2.4	21.2	124.9	148.5	0.0	(3.3)	231.4
1302	New Mexico	1.4	12.2	3.3	15.5	4.7	0.0	8.7	13.4	0.8	0.0	31.0
	Utah	1.4	50.4	0.6	51.0	0.0	0.0	11.6	11.6	2.8	0.0	66.8
	TOTAL	209.1	4,310.3	42.7	4,353.0	86.0	41.1	601.8	728.9	3,737.0	0.0	9,028.0
	Arizona	294.9	3,718.5	36.8	3,755.3	53.8	16.4	467.5	537.6	0.0	3.1	4,590.9
	California	0.0	345.0	0.0	345.0	0.0	0.0	3.2	3.2	3,821.7	0.0	4,170.0
1983	Nevada	4.6	100.1	1.1	101.2	2.3	19.0	134.5	155.8	0.0	(3.1)	258.5
	New Mexico	1.3	9.8	3.1	12.9	5.8	0.0	9.0	14.7	0.9	0.0	29.8
	Utah	1.3	61.4	0.6	62.0	0.0	0.0	12.2	12.2	10.2	0.0	85.7
	TOTAL	302.1	4,234.9	41.5	4,276.4	61.9	35.3	626.4	723.6	3,832.8	0.0	9,134.9
	Arizona	255.6	3,487.4	38.1	3,525.5	59.6	18.5	487.3	565.4	0.0	2.9	4,349.4
	California	0.0	324.1	0.0	324.1	0.0	0.0	3.2	3.2	4,255.8	0.0	4,583.1
1984	Nevada	4.8	94.8	1.1	95.9	2.3	21.1	149.9	173.3	0.0	(2.9)	271.1
	New Mexico	1.4	10.2	3.2	13.5	5.2	0.0	9.1	14.3	0.5	0.0	29.6
	Utah	2.8	59.5	0.6	60.2	0.0	0.0	13.0	13.0	2.4	0.0	78.3
	TOTAL	264.6	3,976.1	43.0	4,019.1	67.1	39.6	662.5	769.2	4,258.7	0.0	9,311.6
	Arizona	288.8	3,891.8	38.7	3,930.5	95.7	24.3	508.1	628.0	0.0	1.8	4,849.1
	California	0.0	402.8	0.0	402.8	0.0	0.0	3.1	3.1	4,292.4	0.0	4,698.2
1985	Nevada	5.2	103.4	1.2	104.5	0.3	14.4	156.0	170.7	0.0	(1.8)	278.7
	New Mexico	1.3	8.7	3.1	11.8	12.1	0.0	9.3	21.4	1.0	0.0	35.5
	Utah	2.9	90.2	0.6	90.8	0.0	0.0	14.1	14.1	2.1	0.0	110.0
	TOTAL	298.2	4,496.9	43.6	4,540.5	108.1	38.6	690.6	837.4	4,295.4	0.0	9,971.5

¹ Includes mainstream and tributary uses. Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes measured and unmeasured tributary reservoirs. Excludes reservoir evaporation from Colorado River mainstream reservoirs listed in Table LC-1.

³ Includes only tributary values.

⁴ Includes rural, urban, and other industrial uses.

⁵ Does not include water delivered to Mexico and other water flowing to Mexico.

Lower Colorado River System Estimated Total Water Use by States and Types of Use¹ 1986-1990

				Agriculture			Municipal	and Industria	Export ⁵			
Year	State	Reservoir Evaporation ^{2,3}	Irrigated Agriculture	Stockpond Evaporation & Livestock ³	Agriculture Subtotal	Mineral Resources ³	Thermal Electric Power	Other ⁴	Municipal and Industrial Other Subtotal	Outside System	Within System	TOTAL ^{2,5}
	Arizona	223.2	3,885.0	38.8	3,923.7	111.1	38.6	525.8	675.5	0.0	3.1	4,825.6
	California	0.0	404.3	0.0	404.3	0.0	0.0	2.8	2.8	4,317.7	0.0	4,724.9
1986	Nevada	5.2	135.5	1.1	136.6	0.6	18.4	159.1	178.1	0.0	(3.1)	316.8
	New Mexico	1.2	9.6	3.1	12.7	9.4	0.0	9.3	18.7	0.7	0.0	33.4
	Utah	2.9	98.8	0.6	99.4	0.0	0.0	15.5	15.5	2.3	0.0	120.2
	TOTAL	232.6	4,533.2	43.6	4,576.9	121.1	57.1	712.5	890.6	4,320.8	0.0	10,020.9
	Arizona	232.5	3,695.8	38.9	3,734.7	126.7	47.3	544.9	718.9	0.0	2.7	4,688.8
	California	0.0	419.9	0.0	419.9	0.0	0.0	2.9	2.9	4,376.3	0.0	4,799.2
1987	Nevada	4.6	106.4	1.1	107.5	8.0	19.5	156.9	177.1	0.0	(2.7)	286.6
1907	New Mexico	1.4	9.0	3.2	12.2	9.4	0.0	9.3	18.8	0.3	0.0	32.6
	Utah	2.6	82.1	0.6	82.7	0.0	0.0	16.6	16.6	3.3	0.0	105.2
	TOTAL	241.2	4,313.2	43.8	4,357.0	136.9	66.8	730.6	934.3	4,379.9	0.0	9,912.4
	Arizona	220.1	3,745.1	38.7	3,783.8	142.2	72.0	560.3	774.4	0.0	2.8	4,781.2
	California	0.0	456.9	0.0	456.9	0.0	0.0	3.7	3.7	4,479.6	0.0	4,940.1
1988	Nevada	5.2	106.0	1.1	107.1	1.0	23.2	176.8	201.0	0.0	(2.8)	310.5
	New Mexico	1.4	7.4	3.0	10.5	8.0	0.0	9.2	17.2	0.3	0.0	29.4
	Utah	3.0	68.7	0.6	69.3	0.1	0.0	17.3	17.4	5.0	0.0	94.6
	TOTAL	229.7	4,384.1	43.5	4,427.6	151.3	95.2	767.2	1,013.6	4,484.9	0.0	10,155.8
	Arizona	210.3	3,717.9	40.0	3,757.9	157.7	43.1	572.2	773.1	0.0	2.4	4,743.7
	California	0.0	467.1	0.0	467.1	0.0	0.0	3.8	3.8	4,570.3	0.0	5,041.2
1989	Nevada	5.4	102.6	1.2	103.8	1.2	21.7	201.5	224.4	0.0	(2.4)	331.3
	New Mexico	1.7	9.6	3.5	13.1	8.1	0.0	9.3	17.4	1.0	0.0	33.2
	Utah	3.4	63.9	0.6	64.6	0.1	0.0	18.0	18.1	0.2	0.0	86.2
	TOTAL	220.8	4,361.2	45.3	4,406.4	167.2	64.9	804.8	1,036.8	4,571.4	0.0	10,235.5
	Arizona	131.5	3,720.0	37.0	3,757.0	173.2	68.8	581.5	823.5	0.0	2.4	4,714.4
	California	0.0	486.3	0.0	486.3	0.0	0.0	2.1	2.1	4,638.8	0.0	5,127.3
1990	Nevada	5.1	114.9	1.1	116.0	1.4	24.0	205.5	230.9	0.0	(2.4)	349.6
	New Mexico	1.4	9.3	3.2	12.5	7.3	0.0	9.4	16.7	0.6	0.0	31.1
	Utah	3.0	61.7	0.6	62.3	0.1	0.0	18.9	19.0	0.2	0.0	84.5
	TOTAL	140.9	4,392.3	41.8	4,434.2	182.1	92.8	817.4	1,092.2	4,639.7	0.0	10,307.0

¹ Includes mainstream and tributary uses. Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes measured and unmeasured tributary reservoirs. Excludes reservoir evaporation from Colorado River mainstream reservoirs listed in Table LC-1.

³ Includes only tributary values.

⁴ Includes rural, urban, and other industrial uses.

⁵ Does not include water delivered to Mexico and other water flowing to Mexico.

Export⁵

(1,000 acre-feet)

5,273.7

5.146.9

386.8

28.4

107.3

10,943.1

5,711.4

4,836.7

386.3

32.4

115.9

11,082.8

2.8

0.0

(2.8)

0.0

0.0

0.0

3.0

0.0

(3.0)

0.0

0.0

0.0

Lower Colorado River System Estimated Total Water Use by States and Types of Use¹ 1991-1995

Municipal and Industrial

Stockpond Municipal and Thermal Mineral Reservoir Evaporation Irrigated **A**ariculture Electric Industrial Other Outside Within Evaporation^{2,3} TOTAL^{2,5} & Livestock³ Subtotal Resources³ Other⁴ Subtotal Year State Agriculture Power System System 204.5 3,678.0 36.6 3,714.7 600.5 853.1 0.0 4,775.0 Arizona 173.4 79.2 2.8 California 0.0 437.9 0.0 437.9 0.0 0.0 5.6 5.6 4,468.9 0.0 4,912.4 1991 6.2 100.5 101.6 208.6 231.3 336.2 Nevada 1.1 1.4 21.3 0.0 (2.8)**New Mexico** 1.5 9.4 3.1 12.5 6.0 0.0 9.7 15.7 0.5 0.0 30.2 Utah 3.1 62.4 0.6 62.9 0.1 0.0 20.3 20.5 0.8 0.0 87.3 TOTAL 215.2 4,288.2 41.4 4,329.6 181.0 100.4 844.7 1,126.1 4,470.2 0.0 10,141.2 Arizona 170.6 3,945.3 34.1 3,979.4 173.7 84.8 621.2 879.7 0.0 2.7 5,032.3 California 0.0 383.8 0.0 383.8 0.0 0.0 1.5 1.5 4,075.9 4,461.2 0.0 Nevada 5.8 112.8 1.0 113.8 1.4 19.1 213.1 233.6 0.0 (2.7)350.6 1992 **New Mexico** 1.4 7.8 3.1 10.9 4.3 0.0 10.0 14.2 0.3 0.0 26.8 2.6 0.2 4.2 Utah 81.6 0.5 82.1 0.0 21.7 21.9 0.0 110.8 TOTAL 180.4 4,531.3 38.7 4,570.0 179.5 103.9 867.5 1,151.0 4,080.4 0.0 9,981.7 356.0 3,783.4 34.7 3,818.0 173.9 79.1 653.2 906.1 5,082.7 Arizona 0.0 2.6 California 0.0 452.6 0.0 452.6 0.0 5.7 5.7 4,753.5 0.0 4,295.1 0.0 1993 Nevada 6.0 111.0 1.1 112.0 1.4 20.8 231.1 253.3 0.0 (2.6)368.8 **New Mexico** 1.4 10.1 3.2 13.2 3.3 0.0 10.1 13.4 0.4 0.0 28.5 2.6 23.7 0.0 Utah 74.7 0.5 75.2 0.2 0.0 23.5 6.2 107.7 TOTAL 366.1 4,431.7 39.4 4,471.1 178.8 99.9 923.5 1,202.2 4,301.7 0.0 10,341.1

174.1

0.0

1.4

4.8

0.2

180.5

174.3

0.0

1.4

6.2

0.2

182.1

82.4

0.0

18.7

0.0

0.0

101.1

84.1

0.0

17.3

0.0

0.0

101.4

686.1

4.7

260.7

10.3

25.6

987.4

714.4

6.2

256.1

10.6

27.7

1,015.1

942.6

4.7

280.8

15.1

25.8

1,269.0

972.8

6.2

274.8

16.8

27.9

1,298.6

0.0

4.674.4

0.0

0.6

1.2

4,676.2

0.0

4,391.7

0.0

0.4

8.3

4,400.4

4,101.8

467.9

102.6

11.2

77.4

4,760.9

4,441.8

438.9

108.4

13.4

77.1

5,079.6

36.4

0.0

1.1

3.1

0.6

41.2

37.0

0.0

1.1

3.4

0.5

42.0

Agriculture

Arizona

Nevada

Utah

TOTAL

Arizona

Nevada

Utah

TOTAL

California

New Mexico

1994

1995

California

New Mexico

226.4

0.0

6.2

1.5

2.9

237.1

293.8

0.0

6.0

1.7

2.7

304.2

4,065.4

467.9

101.5

8.0

76.8

4,719.7

4,404.8

438.9

107.4

10.0

76.5

5,037.6

¹ Includes mainstream and tributary uses. Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes measured and unmeasured tributary reservoirs. Excludes reservoir evaporation from Colorado River mainstream reservoirs listed in Table LC-1.

³ Includes only tributary values.

⁴ Includes rural, urban, and other industrial uses.

⁵ Does not include water delivered to Mexico and other water flowing to Mexico.

Lower Colorado River System Estimated Total Water Use by States and Types of Use¹ 1996-2000

			Agriculture				Municipal	I	Export ⁵			
Year	State I	Reservoir Evaporation ^{2,3}	Irrigated Agriculture	Stockpond Evaporation & Livestock ³	Agriculture Subtotal	Mineral Resources ³	Thermal Electric Power	Other ⁴	Municipal and Industrial Other Subtotal	Outside System	Within System	TOTAL ^{2,5}
	Arizona	235.2	4,274.6	38.0	4,312.6	162.8	90.8	734.0	987.7	0.0	2.8	5,538.2
	California	0.0	505.5	0.0	505.5	0.0	0.0	2.0	2.0	4,718.4	0.0	5,225.9
1996	Nevada	6.5	100.0	1.1	101.1	2.1	17.6	297.4	317.1	0.0	(2.8)	422.0
	New Mexico	1.6	8.7	3.2	11.9	6.0	0.0	10.8	16.8	0.8	0.0	31.0
	Utah	3.0	59.6	0.6	60.2	0.2	0.0	29.5	29.7	3.3	0.0	96.3
	TOTAL	246.3	4,948.4	42.9	4,991.2	171.0	108.4	1,073.8	1,353.2	4,722.5	0.0	11,313.3
	Arizona	186.9	3,867.0	36.6	3,903.6	151.4	93.9	755.1	1,000.4	0.0	2.9	5,093.8
	California	0.0	422.7	0.0	422.7	0.0	0.0	3.9	3.9	4,735.2	0.0	5,161.9
1997	Nevada	6.3	102.8	1.1	103.9	2.7	18.3	281.7	302.7	0.0	(2.9)	410.0
1331	New Mexico	1.4	10.2	3.1	13.3	4.6	0.0	10.9	15.4	0.9	0.0	31.1
	Utah	2.9	78.0	0.6	78.6	0.1	0.0	30.9	31.0	3.3	0.0	115.9
	TOTAL	197.5	4,480.8	41.3	4,522.1	158.8	112.2	1,082.5	1,353.5	4,739.5	0.0	10,812.7
	Arizona	200.3	3,906.4	36.2	3,942.5	139.9	98.0	776.3	1,014.1	0.0	2.8	5,159.8
	California	0.0	433.5	0.0	433.5	0.0	0.0	7.4	7.4	4,512.1	0.0	4,953.0
1998	Nevada	5.5	113.9	1.0	114.9	3.4	20.4	272.3	296.1	0.0	(2.8)	413.7
	New Mexico	1.5	12.1	3.2	15.2	5.4	0.0	11.0	16.4	8.0	0.0	33.9
	Utah	2.4	77.2	0.5	77.7	0.1	0.0	32.2	32.2	3.3	0.0	115.7
	TOTAL	209.7	4,543.0	40.8	4,583.9	148.7	118.4	1,099.1	1,366.2	4,516.3	0.0	10,676.1
	Arizona	211.0	3,642.7	38.1	3,680.8	128.4	101.1	797.8	1,027.4	0.0	2.9	4,922.0
	California	0.0	469.9	0.0	469.9	0.0	0.0	2.3	2.3	4,634.9	0.0	5,107.1
1999	Nevada	6.6	100.3	1.1	101.4	4.1	19.0	314.8	337.9	0.0	(2.9)	443.0
	New Mexico	1.7	11.6	3.1	14.7	3.2	0.0	11.0	14.2	0.9	0.0	31.5
	Utah	3.2	66.5	0.6	67.1	0.0	0.0	33.2	33.3	3.3	0.0	107.0
	TOTAL	222.5	4,291.1	42.8	4,333.9	135.7	120.2	1,159.1	1,415.0	4,639.1	0.0	10,610.5
	Arizona	191.2	3,493.4	37.8	3,531.2	117.0	105.4	824.9	1,047.3	0.0	3.1	4,772.9
	California	0.0	511.1	0.0	511.1	0.0	0.0	2.0	2.0	4,755.7	0.0	5,268.7
2000	Nevada	6.3	100.7	1.1	101.7	4.7	21.3	346.3	372.3	0.0	(3.1)	477.3
	New Mexico	1.7	12.4	3.0	15.5	3.5	0.0	11.1	14.6	1.0	0.0	32.8
	Utah	2.9	58.3	0.6	58.8	0.0	0.0	34.3	34.3	3.3	0.0	99.4
	TOTAL	202.2	4,175.9	42.4	4,218.3	125.1	126.7	1,218.6	1,470.5	4,760.0	0.0	10,651.1

¹ Includes mainstream and tributary uses. Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes measured and unmeasured tributary reservoirs. Excludes reservoir evaporation from Colorado River mainstream reservoirs listed in Table LC-1.

³ Includes only tributary values.

⁴ Includes rural, urban, and other industrial uses.

⁵ Does not include water delivered to Mexico and other water flowing to Mexico.

Lower Colorado River System Estimated Total Water Use by States and Types of Use¹ 2001-2005

				Agriculture			Municipal	I	Export ⁵			
Year	State	Reservoir Evaporation ^{2,3}	Irrigated Agriculture	Stockpond Evaporation & Livestock ³	Agriculture Subtotal	Mineral Resources ³	Thermal Electric Power	Other ⁴	Municipal and Industrial Other Subtotal	Outside System	Within System	TOTAL ^{2,5}
	Arizona	222.1	3,642.7	38.4	3,681.1	112.5	96.6	823.8	1,032.9	0.0	3.1	4,939.2
	California	0.0	499.9	0.0	499.9	0.0	0.0	3.1	3.1	4,665.5	0.0	5,168.5
2001	Nevada	6.5	102.8	1.1	103.8	4.5	20.1	352.5	377.2	0.0	(3.1)	484.3
	New Mexico	1.5	9.4	3.1	12.5	3.4	0.0	10.9	14.3	0.6	0.0	28.9
	Utah	3.1	69.7	0.6	70.3	0.0	0.0	34.5	34.5	3.3	0.0	111.2
	TOTAL	233.2	4,324.5	43.1	4,367.6	120.5	116.7	1,224.7	1,461.9	4,669.5	0.0	10,732.2
	Arizona	214.2	3,531.2	40.0	3,571.2	108.2	97.9	828.8	1,034.9	0.0	3.2	4,823.6
	California	0.0	551.4	0.0	551.4	0.0	0.0	2.0	2.0	4,722.1	0.0	5,275.6
2002	Nevada	7.1	99.3	1.1	100.4	4.4	20.1	387.2	411.7	0.0	(3.2)	515.9
2002	New Mexico	1.6	11.6	2.8	14.3	4.0	0.0	10.4	14.4	0.7	0.0	31.1
	Utah	7.3	53.1	0.6	53.7	0.0	0.0	34.7	34.7	3.3	0.0	99.0
	TOTAL	230.2	4,246.6	44.5	4,291.1	116.5	118.1	1,263.2	1,497.7	4,726.2	0.0	10,745.1
	Arizona	187.5	3,561.2	39.3	3,600.5	103.8	105.8	834.0	1,043.5	0.0	3.1	4,834.6
	California	0.0	447.0	0.0	447.0	0.0	0.0	3.0	3.0	3,958.8	0.0	4,408.8
2003	Nevada	6.6	101.8	1.0	102.9	4.2	19.7	334.4	358.2	0.0	(3.1)	464.6
	New Mexico	1.7	13.6	3.6	17.1	3.9	0.0	10.1	14.0	0.5	0.0	33.3
	Utah	6.6	61.3	0.6	61.8	0.0	0.0	34.9	34.9	3.3	0.0	106.7
	TOTAL	202.4	4,184.9	44.4	4,229.3	111.8	125.4	1,216.4	1,453.6	3,962.6	0.0	9,847.9
	Arizona	191.1	3,470.0	38.9	3,508.9	99.3	112.9	839.6	1,051.8	0.0	3.0	4,754.8
	California	0.0	475.9	0.0	475.9	0.0	0.0	3.4	3.4	3,836.9	0.0	4,316.3
2004	Nevada	6.1	100.0	1.0	101.0	4.0	20.1	329.4	353.5	0.0	(3.0)	457.5
	New Mexico	1.5	12.8	3.3	16.1	2.9	0.0	9.9	12.8	0.5	0.0	30.9
	Utah	5.5	59.5	0.5	60.0	0.0	0.0	35.5	35.5	3.3	0.0	104.4
	TOTAL	204.2	4,118.2	43.7	4,161.9	106.3	132.9	1,217.8	1,457.0	3,840.8	0.0	9,663.9
	Arizona	293.3	3,631.7	39.5	3,671.2	94.9	112.6	845.1	1,052.6	0.0	3.1	5,020.2
	California	0.0	388.8	0.0	388.8	0.0	0.0	3.7	3.7	3,936.9	0.0	4,329.3
2005	Nevada	6.1	112.2	1.0	113.2	3.8	20.2	327.6	351.6	0.0	(3.1)	467.8
	New Mexico	1.6	12.9	2.8	15.8	4.0	0.0	9.6	13.6	0.4	0.0	31.3
	Utah	5.4	77.4	0.5	77.9	0.0	0.0	36.4	36.4	3.3	0.0	123.0
	TOTAL	306.3	4,223.0	43.8	4,266.8	102.8	132.8	1,222.4	1,458.0	3,940.6	0.0	9,971.7

¹ Includes mainstream and tributary uses. Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes measured and unmeasured tributary reservoirs. Excludes reservoir evaporation from Colorado River mainstream reservoirs listed in Table LC-1.

³ Includes only tributary values.

⁴ Includes rural, urban, and other industrial uses.

⁵ Does not include water delivered to Mexico and other water flowing to Mexico.

Lower Colorado River System Colorado River Mainstream Water Use and Exports Within States and to Mexico¹

1971-1975

		Mainstream Consumptive Use ²						Mexico			
Year	State	Irrigated Agriculture	Municipal and Industrial Other	Thermal Electric Power	Within System Exports	Outside System Exports	TOTAL ³	Deliveries to Mexico in Satisfaction of Treaty ^{4,5}	Water Bypassed Pursuant to Minutes 218, 241 and 242 ⁶	To Mexico in Excess of Treaty ⁷	Total Colorado River Mainstream and Mexico ⁸
	Arizona	1,169.7	14.3	0.0	0.0	0.0	1,184.1	-	_	_	-
	California	477.6	4.5	0.0	0.0	4,650.6	5,132.8	-	-	_	_
1971	Nevada	0.0	45.1	5.4	0.0	0.0	50.5	-	-	_	_
	TOTAL	1,647.4	64.0	5.4	0.0	4,650.6	6,367.4	1,500.0	55.2	6.4	7,922.6
	Arizona	1,072.7	16.5	0.0	0.0	0.0	1,089.2	-	-	-	-
1972	California	456.0	4.5	0.0	0.0	4,689.4	5,150.0	-	-	-	-
19/2	Nevada	0.0	69.8	11.2	0.0	0.0	81.0	-	-	-	-
	TOTAL	1,528.8	90.8	11.2	0.0	4,689.4	6,320.1	1,500.0	86.3	26.2	7,906.4
	Arizona	1,126.2	16.2	0.0	0.0	0.0	1,142.4	_	-	-	-
973	California	485.6	4.7	0.0	0.0	4,740.4	5,230.7	-	-	-	-
9/3	Nevada	0.0	80.4	12.2	0.0	0.0	92.6	-	-	-	-
	TOTAL	1,611.8	101.3	12.2	0.0	4,740.4	6,465.7	1,500.0	119.1	5.3	8,084.8
1974	Arizona	1,181.3	17.6	0.0	0.0	0.0	1,198.8	-	-	-	-
	California	472.0	4.4	0.0	0.0	4,852.6	5,329.1	-	-	-	-
9/4	Nevada	0.0	81.4	13.4	0.0	0.0	94.8	-	-	-	-
	TOTAL	1,653.3	103.4	13.4	0.0	4,852.6	6,622.8	1,500.0	159.2	5.5	8,281.9
1975	Arizona	1,217.1	12.7	0.0	0.0	0.0	1,229.8	-	-	-	-
	California	469.3	4.5	0.0	0.0	4,420.5	4,894.3	-	-	-	-
	Nevada	0.0	86.8	14.4	0.0	0.0	101.2	-	-	-	-
	TOTAL	1,686.5	103.9	14.4	0.0	4,420.5	6,225.3	1,500.0	214.7	11.7	7,940.0

Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² All water users on the mainstream were categorized into one or more of the following categories: irrigated agriculture, municipal and industrial, thermal electric power, within system export or outside system exports. Of the available categories, the category or categories that most closely represented the user was chosen. Exported water is not assigned a more specific use category.

³ Does not include evaporation from mainstream reservoirs listed in Table LC-1.

⁴ Referring to Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande Treaty between the United States of America and Mexico, signed on February 3, 1944.

⁵ Water delivered to Mexico pursuant to their approved monthly schedule. May increase or decrease from the Treaty allotment of 1,500,000 acre-feet due to surplus or shortage conditions, and the creation and delivery of water deferred by Mexico and stored in Lake Mead.

⁶ Prior to implementation of *Minute No. 242*, *Permanent and Definitive Solution to the International Problem of the Salinity of the Colorado River* (Minute 242), signed on August 30, 1973, bypassed volumes were made pursuant to *Minute No. 218 Recommendations on the Colorado River Salinity Problem* signed on March 22, 1965 in 1971 and 1972, and pursuant to *Minute No. 241 Recommendations to Improve Immediately the Quality of Colorado River Waters Going to Mexico*, signed on July 14, 1972 in 1973 and 1974. Starting in 1975 volumes were bypassed pursuant to Minute 242.

⁷ Water passing to Mexico in excess of Mexico's approved monthly schedule.

⁸ Does not include volumes in column "To Mexico in Excess of Treaty".

Lower Colorado River System Colorado River Mainstream Water Use and Exports Within States and to Mexico¹

1976-1980

		Mainstream Consumptive Use ²						Mexico			_
Year	State	Irrigated Agriculture	Municipal and Industrial Other	Thermal Electric Power	Within System Exports	Outside System Exports	TOTAL ³	Deliveries to Mexico in Satisfaction of Treaty ^{4,5}	Water Bypassed Pursuant to Minute 242 ⁶	To Mexico in Excess of Treaty ⁷	Total Colorado River Mainstream and Mexico ⁸
	Arizona	1,112.5	12.3	0.0	0.0	0.0	1,124.8	_	_	_	_
	California	419.3	4.3	0.0	0.0	4,192.6	4,616.2	-	-	-	-
1976	Nevada	0.0	58.4	14.7	0.0	0.0	73.1	_	_	_	_
	TOTAL	1,531.8	75.0	14.7	0.0	4,192.6	5,814.2	1,500.0	205.4	68.8	7,519.6
	Arizona	1,091.2	14.2	0.0	0.0	0.0	1,105.4	-	-	-	-
1977	California	449.2	4.6	0.0	0.0	4,557.6	5,011.4	-	-	-	-
9//	Nevada	0.0	58.8	14.3	0.0	0.0	73.1	-	-	-	-
	TOTAL	1,540.4	77.6	14.3	0.0	4,557.6	6,189.9	1,500.0	206.8	70.6	7,896.7
	Arizona	1,099.5	15.5	0.0	0.0	0.0	1,115.1	-	-	-	-
1978	California	439.0	3.8	0.0	0.0	3,976.5	4,419.4	-	-	-	-
9/0	Nevada	0.0	62.2	9.1	0.0	0.0	71.2	-	-	-	-
	TOTAL	1,538.5	81.5	9.1	0.0	3,976.5	5,605.7	1,500.0	182.0	44.4	7,287.7
1979	Arizona	1,006.7	14.5	0.0	0.0	0.0	1,021.2	-	-	-	-
	California	476.9	2.0	0.0	0.0	4,223.7	4,702.6	-	-	-	-
	Nevada	0.0	76.8	11.9	0.0	0.0	88.8	-	-	-	-
	TOTAL	1,483.6	93.3	11.9	0.0	4,223.7	5,812.5	1,700.0	178.0	1,467.4	7,690.5
	Arizona	1,061.9	15.5	0.0	0.0	0.0	1,077.4	-	-	-	-
1980	California	444.2	2.8	0.0	0.0	4,194.7	4,641.7	-	-	-	-
	Nevada	0.0	82.2	10.2	0.0	0.0	92.4				-
	TOTAL	1,506.1	100.5	10.2	0.0	4,194.7	5,811.5	1,700.0	154.6	5,340.6	7,666.1

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² All water users on the mainstream were categorized into one or more of the following categories: irrigated agriculture, municipal and industrial, thermal electric power, within system export or outside system exports. Of the available categories, the category or categories that most closely represented the user was chosen. Exported water is not assigned a more specific use category.

³ Does not include evaporation from mainstream reservoirs listed in Table LC-1.

⁴ Referring to Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande Treaty between the United States of America and Mexico, signed on February 3, 1944.

⁵ Water delivered to Mexico pursuant to their approved monthly schedule. May increase or decrease from the Treaty allotment of 1,500,000 acre-feet due to surplus or shortage conditions, and the creation and delivery of water deferred by Mexico and stored in Lake Mead.

⁶ Referring to water bypassed pursuant to Minute Number 242, Permanent and Definitive Solution to the International Problem of the Salinity of the Colorado River, signed on August 30, 1973.

⁷ Water passing to Mexico in excess of Mexico's approved monthly schedule.

⁸ Does not include volumes in column "To Mexico in Excess of Treaty".

1981-1985

			Mains	tream Consun	nptive Use ²				Mexico		_
Year	State	Irrigated Agriculture	Municipal and Industrial Other	Thermal Electric Power	Within System Exports	Outside System Exports	TOTAL ³	Deliveries to Mexico in Satisfaction of Treaty ^{4,5}	Water Bypassed Pursuant to Minute 242 ⁶	To Mexico in Excess of Treaty ⁷	Total Colorado River Mainstream and Mexico ⁸
	Arizona	1,245.9	16.7	0.0	0.0	0.0	1,262.5	-	-	-	_
	California	535.5	3.1	0.0	0.0	4,150.9	4,689.4	-	_	_	-
1981	Nevada	0.0	96.0	14.0	0.0	0.0	109.9	-	_	_	_
	TOTAL	1,781.3	115.7	14.0	0.0	4,150.9	6,061.9	1,700.0	148.4	342.5	7,910.3
	Arizona	1,085.9	14.6	0.0	0.0	0.0	1,100.5	-	-	-	-
982	California	473.9	3.5	0.0	0.0	3,733.4	4,210.7	-	-	-	-
302	Nevada	0.0	85.0	17.3	0.0	0.0	102.3	-	-	-	-
	TOTAL	1,559.8	103.0	17.3	0.0	3,733.4	5,413.5	1,500.0	149.7	49.3	7,063.2
	Arizona	924.6	16.3	0.0	0.0	0.0	940.9	-	-	-	-
983	California	345.0	3.1	0.0	0.0	3,821.7	4,169.9	-	-	-	-
903	Nevada	0.0	71.8	14.7	0.0	0.0	86.5	-	-	-	-
	TOTAL	1,269.6	91.3	14.7	0.0	3,821.7	5,197.3	1,700.0	169.6	12,459.7	7,066.9
	Arizona	1,011.9	20.5	0.0	0.0	0.0	1,032.4	-	-	-	-
004	California	324.1	3.1	0.0	0.0	4,255.8	4,583.0	-	-	-	-
984	Nevada	0.0	87.2	14.2	0.0	0.0	101.4	-	-	-	-
	TOTAL	1,335.9	110.7	14.2	0.0	4,255.8	5,716.7	1,700.0	125.6	13,843.0	7,542.3
	Arizona	1,050.7	23.1	0.0	33.5	0.0	1,107.3	-	-	-	_
1985	California	402.8	3.0	0.0	0.0	4,292.4	4,698.1	-	-	-	-
300	Nevada	0.0	95.4	6.3	0.0	0.0	101.6				
	TOTAL	1,453.5	121.4	6.3	33.5	4,292.4	5,907.1	1,700.0	129.7	10,111.0	7,736.8

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² All water users on the mainstream were categorized into one or more of the following categories: irrigated agriculture, municipal and industrial, thermal electric power, within system export or outside system exports. Of the available categories, the category or categories that most closely represented the user was chosen. Exported water is not assigned a more specific use category.

³ Does not include evaporation from mainstream reservoirs listed in Table LC-1.

⁴ Referring to Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande Treaty between the United States of America and Mexico, signed on February 3, 1944.

⁵ Water delivered to Mexico pursuant to their approved monthly schedule. May increase or decrease from the Treaty allotment of 1,500,000 acre-feet due to surplus or shortage conditions, and the creation and delivery of water deferred by Mexico and stored in Lake Mead.

⁶ Referring to water bypassed pursuant to Minute Number 242, Permanent and Definitive Solution to the International Problem of the Salinity of the Colorado River, signed on August 30, 1973.

⁷ Water passing to Mexico in excess of Mexico's approved monthly schedule.

⁸ Does not include volumes in column "To Mexico in Excess of Treaty".

1986-1990

			Mains	tream Consun	nptive Use ²				Mexico		_
Year	State	Irrigated Agriculture	Municipal and Industrial Other	Thermal Electric Power	Within System Exports	Outside System Exports	TOTAL ³	Deliveries to Mexico in Satisfaction of Treaty ^{4,5}	Water Bypassed Pursuant to Minute 242 ⁶	To Mexico in Excess of Treaty ⁷	Total Colorado River Mainstream and Mexico ⁸
	Arizona	1,097.9	21.7	0.0	107.6	0.0	1,227.3	_	_	_	_
	California	404.3	2.7	0.0	0.0	4,317.7	4,724.7	-	_	_	_
1986	Nevada	0.0	98.9	13.3	0.0	0.0	112.1	_	-	_	_
	TOTAL	1,502.3	123.2	13.3	107.6	4,317.7	6,064.1	1,700.0	110.0	9,113.7	7,874.2
	Arizona	1,175.6	22.3	0.0	354.6	0.0	1,552.5	-	-	-	-
1987	California	419.9	2.8	0.0	0.0	4,376.3	4,799.1	-	-	-	-
1907	Nevada	0.0	95.2	13.7	0.0	0.0	108.8	-	-	-	-
	TOTAL	1,595.6	120.3	13.7	354.6	4,376.3	6,460.4	1,700.0	97.7	2,946.5	8,258.1
	Arizona	1,206.5	23.4	0.0	499.3	0.0	1,729.3	_	-	-	-
1988	California	456.9	3.5	0.0	0.0	4,479.6	4,940.0	-	-	-	-
1900	Nevada	0.0	112.9	16.0	0.0	0.0	128.9	-	-	-	-
	TOTAL	1,663.4	139.8	16.0	499.3	4,479.6	6,798.2	1,700.0	128.2	630.7	8,626.3
	Arizona	1,236.7	24.4	0.0	759.0	0.0	2,020.1	-	-	-	-
4000	California	467.1	3.7	0.0	0.0	4,570.3	5,041.0	-	-	-	-
1989	Nevada	0.0	138.2	14.3	0.0	0.0	152.5	-	-	-	-
	TOTAL	1,703.8	166.3	14.3	759.0	4,570.3	7,213.6	1,500.0	138.6	89.6	8,852.3
	Arizona	1,292.9	24.4	0.0	779.1	0.0	2,096.3	-	-	-	-
1990	California	486.3	2.0	0.0	0.0	4,638.8	5,127.1	-	-	-	-
1990	Nevada	0.0	150.0	17.3	0.0	0.0	167.3	-	-	-	-
	TOTAL	1,779.2	176.5	17.3	779.1	4,638.8	7,390.8	1,500.0	133.7	42.0	9,024.5

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³ Does not include evaporation from mainstream reservoirs listed in Table LC-1.

⁴ Referring to Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande Treaty between the United States of America and Mexico, signed on February 3, 1944.

⁵ Water delivered to Mexico pursuant to their approved monthly schedule. May increase or decrease from the Treaty allotment of 1,500,000 acre-feet due to surplus or shortage conditions, and the creation and delivery of water deferred by Mexico and stored in Lake Mead.

⁶ Referring to water bypassed pursuant to Minute Number 242, Permanent and Definitive Solution to the International Problem of the Salinity of the Colorado River, signed on August 30, 1973.

⁷ Water passing to Mexico in excess of Mexico's approved monthly schedule.

⁸ Does not include volumes in column "To Mexico in Excess of Treaty".

1991-1995

			Mains	tream Consum	nptive Use ²				Mexico	To Mexico in Excess of Treaty ⁷	_
Year	State	Irrigated Agriculture	Municipal and Industrial Other	Thermal Electric Power	Within System Exports	Outside System Exports	TOTAL ³	Deliveries to Mexico in Satisfaction of Treaty ^{4,5}	Water Bypassed Pursuant to Minute 242 ⁶	in Excess of	Total Colorado River Mainstream and Mexico ⁸
	Arizona	1,220.8	25.3	0.0	453.8	0.0	1,700.0	_	_	_	_
	California	437.9	5.4	0.0	0.0	4,468.9	4,912.2	-	_	_	_
1991	Nevada	0.0	149.3	14.8	0.0	0.0	164.2	_	_	_	_
	TOTAL	1,658.8	180.0	14.8	453.8	4,468.9	6,776.3	1,500.0	140.7	20.9	8,417.0
	Arizona	1,121.5	26.2	0.0	592.1	0.0	1,739.9	-	-	-	-
1992	California	383.8	1.4	0.0	0.0	4,075.9	4,461.1	-	-	-	-
1992	Nevada	0.0	146.6	13.9	0.0	0.0	160.6	-	-	-	-
	TOTAL	1,505.4	174.2	13.9	592.1	4,075.9	6,361.5	1,500.0	101.1 80.7	7,962.6	
	Arizona	1,019.0	34.5	0.0	1,024.8	0.0	2,078.3	-	-	-	-
1993	California	452.6	5.6	0.0	0.0	4,295.1	4,753.3	-	-	-	-
1993	Nevada	0.0	165.0	14.8	0.0	0.0	179.9	-	-	-	-
	TOTAL	1,471.6	205.1	14.8	1,024.8	4,295.1	7,011.5	1,500.0	61.4	3,692.8	8,572.9
	Arizona	1,305.9	39.8	0.0	731.6	0.0	2,077.3	-	-	-	-
	California	467.9	4.5	0.0	0.0	4,674.4	5,146.8	-	-	-	-
1994	Nevada	0.0	191.6	14.0	0.0	0.0	205.6	-	-	-	-
	TOTAL	1,773.8	236.0	14.0	731.6	4,674.4	7,429.7	1,500.0	124.4	25.5	9,054.2
	Arizona	1,216.1	40.7	0.0	785.3	0.0	2,042.0	-	-	-	-
1005	California	438.9	6.1	0.0	0.0	4,391.7	4,836.6	-	-	-	-
1995	Nevada	0.0	187.9	13.3	0.0	0.0	201.2	-	-	-	-
	TOTAL	1,655.0	234.7	13.3	785.3	4,391.7	7,079.8	1,500.0	125.5	212.3	8,705.3

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³ Does not include evaporation from mainstream reservoirs listed in Table LC-1.

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⁸ Does not include volumes in column "To Mexico in Excess of Treaty".

1996-2000

			Mains	tream Consun	nptive Use ²				Mexico		_
Year	State	Irrigated Agriculture	Municipal and Industrial Other	Thermal Electric Power	Within System Exports	Outside System Exports	TOTAL ³	Deliveries to Mexico in Satisfaction of Treaty ^{4,5}	Water Bypassed Pursuant to Minute 242 ⁶	To Mexico in Excess of Treaty ⁷	Total Colorado River Mainstream and Mexico ⁸
	Arizona	1,311.3	36.8	0.0	1,196.1	0.0	2,544.1	-	-	-	-
	California	505.5	1.9	0.0	0.0	4,718.4	5,225.7	-	-	_	_
1996	Nevada	0.1	224.1	13.1	0.0	0.0	237.4	-	_	_	-
	TOTAL	1,816.9	262.8	13.1	1,196.1	4,718.4	8,007.2	1,500.0	112.4	5.3	9,619.6
	Arizona	1,250.4	35.1	0.0	1,413.9	0.0	2,699.4	-	-	-	-
1997	California	422.7	3.9	0.0	0.0	4,735.2	5,161.8	-	-	-	-
1997	Nevada	1.5	208.7	13.1	0.0	0.0	223.4	-	-	-	-
	TOTAL	1,674.6	247.6	13.1	1,413.9	4,735.2	8,084.5	1,700.0	89.2	1,172.5	9,873.6
	Arizona	1,157.7	34.0	0.0	1,228.2	0.0	2,419.9	-	-	-	_
4000	California	433.5	7.3	0.0	0.0	4,512.1	4,952.9	-	-	-	-
1998	Nevada	1.6	202.5	12.9	0.0	0.0	216.9	-	-	-	-
	TOTAL	1,592.9	243.7	12.9	1,228.2	4,512.1	7,589.8	1,700.0	113.8	3,018.4	9,403.6
	Arizona	1,154.6	35.4	0.0	1,388.2	0.0	2,578.2	-	-	-	-
4000	California	469.9	2.2	0.0	0.0	4,634.9	5,107.0	-	-	-	-
1999	Nevada	3.3	241.7	12.1	0.0	0.0	257.2	-	-	-	-
	TOTAL	1,627.9	279.4	12.1	1,388.2	4,634.9	7,942.4	1,700.0	78.7	1,194.1	9,721.1
	Arizona	1,172.4	44.6	0.0	1,424.2	0.0	2,641.1	-	-	-	-
2000	California	511.1	1.9	0.0	0.0	4,755.7	5,268.6	-	-	-	-
2000	Nevada	4.3	272.3	13.4	0.0	0.0	290.1	-	-	-	-
	TOTAL	1,687.8	318.8	13.4	1,424.2	4,755.7	8,199.8	1,700.0	107.4	337.1	10,007.2

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2001-2005

			Mains	tream Consum	nptive Use ²				Mexico		_
Year	State	Irrigated Agriculture	Municipal and Industrial Other	Thermal Electric Power	Within System Exports	Outside System Exports	TOTAL ³	Deliveries to Mexico in Satisfaction of Treaty ^{4,5}	Water Bypassed Pursuant to Minute 242 ⁶	To Mexico in Excess of Treaty ⁷	Total Colorado River Mainstream and Mexico ⁸
	Arizona	1,128.0	36.7	0.0	1,523.1	0.0	2,687.8	_	_	_	_
	California	499.9	3.1	0.0	0.0	4,665.5	5,168.5	_	-	_	_
2001	Nevada	3.1	277.0	13.0	0.0	0.0	293.1	_	_	_	_
	TOTAL	1,630.9	316.8	13.0	1,523.1	4,665.5	8,149.3	1,500.0	103.7	200.6	9,753.1
	Arizona	1,181.8	38.3	0.0	1,581.6	0.0	2,801.7	-	-	-	-
2002	California	551.4	2.0	0.0	0.0	4,722.1	5,275.5	-	-	-	-
2002	Nevada	3.0	309.9	12.3	0.0	0.0	325.2	-	-	-	-
	TOTAL	1,736.3	350.2	12.3	1,581.6	4,722.1	8,402.4	1,500.0	121.7	123.2	10,024.2
	Arizona	1,103.0	40.7	0.0	1,685.2	0.0	2,828.9	-	-	-	-
2003	California	447.0	2.9	0.0	0.0	3,958.8	4,408.7	-	-	-	-
003	Nevada	2.9	256.2	11.6	0.0	0.0	270.7	-	-	-	-
	TOTAL	1,552.9	299.8	11.6	1,685.2	3,958.8	7,508.3	1,500.0	114.7	61.9	9,123.1
	Arizona	1,077.0	40.0	0.0	1,666.3	0.0	2,783.3	-	-	-	-
2004	California	475.9	3.4	0.0	0.0	3,836.9	4,316.2	-	-	-	-
:004	Nevada	2.6	252.2	12.0	0.0	0.0	266.8	-	-	-	-
	TOTAL	1,555.5	295.6	12.0	1,666.3	3,836.9	7,366.3	1,500.0	100.8	93.1	8,967.1
	Arizona	1,072.4	35.2	0.0	1,319.9	0.0	2,427.4	-	-	-	-
005	California	388.8	3.6	0.0	0.0	3,936.9	4,329.3	-	-	-	-
.005	Nevada	3.6	260.5	12.4	0.0	0.0	276.5				_
	TOTAL	1,464.8	299.3	12.4	1,319.9	3,936.9	7,033.2	1,500.0	108.4	116.3	8,641.6

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Arizona Tri Tri Gil Lit Bil Vir TO California Tri TO Nevada Tri Tri Vir Mu				Agriculture			Municipal and				oort	
Arizona Tri Tri Gil Lit Bil Vir TO California Tri TO Nevada Tri Tri Vir Mu	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
Tri Gil Litt Bil Vir TO California Tri TO Nevada Tri Vir Mu	Tributary	Liaporation	Agriountaro	G EIVOOLOOK	Gustotui	1100001000		Cuioi	Gustotui	Cyclon.	- Cycloni	TOTAL
Gill Litt Bill Vir TO California Tri TO Nevada Tri Vir Mu	Tributary Area Above Lake Mead	0.6	0.5	2.4	2.9	0.1	0.0	2.3	2.4	0.0	0.0	5.9
Litt Bill Vir TO California Tri TO Nevada Tri Vir Mu	Tributary Area Below Lake Mead	0.3	12.5	2.4	14.9	6.0	0.0	2.7	8.7	0.0	0.0	23.9
Bill Vir TO California Tri TO Nevada Tri Vir Mu	Gila River	186.3	2,248.7	27.5	2,276.1	56.6	8.0	266.1	330.7	0.0	-11.7	2,781.4
Vir TO California Tri TO Nevada Tri Vir Mu	Little Colorado River	8.7	32.7	5.7	38.4	0.8	1.4	19.0	21.1	0.0	13.0	81.3
California Tri TO Nevada Tri Tri Vir Mu	Bill Williams River	3.2	10.5	0.6	11.2	1.5	0.0	0.3	1.8	0.0	0.0	16.2
California Tri TO Nevada Tri Tri Vir Mu	Virgin River	0.1	4.2	0.9	5.0	0.0	0.0	0.2	0.2	0.0	0.0	5.3
TO Nevada Tri Tri Vir Mu	TOTAL	199.2	2,309.0	39.5	2,348.5	65.0	9.3	290.6	365.0	0.0	1.3	2,914.0
Nevada Tri Tri Vir Mu	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Tri Vir Mu	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Vir Mu	Tributary Area Above Lake Mead	0.2	0.4	0.7	1.1	0.0	0.0	37.8	37.8	0.0	0.0	39.1
Mu	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	1.5	0.0	0.1	1.6	0.0	-1.3	0.2
	Virgin River	0.0	9.2	0.0	9.2	0.0	0.0	0.2	0.2	0.0	0.0	9.4
то	Muddy River	4.2	45.4	0.4	45.8	0.0	3.0	0.9	3.9	0.0	0.0	53.9
. •	TOTAL	4.4	54.9	1.1	56.1	1.5	3.0	39.0	43.4	0.0	-1.3	102.6
New Mexico Gil	Gila River	0.6	11.5	1.8	13.3	3.0	0.0	0.1	3.2	0.5	0.0	17.6
Lit	Little Colorado River	1.0	0.4	0.9	1.3	1.8	0.0	6.6	8.4	0.0	0.0	10.7
то	TOTAL	1.5	11.9	2.7	14.6	4.8	0.0	6.8	11.6	0.5	0.0	28.2
Utah Tri	Tributary Area Above Lake Mead	0.0	4.8	0.0	4.9	0.0	0.0	0.3	0.3	0.0	0.0	5.3
Vir	Virgin River	1.6	25.9	0.6	26.6	0.0	0.0	5.6	5.6	1.5	0.0	35.2
то	TOTAL	1.6	30.8	0.7	31.4	0.0	0.0	6.0	6.0	1.5	0.0	40.5
Lower Basin Tri	Tributary Area Above Lake Mead	0.8	5.7	3.1	8.8	0.1	0.0	40.5	40.5	0.0	0.0	50.2
- " .	Tributary Area Above Lake Mead Tributary Area Below Lake Mead	0.8	5.7 12.5	3.1 2.4	8.8 14.9	0.1 7.5	0.0	40.5 2.8	40.5 10.4	0.0	-1.3	50.2 24.2
Panartina	i ributary Area Below Lake Mead Gila River	0.3 186.8	2,260.2	2.4	2,289.5	7.5 59.7	8.0	2.8	333.9	0.0	-1.3 -11.7	24.2
Arose Totale	Little Colorado River	9.7	33.1	6.6	39.7	2.6	1.4	25.6	29.6	0.0	13.0	92.0
	Bill Williams River	3.2	10.5	0.6	11.2	1.5	0.0	0.3	1.8	0.0	0.0	16.2
	Virgin River	3.2 1.7	39.2	1.5	40.7	0.0	0.0	6.0	6.0	1.5	0.0	49.9
	Muddy River	4.2	45.4	0.4	45.8	0.0	3.0	0.0	3.9	0.0	0.0	53.9
	TOTAL	206.7	2,406.7	43.9	2,450.6	71.4	12.3	342.4	426.1	1.9	0.0	3,085.3

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal and	d Industrial		Ex	port	Ju acre-leet)
State	Tributory	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
State	Tributary	Evaporation	Agriculture	& Livestock	Subtotal	Resources	Fower	Other	Subtotal	System	System	TOTAL
Arizona	Tributary Area Above Lake Mead	0.6	0.5	2.3	2.9	0.1	0.0	2.5	2.6	0.0	0.0	6.0
	Tributary Area Below Lake Mead	0.3	13.8	2.4	16.2	6.7	0.0	2.8	9.5	0.0	0.0	26.0
	Gila River	164.1	2,488.2	27.1	2,515.2	63.0	9.3	281.6	353.9	0.0	-12.9	3,020.4
	Little Colorado River	7.8	36.2	5.6	41.8	2.0	1.1	19.9	23.0	0.0	15.4	88.0
	Bill Williams River	3.1	11.7	0.6	12.3	1.6	0.0	0.4	2.0	0.0	0.0	17.4
	Virgin River	0.1	4.6	0.9	5.5	0.0	0.0	0.2	0.2	0.0	0.0	5.8
	TOTAL	176.0	2,554.9	38.9	2,593.9	73.4	10.4	307.4	391.2	0.0	2.6	3,163.6
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	0.2	0.5	0.7	1.1	0.0	0.0	19.9	19.9	0.0	0.0	21.2
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	1.6	0.0	0.1	1.7	0.0	-2.6	-0.9
	Virgin River	0.0	10.1	0.0	10.1	0.0	0.0	0.2	0.2	0.0	0.0	10.3
	Muddy River	4.2	50.2	0.5	50.7	0.0	3.1	0.9	4.0	0.0	0.0	58.9
	TOTAL	4.4	60.8	1.2	61.9	1.6	3.1	21.0	25.8	0.0	-2.6	89.6
New Mexico	Gila River	0.5	11.5	1.8	13.2	4.8	0.0	0.2	5.1	0.8	0.0	19.5
	Little Colorado River	0.9	0.4	0.8	1.3	2.0	0.0	6.8	8.8	0.0	0.0	11.1
	TOTAL	1.4	11.9	2.6	14.5	6.9	0.0	7.0	13.9	0.8	0.0	30.6
Utah	Tributary Area Above Lake Mead	0.0	5.4	0.0	5.4	0.0	0.0	0.4	0.4	0.0	0.0	5.8
	Virgin River	1.6	28.7	0.6	29.3	0.0	0.0	5.9	5.9	2.2	0.0	39.0
	TOTAL	1.7	34.1	0.7	34.7	0.0	0.0	6.3	6.3	2.2	0.0	44.8
Lower Basin	Tuibutama Anna Abasia Laka Maad	0.0	6.3	2.4	0.4	0.4	0.0	22.0	22.0	0.0	0.0	22.0
Tributary	Tributary Area Above Lake Mead Tributary Area Below Lake Mead	0.8 0.3	6.3 13.8	3.1 2.4	9.4 16.2	0.1 8.3	0.0 0.0	22.8 3.0	22.8 11.3	0.0 0.0	0.0 -2.6	33.0 25.2
Reporting	Gila River	164.6	2,499.6	2.4	2,528.5	67.9	9.3	3.0 281.8	359.0	0.0	-2.6 -12.9	3,039.9
Areas Totals	Little Colorado River	8.8	2,499.6 36.6	6.4	43.0	4.0	9.3 1.1	26.7	31.9	0.0	15.4	99.1
	Bill Williams River	3.1	11.7	0.4	12.3	1.6	0.0	0.4	2.0	0.0	0.0	17.4
	Virgin River	1.7	43.4	1.5	45.0	0.0	0.0	6.3	6.3	2.2	0.0	55.2
	Muddy River	4.2	50.2	0.5	50.7	0.0	3.1	0.9	4.0	0.0	0.0	58.9
	TOTAL	183.5	2,661.7	43.4	2,705.0	81.9	13.5	341.8	437.2	3.0	0.0	3,328.7

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

(1,000 acre-feet) Agriculture Municipal and Industrial Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.7 0.5 2.3 2.9 0.0 2.7 2.8 0.0 0.0 6.3 0.1 Tributary Area Below Lake Mead 0.3 14.0 2.4 16.4 7.0 0.0 2.9 9.9 0.0 0.0 26.6 Gila River 283.7 2,520.9 27.6 2.548.5 64.4 9.3 297.4 371.1 0.0 -18.9 3,184.4 Little Colorado River 9.5 36.6 42.5 1.5 20.8 0.0 5.9 2.3 24.6 21.4 98.0 **Bill Williams River** 3.4 11.8 0.7 12.5 1.5 0.0 0.4 1.9 0.0 0.0 17.8 Virgin River 0.1 4.7 1.0 5.6 0.0 0.0 0.2 0.2 0.0 0.0 5.9 TOTAL 297.6 2,588.6 39.8 2,628.4 75.3 10.7 324.5 410.5 0.0 2.4 3,339.0 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 Nevada Tributary Area Above Lake Mead 0.2 0.5 0.7 1.2 0.0 0.0 15.8 15.8 0.0 0.0 17.1 Tributary Area Below Lake Mead 0.0 0.1 0.0 0.0 0.0 0.0 1.6 0.0 1.7 -2.4 -0.8 Virgin River 0.0 10.3 0.0 0.2 0.0 10.3 0.0 0.2 0.0 0.0 10.5 **Muddy River** 4.2 50.9 0.5 51.3 0.0 2.8 0.9 3.7 0.0 0.0 59.2 TOTAL 4.3 61.6 1.2 62.8 1.6 2.8 17.0 21.4 0.0 -2.4 86.1 New Mexico Gila River 0.7 12.0 1.9 13.9 5.6 0.0 0.2 5.8 0.9 0.0 21.3 Little Colorado River 1.0 0.4 0.9 1.3 2.0 0.0 6.9 8.9 0.0 0.0 11.2 TOTAL 1.7 2.8 15.2 7.6 14.7 0.9 0.0 32.5 12.4 0.0 7.1 Utah 0.0 5.4 0.0 5.5 0.0 0.0 0.4 0.0 0.0 Tributary Area Above Lake Mead 0.4 5.9 Virgin River 1.5 29.1 0.6 29.7 0.0 0.0 6.3 6.3 6.4 0.0 43.8 TOTAL 1.5 34.5 0.6 35.2 0.0 0.0 6.7 6.7 0.0 49.7 Lower Basin Tributary Area Above Lake Mead 3.1 9.5 0.9 6.4 0.1 0.0 18.9 19.0 0.0 0.0 29.4 Tributary Tributary Area Below Lake Mead 0.3 14.0 2.4 16.4 8.6 0.0 3.1 11.7 0.0 -2.4 25.9 Reporting Gila River 284.4 2.532.9 29.5 2.562.4 70.0 9.3 297.7 376.9 0.9 -18.9 3.205.7 **Areas Totals** Little Colorado River 10.5 43.9 27.8 37.1 6.8 4.3 1.5 33.5 0.0 21.4 109.2 **Bill Williams River** 3.4 0.7 12.5 0.0 0.4 11.8 1.5 1.9 0.0 0.0 17.8 Virgin River 44.0 45.6 0.0 6.7 60.2 1.6 1.6 0.0 6.7 6.4 0.0 **Muddy River** 4.2 50.9 0.5 0.0 0.9 3.7 0.0 0.0 51.3 2.8 59.2 44.4 TOTAL 305.2 2,697.1 84.5 355.4 453.4 2,741.6 13.5 7.2 0.0 3,507.4

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² Includes rural, urban, and other industrial uses.

(1,000 acre-feet) Agriculture Municipal and Industrial Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.7 0.0 2.3 2.3 0.0 2.9 3.0 0.0 0.0 6.0 0.1 Tributary Area Below Lake Mead 0.3 14.1 2.4 16.5 6.5 0.0 3.0 9.5 0.0 0.0 26.3 Gila River 235.0 2.643.5 27.3 2.670.9 8.5 309.9 59.7 378.1 0.0 -8.9 3,275.2 Little Colorado River 9.7 50.1 56.0 1.5 21.9 0.0 11.5 103.2 5.9 2.7 26.0 **Bill Williams River** 3.3 16.0 0.7 16.7 1.4 0.0 0.4 1.8 0.0 0.0 21.8 Virgin River 0.1 5.0 1.0 6.1 0.0 0.0 0.2 0.2 0.0 0.0 6.4 TOTAL 249.1 2,728.7 39.7 2,768.4 70.5 10.0 338.3 418.7 0.0 2.7 3,438.9 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 Nevada Tributary Area Above Lake Mead 0.2 1.0 0.7 1.7 0.0 0.0 20.3 20.3 0.0 0.0 22.2 Tributary Area Below Lake Mead 0.1 0.0 -2.7 0.0 0.0 0.0 0.0 1.6 0.0 1.7 -1.0 Virgin River 0.0 10.8 0.0 0.2 0.0 10.8 0.0 0.2 0.0 0.0 11.0 **Muddy River** 4.4 66.9 0.5 67.4 1.5 2.4 1.0 4.9 0.0 0.0 76.6 TOTAL 4.5 78.6 1.2 79.8 3.1 2.4 21.6 27.1 0.0 -2.7 108.8 New Mexico Gila River 0.6 13.9 2.0 15.9 5.7 0.0 0.2 5.9 0.9 0.0 23.3 Little Colorado River 1.0 0.4 0.9 1.3 2.2 0.0 7.0 9.2 0.0 0.0 11.6 TOTAL 1.6 2.9 17.2 7.9 7.3 15.2 0.9 0.0 34.9 14.4 0.0 Utah 0.0 5.7 0.0 5.7 0.0 0.0 0.4 0.0 0.0 Tributary Area Above Lake Mead 0.4 6.2 Virgin River 1.7 39.6 0.7 40.3 0.0 0.0 6.8 6.8 0.6 0.0 49.3 TOTAL 1.8 45.3 0.7 45.9 0.0 0.0 7.2 7.2 0.6 0.0 55.5 Lower Basin Tributary Area Above Lake Mead 3.1 9.7 0.9 6.6 0.1 0.0 23.6 23.7 0.0 0.0 34.4 Tributary Tributary Area Below Lake Mead 0.3 14.1 2.4 16.5 8.1 0.0 3.2 11.3 0.0 -2.7 25.4 Reporting Gila River 235.6 2.657.5 29.3 2.686.8 65.4 8.5 310.1 384.1 0.9 -8.9 3.298.5 **Areas Totals** Little Colorado River 10.7 28.9 50.5 6.8 57.3 4.9 1.5 35.3 0.0 11.5 114.8

16.7

57.1

67.4

2,911.5

1.4

0.0

1.5

81.4

0.0

0.0

2.4

12.4

0.4

7.2

1.0

374.4

1.8

7.2

4.9

468.2

0.0

0.6

0.0

1.5

0.0

0.0

0.0

0.0

16.0

55.4

66.9

2,867.0

0.7

1.7

0.5

44.5

3.3

1.9

4.4

257.0

Virgin River

Muddy River

TOTAL

Bill Williams River

21.8

66.7

76.6

3,638.2

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

(1,000 acre-feet) Agriculture Municipal and Industrial Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.7 1.9 2.3 4.2 0.0 3.1 3.2 0.0 0.0 8.1 0.1 Tributary Area Below Lake Mead 0.3 21.5 2.5 24.0 6.4 0.0 3.1 9.5 0.0 0.0 33.8 Gila River 2.911.3 2.939.2 210.2 27.9 54.1 5.9 318.1 378.0 0.0 -20.3 3,507.1 Little Colorado River 51.1 57.0 22.8 0.0 22.7 9.3 5.9 2.8 1.2 26.9 115.9 **Bill Williams River** 3.8 11.9 0.7 12.6 1.4 0.0 0.4 1.8 0.0 0.0 18.2 Virgin River 0.1 4.8 1.0 5.8 0.0 0.0 0.2 0.2 0.0 0.0 6.1 TOTAL 224.5 3,002.4 40.3 3,042.7 64.8 7.1 347.7 419.6 0.0 2.4 3,689.2 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 Nevada Tributary Area Above Lake Mead 0.2 0.9 0.7 1.6 0.0 0.0 44.0 44.0 0.0 0.0 45.8 Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 1.5 0.1 1.6 -2.4 -0.8 Virgin River 0.0 10.8 0.0 0.2 0.0 10.8 0.0 0.2 0.0 0.0 11.0 **Muddy River** 4.3 72.7 0.5 73.1 2.2 2.2 1.0 5.5 0.0 0.0 82.9 TOTAL 4.5 84.3 1.2 85.5 3.7 2.2 45.4 51.3 0.0 -2.4 138.9 New Mexico Gila River 0.5 13.3 2.0 15.3 4.5 0.0 0.2 4.7 0.7 0.0 21.2 Little Colorado River 1.0 0.6 0.9 1.4 2.3 0.0 7.4 9.7 0.0 0.0 12.1 TOTAL 1.4 2.8 16.7 6.8 7.6 14.4 0.7 0.0 33.3 13.9 0.0 Utah 0.0 8.2 0.0 8.2 0.0 0.0 0.4 0.0 0.0 Tributary Area Above Lake Mead 0.4 8.7 Virgin River 1.7 40.3 0.6 41.0 0.0 0.0 7.0 7.0 3.1 0.0 52.7 TOTAL 1.7 48.5 0.7 49.1 0.0 0.0 7.5 7.5 0.0 61.4 Lower Basin Tributary Area Above Lake Mead 3.1 0.9 10.9 14.0 0.1 0.0 47.6 47.7 0.0 0.0 62.6 Tributary Tributary Area Below Lake Mead 0.3 21.5 2.5 24.0 7.9 0.0 3.2 11.2 0.0 -2.4 33.0 Reporting Gila River 210.6 2.924.6 29.8 2.954.4 58.6 5.9 318.2 382.7 0.7 -20.3 3.528.3 **Areas Totals** Little Colorado River 10.3 30.2 51.6 6.8 58.4 5.1 1.2 36.6 0.0 22.7 127.9 **Bill Williams River** 3.8 12.6 0.0 0.4 11.9 0.7 1.4 1.8 0.0 0.0 18.2 Virgin River 55.9 57.5 0.0 7.5 7.5 69.9 1.8 1.6 0.0 3.1 0.0 **Muddy River** 4.3 72.7 0.5 73.1 2.2 1.0 0.0 2.2 5.5 0.0 82.9

3,194.1

75.3

408.2

9.4

492.9

3.8

0.0

3,149.1

44.9

232.0

TOTAL

3,922.8

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

(1,000 acre-feet)

Lower Colorado River System Estimated Tributary Water Use within States, by Major Tributaries and Types of Use¹ 1976

Agriculture Municipal and Industrial Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.7 1.0 2.4 3.4 0.0 0.0 3.2 3.2 0.0 0.0 7.3 Tributary Area Below Lake Mead 0.3 18.6 2.4 21.0 1.1 0.0 3.3 4.4 0.0 0.0 25.6 Gila River 2.682.2 2.710.0 326.9 181.1 27.8 74.8 5.8 407.4 0.0 -20.5 3,278.1 Little Colorado River 48.3 23.1 0.0 9.6 6.0 54.4 2.7 1.3 27.1 23.4 114.5 **Bill Williams River** 9.1 10.3 0.7 10.9 0.7 0.0 0.4 1.2 0.0 0.0 21.1 Virgin River 0.1 4.9 0.9 5.8 0.0 0.0 0.2 0.2 0.0 0.0 6.2 TOTAL 200.9 2,765.3 40.2 2,805.5 79.3 7.1 357.1 443.5 0.0 2.9 3,452.8 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 Nevada Tributary Area Above Lake Mead 0.2 0.4 0.7 1.1 0.0 0.0 43.5 43.5 0.0 0.0 44.8 Tributary Area Below Lake Mead 0.0 -2.9 0.0 0.0 0.0 0.0 2.1 0.0 0.1 2.2 -0.7 Virgin River 0.0 0.0 0.0 11.4 11.4 0.0 0.3 0.3 0.0 0.0 11.7 **Muddy River** 4.1 68.8 0.4 69.3 0.5 2.9 1.1 4.5 0.0 0.0 77.9 TOTAL 4.3 80.7 1.1 81.8 2.6 2.9 44.9 50.5 0.0 -2.9 133.7 New Mexico Gila River 0.6 14.4 2.1 16.5 5.1 0.0 0.2 5.4 8.0 0.0 23.3 Little Colorado River 1.1 0.6 0.9 1.5 0.2 0.0 7.8 8.0 0.0 0.0 10.5 TOTAL 3.0 5.4 8.0 13.3 0.8 0.0 33.8 1.7 15.0 18.0 0.0 Utah 0.0 6.0 0.0 6.0 0.0 0.0 0.5 0.5 0.0 0.0 Tributary Area Above Lake Mead 6.5 Virgin River 1.8 36.5 0.6 37.2 0.0 0.0 7.5 7.5 1.4 0.0 47.8 TOTAL 1.8 42.5 0.7 43.2 0.0 0.0 7.9 7.9 1.4 0.0 54.3 Lower Basin Tributary Area Above Lake Mead 3.1 0.9 7.4 10.5 0.0 0.0 47.2 47.2 0.0 0.0 58.6 Tributary Tributary Area Below Lake Mead 0.3 18.6 2.4 21.0 3.2 0.0 3.5 6.7 0.0 -2.9 25.0 Reporting Gila River 181.7 2.696.7 29.9 2.726.5 79.9 5.8 327.1 412.8 8.0 -20.5 3.301.3 **Areas Totals**

55.9

10.9

54.4

69.3

2,948.4

2.9

0.7

0.0

0.5

87.2

7.0

0.7

1.6

0.4

45.0

30.9

0.4

8.0

1.1

418.1

35.1

1.2

8.0

4.5

515.3

0.0

0.0

1.4

0.0

2.2

23.4

0.0

0.0

0.0

0.0

1.3

0.0

0.0

2.9

10.1

48.9

10.3

52.8

68.8

2,903.5

10.7

9.1

1.9

4.1

208.6

Virgin River

Muddy River

TOTAL

Little Colorado River

Bill Williams River

125.0

21.1

65.7

77.9

3,674.7

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal and	d Industrial		Ex	oort	o acre-leet)
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
State	Tributary	Lvaporation	Agriculture	G LIVESTOCK	Gubtotai	Resources	1 OWEI	Other	Gubtotui	Oystem	Cystoni	TOTAL
Arizona	Tributary Area Above Lake Mead	0.7	3.4	2.4	5.8	0.0	0.0	3.3	3.3	0.0	0.0	9.8
	Tributary Area Below Lake Mead	0.3	31.3	2.5	33.8	1.3	0.0	3.4	4.7	0.0	0.0	38.8
	Gila River	145.7	2,711.9	28.1	2,740.0	66.2	7.7	338.2	412.1	0.0	-3.5	3,294.2
	Little Colorado River	9.5	51.0	6.0	57.0	3.1	1.2	23.8	28.2	0.0	6.4	101.0
	Bill Williams River	7.8	13.5	0.7	14.2	0.9	0.0	0.5	1.4	0.0	0.0	23.4
	Virgin River	0.1	5.7	0.9	6.6	0.0	0.0	0.2	0.2	0.0	0.0	7.0
	TOTAL	164.1	2,816.8	40.6	2,857.4	71.5	8.9	369.5	449.9	0.0	2.8	3,474.2
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	0.2	1.1	0.7	1.8	0.0	0.0	43.2	43.2	0.0	0.0	45.1
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	3.3	0.0	0.1	3.4	0.0	-2.8	0.6
	Virgin River	0.0	12.7	0.0	12.7	0.0	0.0	0.3	0.3	0.0	0.0	13.0
	Muddy River	4.3	85.0	0.4	85.4	0.6	4.0	1.1	5.7	0.0	0.0	95.4
	TOTAL	4.5	98.7	1.1	99.9	3.9	4.0	44.7	52.5	0.0	-2.8	154.0
New Mexico	Gila River	0.6	12.7	2.0	14.7	5.1	0.0	0.3	5.4	0.8	0.0	21.5
	Little Colorado River	1.0	0.6	0.9	1.4	0.4	0.0	7.9	8.3	0.0	0.0	10.7
	TOTAL	1.6	13.3	2.9	16.2	5.5	0.0	8.2	13.7	0.8	0.0	32.2
Utah	Tributary Area Above Lake Mead	0.0	11.5	0.0	11.6	0.0	0.0	0.5	0.5	0.0	0.0	12.1
	Virgin River	1.8	47.2	0.6	47.8	0.0	0.0	7.9	7.9	0.3	0.0	57.9
	TOTAL	1.8	58.8	0.7	59.4	0.0	0.0	8.4	8.4	0.3	0.0	69.9
Lower Basin	Tributery Area About Lake Mond	0.0	46.0	2.4	40.4	0.0	0.0	47.0	47.0	0.0	0.0	67.0
Tributary	Tributary Area Above Lake Mead Tributary Area Below Lake Mead	0.9 0.3	16.0 31.3	3.1 2.5	19.1 33.8	0.0 4.6	0.0 0.0	47.0 3.6	47.0 8.2	0.0 0.0	0.0 -2.8	67.0 39.5
Reporting	Gila River	0.3 146.3	31.3 2,724.6	2.5 30.1	33.8 2,754.7	4.6 71.3	0.0 7.7	3.6 338.5	8.2 417.4	0.0	-2.8 -3.5	39.5 3,315.7
Areas Totals	Little Colorado River	146.3	2,724.6 51.6	6.8	2,754.7 58.4	3.5	7.7 1.2	338.5	36.4	0.0	-3.5 6.4	3,315.7 111.7
	Bill Williams River	7.8	13.5	0.7	14.2	0.9	0.0	0.5	1.4	0.0	0.0	23.4
	Virgin River	7.8 1.9	65.6	0. <i>7</i> 1.5	67.2	0.9	0.0	0.5 8.4	8.4	0.0	0.0	23.4 77.8
	Muddy River	4.3	85.0	0.4	85.4	0.6	4.0	1.1	5.7	0.0	0.0	95.4
	TOTAL	172.0	2,987.6	45.2	3,032.8	80.9	12.8	430.8	524.5	1.1	0.0	3,730.5
	TOTAL	172.0	2,907.0	45.2	3,032.0	60.9	12.0	430.0	524.5	1.1	0.0	3,730

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

State												
State				Stockpond			Thermal					
State		Reservoir	Irrigated	Evaporation		Mineral	Electric	2 2		Outside	Within	
	Tributary	Evaporation	Agriculture	& Livestock	Subtotal	Resources	Power	Other ²	Subtotal	System	System	TOTAL
Arizona	Tributary Area Above Lake Mead	0.5	3.9	2.0	6.0	0.0	0.0	3.5	3.5	0.0	0.0	10.0
	Tributary Area Below Lake Mead	0.2	31.8	2.3	34.2	1.2	0.0	3.5	4.7	0.0	0.0	39.2
	Gila River	216.5	2,438.5	26.2	2,464.7	67.9	7.9	351.8	427.6	0.0	-17.1	3,091.6
	Little Colorado River	6.1	46.8	5.4	52.2	3.6	2.9	24.7	31.2	0.0	19.2	108.7
	Bill Williams River	25.1	12.0	0.6	12.6	2.3	0.0	0.5	2.8	0.0	0.0	40.5
	Virgin River	0.1	5.6	0.8	6.4	0.0	0.0	0.3	0.3	0.0	0.0	6.8
	TOTAL	248.6	2,538.7	37.4	2,576.1	75.0	10.8	384.3	470.1	0.0	2.1	3,296.8
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	0.2	1.1	0.6	1.7	0.0	0.0	42.5	42.5	0.0	0.0	44.3
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	3.5	0.0	0.1	3.6	0.0	-2.1	1.5
	Virgin River	0.0	11.6	0.0	11.6	0.0	0.0	0.3	0.3	0.0	0.0	11.9
	Muddy River	3.9	69.3	0.4	69.7	0.6	3.8	1.2	5.6	0.0	0.0	79.2
	TOTAL	4.1	82.0	1.0	83.0	4.1	3.8	44.1	51.9	0.0	-2.1	136.9
New Mexico	Gila River	0.5	14.8	1.9	16.7	4.9	0.0	0.3	5.3	0.8	0.0	23.3
	Little Colorado River	0.9	0.0	0.8	8.0	0.6	0.0	8.0	8.6	0.0	0.0	10.4
	TOTAL	1.4	14.8	2.8	17.6	5.5	0.0	8.4	13.9	0.8	0.0	33.6
Utah	Tributary Area Above Lake Mead	0.0	9.6	0.0	9.6	0.0	0.0	0.5	0.5	0.0	0.0	10.2
	Virgin River	1.2	46.1	0.5	46.6	0.0	0.0	8.5	8.5	8.6	0.0	64.8
	TOTAL	1.2	55.7	0.5	56.2	0.0	0.0	9.0	9.0	8.6	0.0	74.9
Lower Basin	Talle dama Amara Albarra I also Barra I	0.7	44.0	0.7	47.0	0.0	0.0	40.5	40.5	0.0	0.0	04.5
Tributary		0.7	14.6	2.7	17.3	0.0	0.0	46.5	46.5	0.0	0.0	64.5
Reporting	Tributary Area Below Lake Mead Gila River	0.2 217.0	31.8 2,453.3	2.3 28.1	34.2 2,481.4	4.7 72.8	0.0 7.9	3.7 352.1	8.4 432.9	0.0 0.8	-2.1 -17.1	40.8
Areas Totals	Little Colorado River	7.0	2,453.3 46.8	6.2	2,481.4 53.1	72.8 4.2	7.9 2.9	352.1	432.9 39.8	0.8	-17.1 19.2	3,114.9 119.1
	Bill Williams River	7.0 25.1	46.8 12.0	0.6	12.6	2.3	0.0	0.5	2.8	0.0	0.0	40.5
	Virgin River	1.3	63.3	1.4	64.6	2.3 0.0	0.0	9.0	9.0	8.6	0.0	40.5 83.5
	Muddy River	3.9	69.3	0.4	69.7	0.6	3.8	9.0 1.2	9.0 5.6	0.0	0.0	83.5 79.2
	TOTAL	255.2	2,691.2	41.7	2,732.9	84.6	14.6	445.8	545.0	9.3	0.0	3,542.4

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² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal and	d Industrial		Ex	port	Ju acre-leet)
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
State	Tributary	Lvaporation	Agriculturo	G ENTOCOOK	Gustotai	1100001000		Othor	Gubtotui	oyoto	Cyotom	TOTAL
Arizona	Tributary Area Above Lake Mead	0.7	3.2	2.3	5.6	0.0	0.0	3.8	3.8	0.0	0.0	10.1
	Tributary Area Below Lake Mead	0.3	44.6	2.5	47.1	2.4	0.0	3.7	6.1	0.0	0.0	53.5
	Gila River	405.6	2,618.0	27.9	2,645.9	71.5	7.7	366.6	445.9	0.0	-15.6	3,481.8
	Little Colorado River	9.7	47.2	6.0	53.2	3.7	4.4	25.6	33.6	0.0	18.0	114.5
	Bill Williams River	30.2	13.4	0.6	14.1	2.2	0.0	0.5	2.7	0.0	0.0	47.0
	Virgin River	0.1	6.3	0.8	7.1	0.0	0.0	0.3	0.3	0.0	0.0	7.6
	TOTAL	446.6	2,732.8	40.2	2,772.9	79.8	12.1	400.5	492.5	0.0	2.4	3,714.4
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	0.2	0.8	0.7	1.5	0.0	0.0	47.0	47.0	0.0	0.0	48.6
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	2.9	0.0	0.1	3.0	0.0	-2.4	0.6
	Virgin River	0.0	11.2	0.0	11.2	0.0	0.0	0.3	0.3	0.0	0.0	11.5
	Muddy River	4.6	71.6	0.4	72.0	0.0	4.0	1.3	5.2	0.0	0.0	81.8
	TOTAL	4.7	83.6	1.1	84.7	2.9	4.0	48.6	55.5	0.0	-2.4	142.5
New Mexico	Gila River	0.6	8.4	2.0	10.4	4.8	0.0	0.3	5.2	0.8	0.0	17.0
	Little Colorado River	0.9	0.0	0.9	0.9	0.7	0.0	8.3	9.0	0.0	0.0	10.8
	TOTAL	1.5	8.4	2.9	11.3	5.5	0.0	8.6	14.2	0.8	0.0	27.8
Utah	Tributary Area Above Lake Mead	0.0	5.5	0.0	5.6	0.0	0.0	0.5	0.5	0.0	0.0	6.1
	Virgin River	1.7	45.6	0.6	46.2	0.0	0.0	9.1	9.1	4.4	0.0	61.3
	TOTAL	1.7	51.1	0.6	51.7	0.0	0.0	9.7	9.7	4.4	0.0	67.5
Lower Basin	Tuibustamu Aura Abaura Laka Maad	0.0	9.6	2.0	10.0	0.0	0.0	F4.2	F1 2	0.0	0.0	64.0
Tributary	Tributary Area Above Lake Mead Tributary Area Below Lake Mead	0.9 0.3	9.6 44.6	3.0 2.5	12.6 47.1	0.0 5.3	0.0 0.0	51.3 3.9	51.3 9.2	0.0 0.0	0.0 -2.4	64.9 54.1
Reporting	Gila River	406.2	2,626.4	29.9	2,656.3	76.4	7.7	366.9	9.2 451.0	0.0	-2.4 -15.6	3,498.7
Areas Totals	Little Colorado River	10.6	47.2	6.9	2,030.3 54.1	4.4	4.4	33.9	42.6	0.0	18.0	125.3
	Bill Williams River	30.2	13.4	0.6	14.1	2.2	0.0	0.5	2.7	0.0	0.0	47.0
	Virgin River	1.8	63.1	1.4	64.5	0.0	0.0	9.7	9.7	4.4	0.0	80.4
	Muddy River	4.6	71.6	0.4	72.0	0.0	4.0	1.3	5.2	0.0	0.0	81.8
	TOTAL	454.5	2,875.9	44.8	2,920.7	88.3	16.1	467.5	571.9	5.2	0.0	3,952.3

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² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal an	d Industrial		Ex	oort	
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
	-											
Arizona	Tributary Area Above Lake Mead	0.6	5.1	2.2	7.2	0.0	0.0	4.0	4.0	0.0	0.0	11.8
	Tributary Area Below Lake Mead	0.3	48.1	2.4	50.6	1.9	0.0	4.0	5.8	0.0	0.0	56.7
	Gila River	369.0	2,764.1	27.4	2,791.6	58.3	5.1	378.1	441.5	0.0	-12.4	3,589.6
	Little Colorado River	8.7	58.9	5.8	64.8	3.3	8.8	25.9	38.0	0.0	14.9	126.3
	Bill Williams River	29.7	15.1	0.6	15.7	1.8	0.0	0.6	2.4	0.0	0.0	47.8
	Virgin River	0.1	7.0	0.8	7.8	0.0	0.0	0.3	0.3	0.0	0.0	8.2
	TOTAL	408.3	2,898.4	39.2	2,937.6	65.3	13.9	412.9	492.1	0.0	2.5	3,840.4
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	0.2	1.1	0.7	1.7	0.0	0.0	44.7	44.7	0.0	0.0	46.6
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	2.5	0.0	0.1	2.6	0.0	-2.5	0.1
	Virgin River	0.0	12.6	0.0	12.6	0.0	0.0	0.3	0.3	0.0	0.0	12.9
	Muddy River	4.6	99.8	0.4	100.2	0.0	3.8	1.3	5.1	0.0	0.0	110.0
	TOTAL	4.8	113.5	1.1	114.6	2.5	3.8	46.5	52.8	0.0	-2.5	169.7
New Mexico	Gila River	0.7	12.9	2.3	15.2	4.9	0.0	0.5	5.4	0.8	0.0	22.1
	Little Colorado River	1.0	0.0	0.9	0.9	0.7	0.0	8.4	9.0	0.0	0.0	11.0
	TOTAL	1.7	12.9	3.2	16.1	5.6	0.0	8.8	14.4	0.8	0.0	33.0
Utah	Tributary Area Above Lake Mead	0.0	13.8	0.0	13.8	0.0	0.0	0.5	0.5	0.0	0.0	14.4
	Virgin River	1.3	65.1	0.5	65.6	0.0	0.0	9.8	9.8	4.8	0.0	81.6
	TOTAL	1.3	78.9	0.6	79.5	0.0	0.0	10.4	10.4	4.8	0.0	95.9
Lower Basin	Tulburdania Anna Abassa I alia Marad	0.7	40.0	0.0	00.0	0.0	0.0	40.0	40.0	0.0	0.0	70.0
Tributary		0.7	19.9	2.9	22.8	0.0	0.0	49.3	49.3	0.0	0.0	72.8
Reporting	Tributary Area Below Lake Mead Gila River	0.3	48.1	2.4	50.6	4.4	0.0	4.2 378.6	8.5	0.0	-2.5	56.9
Areas Totals	Little Colorado River	369.7 9.7	2,777.1 58.9	29.7 6.7	2,806.8 65.7	63.2 4.0	5.1 8.8	3/8.6	446.9 47.0	0.8 0.0	-12.4 14.9	3,611.7 137.3
	Bill Williams River	29.7	15.1	0.6	15.7	1.8	0.0	0.6	2.4	0.0	0.0	47.8
	Virgin River	1.4	84.7	1.3	86.0	0.0	0.0	10.5	10.5	4.8	0.0	102.7
	Muddy River TOTAL	4.6	99.8	<u>0.4</u> 44.1	<u>100.2</u> 3.147.8	73.3	3.8 17.7	1.3 478.7	5.1 569.7	5.6	0.0	110.0 4,139.2
	TOTAL	410.2	3,103.7	44.1	3,147.8	13.3	17.7	4/8./	209.7	0.0	0.0	4,139.2

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² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal and	d Industrial		Ex	oort	o acre-leet)
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
State	Tributary	Lvaporation	Agriculture	& LIVESTOCK	Subtotal	Resources	rowei	Other	Subtotal	System	System	TOTAL
Arizona	Tributary Area Above Lake Mead	0.7	4.3	2.3	6.5	0.0	0.0	4.2	4.2	0.0	0.0	11.4
	Tributary Area Below Lake Mead	0.3	62.8	2.5	65.3	1.8	0.0	4.1	5.9	0.0	0.0	71.4
	Gila River	215.3	2,951.1	27.6	2,978.7	54.5	5.6	391.0	451.1	0.0	-6.9	3,638.1
	Little Colorado River	9.4	54.4	5.9	60.3	3.1	15.1	26.1	44.3	0.0	9.7	123.7
	Bill Williams River	20.1	14.5	0.6	15.2	1.7	0.0	0.6	2.3	0.0	0.0	37.6
	Virgin River	0.1	7.1	0.7	7.9	0.0	0.0	0.3	0.3	0.0	0.0	8.3
	TOTAL	245.8	3,094.2	39.6	3,133.8	61.1	20.6	426.4	508.1	0.0	2.8	3,890.5
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	0.2	1.1	0.7	1.8	0.0	0.0	44.8	44.8	0.0	0.0	46.8
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	2.9	0.0	0.1	3.0	0.0	-2.8	0.2
	Virgin River	0.0	11.5	0.0	11.5	0.0	0.0	0.3	0.3	0.0	0.0	11.8
	Muddy River	4.8	92.6	0.4	93.0	0.6	3.9	1.4	5.9	0.0	0.0	103.7
	TOTAL	4.9	105.2	1.1	106.3	3.5	3.9	46.6	54.0	0.0	-2.8	162.5
New Mexico	Gila River	0.6	12.8	2.0	14.8	6.0	0.0	0.6	6.6	1.0	0.0	22.9
	Little Colorado River	1.0	0.0	0.9	0.9	1.2	0.0	8.3	9.5	0.0	0.0	11.4
	TOTAL	1.6	12.8	2.9	15.7	7.2	0.0	8.9	16.1	1.0	0.0	34.3
Utah	Tributary Area Above Lake Mead	0.0	11.2	0.0	11.2	0.0	0.0	0.5	0.5	0.0	0.0	11.8
	Virgin River	1.6	54.6	0.6	55.2	0.0	0.0	10.5	10.5	1.4	0.0	68.7
	TOTAL	1.6	65.7	0.6	66.4	0.0	0.0	11.1	11.1	1.4	0.0	80.4
Lower Basin	Tributary Area Above Lake Mead	0.9	16.5	3.0	19.5	0.0	0.0	49.6	49.6	0.0	0.0	70.0
Tributary	Tributary Area Below Lake Mead	0.3	62.8	2.5	65.3	4.7	0.0	4.3	9.0	0.0	-2.8	70.0
Reporting	Gila River	215.9	2,963.9	2.5	2,993.4	60.6	5.6	4.3 391.6	9.0 457.7	1.0	-2.0 -6.9	3,661.1
Areas Totals	Little Colorado River	10.3	2,903.9 54.4	6.8	61.3	4.3	15.1	34.4	53.8	0.0	9.7	135.1
	Bill Williams River	20.1	14.5	0.6	15.2	1.7	0.0	0.6	2.3	0.0	0.0	37.6
	Virgin River	1.7	73.2	1.3	74.6	0.0	0.0	11.2	11.2	1.4	0.0	88.9
	Muddy River	4.8	92.6	0.4	93.0	0.6	3.9	1.4	5.9	0.0	0.0	103.7
	TOTAL	253.9	3,277.9	44.3	3,322.2	71.9	24.5	493.0	589.4	2.4	0.0	4,168.0

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² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal an	d Industrial		Ex	port	
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
Arizona	Tributary Area Above Lake Mead	0.5	3.1	2.2	5.3	0.0	0.0	4.4	4.4	0.0	0.0	10.2
	Tributary Area Below Lake Mead	0.3	47.5	2.4	49.9	2.2	0.0	4.2	6.4	0.0	0.0	56.6
	Gila River	178.5	2,495.5	26.3	2,521.8	72.2	2.9	402.3	477.5	0.0	-14.8	3,163.0
	Little Colorado River	7.1	41.4	5.6	47.0	2.2	17.0	26.5	45.7	0.0	18.1	117.9
	Bill Williams River	15.0	14.2	0.6	14.8	2.3	0.0	0.6	2.9	0.0	0.0	32.7
	Virgin River	0.1	5.9	0.7	6.7	0.0	0.0	0.4	0.4	0.0	0.0	7.1
	TOTAL	201.6	2,607.7	37.7	2,645.4	78.9	19.9	438.4	537.2	0.0	3.3	3,387.5
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	0.2	0.4	0.7	1.1	0.0	0.0	38.1	38.1	0.0	0.0	39.4
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	1.8	0.0	0.1	1.9	0.0	-3.3	-1.4
	Virgin River	0.0	9.7	0.0	9.7	0.0	0.0	0.4	0.4	0.0	0.0	10.0
	Muddy River	4.6	70.2	0.4	70.6	0.6	3.9	1.4	5.9	0.0	0.0	81.0
	TOTAL	4.7	80.3	1.1	81.4	2.4	3.9	40.0	46.3	0.0	-3.3	129.1
New Mexico	Gila River	0.5	12.2	2.4	14.5	3.5	0.0	0.3	3.8	0.8	0.0	19.6
	Little Colorado River	0.9	0.1	0.9	1.0	1.2	0.0	8.4	9.6	0.0	0.0	11.4
	TOTAL	1.4	12.2	3.3	15.5	4.7	0.0	8.7	13.4	0.8	0.0	31.0
Utah	Tributary Area Above Lake Mead	0.0	9.3	0.0	9.4	0.0	0.0	0.6	0.6	0.0	0.0	10.0
	Virgin River	1.4	41.1	0.6	41.6	0.0	0.0	11.0	11.0	2.8	0.0	56.8
	TOTAL	1.4	50.4	0.6	51.0	0.0	0.0	11.6	11.6	2.8	0.0	66.8
I ama Baala												
Lower Basin Tributary		0.7	12.8	2.9	15.8	0.0	0.0	43.1	43.1	0.0	0.0	59.6
Reporting	Tributary Area Below Lake Mead	0.3	47.5	2.4	49.9	4.0	0.0	4.5	8.5	0.0	-3.3	55.3
Areas Totals	Gila River	179.0	2,507.7	28.7	2,536.3	75.7	2.9	402.6	481.2	0.8	-14.8	3,182.6
	Little Colorado River	8.0	41.5	6.4	47.9	3.4	17.0	34.9	55.3	0.0	18.1	129.3
	Bill Williams River	15.0	14.2	0.6	14.8	2.3	0.0	0.6	2.9	0.0	0.0	32.7
	Virgin River	1.5	56.7	1.3	57.9	0.0	0.0	11.8	11.8	2.8	0.0	74.0
	Muddy River	4.6	70.2	0.4	70.6	0.6	3.9	1.4	5.9	0.0	0.0	81.0
	TOTAL	209.1	2,750.6	42.7	2,793.3	86.0	23.8	498.8	608.6	3.6	0.0	3,614.6

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

Export

(1,000 acre-feet)

Lower Colorado River System Estimated Tributary Water Use within States, by Major Tributaries and Types of Use¹ 1983

Municipal and Industrial

Agriculture

2.9

2.3

27.5

6.6

0.6

1.3

0.4

41.5

Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.5 3.0 2.2 5.2 0.0 0.0 4.5 4.6 0.0 10.3 0.0 Tributary Area Below Lake Mead 0.2 37.1 2.3 39.4 1.7 0.0 4.4 6.0 0.0 0.0 45.7 Gila River 268.9 2.677.0 25.3 2.702.3 47.9 1.6 414.2 463.7 0.0 -9.8 3,425.1 Little Colorado River 51.2 56.9 27.1 12.9 6.9 5.7 2.7 14.8 44.5 0.0 121.2 **Bill Williams River** 18.3 19.7 0.6 20.3 1.5 0.0 0.6 2.1 0.0 0.0 40.7 Virgin River 0.1 5.9 0.7 6.7 0.0 0.0 0.4 0.4 0.0 0.0 7.1 TOTAL 294.9 2,793.9 36.8 2,830.7 53.8 16.4 451.1 521.3 0.0 3.1 3,650.0 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 Nevada Tributary Area Above Lake Mead 0.2 0.7 0.7 1.4 0.0 0.0 60.8 60.8 0.0 0.0 62.3 Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 1.7 0.0 0.1 1.8 -3.1 -1.3 Virgin River 0.0 0.0 0.0 11.7 11.7 0.0 0.4 0.4 0.0 0.0 12.1 **Muddy River** 4.4 87.7 0.4 88.1 0.6 4.3 1.4 6.3 0.0 0.0 98.9 TOTAL 4.6 100.1 1.1 101.2 2.3 4.3 62.6 69.2 0.0 -3.1 172.0 New Mexico Gila River 0.5 9.8 2.2 12.0 4.6 0.0 0.5 5.0 0.9 0.0 18.4 Little Colorado River 0.8 0.1 0.9 0.9 1.2 0.0 8.5 9.7 0.0 0.0 11.5 TOTAL 3.1 9.0 14.7 0.9 0.0 29.8 1.3 9.8 12.9 5.8 0.0 Utah 0.0 10.4 0.0 10.4 0.0 0.0 0.6 0.0 0.0 Tributary Area Above Lake Mead 0.6 11.0 Virgin River 1.3 51.0 0.5 51.6 0.0 0.0 11.6 11.6 10.2 0.0 74.7 TOTAL 1.3 61.4 0.6 62.0 0.0 0.0 12.2 12.2 10.2 0.0 85.7

17.0

39.4

2.714.3

57.8

20.3

69.9

88.1

3,006.8

0.0

3.4

52.5

3.9

1.5

0.0

0.6

61.9

0.0

0.0

1.6

14.8

0.0

0.0

4.3

20.7

65.9

4.6

414.6

35.6

0.6

12.4

1.4

535.1

65.9

8.0

468.7

54.2

2.1

12.4

6.3

617.6

0.0

0.0

0.9

0.0

0.0

10.2

0.0

11.1

0.0

-3.1

-9.8

12.9

0.0

0.0

0.0

0.0

14.1

37.1

2.686.8

51.2

19.7

68.7

87.7

2,965.3

0.7

0.2

269.4

7.7

18.3

1.4

4.4

302.1

Lower Basin Tributary Area Above Lake Mead

Little Colorado River

Bill Williams River

Gila River

Virgin River

Muddy River

TOTAL

Tributary Area Below Lake Mead

Tributary

Reporting

Areas Totals

83.6

44.5

3.443.4

132.7

40.7

93.9

98.9

3,937.6

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal and	d Industrial		Ex	oort	
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
	,											
Arizona	Tributary Area Above Lake Mead	0.7	2.9	2.4	5.3	0.0	0.0	4.7	4.8	0.0	0.0	10.7
	Tributary Area Below Lake Mead	0.3	20.4	2.4	22.7	1.8	0.0	4.5	6.3	0.0	0.0	29.3
	Gila River	226.6	2,375.1	26.1	2,401.2	53.0	1.8	429.1	484.0	0.0	-17.1	3,094.6
	Little Colorado River	8.5	59.2	5.9	65.0	3.2	16.7	27.4	47.3	0.0	20.0	140.8
	Bill Williams River	19.5	12.8	0.6	13.5	1.6	0.0	0.6	2.3	0.0	0.0	35.2
	Virgin River	0.1	5.2	0.7	5.9	0.0	0.0	0.4	0.4	0.0	0.0	6.4
	TOTAL	255.6	2,475.5	38.1	2,513.6	59.6	18.5	466.8	544.9	0.0	2.9	3,317.0
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	0.2	0.1	0.7	0.8	0.0	0.0	60.9	60.9	0.0	0.0	61.9
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	1.7	0.0	0.1	1.8	0.0	-2.9	-1.1
	Virgin River	0.0	11.2	0.0	11.2	0.0	0.0	0.4	0.4	0.0	0.0	11.5
	Muddy River	4.6	83.5	0.4	83.9	0.6	6.9	1.4	8.9	0.0	0.0	97.4
	TOTAL	4.8	94.8	1.1	95.9	2.3	6.9	62.8	72.0	0.0	-2.9	169.8
New Mexico	Gila River	0.5	10.2	2.4	12.6	4.0	0.0	0.4	4.4	0.5	0.0	18.0
	Little Colorado River	0.9	0.0	0.9	0.9	1.2	0.0	8.7	9.9	0.0	0.0	11.6
	TOTAL	1.4	10.2	3.2	13.5	5.2	0.0	9.1	14.3	0.5	0.0	29.6
Utah	Tributary Area Above Lake Mead	0.0	9.4	0.0	9.4	0.0	0.0	0.6	0.6	0.0	0.0	10.0
	Virgin River	2.8	50.2	0.6	50.8	0.0	0.0	12.4	12.4	2.4	0.0	68.3
	TOTAL	2.8	59.5	0.6	60.2	0.0	0.0	13.0	13.0	2.4	0.0	78.3
Lower Basin												
Tributary		0.9	12.4	3.1	15.5	0.0	0.0	66.2	66.3	0.0	0.0	82.6
Reporting	Tributary Area Below Lake Mead	0.3	20.4	2.4	22.7	3.5	0.0	4.7	8.2	0.0	-2.9	28.3
Areas Totals	Gila River Little Colorado River	227.1	2,385.3	28.5	2,413.8	57.0 4.4	1.8	429.5	488.4	0.5	-17.1	3,112.6
		9.4	59.2	6.7	65.9		16.7	36.1	57.2	0.0	20.0	152.4
	Bill Williams River	19.5	12.8	0.6	13.5	1.6 0.0	0.0	0.6 13.2	2.3	0.0 2.4	0.0 0.0	35.2
	Virgin River	2.9	66.5	1.3	67.8		0.0		13.2			86.3
	Muddy River TOTAL	4.6 264.6	83.5 2,640.1	43.0	2,683.2	0.6 67.1	6.9 25.4	<u>1.4</u> 551.8	8.9 644.3	2.8	0.0	97.4 3,594.9
	TOTAL	204.0	∠,040.1	43.0	2,003.2	07.1	23.4	0.100	044.3	2.0	0.0	3,394.9

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² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal and	d Industrial		Fvi	oort	u acre-feet)
				Stockpond			Thermal	a mausural				
		Reservoir	Irrigated	Evaporation		Mineral	Electric			Outside	Within	
State	Tributary	Evaporation	Agriculture	& Livestock	Subtotal	Resources	Power	Other ²	Subtotal	System	System	TOTAL
Arizona	Tributary Area Above Lake Mead	0.6	4.2	2.4	6.6	0.0	0.0	4.9	4.9	0.0	0.0	12.2
	Tributary Area Below Lake Mead	0.3	32.2	2.5	34.7	1.0	0.0	4.6	5.6	0.0	0.0	40.6
	Gila River	257.3	2,716.2	26.6	2,742.8	90.4	5.7	446.3	542.3	0.0	-42.8	3,499.6
	Little Colorado River	8.3	58.7	5.9	64.6	1.3	18.6	28.0	47.9	0.0	11.0	131.9
	Bill Williams River	22.1	20.3	0.6	21.0	3.0	0.0	0.7	3.7	0.0	0.0	46.7
	Virgin River	0.1	9.4	0.7	10.1	0.0	0.0	0.4	0.4	0.0	0.0	10.7
	TOTAL	288.8	2,841.1	38.7	2,879.8	95.7	24.3	485.0	604.9	0.0	-31.8	3,741.7
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	0.2	0.6	0.7	1.4	0.0	0.0	58.8	58.8	0.0	0.0	60.3
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	-1.8	-1.6
	Virgin River	0.0	13.1	0.0	13.1	0.0	0.0	0.4	0.4	0.0	0.0	13.5
	Muddy River	5.0	89.6	0.4	90.1	0.3	8.1	1.4	9.8	0.0	0.0	104.9
	TOTAL	5.2	103.4	1.2	104.5	0.3	8.1	60.7	69.1	0.0	-1.8	177.1
New Mexico	Gila River	0.4	8.6	2.2	10.8	6.5	0.0	0.4	6.9	1.0	0.0	19.1
	Little Colorado River	0.9	0.1	0.9	1.0	5.6	0.0	8.9	14.5	0.0	0.0	16.4
	TOTAL	1.3	8.7	3.1	11.8	12.1	0.0	9.3	21.4	1.0	0.0	35.5
Utah	Tributary Area Above Lake Mead	0.0	9.9	0.0	9.9	0.0	0.0	0.6	0.6	0.0	0.0	10.6
	Virgin River	2.9	80.3	0.6	80.9	0.0	0.0	13.5	13.5	2.1	0.0	99.4
	TOTAL	2.9	90.2	0.6	90.8	0.0	0.0	14.1	14.1	2.1	0.0	110.0
		0.9	14.7	3.2	17.9	0.0	0.0	64.3	64.3	0.0	0.0	83.1
Tributary Reporting	Tributary Area Below Lake Mead	0.3	32.2	2.5	34.7	1.0	0.0	4.9	5.9	0.0	-1.8	39.1
Areas Totals	Gila River	257.7	2,724.8	28.8	2,753.6	96.9	5.7	446.8	549.3	1.0	-42.8	3,518.8
Alous Iotals	Little Colorado River	9.2	58.8	6.8	65.6	6.9	18.6	36.9	62.4	0.0	11.0	148.3
	Bill Williams River	22.1	20.3	0.6	21.0	3.0	0.0	0.7	3.7	0.0	0.0	46.7
	Virgin River	3.0	102.8	1.3	104.1	0.0	0.0	14.3	14.3	2.1	0.0	123.6
	Muddy River	5.0	89.6	0.4	90.1	0.3	8.1	1.4	9.8	0.0	0.0	104.9
	TOTAL	298.2	3,043.4	43.6	3,087.0	108.1	32.4	569.2	709.8	3.1	-33.5	4,064.5

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² Includes rural, urban, and other industrial uses.

(1,000 acre-feet) Agriculture Municipal and Industrial Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.6 6.2 2.4 8.6 0.0 0.0 5.2 5.2 0.0 14.5 0.0 Tributary Area Below Lake Mead 0.3 46.2 2.4 48.6 1.1 0.0 4.8 5.9 0.0 0.0 54.8 Gila River 2,643.1 2.669.6 0.0 199.4 26.5 105.6 25.1 464.1 594.8 -122.1 3,341.7 Little Colorado River 60.1 28.9 7.9 54.1 6.0 1.4 13.5 43.8 0.0 17.6 129.5 **Bill Williams River** 14.8 28.2 0.6 28.8 3.0 0.0 0.7 3.7 0.0 0.0 47.3 Virgin River 0.1 9.3 0.7 10.0 0.0 0.0 0.4 0.4 0.0 0.0 10.6 TOTAL 223.2 2,787.0 38.8 2,825.8 111.1 38.6 504.1 653.9 0.0 -104.5 3,598.3 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.1 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 0.1 Nevada Tributary Area Above Lake Mead 0.2 1.0 0.7 1.7 0.0 0.0 58.3 58.3 0.0 0.0 60.2 Tributary Area Below Lake Mead 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 -3.1 -3.0 Virgin River 0.0 0.0 0.0 14.3 14.3 0.0 0.4 0.4 0.0 0.0 14.7 **Muddy River** 5.1 120.2 0.4 120.6 0.5 5.2 1.4 7.1 0.0 0.0 132.8 TOTAL 5.2 135.5 1.1 136.6 0.6 5.2 60.2 65.9 0.0 -3.1 204.7 New Mexico Gila River 0.4 9.4 2.3 11.6 4.8 0.0 0.4 5.2 0.7 0.0 18.0 Little Colorado River 0.8 0.3 8.0 1.1 4.6 0.0 8.9 13.5 0.0 0.0 15.4 TOTAL 1.2 12.7 9.4 9.3 0.7 0.0 33.4 9.6 3.1 0.0 18.7 Utah 0.0 0.0 14.3 0.0 0.0 0.6 0.0 0.0 Tributary Area Above Lake Mead 14.3 0.6 15.0 Virgin River 2.9 84.5 0.6 85.1 0.0 0.0 14.8 14.9 2.3 0.0 105.2 TOTAL 2.9 98.8 0.6 99.4 0.0 0.0 15.5 15.5 2.3 0.0 120.2 Lower Basin Tributary Area Above Lake Mead 3.2 0.9 21.5 24.6 0.0 0.0 64.1 64.1 0.0 0.0 89.6 Tributary Tributary Area Below Lake Mead 0.3 46.2 2.4 48.6 1.1 0.0 5.0 6.2 0.0 -3.1 52.0 Reporting Gila River 199.8 2.652.5 28.8 2.681.3 110.4 25.1 464.5 600.0 0.7 -122.1 3.359.7 **Areas Totals** Little Colorado River 8.8 54.3 6.9 61.2 5.9 13.5 37.8 57.3 0.0 17.6 144.9 **Bill Williams River** 28.2 0.6 28.8 0.0 0.7 14.8 3.0 3.7 0.0 0.0 47.3 Virgin River 3.0 108.1 109.4 0.0 15.7 2.3 0.0 130.5 1.3 0.0 15.7 **Muddy River** 120.2 1.4 7.1 5.1 0.4 120.6 0.5 5.2 0.0 0.0 132.8 TOTAL 232.6 3,030.9 43.6 3,074.6 589.3 754.1 121.1 43.8 3.1 -107.6 3,956.7

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal and	d Industrial		Ex	port	o acre-leet)
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
State	Tributary	Lvaporation	Agriculture	G ENGSTOCK	Gubtotai	Resources	1 OWEI	Other	Gubtotai	Oystem	Cystelli	TOTAL
Arizona	Tributary Area Above Lake Mead	0.6	4.7	2.4	7.1	0.0	0.0	5.4	5.4	0.0	0.0	13.1
	Tributary Area Below Lake Mead	0.3	39.1	2.5	41.5	1.3	0.0	4.9	6.2	0.0	0.0	48.0
	Gila River	211.2	2,389.3	26.6	2,416.0	121.0	32.6	481.4	635.0	0.0	-366.3	2,895.8
	Little Colorado River	8.4	57.9	6.1	64.0	1.4	14.7	29.7	45.9	0.0	14.4	132.7
	Bill Williams River	12.0	20.8	0.6	21.5	3.0	0.0	0.8	3.8	0.0	0.0	37.2
	Virgin River	0.1	8.3	0.7	9.0	0.0	0.0	0.4	0.4	0.0	0.0	9.6
	TOTAL	232.5	2,520.2	38.9	2,559.1	126.7	47.3	522.6	696.6	0.0	-351.9	3,136.4
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	0.2	0.8	0.7	1.5	0.0	0.0	59.7	59.7	0.0	0.0	61.4
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	-2.7	-2.5
	Virgin River	0.0	12.8	0.0	12.8	0.0	0.0	0.4	0.4	0.0	0.0	13.2
	Muddy River	4.4	92.8	0.4	93.2	0.8	5.8	1.4	8.0	0.0	0.0	105.6
	TOTAL	4.6	106.4	1.1	107.5	0.8	5.8	61.7	68.3	0.0	-2.7	177.8
New Mexico	Gila River	0.5	7.8	2.4	10.2	5.9	0.0	0.5	6.3	0.3	0.0	17.3
	Little Colorado River	0.9	0.1	0.8	0.9	3.5	0.0	8.9	12.4	0.0	0.0	14.2
	TOTAL	1.4	7.9	3.2	11.1	9.4	0.0	9.3	18.8	0.3	0.0	31.5
Utah	Tributary Area Above Lake Mead	0.0	10.3	0.0	10.3	0.0	0.0	0.7	0.7	0.0	0.0	11.0
	Virgin River	2.6	71.7	0.6	72.3	0.0	0.0	15.9	15.9	3.3	0.0	94.1
	TOTAL	2.6	82.1	0.6	82.7	0.0	0.0	16.6	16.6	3.3	0.0	105.2
Lower Basin	Tributery Area About Lake Mond	0.0	45.0	2.4	40.0	0.0	0.0	65.0	65.0	0.0	0.0	05.0
Tributary	Tributary Area Above Lake Mead Tributary Area Below Lake Mead	0.8 0.3	15.8 39.1	3.1 2.5	19.0 41.5	0.0 1.3	0.0 0.0	65.8 5.2	65.8 6.5	0.0 0.0	0.0 -2.7	85.6 45.6
Reporting	Gila River	0.3 211.7	39.1 2,397.2	2.5 29.0	41.5 2,426.1	1.3	0.0 32.6	5.2 481.9	6.5 641.3	0.0	-2.7 -366.3	45.6 2,913.1
Areas Totals	Little Colorado River	9.3	2,397.2 57.9	29.0 7.0	64.9	5.0	32.6 14.7	38.6	58.3	0.3	-300.3 14.4	2,913.1 146.9
	Bill Williams River	12.0	20.8	0.6	21.5	3.0	0.0	0.8	3.8	0.0	0.0	37.2
	Virgin River	2.7	92.9	1.3	94.2	0.1	0.0	16.8	16.8	3.3	0.0	117.0
	Muddy River	4.4	92.8	0.4	93.2	0.8	5.8	1.4	8.0	0.0	0.0	105.6
	TOTAL	241.2	2,716.5	43.8	2,760.3	136.9	53.2	610.4	800.4	3.5	-354.6	3,450.9

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

(1,000 acre-feet)

Lower Colorado River System Estimated Tributary Water Use within States, by Major Tributaries and Types of Use¹ 1988

Municipal and Industrial

Agriculture Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.7 3.6 2.5 6.1 0.0 0.0 5.7 5.7 0.0 12.5 0.0 Tributary Area Below Lake Mead 0.3 37.8 2.4 40.2 1.4 0.0 5.1 6.5 0.0 0.0 47.0 Gila River 2,417.5 26.3 2,443.8 198.4 136.3 55.4 494.4 686.0 0.0 -512.9 2,815.3 Little Colorado River 52.9 59.1 30.4 48.5 9.7 6.2 1.5 16.6 0.0 16.4 133.7 **Bill Williams River** 10.9 19.5 0.6 20.1 3.0 0.0 0.8 3.8 0.0 0.0 34.8 Virgin River 0.1 7.3 0.7 8.0 0.0 0.0 0.5 0.5 0.0 0.0 8.6 TOTAL 220.1 2,538.6 38.7 2,577.3 142.2 72.0 536.8 751.0 0.0 -496.5 3,051.9 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.2 0.0 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 0.2 Nevada Tributary Area Above Lake Mead 0.2 0.9 0.7 1.7 0.0 0.0 61.8 61.8 0.0 0.0 63.6 Tributary Area Below Lake Mead 0.0 0.0 0.0 0.1 0.0 -2.8 0.0 0.0 0.0 0.2 -2.7 Virgin River 7.7 0.0 7.7 0.0 0.5 0.0 0.0 0.5 0.0 0.0 8.2 **Muddy River** 5.0 97.3 0.4 97.7 1.0 7.2 1.5 9.7 0.0 0.0 112.4 TOTAL 5.2 105.9 1.1 107.1 1.0 7.2 63.9 72.1 0.0 -2.8 181.6 New Mexico Gila River 0.5 7.4 2.2 9.6 5.6 0.0 0.5 6.0 0.3 0.0 16.4 Little Colorado River 0.9 0.0 0.9 0.9 2.5 0.0 8.7 11.2 0.0 0.0 13.0 TOTAL 3.0 9.2 17.2 0.3 0.0 29.4 1.4 7.4 10.5 8.0 0.0 Utah 0.0 8.4 0.0 8.4 0.0 0.0 0.7 0.7 0.0 0.0 Tributary Area Above Lake Mead 9.1 Virgin River 2.9 60.3 0.6 60.9 0.1 0.0 16.6 16.7 5.0 0.0 85.5 TOTAL 3.0 68.7 0.6 69.3 0.1 0.0 17.3 17.4 5.0 0.0 94.6

16.2

40.2

2.453.4

59.9

20.1

76.6

97.7

2,764.1

0.0

1.4

141.8

4.0

3.0

0.1

1.0

151.3

0.0

0.0

55.4

16.6

0.0

0.0

7.2

79.2

68.1

5.4

494.8

39.1

0.8

17.5

1.5

627.3

68.1

6.8

692.0

59.7

3.8

17.6

9.7

857.8

0.0

0.0

0.3

0.0

0.0

5.0

0.0

0.0

-2.8

-512.9

16.4

0.0

0.0

0.0

-499.3

3.2

2.4

28.5

7.0

0.6

1.3

0.4

43.5

12.9

37.8

2.424.9

52.9

19.5

75.3

97.3

2,720.6

0.9

0.3

198.8

10.6

10.9

3.1

5.0

229.7

Lower Basin Tributary Area Above Lake Mead

Little Colorado River

Bill Williams River

Gila River

Virgin River

Muddy River

TOTAL

Tributary Area Below Lake Mead

Tributary

Reporting

Areas Totals

85.2

44.5

2.831.7

146.7

34.8

102.3

112.4

3,357.6

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² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal and	d Industrial		Ex	port	o acre-leet)
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
State	Tributary	Lvaporation	Agriculture	G ENTOCIOON	Gustotai	11000011000		Othor	Gubtotui	oyoto	- Cyclonii	TOTAL
Arizona	Tributary Area Above Lake Mead	0.8	2.8	2.6	5.4	0.0	0.0	5.9	6.0	0.0	0.0	12.2
	Tributary Area Below Lake Mead	0.3	40.4	2.5	43.0	1.5	0.0	5.4	6.9	0.0	0.0	50.1
	Gila River	183.9	2,368.1	26.9	2,395.0	151.6	22.4	504.1	678.1	0.0	-772.8	2,484.2
	Little Colorado River	12.5	42.7	6.5	49.2	1.6	20.7	31.0	53.3	0.0	16.2	131.1
	Bill Williams River	12.7	18.9	0.7	19.6	3.0	0.0	0.8	3.8	0.0	0.0	36.1
	Virgin River	0.1	8.3	0.7	9.1	0.0	0.0	0.5	0.5	0.0	0.0	9.7
	TOTAL	210.3	2,481.3	40.0	2,521.2	157.7	43.1	547.8	748.6	0.0	-756.6	2,723.5
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2
Nevada	Tributary Area Above Lake Mead	0.2	0.6	0.7	1.4	0.0	0.0	61.0	61.0	0.0	0.0	62.6
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	-2.4	-2.2
	Virgin River	0.0	11.9	0.0	11.9	0.0	0.0	0.5	0.5	0.0	0.0	12.4
	Muddy River	5.2	90.1	0.4	90.5	1.2	7.5	1.6	10.2	0.0	0.0	106.0
	TOTAL	5.4	102.6	1.2	103.8	1.2	7.5	63.2	71.9	0.0	-2.4	178.7
New Mexico	Gila River	0.6	9.6	2.6	12.2	6.7	0.0	0.5	7.3	1.0	0.0	21.0
	Little Colorado River	1.1	0.0	0.9	0.9	1.4	0.0	8.7	10.1	0.0	0.0	12.2
	TOTAL	1.7	9.6	3.5	13.1	8.1	0.0	9.3	17.4	1.0	0.0	33.2
Utah	Tributary Area Above Lake Mead	0.0	7.9	0.0	7.9	0.0	0.0	0.7	0.7	0.0	0.0	8.6
	Virgin River	3.3	56.1	0.6	56.7	0.1	0.0	17.3	17.4	0.2	0.0	77.7
	TOTAL	3.4	63.9	0.6	64.6	0.1	0.0	18.0	18.1	0.2	0.0	86.2
Lower Basin	Tuibustamu Aura Abaura Laka Maad	4.4	44.0	2.4	44.7	0.0	0.0	67.6	67.6	0.0	0.0	02.4
Tributary	Tributary Area Above Lake Mead Tributary Area Below Lake Mead	1.1 0.3	11.3 40.4	3.4 2.5	14.7 43.0	0.0 1.5	0.0 0.0	67.6 5.7	67.6 7.3	0.0 0.0	0.0 -2.4	83.4 48.1
Reporting	Gila River	0.3 184.5	40.4 2,377.8	2.5 29.5	43.0 2,407.2	1.5	0.0 22.4	5.7 504.6	7.3 685.3	1.0	-2.4 -772.8	2,505.2
Areas Totals	Little Colorado River	13.6	42.7	7.5	2,407.2 50.1	3.0	20.7	39.7	63.5	0.0	-772.6 16.2	143.3
	Bill Williams River	12.7	18.9	0.7	19.6	3.0	0.0	0.8	3.8	0.0	0.0	36.1
	Virgin River	3.5	76.3	1.4	77.6	0.1	0.0	18.3	18.4	0.0	0.0	99.8
	Muddy River	5.2	90.1	0.4	90.5	1.2	7.5	1.6	10.4	0.0	0.0	106.0
	TOTAL	220.8	2,657.4	45.3	2,702.7	167.2	50.6	638.4	856.2	1.2	-759.0	3,021.9

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² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal and	d Industrial		Ex	port	o acre-leet)
		Reservoir	Irrigated	Stockpond Evaporation		Mineral	Thermal Electric			Outside	Within	
State	Tributary	Evaporation	Agriculture	& Livestock	Subtotal	Resources	Power	Other ²	Subtotal	System	System	TOTAL
Arizona	Tributary Area Above Lake Mead	0.6	3.6	2.3	5.9	0.0	0.0	6.3	6.4	0.0	0.0	12.8
	Tributary Area Below Lake Mead	0.3	51.4	2.4	53.8	1.6	0.0	5.7	7.3	0.0	0.0	61.4
	Gila River	111.1	2,299.2	24.9	2,324.1	166.8	49.9	512.1	728.8	0.0	-783.0	2,381.0
	Little Colorado River	9.5	44.2	5.9	50.2	1.7	19.0	31.5	52.2	0.0	6.3	118.2
	Bill Williams River	9.9	20.5	0.6	21.1	3.0	0.0	0.9	3.9	0.0	0.0	34.9
	Virgin River	0.1	8.4	0.7	9.1	0.0	0.0	0.6	0.6	0.0	0.0	9.8
	TOTAL	131.5	2,427.2	37.0	2,464.2	173.2	68.8	557.1	799.1	0.0	-776.7	2,618.1
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2
Nevada	Tributary Area Above Lake Mead	0.2	1.4	0.7	2.1	0.0	0.0	53.0	53.0	0.0	0.0	55.4
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	-2.4	-2.2
	Virgin River	0.0	8.7	0.0	8.7	0.0	0.0	0.5	0.5	0.0	0.0	9.3
	Muddy River	4.9	104.8	0.4	105.2	1.4	6.7	1.7	9.8	0.0	0.0	119.8
	TOTAL	5.1	114.9	1.1	116.0	1.4	6.7	55.4	63.5	0.0	-2.4	182.3
New Mexico	Gila River	0.5	9.3	2.3	11.7	6.9	0.0	0.4	7.4	0.6	0.0	20.1
	Little Colorado River	0.9	0.0	0.8	8.0	0.4	0.0	8.9	9.3	0.0	0.0	11.0
	TOTAL	1.4	9.3	3.2	12.5	7.3	0.0	9.4	16.7	0.6	0.0	31.1
Utah	Tributary Area Above Lake Mead	0.0	7.4	0.0	7.4	0.0	0.0	0.7	0.7	0.0	0.0	8.1
	Virgin River	2.9	54.3	0.6	54.9	0.1	0.0	18.2	18.3	0.2	0.0	76.4
	TOTAL	3.0	61.7	0.6	62.3	0.1	0.0	18.9	19.0	0.2	0.0	84.5
Lower Basin	Tributary Area Above Lake Mead	0.8	12.4	3.1	15.5	0.0	0.0	60.0	60.1	0.0	0.0	76.3
Tributary	Tributary Area Below Lake Mead	0.3	51.4	2.4	53.8	1.7	0.0	6.0	7.7	0.0	-2.4	76.3 59.4
Reporting	Gila River	111.5	2,308.5	2.4	2,335.8	173.8	49.9	512.6	736.2	0.6	-2.4 -783.0	2,401.1
Areas Totals	Little Colorado River	10.4	44.2	6.8	2,333.6 51.0	2.0	19.0	40.4	61.4	0.0	6.3	129.2
	Bill Williams River	9.9	20.5	0.6	21.1	3.0	0.0	0.9	3.9	0.0	0.0	34.9
	Virgin River	3.1	71.4	1.3	72.7	0.1	0.0	19.3	19.4	0.0	0.0	95.4
	Muddy River	4.9	104.8	0.4	105.2	1.4	6.7	1.7	9.8	0.0	0.0	119.8
	TOTAL	140.9	2,613.2	41.8	2,655.0	182.1	75.5	640.9	898.5	0.8	-779.1	2,916.2

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² Includes rural, urban, and other industrial uses.

Export

(1,000 acre-feet)

Lower Colorado River System Estimated Tributary Water Use within States, by Major Tributaries and Types of Use¹ 1991

Municipal and Industrial

Agriculture

3.1

2.4

26.9

6.7

0.6

1.3

0.4

41.4

Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.6 2.0 2.3 4.3 0.0 0.0 6.7 6.8 0.0 11.7 0.0 Tributary Area Below Lake Mead 0.3 41.7 2.4 44.1 5.7 0.0 6.1 11.8 0.0 0.0 56.2 Gila River 183.2 2,346.8 24.7 2.371.5 745.8 158.2 58.9 528.7 0.0 -456.7 2,843.8 Little Colorado River 41.9 47.8 32.2 54.2 0.0 9.4 5.9 1.7 20.3 5.6 117.0 **Bill Williams River** 10.8 17.7 0.6 18.3 7.7 0.0 0.9 8.6 0.0 0.0 37.8 Virgin River 0.1 7.1 0.7 7.8 0.0 0.0 0.6 0.6 0.0 0.0 8.6 TOTAL 204.5 2,457.2 36.6 2,493.8 173.4 79.2 575.2 827.8 0.0 -451.0 3,075.0 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.2 0.0 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 0.2 Nevada Tributary Area Above Lake Mead 1.2 0.7 0.7 1.4 0.0 0.0 56.7 56.7 0.0 0.0 59.3 Tributary Area Below Lake Mead 0.0 0.2 0.0 -2.8 -2.6 0.0 0.0 0.0 0.0 0.0 0.2 Virgin River 9.2 0.0 9.2 0.0 0.6 9.8 0.0 0.0 0.6 0.0 0.0 **Muddy River** 5.0 90.6 0.4 91.0 1.4 6.4 1.7 9.6 0.0 0.0 105.6 **TOTAL** 6.2 100.5 1.1 101.6 1.4 6.4 59.2 67.1 0.0 -2.8 172.1 New Mexico Gila River 0.5 9.3 2.3 11.5 5.7 0.0 0.4 6.1 0.5 0.0 18.7 Little Colorado River 0.9 0.1 8.0 1.0 0.3 0.0 9.3 9.6 0.0 0.0 11.5 TOTAL 3.1 12.5 6.0 9.7 15.7 0.5 0.0 30.2 1.5 9.4 0.0 Utah 0.0 6.0 0.0 6.1 0.0 0.0 0.7 0.0 0.0 Tributary Area Above Lake Mead 0.7 6.8 Virgin River 3.0 56.3 0.6 56.9 0.1 0.0 19.7 19.8 8.0 0.0 80.5 TOTAL 3.1 62.4 0.6 62.9 0.1 0.0 20.3 20.5 8.0 0.0 87.3

11.8

44.1

2.383.0

48.8

18.3

73.9

91.0

2,670.9

0.0

5.7

163.9

2.0

7.7

0.1

1.4

181.0

0.0

0.0

58.9

20.3

0.0

0.0

6.4

85.6

64.1

6.4

529.1

41.5

0.9

20.9

1.7

664.7

64.1

12.2

752.0

63.8

8.6

21.1

9.6

931.3

0.0

0.0

0.5

0.0

0.0

8.0

0.0

1.3

0.0

-2.8

-456.7

5.6

0.0

0.0

0.0

-453.8

1 The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

8.7

41.7

2.356.1

42.0

17.7

72.6

90.6

2,629.4

1.8

0.3

183.7

10.4

10.8

3.2

5.0

215.2

Lower Basin Tributary Area Above Lake Mead

Little Colorado River

Bill Williams River

Gila River

Virgin River

Muddy River

TOTAL

Tributary Area Below Lake Mead

Tributary

Reporting

Areas Totals

77.7

53.8

2.862.5

128.6

37.8 98.9

105.6

3,364.8

² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal an	d Industrial		Ex	port	
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
			J							.,	.,	
Arizona	Tributary Area Above Lake Mead	0.5	7.3	2.1	9.5	0.0	0.0	7.1	7.1	0.0	0.0	17.1
	Tributary Area Below Lake Mead	0.2	35.0	2.3	37.3	9.8	0.0	6.5	16.3	0.0	0.0	53.8
	Gila River	154.0	2,685.1	23.0	2,708.1	149.6	60.8	546.9	757.3	0.0	-592.2	3,027.3
	Little Colorado River	6.8	64.4	5.3	69.7	1.8	24.0	32.9	58.7	0.0	2.8	138.0
	Bill Williams River	8.9	24.3	0.6	24.9	12.4	0.0	0.9	13.4	0.0	0.0	47.1
	Virgin River	0.1	7.7	0.7	8.4	0.0	0.0	0.7	0.7	0.0	0.0	9.2
	TOTAL	170.6	2,823.8	34.1	2,857.8	173.7	84.8	595.0	853.4	0.0	-589.4	3,292.4
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2
Nevada	Tributary Area Above Lake Mead	1.1	1.2	0.7	1.9	0.0	0.0	63.8	63.8	0.0	0.0	66.8
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	-2.7	-2.4
	Virgin River	0.0	9.2	0.0	9.2	0.0	0.0	0.7	0.7	0.0	0.0	9.9
	Muddy River	4.7	102.4	0.4	102.8	1.4	5.2	1.8	8.3	0.0	0.0	115.8
	TOTAL	5.8	112.8	1.0	113.8	1.4	5.2	66.5	73.1	0.0	-2.7	190.1
New Mexico	Gila River	0.5	7.5	2.3	9.8	4.0	0.0	0.4	4.4	0.3	0.0	15.1
	Little Colorado River	0.9	0.2	0.8	1.0	0.2	0.0	9.6	9.8	0.0	0.0	11.7
	TOTAL	1.4	7.8	3.1	10.9	4.3	0.0	10.0	14.2	0.3	0.0	26.8
Utah	Tributary Area Above Lake Mead	0.0	12.2	0.0	12.2	0.0	0.0	0.7	0.7	0.0	0.0	12.9
	Virgin River	2.6	69.4	0.5	69.9	0.2	0.0	21.0	21.2	4.2	0.0	97.9
	TOTAL	2.6	81.6	0.5	82.1	0.2	0.0	21.7	21.9	4.2	0.0	110.8
Lower Basin		4.0	00.0	0.0	20.0	0.0	0.0	74.5	71.0	0.0		
Tributary		1.6	20.8	2.8	23.6	0.0	0.0	71.5	71.6	0.0	0.0	96.8
Reporting	Tributary Area Below Lake Mead	0.2	35.0	2.3	37.3	9.8	0.0	6.8	16.7	0.0	-2.7	51.5
Areas Totals	Gila River Little Colorado River	154.6 7.7	2,692.6 64.7	25.3 6.1	2,717.9 70.8	153.6 2.0	60.8	547.3 42.5	761.7 68.5	0.3 0.0	-592.2 2.8	3,042.3 149.7
							24.0					
	Bill Williams River	8.9	24.3	0.6	24.9	12.4 0.2	0.0	0.9 22.4	13.4	0.0 4.2	0.0 0.0	47.1
	Virgin River	2.7	86.2	1.2	87.5		0.0		22.6			116.9
	Muddy River TOTAL	4.7 180.4	3,025.9	38.7	3.064.6	1.4 179.5	90.0	1.8 693.3	8.3 962.8	4.5		115.8 3,620.3
	TOTAL	100.4	3,023.9	30.1	3,004.0	179.5	90.0	093.3	902.0	4.5	-392.1	3,020.3

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

(1,000 acre-feet) Agriculture Municipal and Industrial Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.5 6.6 2.1 8.7 0.0 0.0 7.4 7.5 0.0 16.8 0.0 Tributary Area Below Lake Mead 0.3 34.6 2.3 37.0 13.8 0.0 6.9 20.8 0.0 0.0 58.0 Gila River 333.3 2.631.6 23.5 2.655.1 762.6 0.0 141.0 52.9 568.7 -1,029.1 2,722.0 Little Colorado River 60.9 5.4 66.3 33.9 0.0 8.4 1.8 26.2 61.9 6.8 143.5 **Bill Williams River** 13.4 23.3 0.5 23.9 17.2 0.0 0.9 18.1 0.0 0.0 55.4 Virgin River 0.1 7.3 0.7 8.0 0.0 0.0 0.7 0.7 0.0 0.0 8.9 TOTAL 356.0 2,764.4 34.7 2,799.0 173.9 79.1 618.6 871.6 0.0 -1,022.2 3,004.4 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 Nevada Tributary Area Above Lake Mead 1.2 1.2 0.7 1.9 0.0 0.0 63.2 63.2 0.0 0.0 66.3 Tributary Area Below Lake Mead 0.0 0.0 0.2 0.0 -2.6 -2.3 0.0 0.0 0.0 0.0 0.2 Virgin River 0.0 0.0 0.8 0.0 11.1 11.1 0.0 0.8 0.0 0.0 12.0 **Muddy River** 4.8 98.6 0.4 99.0 1.4 6.0 1.8 9.2 0.0 0.0 113.0 **TOTAL** 6.0 110.9 1.1 112.0 1.4 6.0 66.0 73.4 0.0 -2.6 188.9 New Mexico Gila River 0.5 9.8 2.3 12.2 3.2 0.0 0.4 3.6 0.4 0.0 16.6 Little Colorado River 0.9 0.3 8.0 1.1 0.2 0.0 9.7 9.9 0.0 0.0 11.9 TOTAL 3.2 13.2 3.3 0.4 0.0 28.5 1.4 10.1 0.0 10.1 13.4 Utah 0.0 10.4 0.0 10.4 0.0 0.0 0.7 0.0 0.0 Tributary Area Above Lake Mead 0.7 11.2 Virgin River 2.6 64.3 0.5 64.8 0.2 0.0 22.8 22.9 6.2 0.0 96.5 TOTAL 2.6 74.7 0.5 75.2 0.2 0.0 23.5 23.7 6.2 0.0 107.7 Lower Basin Tributary Area Above Lake Mead 2.8 1.8 18.2 21.0 0.0 0.0 71.3 71.4 0.0 0.0 94.2 Tributary Tributary Area Below Lake Mead 0.3 34.6 2.3 37.0 13.9 0.0 7.3 21.1 0.0 -2.6 55.8 Reporting Gila River 333.9 2.641.4 25.8 2.667.3 144.2 52.9 569.1 766.2 0.4 -1.029.12.738.6 **Areas Totals** Little Colorado River 9.3 67.4 61.2 6.3 2.0 26.2 43.6 71.8 0.0 6.8 155.3 **Bill Williams River** 13.4 23.3 0.5 23.9 0.0 0.9 17.2 18.1 0.0 0.0 55.4 Virgin River 2.7 82.8 84.0 24.3 1.2 0.2 0.0 24.5 6.2 0.0 117.3 **Muddy River** 98.6 0.4 1.8 9.2 0.0 4.8 99.0 1.4 6.0 0.0 113.0

2,999.5

178.8

718.4

85.0

982.3

6.5

-1,024.8

2,960.1

39.4

366.1

TOTAL

3,329.6

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

Export

(1,000 acre-feet)

Lower Colorado River System Estimated Tributary Water Use within States, by Major Tributaries and Types of Use¹ 1994

Municipal and Industrial

Agriculture

0.7

0.0

0.0

0.4

1.1

2.4

8.0

3.1

0.0

Stockpond Thermal Reservoir Irrigated Evaporation Mineral Electric Outside Within State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.7 4.6 2.3 7.0 0.0 0.0 7.8 7.8 0.0 0.0 15.5 Tributary Area Below Lake Mead 0.3 31.9 2.5 34.4 17.9 0.0 7.2 25.2 0.0 0.0 59.8 Gila River 204.0 2,644.9 24.8 2,669.6 132.4 56.2 594.6 783.2 0.0 -746.8 2,910.0 Little Colorado River 9.9 60.7 5.5 66.3 26.2 34.8 62.9 0.0 18.0 1.9 157.1 **Bill Williams River** 0.6 22.9 0.0 11.5 10.5 11.1 21.9 0.0 1.0 0.0 45.5 Virgin River 0.1 6.8 0.7 7.5 0.0 0.0 0.8 8.0 0.0 0.0 8.5 TOTAL 226.4 2,759.6 36.4 2,796.0 174.1 82.4 646.3 902.8 0.0 -728.8 3,196.4 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 TOTAL 0.0 0.1 0.1

1.5

0.0

9.9

91.2

102.6

10.4

8.0

11.2

9.2

0.0

0.0

0.0

1.4

1.4

4.7

0.1

4.8

0.0

0.0

0.0

0.0

4.7

4.7

0.0

0.0

0.0

0.0

66.0

0.2

1.0

1.9

69.1

0.4

9.9

10.3

0.7

66.0

0.3

1.0

8.0

75.2

5.1

10.0

15.1

0.7

0.0

0.0

0.0

0.0

0.0

0.6

0.0

0.6

0.0

0.0

-2.8

0.0

0.0

-2.8

0.0

0.0

0.0

0.0

68.8

-2.6

10.9

104.1

181.2

16.6

11.7

28.4

10.0

	Virgin River	2.9	67.6	0.5	68.2	0.2	0.0	24.9	25.0	1.2	0.0	97.3
	TOTAL	2.9	76.8	0.6	77.4	0.2	0.0	25.6	25.8	1.2	0.0	107.3
Lawar Basin												
Lower Basin		2.0	14.7	3.1	17.7	0.0	0.0	74.5	74.6	0.0	0.0	94.3
Tributary	Tributary Area Below Lake Mead	0.3	31.9	2.5	34.4	18.0	0.0	7.6	25.6	0.0	-2.8	57.4
Reporting	Gila River	204.6	2,652.9	27.1	2,680.0	137.0	56.2	595.0	788.3	0.6	-746.8	2,926.7
Areas Totals	Little Colorado River	10.8	60.8	6.3	67.1	2.0	26.2	44.8	73.0	0.0	18.0	168.8
	Bill Williams River	11.5	10.5	0.6	11.1	21.9	0.0	1.0	22.9	0.0	0.0	45.5
	Virgin River	3.0	84.4	1.2	85.6	0.2	0.0	26.6	26.8	1.2	0.0	116.6
	Muddy River	4.9	90.8	0.4	91.2	1.4	4.7	1.9	8.0	0.0	0.0	104.1
	TOTAL	237.1	2,945.9	41.2	2,987.1	180.5	87.2	751.4	1,019.0	1.8	-731.6	3,513.4
¹ The subtotals:	and totals may differ from the sum of the dis	nlaved values due	to total being calculate	ed before rounding	all values to the ne	arest 1 000 acre-fe	eet .					

1.3

0.0

0.0

4.9

6.2

0.6

0.9

1.5

0.0

8.0

0.0

9.9

90.8

101.5

8.0

0.0

8.0

9.2

Tributary Area Above Lake Mead

Tributary Area Below Lake Mead

Tributary Area Above Lake Mead

Virgin River

Muddy River

Little Colorado River

TOTAL

TOTAL

New Mexico Gila River

Nevada

Utah

² Includes rural, urban, and other industrial uses.

(1,000 acre-feet) Agriculture Municipal and Industrial Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.7 3.9 2.2 6.1 0.0 0.0 8.1 8.2 0.0 0.0 15.0 Tributary Area Below Lake Mead 0.3 35.9 2.5 38.3 22.0 0.0 7.6 29.6 0.0 0.0 68.2 Gila River 3,085.7 25.5 3.111.2 620.3 808.0 0.0 267.8 123.7 63.9 -797.8 3,389.1 Little Colorado River 45.1 50.7 20.2 35.8 0.0 11.0 5.5 1.9 57.9 15.6 135.1 **Bill Williams River** 13.9 11.6 0.6 12.2 26.6 0.0 1.0 27.6 0.0 0.0 53.8 Virgin River 0.1 6.6 0.7 7.2 0.0 0.0 0.9 0.9 0.0 0.0 8.2 TOTAL 293.8 3,188.7 37.0 3,225.7 174.3 84.1 673.7 932.1 0.0 -782.3 3,669.4 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.1 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 Nevada Tributary Area Above Lake Mead 1.3 8.0 0.7 1.5 0.0 0.0 65.0 65.0 0.0 0.0 67.8 Tributary Area Below Lake Mead 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.3 -3.0 -2.7 Virgin River 8.5 0.0 8.5 0.0 0.0 0.0 1.1 1.1 0.0 0.0 9.6 **Muddy River** 4.7 98.0 0.4 98.4 1.4 4.0 1.9 7.3 0.0 0.0 110.4 TOTAL 6.0 107.3 1.1 108.4 1.4 4.0 68.2 73.7 0.0 -3.0 185.1 New Mexico Gila River 0.7 10.0 2.6 12.6 6.2 0.0 0.5 6.6 0.4 0.0 20.3 Little Colorado River 1.0 0.0 8.0 0.9 0.0 0.0 10.2 10.2 0.0 0.0 12.1 TOTAL 1.7 3.4 6.2 0.4 0.0 32.4 10.0 13.4 0.0 10.6 16.8 Utah 0.0 10.8 0.0 10.8 0.0 0.0 8.0 0.0 0.0 Tributary Area Above Lake Mead 8.0 11.6 Virgin River 2.6 65.8 0.5 66.3 0.2 0.0 26.9 27.1 8.3 0.0 104.4 TOTAL 2.7 76.5 0.5 77.1 0.2 0.0 27.7 27.9 8.3 0.0 115.9 Lower Basin Tributary Area Above Lake Mead 2.9 2.0 15.5 18.4 0.0 0.0 73.8 73.9 0.0 0.0 94.3 Tributary Tributary Area Below Lake Mead 0.3 35.9 2.5 38.3 22.0 0.0 8.0 30.0 0.0 -3.0 65.6 Reporting Gila River 268.5 3.095.6 28.1 3.123.7 129.9 63.9 620.8 814.6 0.4 -797.8 3.409.4 **Areas Totals** Little Colorado River 12.0 45.2 6.3 51.5 2.0 20.2 45.9 68.1 0.0 15.6 147.2 **Bill Williams River** 13.9 0.6 12.2 0.0 1.0 11.6 26.6 27.6 0.0 0.0 53.8 Virgin River 2.8 80.8 82.0 28.9 29.1 1.2 0.2 0.0 8.3 0.0 122.2 **Muddy River** 4.7 98.0 0.4 1.9 7.3 0.0 98.4 1.4 4.0 0.0 110.4 TOTAL 304.2 3,382.6 42.0 3,424.6 182.1 780.4 88.1 1,050.6 8.8 -785.3 4,003.0

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² Includes rural, urban, and other industrial uses.

(1,000 acre-feet) Agriculture Municipal and Industrial Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.8 3.6 2.4 5.9 0.0 0.0 8.4 8.4 0.0 15.1 0.0 Tributary Area Below Lake Mead 0.3 34.3 2.6 36.8 17.6 0.0 8.1 25.7 0.0 0.0 62.8 Gila River 2.858.6 2.884.8 828.6 0.0 207.6 26.2 117.7 68.5 642.4 -1,198.2 2,722.9 Little Colorado River 53.2 58.7 22.3 36.5 0.0 4.9 135.9 11.7 5.6 1.8 60.6 **Bill Williams River** 14.7 9.1 0.6 9.7 25.7 0.0 1.0 26.7 0.0 0.0 51.1 Virgin River 0.1 4.6 0.6 5.2 0.0 0.0 0.9 0.9 0.0 0.0 6.3 TOTAL 235.2 2,963.3 38.0 3,001.3 162.8 90.8 697.2 950.9 0.0 -1,193.3 2,994.1 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.1 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 0.1 Nevada Tributary Area Above Lake Mead 1.3 8.0 0.7 1.5 0.0 0.0 69.8 69.8 0.0 0.0 72.6 Tributary Area Below Lake Mead 0.0 0.0 0.2 0.0 -2.8 -2.5 0.0 0.0 0.0 0.0 0.3 Virgin River 7.7 0.0 7.7 0.0 0.0 0.0 1.3 1.3 0.0 0.0 9.0 **Muddy River** 2.0 5.2 91.4 0.4 91.8 2.1 4.4 8.5 0.0 0.0 105.5 TOTAL 6.5 99.9 1.1 101.0 2.1 4.4 73.3 79.8 0.0 -2.8 184.6 New Mexico Gila River 0.6 8.7 2.4 11.1 6.0 0.0 0.5 6.4 8.0 0.0 18.9 Little Colorado River 1.0 0.0 8.0 0.8 0.0 0.0 10.4 10.4 0.0 0.0 12.1 TOTAL 1.6 3.2 6.0 0.8 0.0 8.7 11.9 0.0 10.8 16.8 31.0 Utah 0.0 6.9 0.0 6.9 0.0 0.0 8.0 0.0 0.0 Tributary Area Above Lake Mead 8.0 7.7 Virgin River 3.0 52.7 0.5 53.3 0.2 0.0 28.8 28.9 3.3 0.0 88.5 TOTAL 3.0 59.6 0.6 60.2 0.2 0.0 29.5 29.7 3.3 0.0 96.3 Lower Basin Tributary Area Above Lake Mead 3.1 2.1 11.3 14.3 0.0 0.0 78.9 79.0 0.0 0.0 95.5 Tributary Tributary Area Below Lake Mead 0.3 34.3 2.6 36.8 17.6 0.0 8.4 26.0 0.0 -2.8 60.4 Reporting Gila River 208.2 2.867.3 28.7 2.895.9 123.6 68.5 642.9 835.0 8.0 -1.198.2 2.741.8 **Areas Totals** Little Colorado River 12.7 59.5 53.2 6.4 1.8 22.3 46.8 71.0 0.0 4.9 148.0 **Bill Williams River** 14.7 9.1 9.7 1.0 0.6 25.7 0.0 26.7 0.0 0.0 51.1 Virgin River 3.1 65.0 66.2 31.0 31.1 3.3 1.2 0.2 0.0 0.0 103.8

91.8

3,174.4

2.1

171.0

2.0

811.0

4.4

95.3

0.0

4.2

0.0

-1,196.1

8.5

1,077.3

5.2

246.3

91.4

3,131.5

0.4

42.9

Muddy River

TOTAL

105.5

3,306.1

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal an	d Industrial		Ex	port	
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
			J							.,	.,	
Arizona	Tributary Area Above Lake Mead	0.7	3.2	2.2	5.5	0.0	0.0	8.6	8.6	0.0	0.0	14.8
	Tributary Area Below Lake Mead	0.3	35.4	2.4	37.8	13.2	0.0	8.5	21.7	0.0	0.0	59.8
	Gila River	165.3	2,507.3	25.8	2,533.1	111.7	70.0	663.9	845.6	0.0	-1,424.4	2,119.5
	Little Colorado River	9.9	56.1	5.0	61.1	1.7	23.9	37.0	62.7	0.0	13.3	147.0
	Bill Williams River	10.7	9.4	0.6	10.0	24.8	0.0	1.0	25.8	0.0	0.0	46.4
	Virgin River	0.1	5.2	0.6	5.8	0.0	0.0	1.0	1.0	0.0	0.0	6.9
	TOTAL	186.9	2,616.6	36.6	2,653.2	151.4	93.9	720.0	965.3	0.0	-1,411.1	2,394.4
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	1.4	0.9	0.7	1.6	0.0	0.0	69.2	69.2	0.0	0.0	72.1
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	-2.9	-2.6
	Virgin River	0.0	8.5	0.0	8.5	0.0	0.0	1.5	1.5	0.0	0.0	9.9
	Muddy River	4.9	91.9	0.4	92.3	2.7	5.2	2.1	10.0	0.0	0.0	107.2
	TOTAL	6.3	101.3	1.1	102.4	2.7	5.2	72.9	80.9	0.0	-2.9	186.7
New Mexico	Gila River	0.6	10.2	2.4	12.6	4.5	0.0	0.4	5.0	0.9	0.0	19.0
	Little Colorado River	0.9	0.0	0.7	0.7	0.0	0.0	10.5	10.5	0.0	0.0	12.1
	TOTAL	1.4	10.2	3.1	13.3	4.6	0.0	10.9	15.4	0.9	0.0	31.1
Utah	Tributary Area Above Lake Mead	0.0	11.7	0.0	11.7	0.0	0.0	0.8	0.8	0.0	0.0	12.5
	Virgin River	2.9	66.3	0.5	66.9	0.1	0.0	30.2	30.3	3.3	0.0	103.4
	TOTAL	2.9	78.0	0.6	78.6	0.1	0.0	30.9	31.0	3.3	0.0	115.9
Lower Basin												
Tributary		2.1	15.9	2.9	18.8	0.0	0.0	78.5	78.6	0.0	0.0	99.4
Reporting	Tributary Area Below Lake Mead	0.3	35.4	2.4	37.8	13.2	0.0	8.8	22.0	0.0	-2.9	57.3
Areas Totals	Gila River Little Colorado River	165.9 10.8	2,517.5 56.1	28.1 5.7	2,545.6 61.8	116.2 1.7	70.0 23.9	664.3 47.5	850.5	0.9 0.0	-1,424.4 13.3	2,138.5 159.1
									73.2			
	Bill Williams River	10.7	9.4	0.6	10.0 81.1	24.8 0.1	0.0	1.0	25.8	0.0 3.3	0.0 0.0	46.4
	Virgin River	3.0	80.0	1.2			0.0	32.6	32.7			120.2
	Muddy River TOTAL	4.9 197.5	91.9	<u>0.4</u> 41.3	92.3	<u>2.7</u> 158.8	<u>5.2</u> 99.1	2.1 834.9	1,092.8	4.3	-1.413.9	107.2 2,728.2
	TOTAL	G. 181	∠,000.∠	41.3	2,041.3	100.0	99.1	034.9	1,092.0	4.3	-1,413.9	2,120.2

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

Export

(1,000 acre-feet)

Lower Colorado River System Estimated Tributary Water Use within States, by Major Tributaries and Types of Use¹ 1998

Municipal and Industrial

Agriculture

Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.6 3.6 2.0 5.7 0.0 0.0 8.8 8.8 0.0 0.0 15.0 Tributary Area Below Lake Mead 0.3 46.1 2.4 48.5 8.8 0.0 8.9 17.7 0.0 0.0 66.5 Gila River 176.1 2.623.5 25.7 2.649.2 863.7 105.6 72.8 685.3 0.0 -1,243.12,445.9 Little Colorado River 56.8 61.7 25.2 9.6 5.0 1.6 37.3 64.1 0.0 17.6 153.1 **Bill Williams River** 13.7 12.8 0.5 13.4 23.8 0.0 1.0 24.9 0.0 0.0 51.9 Virgin River 0.1 5.8 0.6 6.3 0.0 0.0 1.0 1.0 0.0 0.0 7.4 TOTAL 200.3 2,748.6 36.2 2,784.8 139.9 98.0 742.3 980.2 0.0 -1,225.4 2,739.8 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.1 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 Nevada Tributary Area Above Lake Mead 1.3 1.2 0.6 1.8 0.0 0.0 65.8 65.8 0.0 0.0 68.9 Tributary Area Below Lake Mead 0.0 0.0 0.3 0.0 -2.8 -2.5 0.0 0.0 0.0 0.0 0.3 Virgin River 8.0 0.0 0.0 0.0 8.0 0.0 1.6 1.6 0.0 0.0 9.7 **Muddy River** 4.2 103.1 0.4 103.5 3.4 7.5 2.1 13.0 0.0 0.0 120.7 TOTAL 5.5 112.3 1.0 113.3 3.4 7.5 69.8 0.0 -2.8 196.7 8.08 New Mexico Gila River 0.6 12.0 2.5 14.5 5.4 0.0 0.4 5.8 8.0 0.0 21.7 Little Colorado River 0.9 0.0 0.7 0.8 0.0 0.0 10.6 10.6 0.0 0.0 12.2 TOTAL 3.2 5.4 0.8 0.0 33.9 1.5 12.1 15.2 0.0 11.0 16.4 Utah 0.0 10.7 0.0 10.7 0.0 0.0 0.8 0.0 0.0 Tributary Area Above Lake Mead 8.0 11.5 Virgin River 2.4 66.5 0.5 67.0 0.1 0.0 31.4 31.5 3.3 0.0 104.2 TOTAL 2.4 77.2 0.5 77.7 0.1 0.0 32.2 32.2 3.3 0.0 115.7

18.2

48.5

2.663.7

62.5

13.4

81.4

103.5

2,991.0

0.0

8.8

111.0

1.6

23.8

0.1

3.4

148.7

0.0

0.0

72.8

25.2

0.0

0.0

7.5

105.5

75.3

9.2

685.7

47.9

1.0

34.0

2.1

855.3

75.4

18.0

869.5

74.7

24.9

34.1

13.0

1,109.6

0.0

0.0

8.0

0.0

0.0

3.3

0.0

4.2

0.0

-2.8

-1.243.1

17.6

0.0

0.0

0.0

-1,228.2

15.5

46.1

2.635.5

56.8

12.8

80.3

103.1

2,950.2

2.7

2.4

28.1

5.7

0.5

1.0

0.4

40.8

1.9

0.3

176.7

10.5

13.7

2.5

4.2

209.7

Lower Basin Tributary Area Above Lake Mead

Little Colorado River

Bill Williams River

Gila River

Virgin River

Muddy River

TOTAL

Tributary Area Below Lake Mead

Tributary

Reporting

Areas Totals

95.4

64.0

2.467.6

165.3

51.9

121.3

120.7

3,086.3

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal an	d Industrial		Ex	port	
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
	•	-								-		
Arizona	Tributary Area Above Lake Mead	0.7	2.0	2.2	4.2	0.0	0.0	9.0	9.0	0.0	0.0	13.9
	Tributary Area Below Lake Mead	0.3	47.9	2.5	50.4	4.4	0.0	9.3	13.7	0.0	0.0	64.4
	Gila River	183.6	2,362.5	27.0	2,389.5	99.6	74.5	704.4	878.5	0.0	-1,393.7	2,057.9
	Little Colorado River	11.1	60.4	5.2	65.6	1.5	26.6	37.6	65.7	0.0	8.5	150.9
	Bill Williams River	15.2	10.2	0.6	10.8	22.9	0.0	1.0	24.0	0.0	0.0	49.9
	Virgin River	0.1	5.1	0.5	5.7	0.0	0.0	1.1	1.1	0.0	0.0	6.9
	TOTAL	211.0	2,488.1	38.1	2,526.1	128.4	101.1	762.4	991.9	0.0	-1,385.2	2,343.8
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	1.4	0.9	0.7	1.6	0.0	0.0	68.8	68.8	0.0	0.0	71.8
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	-2.9	-2.6
	Virgin River	0.0	8.0	0.0	8.0	0.0	0.0	1.8	1.8	0.0	0.0	9.9
	Muddy River	5.2	88.0	0.4	88.5	4.0	6.9	2.2	13.1	0.0	0.0	106.8
	TOTAL	6.6	97.0	1.1	98.1	4.1	6.9	73.1	84.0	0.0	-2.9	185.9
New Mexico	Gila River	0.7	11.6	2.3	13.9	3.2	0.0	0.4	3.6	0.9	0.0	19.0
	Little Colorado River	1.0	0.0	0.8	0.8	0.0	0.0	10.6	10.6	0.0	0.0	12.5
	TOTAL	1.7	11.6	3.1	14.7	3.2	0.0	11.0	14.2	0.9	0.0	31.5
Utah	Tributary Area Above Lake Mead	0.0	9.2	0.0	9.2	0.0	0.0	0.8	0.8	0.0	0.0	10.0
	Virgin River	3.2	57.3	0.6	57.9	0.0	0.0	32.5	32.5	3.3	0.0	97.0
	TOTAL	3.2	66.5	0.6	67.1	0.0	0.0	33.2	33.3	3.3	0.0	107.0
Lower Basin Tributary		2.1	12.1	2.9	15.0	0.0	0.0	78.6	78.6	0.0	0.0	95.7
Reporting	Tributary Area Below Lake Mead	0.3	47.9	2.5	50.4	4.4	0.0	9.7	14.1	0.0	-2.9	61.8
Areas Totals	Gila River	184.3	2,374.1	29.4	2,403.4	102.8	74.5	704.8	882.0	0.9	-1,393.7	2,076.9
	Little Colorado River	12.1	60.5	6.0	66.4	1.5	26.6	48.2	76.4	0.0	8.5	163.4
	Bill Williams River	15.2	10.2	0.6	10.8	22.9	0.0	1.0	24.0	0.0	0.0	49.9
	Virgin River	3.4	70.5	1.1	71.6	0.0	0.0	35.4	35.4	3.3	0.0	113.7
	Muddy River TOTAL	5.2	88.0	<u>0.4</u> 42.8	88.5	4.0	6.9 108.0	2.2 879.8	13.1	4.2	0.0	106.8
	TOTAL	222.5	2,663.2	42.8	2,706.0	135.7	108.0	8/9.8	1,123.5	4.2	-1,388.2	2,668.2

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal an	d Industrial		Ex	port	
State	Tributary	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
	,	· ·										
Arizona	Tributary Area Above Lake Mead	0.7	1.2	2.2	3.4	0.0	0.0	9.2	9.2	0.0	0.0	13.3
	Tributary Area Below Lake Mead	0.3	56.4	2.5	58.9	0.0	0.0	9.7	9.7	0.0	0.0	68.9
	Gila River	165.9	2,209.2	26.9	2,236.1	93.6	77.2	721.4	892.2	0.0	-1,426.2	1,868.0
	Little Colorado River	11.1	41.2	5.1	46.4	1.4	28.2	37.9	67.5	0.0	5.2	130.2
	Bill Williams River	13.2	8.9	0.5	9.5	22.0	0.0	1.1	23.1	0.0	0.0	45.7
	Virgin River	0.1	4.1	0.5	4.6	0.0	0.0	1.1	1.1	0.0	0.0	5.9
	TOTAL	191.2	2,321.1	37.8	2,358.9	117.0	105.4	780.4	1,002.7	0.0	-1,421.0	2,131.8
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	1.5	1.0	0.7	1.7	0.0	0.0	69.5	69.5	0.0	0.0	72.7
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	-3.1	-2.8
	Virgin River	0.0	7.9	0.0	7.9	0.0	0.0	2.0	2.0	0.0	0.0	9.9
	Muddy River	4.9	87.4	0.4	87.8	4.7	7.9	2.2	14.8	0.0	0.0	107.5
	TOTAL	6.3	96.3	1.1	97.4	4.7	7.9	74.0	86.6	0.0	-3.1	187.2
New Mexico	Gila River	0.7	12.4	2.3	14.7	3.5	0.0	0.4	3.9	1.0	0.0	20.2
	Little Colorado River	1.0	0.0	0.8	0.8	0.0	0.0	10.8	10.8	0.0	0.0	12.6
	TOTAL	1.7	12.4	3.0	15.5	3.5	0.0	11.1	14.6	1.0	0.0	32.8
Utah	Tributary Area Above Lake Mead	0.0	7.1	0.0	7.1	0.0	0.0	0.8	0.8	0.0	0.0	7.9
	Virgin River	2.9	51.2	0.5	51.7	0.0	0.0	33.5	33.5	3.3	0.0	91.5
	TOTAL	2.9	58.3	0.6	58.8	0.0	0.0	34.3	34.3	3.3	0.0	99.4
Lower Basin	Talle dam Anna Ale and Lake Mand	0.0	0.0	0.0	40.0	0.0	0.0	70.5	70.5	0.0	0.0	00.0
Tributary		2.2	9.3 56.4	2.9	12.2 58.9	0.0 0.0	0.0	79.5 10.0	79.5	0.0	0.0 -3.1	93.8 66.1
Reporting	Tributary Area Below Lake Mead Gila River	0.3		2.5			0.0 77.2		10.0	0.0	-3.1 -1,426.2	
Areas Totals	Little Colorado River	166.6 12.1	2,221.7 41.3	29.1 5.9	2,250.8 47.2	97.0 1.4	77.2 28.2	721.8 48.6	896.0 78.3	1.0 0.0	-1,426.2 5.2	1,888.2 142.7
	Bill Williams River		41.3 8.9		9.5	22.0				0.0		45.7
	Virgin River	13.2 3.1	8.9 63.2	0.5 1.0	9.5 64.3	0.0	0.0 0.0	1.1 36.6	23.1 36.6	3.3	0.0 0.0	45.7 107.3
	Muddy River	3.1 4.9	63.2 87.4	0.4	64.3 87.8	0.0 4.7	0.0 7.9	36.6 2.2	36.6 14.8	0.0	0.0	107.3
	TOTAL	202.2	2,488.1	42.4	2,530.6	125.1	113.3	899.8	1,138.3	4.4	-1,424.2	2,451.3
	IOIAL	202.2	۷,400. ۱	42.4	2,000.0	120.1	113.3	033.0	1,130.3	4.4	-1,424.2	2,401.3

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

				Agriculture			Municipal and	d Industrial		Ex	port	o acre-leet)
04-4-	Tillion	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
State	Tributary	Evaporation	Agriculture	& LIVESTOCK	Subtotal	Resources	Power	Other	Subtotal	System	System	TOTAL
Arizona	Tributary Area Above Lake Mead	0.7	2.9	2.2	5.0	0.0	0.0	9.3	9.3	0.0	0.0	15.1
	Tributary Area Below Lake Mead	0.3	64.5	2.5	67.0	0.0	0.0	9.9	9.9	0.0	0.0	77.2
	Gila River	192.7	2,386.3	27.6	2,413.8	90.0	67.9	728.0	885.8	0.0	-1,530.3	1,962.0
	Little Colorado River	11.5	45.3	5.2	50.5	1.4	28.7	37.6	67.6	0.0	10.4	139.9
	Bill Williams River	16.8	10.7	0.5	11.2	21.2	0.0	1.1	22.3	0.0	0.0	50.2
	Virgin River	0.1	5.2	0.5	5.7	0.0	0.0	1.2	1.2	0.0	0.0	7.0
	TOTAL	222.1	2,514.8	38.4	2,553.1	112.5	96.6	787.1	996.2	0.0	-1,519.9	2,251.4
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	1.5	1.0	0.6	1.7	0.0	0.0	70.9	70.9	0.0	0.0	74.0
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	-3.1	-2.9
	Virgin River	0.0	8.0	0.0	8.0	0.0	0.0	2.1	2.1	0.0	0.0	10.1
	Muddy River	5.0	90.7	0.4	91.1	4.5	7.2	2.2	13.9	0.0	0.0	110.0
	TOTAL	6.5	99.7	1.1	100.8	4.5	7.2	75.4	87.2	0.0	-3.1	191.3
New Mexico	Gila River	0.5	9.4	2.3	11.7	3.3	0.0	0.4	3.7	0.6	0.0	16.5
	Little Colorado River	1.0	0.0	0.8	0.8	0.1	0.0	10.5	10.6	0.0	0.0	12.4
	TOTAL	1.5	9.4	3.1	12.5	3.4	0.0	10.9	14.3	0.6	0.0	28.9
Utah	Tributary Area Above Lake Mead	0.0	10.0	0.0	10.1	0.0	0.0	0.8	0.8	0.0	0.0	10.9
	Virgin River	3.1	59.7	0.5	60.2	0.0	0.0	33.7	33.7	3.3	0.0	100.4
	TOTAL	3.1	69.7	0.6	70.3	0.0	0.0	34.5	34.5	3.3	0.0	111.2
Lower Basin	Tributary Area Above Lake Mead	2.2	13.9	2.8	16.8	0.0	0.0	80.9	80.9	0.0	0.0	99.9
Tributary	Tributary Area Above Lake Mead Tributary Area Below Lake Mead	0.3	13.9 64.5	2.8 2.5	67.0	0.0	0.0	10.3	80.9 10.3	0.0	-3.1	99.9 74.4
Reporting	Gila River	193.2	2,395.7	29.9	2,425.5	93.3	67.9	728.4	889.5	0.6	-1,530.3	1,978.5
Areas Totals	Little Colorado River	12.5	45.3	5.9	51.3	1.5	28.7	48.1	78.2	0.0	10.4	152.3
	Bill Williams River	16.8	10.7	0.5	11.2	21.2	0.0	1.1	22.3	0.0	0.0	50.2
	Virgin River	3.2	72.9	1.0	73.9	0.0	0.0	37.0	37.0	3.3	0.0	117.4
	Muddy River	5.0	90.7	0.4	91.1	4.5	7.2	2.2	13.9	0.0	0.0	110.0
	TOTAL	233.2	2,693.6	43.1	2,736.7	120.5	103.7	907.9	1,132.1	4.0	-1,523.1	2,582.8

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

Lower Colorado River System Estimated Tributary Water Use within States, by Major Tributaries and Types of Use¹ 2002

(1,000 acre-feet)

				Agriculture			Municipal and	d Industrial		Ex	port	o acre-leet)
State	Taibutanu	Reservoir Evaporation	Irrigated Agriculture	Stockpond Evaporation & Livestock	Subtotal	Mineral Resources	Thermal Electric Power	Other ²	Subtotal	Outside System	Within System	TOTAL
State	Tributary	Evaporation	Agriculture	& Livestock	Subtotal	Resources	Fower	Other	Subtotal	System	System	TOTAL
Arizona	Tributary Area Above Lake Mead	0.8	0.9	2.3	3.2	0.0	0.0	9.5	9.5	0.0	0.0	13.5
	Tributary Area Below Lake Mead	0.3	64.3	2.6	66.9	0.0	0.0	10.2	10.2	0.0	0.0	77.3
	Gila River	184.0	2,228.4	28.9	2,257.3	86.4	72.3	731.0	889.6	0.0	-1,581.8	1,749.1
	Little Colorado River	12.7	46.2	5.3	51.5	1.4	25.7	37.6	64.7	0.0	3.4	132.3
	Bill Williams River	16.2	6.1	0.5	6.6	20.4	0.0	1.1	21.5	0.0	0.0	44.3
	Virgin River	0.2	3.6	0.4	4.0	0.0	0.0	1.2	1.2	0.0	0.0	5.4
	TOTAL	214.2	2,349.4	40.0	2,389.4	108.2	97.9	790.6	996.6	0.0	-1,578.4	2,021.9
California	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada	Tributary Area Above Lake Mead	1.5	0.8	0.7	1.4	0.0	0.0	72.6	72.6	0.0	0.0	75.6
	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	-3.2	-2.9
	Virgin River	0.0	7.9	0.0	7.9	0.0	0.0	2.2	2.2	0.0	0.0	10.1
	Muddy River	5.5	87.5	0.4	88.0	4.4	7.8	2.2	14.4	0.0	0.0	107.9
	TOTAL	7.1	96.2	1.1	97.3	4.4	7.8	77.3	89.5	0.0	-3.2	190.7
New Mexico	Gila River	0.6	11.5	2.1	13.6	3.8	0.0	0.3	4.1	0.7	0.0	19.0
	Little Colorado River	1.0	0.1	0.7	8.0	0.2	0.0	10.2	10.3	0.0	0.0	12.1
	TOTAL	1.6	11.6	2.8	14.3	4.0	0.0	10.4	14.4	0.7	0.0	31.1
Utah	Tributary Area Above Lake Mead	0.0	6.4	0.0	6.4	0.0	0.0	0.8	0.8	0.0	0.0	7.2
	Virgin River	7.2	46.7	0.6	47.3	0.0	0.0	34.0	34.0	3.3	0.0	91.8
	TOTAL	7.3	53.1	0.6	53.7	0.0	0.0	34.7	34.7	3.3	0.0	99.0
Lower Basin	Tributary Area Above Lake Mead	2.4	8.1	3.0	11.0	0.0	0.0	82.9	82.9	0.0	0.0	96.3
Tributary	Tributary Area Above Lake Mead Tributary Area Below Lake Mead	0.3	64.3	2.6	66.9	0.0	0.0	10.5	82.9 10.5	0.0	-3.2	96.3 74.4
Reporting	Gila River	184.7	2,239.8	31.0	2,270.8	90.2	72.3	731.3	893.7	0.0	-3.2 -1,581.8	1,768.1
Areas Totals	Little Colorado River	13.7	46.3	6.0	52.3	1.6	25.7	47.7	75.0	0.0	3.4	1,700.1
	Bill Williams River	16.2	6.1	0.5	6.6	20.4	0.0	1.1	21.5	0.0	0.0	44.3
	Virgin River	7.4	58.2	1.0	59.2	0.0	0.0	37.4	37.4	3.3	0.0	107.3
	Muddy River	5.5	87.5	0.4	88.0	4.4	7.8	2.2	14.4	0.0	0.0	107.9
	TOTAL	230.2	2,510.3	44.5	2,554.8	116.5	105.8	913.0	1,135.3	4.1	-1,581.6	2,342.7

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

(1,000 acre-feet)

Lower Colorado River System Estimated Tributary Water Use within States, by Major Tributaries and Types of Use¹ 2003

Agriculture Municipal and Industrial Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.7 2.1 2.2 4.3 0.0 0.0 9.6 9.6 0.0 14.6 0.0 Tributary Area Below Lake Mead 0.3 71.0 2.5 73.5 0.0 1.3 10.4 11.7 0.0 0.0 85.5 Gila River 2.321.1 28.4 2.349.5 733.3 893.2 0.0 164.5 82.8 77.1 -1,685.4 1,721.8 Little Colorado River 45.6 50.9 27.4 66.2 0.0 11.2 5.3 1.4 37.5 3.3 131.7 **Bill Williams River** 10.8 13.8 0.5 14.3 19.5 0.0 1.1 20.6 0.0 0.0 45.7 Virgin River 0.1 4.6 0.4 5.0 0.0 0.0 1.3 1.3 0.0 0.0 6.4 TOTAL 187.5 2,458.2 39.3 2,497.5 103.8 105.8 793.2 1,002.8 0.0 -1,682.1 2,005.7 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 TOTAL 0.0 0.0 0.0 0.0 0.0 Nevada Tributary Area Above Lake Mead 1.5 1.0 0.6 1.6 0.0 0.0 73.5 73.5 0.0 0.0 76.6 Tributary Area Below Lake Mead 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.2 -3.1 -2.8 Virgin River 8.4 0.0 0.0 2.2 0.0 8.4 0.0 2.2 0.0 0.0 10.6 **Muddy River** 2.2 5.0 89.5 0.4 89.9 4.2 8.1 14.5 0.0 0.0 109.5 99.9 TOTAL 6.6 98.9 1.0 4.2 8.1 78.2 90.5 0.0 -3.1 193.9 New Mexico Gila River 0.6 13.5 2.8 16.2 3.6 0.0 0.2 3.9 0.5 0.0 21.2 Little Colorado River 1.1 0.1 8.0 0.9 0.2 0.0 9.9 10.1 0.0 0.0 12.0 TOTAL 3.6 3.9 0.5 0.0 33.3 1.7 13.6 17.1 0.0 10.1 14.0 Utah 0.0 8.5 0.0 8.5 0.0 0.0 0.7 0.0 0.0 Tributary Area Above Lake Mead 0.7 9.3 Virgin River 6.5 52.8 0.5 53.4 0.0 0.0 34.2 34.2 3.3 0.0 97.4 TOTAL 6.6 61.3 0.6 61.8 0.0 0.0 34.9 34.9 3.3 0.0 106.7 Lower Basin Tributary Area Above Lake Mead 2.8 2.2 11.6 14.4 0.0 0.0 83.9 83.9 0.0 0.0 100.5 Tributary Tributary Area Below Lake Mead 0.3 71.0 2.5 73.5 0.0 1.3 10.8 12.1 0.0 -3.1 82.8 Reporting Gila River 165.1 2.334.5 31.2 2.365.8 86.4 77.1 733.5 897.1 0.5 -1.685.4 1.743.0 **Areas Totals** Little Colorado River 12.3 45.8 0.0

51.8

14.3

66.7

89.9

2,676.4

1.6

19.5

0.0

4.2

111.8

27.4

0.0

0.0

8.1

113.9

47.3

1.1

37.7

2.2

916.5

76.3

20.6

37.7

14.5

1,142.2

0.0

3.3

0.0

3.8

6.1

0.5

1.0

0.4

44.4

13.8

65.7

89.5

2,632.0

10.8

6.7

5.0

202.4

Virgin River

Muddy River

TOTAL

Bill Williams River

143.7

45.7

114.5

109.5

2,339.6

3.3

0.0

0.0

0.0

-1,685.2

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² Includes rural, urban, and other industrial uses.

Lower Colorado River System Estimated Tributary Water Use within States, by Major Tributaries and Types of Use¹ 2004

(1,000 acre-feet)

Arizona Ti G Li B V Ti California Ti	Tributary Tributary Area Above Lake Mead Tributary Area Below Lake Mead Gila River Little Colorado River Bill Williams River Virgin River TOTAL Tributary Area Below Lake Mead TOTAL	0.6 0.3 171.0 10.2 8.9 0.1 191.1	2.4 61.6 2,272.2 44.4 9.1 3.2 2,393.0	Stockpond Evaporation & Livestock 2.0 2.4 28.6 5.1 0.5 0.4	4.3 64.0 2,300.8 49.5	Mineral Resources 0.0 0.0 79.2	Thermal Electric Power 0.0 1.2 84.0	9.9 10.8 739.1	9.9 12.0	Outside System 0.0 0.0	Within System 0.0 0.0	14.8 76.2
Arizona Ti G Li B V Ti California Ti	Tributary Area Above Lake Mead Tributary Area Below Lake Mead Gila River Little Colorado River Bill Williams River Virgin River TOTAL Tributary Area Below Lake Mead	0.6 0.3 171.0 10.2 8.9 0.1	2.4 61.6 2,272.2 44.4 9.1 3.2	2.0 2.4 28.6 5.1 0.5	4.3 64.0 2,300.8 49.5	0.0 0.0 79.2	0.0 1.2	9.9 10.8	9.9 12.0	0.0 0.0	0.0 0.0	14.8
Ti G Li B V Ti	Tributary Area Below Lake Mead Gila River Little Colorado River Bill Williams River Virgin River TOTAL Tributary Area Below Lake Mead	0.3 171.0 10.2 8.9 0.1	61.6 2,272.2 44.4 9.1 3.2	2.4 28.6 5.1 0.5	64.0 2,300.8 49.5	0.0 79.2	1.2	10.8	12.0	0.0	0.0	
Ti G Li B V Ti	Tributary Area Below Lake Mead Gila River Little Colorado River Bill Williams River Virgin River TOTAL Tributary Area Below Lake Mead	0.3 171.0 10.2 8.9 0.1	2,272.2 44.4 9.1 3.2	2.4 28.6 5.1 0.5	2,300.8 49.5	79.2	1.2		12.0			76.2
Li B V Tr California T	Little Colorado River Bill Williams River Virgin River TOTAL Tributary Area Below Lake Mead	10.2 8.9 0.1 191.1	9.1 3.2	5.1 0.5	49.5		84.0	730 1				
B V Tr California	Bill Williams River Virgin River TOTAL Tributary Area Below Lake Mead	8.9 0.1 191.1	9.1 3.2	0.5				105.1	902.2	0.0	-1,666.5	1,707.6
V T California T	Virgin River TOTAL Tributary Area Below Lake Mead	0.1 191.1	3.2		0.0	1.4	27.7	37.3	66.4	0.0	3.2	129.4
To California To	TOTAL Tributary Area Below Lake Mead	191.1		0.4	9.6	18.7	0.0	1.1	19.9	0.0	0.0	38.3
California T	Tributary Area Below Lake Mead		2,393.0		3.6	0.0	0.0	1.4	1.4	0.0	0.0	5.1
= :	•	0.0		38.9	2,431.9	99.3	112.9	799.5	1,011.8	0.0	-1,663.3	1,971.4
T	TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Nevada T	Tributary Area Above Lake Mead	1.4	1.2	0.6	1.8	0.0	0.0	72.4	72.4	0.0	0.0	75.7
Т	Tributary Area Below Lake Mead	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	-3.0	-2.8
V	Virgin River	0.0	7.8	0.0	7.8	0.0	0.0	2.3	2.3	0.0	0.0	10.2
M	Muddy River	4.7	88.4	0.4	88.8	4.0	8.0	2.2	14.3	0.0	0.0	107.7
T	TOTAL	6.1	97.4	1.0	98.4	4.0	8.0	77.2	89.2	0.0	-3.0	190.7
New Mexico G	Gila River	0.4	12.6	2.5	15.1	2.6	0.0	0.2	2.8	0.5	0.0	18.9
Li	Little Colorado River	1.1	0.2	0.8	1.0	0.3	0.0	9.7	10.0	0.0	0.0	12.0
T	TOTAL	1.5	12.8	3.3	16.1	2.9	0.0	9.9	12.8	0.5	0.0	30.9
Utah T	Tributary Area Above Lake Mead	0.0	8.6	0.0	8.6	0.0	0.0	0.7	0.7	0.0	0.0	9.4
V	Virgin River	5.5	51.0	0.5	51.4	0.0	0.0	34.8	34.8	3.3	0.0	95.1
T	TOTAL	5.5	59.5	0.5	60.0	0.0	0.0	35.5	35.5	3.3	0.0	104.4
Lower Basin T	Tributeru Area Aberra Leka Masad	2.4	40.0	2.6	44.0	0.0	0.0	02.0	92.0	0.0	0.0	00.0
	Tributary Area Above Lake Mead Tributary Area Below Lake Mead	2.1 0.3	12.2 61.6	2.6 2.4	14.8 64.0	0.0 0.0	0.0 1.2	83.0 11.1	83.0 12.3	0.0 0.0	0.0 -3.0	99.8 73.5
Banartina	Gila River	0.3 171.4	2,284.9	2. 4 31.1	64.0 2,315.9	0.0 81.8	84.0	739.3	905.1	0.0	-3.0 -1,666.5	73.5 1,726.5
Arose Totale	Little Colorado River	171.4	2,284.9 44.6	5.9	2,315.9 50.5	1.7	84.0 27.7	739.3 47.0	905.1 76.4	0.0	3.2	1,726.5
	Bill Williams River	8.9	9.1	0.5	9.6	18.7	0.0	1.1	19.9	0.0	0.0	38.3
	Virgin River	5.6	62.0	0.9	62.9	0.0	0.0	38.5	38.5	3.3	0.0	110.3
	Muddy River	4.7	88.4	0.4	88.8	4.0	8.0	2.2	14.3	0.0	0.0	10.3
	TOTAL	204.2	2,562.8	43.7	2,606.5	106.3	120.9	922.2	1,149.3	3.9	-1,666.3	2,297.5

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

Lower Colorado River System Estimated Tributary Water Use within States, by Major Tributaries and Types of Use¹ 2005

(1,000 acre-feet) Agriculture Municipal and Industrial Export Stockpond Thermal Irrigated Evaporation Electric Outside Within Reservoir Mineral State Tributary Evaporation Agriculture & Livestock Subtotal Resources Power Other² Subtotal System System TOTAL Arizona Tributary Area Above Lake Mead 0.6 4.5 2.1 6.6 0.0 0.0 10.0 10.0 0.0 0.0 17.2 Tributary Area Below Lake Mead 0.3 60.0 2.4 62.3 0.0 8.0 11.2 12.0 0.0 0.0 74.6 Gila River 28.9 2.455.6 263.6 2,426.7 75.6 82.5 748.9 907.0 0.0 -1,320.22.306.0 Little Colorado River 47.8 53.0 29.3 37.1 10.5 5.2 1.4 67.8 0.0 3.4 134.8 **Bill Williams River** 18.2 16.3 0.5 16.8 17.9 0.0 1.1 19.1 0.0 0.0 54.1 Virgin River 0.1 4.0 0.4 4.5 0.0 0.0 1.5 1.5 0.0 0.0 6.0 TOTAL 293.3 2,559.3 39.5 2,598.8 94.9 112.6 809.9 1,017.5 0.0 -1,316.8 2,592.8 California Tributary Area Below Lake Mead 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.1 TOTAL 0.0 0.0 0.0 0.0 0.0 Nevada Tributary Area Above Lake Mead 1.4 0.9 0.6 1.5 0.0 0.0 62.3 62.3 0.0 0.0 65.3 Tributary Area Below Lake Mead 0.0 0.2 0.0 -2.9 0.0 0.0 0.0 0.0 0.0 0.2 -3.1 Virgin River 7.7 0.0 0.0 2.4 2.4 0.0 7.7 0.0 0.0 0.0 10.1 **Muddy River** 4.6 100.0 0.4 100.4 3.8 7.8 2.3 13.9 0.0 0.0 118.9 TOTAL 6.1 108.6 1.0 109.6 3.8 7.8 67.2 78.8 0.0 -3.1 191.3 New Mexico Gila River 0.5 12.3 2.0 14.4 3.6 0.0 0.2 3.8 0.4 0.0 19.1 Little Colorado River 1.0 0.6 8.0 1.4 0.4 0.0 9.4 9.8 0.0 0.0 12.2 TOTAL 1.6 2.8 4.0 0.4 0.0 31.3 12.9 15.8 0.0 9.6 13.6 Utah 0.0 10.8 0.0 10.8 0.0 0.0 8.0 0.0 0.0 Tributary Area Above Lake Mead 8.0 11.6 Virgin River 5.4 66.6 0.5 67.1 0.0 0.0 35.6 35.6 3.3 0.0 111.4 TOTAL 5.4 77.4 0.5 77.9 0.0 0.0 36.4 36.4 3.3 0.0 123.0 Lower Basin Tributary Area Above Lake Mead 2.1 16.2 2.7 18.9 0.0 0.0 73.1 73.1 0.0 0.0 94.0 Tributary Tributary Area Below Lake Mead 0.3 60.0 2.4 62.3 0.0 8.0 11.5 12.3 0.0 -3.1 71.8 Reporting Gila River 264.1 2.439.0 31.0 2.470.0 79.2 82.5 749.1 910.9 0.4 -1.320.22.325.1 **Areas Totals** Little Colorado River 48.4 11.5 6.0 54.4 1.8 29.3 46.6 77.6 0.0 3.4 147.0 **Bill Williams River** 18.2 16.3 0.5 16.8 0.0 17.9 1.1 19.1 0.0 0.0 54.1 Virgin River 5.5 78.3 0.9 79.2 0.0 39.5 39.5 0.0 3.3 0.0 127.5 **Muddy River** 100.0 100.4 2.3 13.9 4.6 0.4 3.8 7.8 0.0 0.0 118.9 TOTAL 306.3 2,758.2 43.8 102.8 2,802.0 120.4 923.1 1,146.3 3.7 -1,319.9 2,938.5

¹ The subtotals and totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acre-feet.

² Includes rural, urban, and other industrial uses.

Lower Colorado River System Tributary Irrigated Acreage Estimates^{1,2} 1971-1975

			Irriga	ited Acreage)	
State	Tributary	1971	1972	1973	1974	1975
Arizona	Tributary Area Above Lake Mead	0.2	0.2	0.2	-	0.5
	Tributary Area Below Lake Mead	3.6	3.6	3.6	3.7	5.6
	Gila River	713.1	713.1	713.1	746.8	823.0
	Little Colorado River	10.6	10.6	10.6	14.1	14.7
	Bill Williams River	3.6	3.6	3.6	4.8	3.6
	Virgin River	1.1	1.1	1.1	1.2	1.1
	TOTAL	732.2	732.2	732.2	770.6	848.6
California	Tributary Area Below Lake Mead	-	-	-	-	-
	TOTAL	-	-	-	-	-
Nevada	Tributary Area Above Lake Mead	0.1	0.1	0.1	0.2	0.2
	Tributary Area Below Lake Mead	-	-	-	-	-
	Virgin River	1.8	1.8	1.8	1.9	1.9
	Muddy River	11.2	11.2	11.2	15.0	16.5
	TOTAL	13.1	13.1	13.1	17.1	18.6
New Mexico	Gila River	7.8	7.8	7.7	7.7	8.4
	Little Colorado River	0.2	0.2	0.2	0.2	0.2
	TOTAL	7.9	8.0	7.9	7.8	8.6
Utah	Tributary Area Above Lake Mead	1.5	1.5	1.5	1.6	2.3
	Virgin River	8.2	8.2	8.2	11.1	11.3
	TOTAL	9.7	9.7	9.7	12.7	13.6
L. D. C.	T. No. 4 and Alexandra I. alice Manager	4.0	4.0	4.0	4.0	0.0
Lower Basin	Tributary Area Above Lake Mead	1.8	1.8	1.8	1.8	3.0
Tributary	Tributary Area Below Lake Mead	3.6	3.6	3.6	3.7	5.6
Reporting Areas Totals	Gila River	720.8	720.9	720.8	754.5	831.4
AI Ed S I Ulais	Little Colorado River	10.8	10.8	10.8	14.3	14.9
	Bill Williams River	3.6	3.6	3.6	4.8	3.6
	Virgin River	11.1	11.1	11.1	14.2	14.4
	Muddy River	11.2	11.2	11.2	15.0	16.5
	TOTAL	763.0	763.0	762.9	808.2	889.4

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acres.

² Irrigated acreage includes all irrigated croplands as well as irrigated pasture. It does not include mainstream irrigated acreage.

Lower Colorado River System Tributary Irrigated Acreage Estimates^{1,2} 1976-1980

			Irriga	ated Acreage)	
State	Tributary	1976	1977	1978	1979	1980
Arizona	Tributary Area Above Lake Mead	0.3	1.0	1.2	1.0	1.6
	Tributary Area Below Lake Mead	4.8	8.1	8.3	11.5	12.4
	Gila River	757.3	762.9	685.5	738.7	777.0
	Little Colorado River	13.9	14.8	13.2	13.5	17.1
	Bill Williams River	3.1	4.1	3.7	4.1	4.6
	Virgin River	1.1	1.4	1.3	1.5	2.0
	TOTAL	780.6	792.3	713.2	770.4	814.6
California	Tributary Area Below Lake Mead	-	-	-	-	-
	TOTAL	-	-	-	-	-
Nevada	Tributary Area Above Lake Mead	0.1	0.2	0.2	0.2	0.2
	Tributary Area Below Lake Mead	-	-	-	-	-
	Virgin River	2.0	2.3	2.1	2.0	2.2
	Muddy River	15.6	19.4	15.6	16.2	23.0
	TOTAL	17.7	21.9	17.9	18.4	25.4
New Mexico	Gila River	8.5	7.5	7.8	4.5	7.2
	Little Colorado River	0.2	0.2	-	-	-
	TOTAL	8.7	7.7	7.8	4.5	7.2
Utah	Tributary Area Above Lake Mead	1.7	3.3	2.7	1.6	3.9
	Virgin River	10.3	13.3	13.0	12.8	18.3
	TOTAL	12.0	16.6	15.7	14.4	22.2
	T. 75 . 4 A A	0.4	4.5	4.4	0.7	5.0
Lower Basin	Tributary Area Balaw Lake Mead	2.1	4.5	4.1	2.7	5.6
Tributary	Tributary Area Below Lake Mead	4.8	8.1	8.3	11.5	12.4
Reporting Areas Totals	Gila River	765.8	770.3	693.3	743.2	784.1
AI Eas I Oldis	Little Colorado River	14.1	15.0	13.2	13.5	17.1
	Bill Williams River	3.1	4.1	3.7	4.1	4.6
	Virgin River	13.4	16.9	16.4	16.4	22.6
	Muddy River	15.6	19.4	15.6	16.2	23.0
	IUIAL	819.0	838.4	754.6	807.6	869.4

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acres.

² Irrigated acreage includes all irrigated croplands as well as irrigated pasture. It does not include mainstream irrigated acreage.

Lower Colorado River System Tributary Irrigated Acreage Estimates^{1,2} 1981-1985

			Irriga	ted Acreage)	
State	Tributary	1981	1982	1983	1984	1985
Arizona	Tributary Area Above Lake Mead	1.3	0.9	0.9	0.9	1.1
	Tributary Area Below Lake Mead	16.1	12.2	9.7	5.3	10.3
	Gila River	830.6	700.5	753.6	666.8	712.4
	Little Colorado River	15.8	11.9	14.7	16.9	16.4
	Bill Williams River	4.4	4.2	5.9	3.8	5.0
	Virgin River	1.9	1.7	1.6	1.4	1.8
	TOTAL	870.1	731.5	786.4	695.1	747.0
California	Tributary Area Below Lake Mead	-	-	-	-	-
	TOTAL	-	-	-	-	-
Nevada	Tributary Area Above Lake Mead	0.2	0.1	0.1	0.0	0.1
	Tributary Area Below Lake Mead	-	-	-	-	-
	Virgin River	2.0	1.7	2.1	2.0	2.0
	Muddy River	21.3	16.1	20.3	19.2	19.7
	TOTAL	23.5	17.9	22.5	21.2	21.8
New Mexico	Gila River	6.9	6.8	6.2	5.7	4.5
	Little Colorado River	-	0.0	0.0	-	0.0
	TOTAL	6.9	6.8	6.2	5.7	4.5
Utah	Tributary Area Above Lake Mead	3.2	2.6	3.0	2.6	3.1
	Virgin River	15.3	11.5	14.4	14.1	16.0
	TOTAL	18.5	14.1	17.3	16.7	19.1
Lauran Baain	Tributana Anna Abassa I aka Maad	4.0	2.0	4.0	2.5	4.0
Lower Basin	Tributary Area Bolovy Lake Mead	4.6	3.6	4.0	3.5	4.3
Tributary	Tributary Area Below Lake Mead	16.1	12.2	9.7	5.3	10.3
Reporting Areas Totals	Gila River	837.5	707.3	759.8	672.5	716.9
AI Ed S I Ulais	Little Colorado River	15.8	11.9	14.7	16.9	16.4
	Bill Williams River	4.4	4.2	5.9	3.8	5.0
	Virgin River	19.3	15.0	18.0	17.5	19.9
	Muddy River	21.3	16.1	20.3	19.2	19.7
	TOTAL	919.0	770.3	832.4	738.8	792.5

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acres.

² Irrigated acreage includes all irrigated croplands as well as irrigated pasture. It does not include mainstream irrigated acreage.

Lower Colorado River System Tributary Irrigated Acreage Estimates^{1,2} 1986-1990

			Irriga	ated Acreage	9	
State	Tributary	1986	1987	1988	1989	1990
Arizona	Tributary Area Above Lake Mead	1.5	1.3	1.0	0.7	0.9
	Tributary Area Below Lake Mead	11.8	9.7	9.5	10.5	11.4
	Gila River	747.8	653.8	685.2	677.7	680.6
	Little Colorado River	15.9	15.8	15.6	11.2	13.6
	Bill Williams River	6.1	5.5	5.3	4.2	4.8
	Virgin River	2.2	1.9	1.5	1.6	1.5
	TOTAL	785.2	688.0	718.1	705.9	712.7
California	Tributary Area Below Lake Mead	-	-	-	-	_
	TOTAL	-	-	-	-	-
Nevada	Tributary Area Above Lake Mead	0.2	0.1	0.2	0.1	0.2
	Tributary Area Below Lake Mead	-	-	-	-	-
	Virgin River	2.1	1.9	1.3	1.8	1.3
	Muddy River	24.1	21.2	20.0	19.4	20.8
	TOTAL	26.4	23.3	21.4	21.3	22.3
New Mexico	Gila River	5.3	4.3	4.5	4.3	4.4
	Little Colorado River	0.1	0.0	-	-	-
	TOTAL	5.4	4.3	4.5	4.3	4.4
Utah	Tributary Area Above Lake Mead	3.9	3.2	2.7	2.3	2.2
	Virgin River	19.2	15.5	13.4	11.9	11.2
	TOTAL	23.0	18.7	16.2	14.2	13.4
Lauran Baain	Tributana Anna Abassa I aka Maad	F. F.	4.0	4.0	0.4	2.2
Lower Basin	Tributary Area Bolovy Lake Mead	5.5	4.6	4.0	3.1	3.3
Tributary	Tributary Area Below Lake Mead	11.8	9.7	9.5	10.5	11.4
Reporting Areas Totals	Gila River	753.0	658.1	689.6	682.0	685.0
Areas rotals	Little Colorado River	16.1	15.8	15.6	11.2	13.6
	Bill Williams River	6.1	5.5	5.3	4.2	4.8
	Virgin River	23.5	19.3	16.2	15.3	14.0
	Muddy River	24.1	21.2	20.0	19.4	20.8
	TOTAL	840.0	734.3	760.2	745.6	752.8

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acres.

² Irrigated acreage includes all irrigated croplands as well as irrigated pasture. It does not include mainstream irrigated acreage.

Lower Colorado River System Tributary Irrigated Acreage Estimates^{1,2} 1991-1995

			Irriga	ted Acreage)	
State	Tributary	1991	1992	1993	1994	1995
Arizona	Tributary Area Above Lake Mead	0.5	1.5	1.8	1.1	0.9
	Tributary Area Below Lake Mead	10.1	9.5	11.9	9.4	10.2
	Gila River	630.9	728.6	807.1	675.5	714.4
	Little Colorado River	10.6	17.9	16.8	14.9	9.4
	Bill Williams River	3.7	5.4	5.7	3.2	3.0
	Virgin River	1.5	1.9	2.1	1.8	1.6
	TOTAL	657.3	764.8	845.3	705.9	739.5
California	Tributary Area Below Lake Mead	-	-	-	-	_
	TOTAL	-	-	-	-	-
Nevada	Tributary Area Above Lake Mead	0.1	0.2	0.2	0.2	0.1
	Tributary Area Below Lake Mead	-	-	-	-	-
	Virgin River	1.6	1.3	1.9	1.6	1.3
	Muddy River	19.3	21.8	21.2	19.7	18.1
	TOTAL	21.0	23.3	23.3	21.4	19.6
New Mexico	Gila River	4.8	4.1	5.1	3.6	4.3
	Little Colorado River	0.0	0.1	0.1	0.0	0.0
	TOTAL	4.8	4.1	5.1	3.6	4.3
Utah	Tributary Area Above Lake Mead	1.7	3.5	3.2	2.8	2.8
	Virgin River	11.9	15.0	14.3	14.3	13.0
	TOTAL	13.6	18.5	17.5	17.1	15.7
			5.0	5.0	4.0	0.7
Lower Basin	Tributary Area Above Lake Mead	2.3	5.2	5.2	4.0	3.7
Tributary	Tributary Area Below Lake Mead	10.1	9.5	11.9	9.4	10.2
Reporting	Gila River	635.7	732.7	812.1	679.1	718.6
Areas Totals	Little Colorado River	10.6	17.9	16.9	14.9	9.4
	Bill Williams River	3.7	5.4	5.7	3.2	3.0
	Virgin River	15.0	18.1	18.3	17.7	16.0
	Muddy River	19.3	21.8	21.2	19.7	18.1
	TOTAL	696.8	810.7	891.2	748.1	779.1

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acres.

² Irrigated acreage includes all irrigated croplands as well as irrigated pasture. It does not include mainstream irrigated acreage.

Lower Colorado River System Tributary Irrigated Acreage Estimates^{1,2} 1996-2000

			Irriga	ated Acreage	•	
State	Tributary	1996	1997	1998	1999	2000
Arizona	Tributary Area Above Lake Mead	1.0	0.9	0.9	0.5	0.3
	Tributary Area Below Lake Mead	10.8	11.8	13.1	13.2	15.0
	Gila River	700.0	677.2	715.7	635.1	615.3
	Little Colorado River	14.2	16.5	14.3	17.3	13.1
	Bill Williams River	2.5	3.0	3.5	2.9	2.7
	Virgin River	1.1	1.2	1.6	1.3	1.0
	TOTAL	729.6	710.7	749.1	670.3	647.5
California	Tributary Area Below Lake Mead	-	-	-	-	_
	TOTAL	-	-	-	-	-
Nevada	Tributary Area Above Lake Mead	0.2	0.2	0.2	0.1	0.2
	Tributary Area Below Lake Mead	-	-	-	-	-
	Virgin River	1.2	1.3	1.3	1.3	1.2
	Muddy River	19.3	20.3	21.9	20.3	19.9
	TOTAL	20.6	21.7	23.3	21.7	21.3
New Mexico	Gila River	4.9	5.4	6.3	5.4	5.5
	Little Colorado River	-	0.0	0.0	0.0	0.0
	TOTAL	4.9	5.4	6.3	5.5	5.5
Utah	Tributary Area Above Lake Mead	2.2	3.6	3.0	2.7	2.2
	Virgin River	12.0	15.1	14.9	12.2	11.6
	TOTAL	14.1	18.7	17.9	14.8	13.8
Lauran Baain	Tulbustania Anna Abassa I alsa Maad	0.4	4.7	4.4	0.0	0.7
Lower Basin	Tributary Area Below Lake Mead	3.4	4.7	4.1	3.3	2.7
Tributary	Tributary Area Below Lake Mead	10.8	11.8	13.1	13.2	15.0
Reporting Areas Totals	Gila River	704.9	682.5	722.0	640.5	620.8
AI Cas I Ulais	Little Colorado River	14.2	16.5	14.3	17.3	13.2
	Bill Williams River	2.5	3.0	3.5	2.9	2.7
	Virgin River	14.2	17.6	17.7	14.8	13.9
	Muddy River	19.3	20.3	21.9	20.3	19.9
	TOTAL	769.3	756.4	796.6	712.3	688.1

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acres.

² Irrigated acreage includes all irrigated croplands as well as irrigated pasture. It does not include mainstream irrigated acreage.

Lower Colorado River System Tributary Irrigated Acreage Estimates^{1,2} 2001-2005

			Irriga	ated Acreage	9	
State	Tributary	2001	2002	2003	2004	2005
Arizona	Tributary Area Above Lake Mead	0.8	0.4	0.8	0.8	1.3
	Tributary Area Below Lake Mead	17.8	17.7	19.0	18.9	20.6
	Gila River	672.6	587.7	606.0	596.9	725.5
	Little Colorado River	14.1	14.1	15.1	13.3	15.3
	Bill Williams River	3.3	1.9	4.6	4.6	5.0
	Virgin River	1.5	0.9	1.0	1.0	1.6
	TOTAL	710.1	622.8	646.6	635.5	769.3
California	Tributary Area Below Lake Mead	-	-	-	-	_
	TOTAL	-	-	-	-	-
Nevada	Tributary Area Above Lake Mead	0.2	0.1	0.2	0.2	0.2
	Tributary Area Below Lake Mead	-	-	-	-	-
	Virgin River	1.3	1.3	1.3	1.3	1.2
	Muddy River	20.1	20.2	21.3	21.0	23.2
	TOTAL	21.5	21.7	22.8	22.6	24.6
New Mexico	Gila River	5.2	5.5	5.5	5.5	5.9
	Little Colorado River	0.0	0.0	0.0	0.1	0.2
	TOTAL	5.2	5.5	5.5	5.6	6.1
Utah	Tributary Area Above Lake Mead	2.9	2.2	2.9	2.9	3.2
	Virgin River	13.8	11.5	13.3	13.7	15.0
	TOTAL	16.7	13.7	16.2	16.6	18.2
L. D. L.	T. No. 4 and Alexandra I. alice Manager	2.0	0.7	0.0	0.0	4.0
Lower Basin	Tributary Area Bolovy Lake Mead	3.9	2.7	3.9	3.9	4.6
Tributary	Tributary Area Below Lake Mead	17.8	17.7	19.0	18.9	20.6
Reporting Areas Totals	Gila River	677.8	593.2	611.5	602.5	731.4
AI Ed S I Ulais	Little Colorado River	14.1	14.2	15.1	13.4	15.5
	Bill Williams River	3.3	1.9	4.6	4.6	5.0
	Virgin River	16.6	13.8	15.6	16.0	17.9
	Muddy River	20.1	20.2	21.3	21.0	23.2
	TOTAL	753.5	663.7	691.1	680.3	818.2

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000 acres.

² Irrigated acreage includes all irrigated croplands as well as irrigated pasture. It does not include mainstream irrigated acreage.

Lower Colorado River System Total Population Estimates¹ 1971-1975

			F	Population		(1,000 S)
State	Reporting Area	1971	1972	1973	1974	1975
Arizona	Tributary Area Above Lake Mead	12.5	13.5	14.6	15.6	16.6
	Tributary Area Below Lake Mead	14.6	15.2	15.8	16.3	16.6
	Gila River	1,670.4	1,766.7	1,866.0	1,944.6	1,997.2
	Little Colorado River	101.7	106.8	111.8	117.3	122.5
	Bill Williams River	1.8	1.9	2.1	2.2	2.2
	Virgin River	0.9	1.0	1.1	1.1	1.2
	Mainstream Areas	69.7	72.7	75.9	78.7	80.8
	TOTAL	1,871.6	1,977.8	2,087.2	2,175.8	2,237.2
California	Tributary Area Below Lake Mead	0.5	0.5	0.5	0.5	0.5
	Mainstream Areas	11.9	12.1	12.3	12.6	12.9
	TOTAL	12.3	12.5	12.8	13.1	13.4
Nevada	Tributary Area Above Lake Mead	0.6	0.7	0.7	0.7	0.8
	Tributary Area Below Lake Mead	0.4	0.4	0.4	0.4	0.4
	Virgin River	1.1	1.1	1.2	1.2	1.3
	Muddy River	4.7	4.7	4.9	5.2	5.5
	Mainstream Areas	286.7	299.4	312.5	328.4	343.4
	TOTAL	293.5	306.4	319.6	336.0	351.4
New Mexico	Gila River	3.2	3.3	3.5	3.5	3.6
	Little Colorado River	35.6	36.7	37.0	37.8	39.6
	Mainstream Areas	-	_	_	_	_
	TOTAL	38.7	40.0	40.5	41.3	43.2
Utah	Tributary Area Above Lake Mead	1.8	2.1	2.2	2.3	2.4
	Virgin River	15.4	16.0	17.1	18.4	19.1
	Mainstream Areas	-	-	-	-	-
	TOTAL	17.2	18.1	19.3	20.7	21.5
Lower	Tributary Area Above Lake Mead	15.0	16.3	17.5	18.6	19.7
Colorado River	moduly / mod Bolow Ballo modu	15.4	16.0	16.6	17.2	17.5
System	Gila River	1,673.6	1,770.0	1,869.4	1,948.1	2,000.8
	Little Colorado River	137.3	143.5	148.8	155.1	162.2
	Bill Williams River	1.8	1.9	2.1	2.2	2.2
	Virgin River	17.4	18.1	19.3	20.8	21.6
	Muddy River	4.7	4.7	4.9	5.2	5.5
	Mainstream Areas	368.2	384.2	400.7	419.8	437.1
	TOTAL	2,233.3	2,354.8	2,479.4	2,586.9	2,666.7

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000s of people.

Lower Colorado River System Total Population Estimates¹ 1976-1980

			F	Population		
State	Reporting Area	1976	1977	1978	1979	1980
Arizona	Tributary Area Above Lake Mead	17.1	17.7	18.8	20.4	21.6
	Tributary Area Below Lake Mead	17.9	18.5	19.1	20.2	21.4
	Gila River	2,052.1	2,122.7	2,208.1	2,301.5	2,374.1
	Little Colorado River	123.9	127.9	132.6	137.1	139.1
	Bill Williams River	2.4	2.6	2.7	2.9	3.0
	Virgin River	1.3	1.3	1.5	1.6	1.7
	Mainstream Areas	86.9	89.8	93.2	99.1	105.0
	TOTAL	2,301.6	2,380.5	2,475.9	2,582.7	2,665.9
California	Tributary Area Below Lake Mead	0.5	0.5	0.5	0.6	0.6
	Mainstream Areas	13.4	14.0	14.7	15.2	15.8
	TOTAL	13.8	14.5	15.2	15.8	16.4
Nevada	Tributary Area Above Lake Mead	0.8	0.9	0.9	1.0	1.0
	Tributary Area Below Lake Mead	0.5	0.5	0.5	0.5	0.6
	Virgin River	1.4	1.5	1.5	1.6	1.7
	Muddy River	5.7	6.0	6.4	6.8	7.1
	Mainstream Areas	361.4	381.7	405.1	430.7	453.9
	TOTAL	369.7	390.4	414.5	440.7	464.3
New Mexico	Gila River	3.7	3.8	3.8	3.8	3.9
	Little Colorado River	41.6	42.2	43.1	44.5	44.8
	Mainstream Areas	_	_	-	_	_
	TOTAL	45.4	46.0	47.0	48.4	48.7
Utah	Tributary Area Above Lake Mead	2.5	2.6	2.8	2.9	2.8
	Virgin River	20.3	21.5	23.0	24.8	26.7
	Mainstream Areas	-	-	-	-	-
	TOTAL	22.8	24.1	25.8	27.7	29.6
Lower	Tributary Area Above Lake Mead	20.4	21.1	22.5	24.2	25.4
Colorado River	Tributary / area Bolow Bane moda	18.8	19.5	20.1	21.3	22.5
System	Gila River	2,055.8	2,126.5	2,211.9	2,305.3	2,378.0
	Little Colorado River	165.5	170.1	175.7	181.6	183.9
	Bill Williams River	2.4	2.6	2.7	2.9	3.0
	Virgin River	23.0	24.3	26.0	28.0	30.2
	Muddy River	5.7	6.0	6.4	6.8	7.1
	Mainstream Areas	461.6	485.5	512.9	545.1	574.7
	TOTAL	2,753.3	2,855.6	2,978.3	3,115.2	3,224.9

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000s of people.

Lower Colorado River System Total Population Estimates¹ 1981-1985

			F	Population		
State	Reporting Area	1981	1982	1983	1984	1985
Arizona	Tributary Area Above Lake Mead	22.6	23.6	24.3	25.4	26.5
	Tributary Area Below Lake Mead	22.2	22.9	23.6	24.3	25.0
	Gila River	2,455.3	2,526.7	2,601.4	2,694.8	2,802.2
	Little Colorado River	140.2	142.3	145.3	147.2	150.3
	Bill Williams River	3.1	3.2	3.4	3.5	3.6
	Virgin River	1.8	1.9	2.0	2.1	2.2
	Mainstream Areas	109.2	113.1	116.6	120.3	124.4
	TOTAL	2,754.5	2,833.8	2,916.6	3,017.6	3,134.2
California	Tributary Area Below Lake Mead	0.6	0.6	0.6	0.7	0.7
	Mainstream Areas	16.4	17.0	17.5	18.2	19.0
	TOTAL	17.0	17.6	18.2	18.9	19.7
Nevada	Tributary Area Above Lake Mead	1.1	1.1	1.2	1.2	1.2
	Tributary Area Below Lake Mead	0.6	0.6	0.6	0.7	0.7
	Virgin River	1.8	1.9	2.0	2.0	2.1
	Muddy River	7.3	7.4	7.3	7.4	7.4
	Mainstream Areas	480.1	499.7	515.4	530.0	546.4
	TOTAL	491.0	510.7	526.5	541.2	557.9
New Mexico	Gila River	4.0	4.0	4.0	4.0	3.9
	Little Colorado River	44.7	45.1	45.6	46.5	47.6
	Mainstream Areas	_	_	-	_	_
	TOTAL	48.6	49.1	49.6	50.5	51.5
Utah	Tributary Area Above Lake Mead	2.9	3.0	3.1	3.2	3.3
	Virgin River	28.6	30.0	31.6	33.7	36.8
	Mainstream Areas	_	-	-	-	-
	TOTAL	31.5	33.0	34.7	36.9	40.1
Lower	Tributary Area Above Lake Mead	26.6	27.7	28.6	29.8	31.1
Colorado River	Tributary Area Below Lake Mead	23.4	24.1	24.9	25.6	26.4
System	Gila River	2,459.3	2,530.7	2,605.4	2,698.8	2,806.0
	Little Colorado River	184.9	187.4	190.9	193.7	197.9
	Bill Williams River	3.1	3.2	3.4	3.5	3.6
	Virgin River	32.2	33.9	35.5	37.8	41.0
	Muddy River	7.3	7.4	7.3	7.4	7.4
	Mainstream Areas	605.8	629.8	649.5	668.5	689.8
	TOTAL	3,342.6	3,444.2	3,545.5	3,665.1	3,803.2

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000s of people.

Lower Colorado River System Total Population Estimates¹ 1986-1990

	Reporting Area	Population					
State		1986	1987	1988	1989	1990	
Arizona	Tributary Area Above Lake Mead	27.8	28.8	30.4	31.9	33.9	
	Tributary Area Below Lake Mead	25.8	26.5	27.8	29.3	30.7	
	Gila River	2,913.3	3,021.9	3,103.7	3,164.5	3,214.6	
	Little Colorado River	155.1	159.4	163.0	166.4	169.1	
	Bill Williams River	3.9	4.1	4.3	4.5	4.7	
	Virgin River	2.3	2.4	2.6	2.7	2.9	
	Mainstream Areas	128.8	132.8	139.6	147.4	154.9	
	TOTAL	3,257.1	3,375.9	3,471.3	3,546.6	3,610.8	
California	Tributary Area Below Lake Mead	0.7	0.8	0.8	0.8	0.9	
	Mainstream Areas	19.9	21.0	22.4	24.0	25.4	
	TOTAL	20.6	21.8	23.2	24.8	26.3	
Nevada	Tributary Area Above Lake Mead	1.3	1.3	1.4	1.5	1.6	
	Tributary Area Below Lake Mead	0.7	0.8	0.8	0.9	0.9	
	Virgin River	2.2	2.3	2.4	2.6	2.9	
	Muddy River	7.5	7.8	8.1	8.5	9.0	
	Mainstream Areas	568.1	598.7	635.0	678.7	732.8	
	TOTAL	579.7	610.8	647.7	692.1	747.2	
New Mexico	Gila River	3.9	3.9	3.9	3.9	3.9	
TOTI MOXICO	Little Colorado River	47.8	47.7	46.9	46.8	47.9	
	Mainstream Areas	-	-	-	-	-	
	TOTAL	51.6	51.6	50.8	50.7	51.8	
Utah	Tributary Area Above Lake Mead	3.5	3.6	3.6	3.6	3.6	
Otali	Virgin River	40.3	43.2	45.1	47.1	49.5	
	Mainstream Areas	-	-	-	-		
	TOTAL	43.8	46.8	48.8	50.7	53.1	
Lower	Tributary Area Above Lake Mead	32.6	33.8	35.4	37.0	39.1	
Colorado River	Tributary Area Below Lake Mead	27.2	28.0	29.4	31.0	32.5	
System	Gila River	2,917.2	3,025.8	3,107.6	3,168.4	3,218.5	
	Little Colorado River	202.9	207.1	209.9	213.2	217.0	
	Bill Williams River	3.9	4.1	4.3	4.5	4.7	
	Virgin River	44.8	47.9	50.1	52.4	55.3	
	Muddy River	7.5	7.8	8.1	8.5	9.0	
	Mainstream Areas	716.7	752.5	796.9	850.0	913.1	
	TOTAL	3,952.8	4,106.9	4,241.8	4,365.0	4,489.2	

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000s of people.

Lower Colorado River System Total Population Estimates¹ 1991-1995

		Population					
State	Reporting Area	1991	1992	1993	1994	1995	
Arizona	Tributary Area Above Lake Mead	36.1	37.9	39.9	41.8	43.6	
	Tributary Area Below Lake Mead	32.9	35.1	37.3	39.2	41.2	
	Gila River	3,316.9	3,430.4	3,566.0	3,727.7	3,887.8	
	Little Colorado River	172.7	176.8	182.2	187.0	191.9	
	Bill Williams River	4.8	4.9	5.1	5.3	5.4	
	Virgin River	3.3	3.6	3.9	4.2	4.6	
	Mainstream Areas	164.1	173.2	181.8	189.0	196.7	
	TOTAL	3,730.7	3,862.0	4,016.2	4,194.1	4,371.2	
California	Tributary Area Below Lake Mead	0.9	0.8	0.8	0.7	0.7	
	Mainstream Areas	26.4	26.8	27.0	27.0	26.9	
	TOTAL	27.3	27.6	27.8	27.7	27.6	
Nevada	Tributary Area Above Lake Mead	1.7	1.8	1.8	1.9	1.9	
	Tributary Area Below Lake Mead	1.0	1.0	1.1	1.1	1.2	
	Virgin River	3.4	4.0	4.5	5.3	6.0	
	Muddy River	9.3	9.4	9.6	10.0	10.4	
	Mainstream Areas	796.3	838.9	888.9	954.7	1,017.0	
	TOTAL	811.7	855.1	906.0	973.0	1,036.5	
New Mexico	Gila River	4.0	4.1	4.2	4.3	4.5	
	Little Colorado River	49.9	51.5	52.0	53.2	54.6	
	Mainstream Areas	_	-	-	-	-	
	TOTAL	53.9	55.5	56.2	57.5	59.1	
Utah	Tributary Area Above Lake Mead	3.6	3.7	3.9	4.0	4.0	
O turi	Virgin River	53.4	57.2	61.9	67.6	73.2	
	Mainstream Areas	-	-	-	-	-	
	TOTAL	57.0	60.8	65.7	71.5	77.3	
Lower	Tributary Area Above Lake Mead	41.4	43.3	45.6	47.6	49.6	
Colorado River	,	34.7	37.0	39.1	41.0	43.0	
System	Gila River	3,320.9	3,434.5	3,570.2	3,732.0	3,892.2	
	Little Colorado River	222.6	228.3	234.2	240.2	246.5	
	Bill Williams River	4.8	4.9	5.1	5.3	5.4	
	Virgin River	60.1	64.7	70.3	77.1	83.8	
	Muddy River	9.3	9.4	9.6	10.0	10.4	
	Mainstream Areas	986.8	1,038.9	1,097.7	1,170.7	1,240.6	
	TOTAL	4,680.6	4,861.1	5,071.8	5,323.9	5,571.6	

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000s of people.

Lower Colorado River System Total Population Estimates¹ 1996-2000

State	Reporting Area	Population					
		1996	1997	1998	1999	2000	
Arizona	Tributary Area Above Lake Mead	45.1	46.1	47.1	48.2	49.3	
	Tributary Area Below Lake Mead	43.5	45.8	48.0	50.3	52.3	
	Gila River	4,025.6	4,159.8	4,292.9	4,412.7	4,519.4	
	Little Colorado River	195.7	198.8	200.3	201.7	203.3	
	Bill Williams River	5.5	5.6	5.6	5.6	5.7	
	Virgin River	4.9	5.1	5.4	5.7	6.0	
	Mainstream Areas	204.9	212.5	219.5	227.0	232.6	
	TOTAL	4,525.1	4,673.6	4,818.7	4,951.2	5,068.6	
California	Tributary Area Below Lake Mead	0.6	0.5	0.5	0.4	0.4	
	Mainstream Areas	26.8	26.8	26.9	27.0	27.1	
	TOTAL	27.4	27.3	27.3	27.4	27.4	
Nevada	Tributary Area Above Lake Mead	2.0	2.0	2.0	2.1	2.1	
	Tributary Area Below Lake Mead	1.2	1.3	1.4	1.4	1.4	
	Virgin River	6.9	7.8	8.8	9.8	10.7	
	Muddy River	10.7	11.1	11.4	11.6	11.8	
	Mainstream Areas	1,082.9	1,157.2	1,228.8	1,293.9	1,355.5	
	TOTAL	1,103.7	1,179.4	1,252.4	1,318.7	1,381.5	
New Mexico	Gila River	4.6	4.8	4.9	5.0	5.0	
	Little Colorado River	55.6	56.2	56.7	57.1	57.7	
	Mainstream Areas	_	_	_	_	_	
	TOTAL	60.2	61.0	61.6	62.1	62.7	
Utah	Tributary Area Above Lake Mead	4.1	4.1	4.1	4.1	4.1	
	Virgin River	78.2	82.0	85.3	88.3	91.2	
	Mainstream Areas	-	-	-	-	-	
	TOTAL	82.3	86.1	89.5	92.4	95.3	
Lower	Tributary Area Above Lake Mead	51.1	52.2	53.3	54.3	55.6	
Colorado River	Tributary Arou Bolow Build inidua	45.4	47.6	49.8	52.1	54.1	
System	Gila River	4,030.2	4,164.6	4,297.8	4,417.7	4,524.4	
	Little Colorado River	251.2	255.0	257.0	258.8	261.0	
	Bill Williams River	5.5	5.6	5.6	5.6	5.7	
	Virgin River	89.9	94.9	99.5	103.8	107.8	
	Muddy River	10.7	11.1	11.4	11.6	11.8	
	Mainstream Areas	1,314.6	1,396.4	1,475.2	1,547.9	1,615.1	
	TOTAL	5,798.6	6,027.4	6,249.6	6,451.8	6,635.5	

¹ Annual totals may differ from the sum of the displayed values due to total being calculated before rounding all values to the nearest 1,000s of people.

Lower Colorado River System Total Population Estimates¹ 2001-2005

State	Reporting Area	Population					
		2001	2002	2003	2004	2005	
Arizona	Tributary Area Above Lake Mead	50.9	52.7	54.7	56.9	59.2	
	Tributary Area Below Lake Mead	54.5	56.8	59.5	62.7	66.2	
	Gila River	4,645.6	4,754.3	4,861.7	4,996.4	5,163.7	
	Little Colorado River	205.3	209.2	212.5	215.7	219.0	
	Bill Williams River	5.9	6.1	6.3	6.5	6.8	
	Virgin River	6.5	6.9	7.5	8.1	8.7	
	Mainstream Areas	236.7	240.9	246.1	253.4	261.3	
	TOTAL	5,205.4	5,326.9	5,448.2	5,599.7	5,784.9	
California	Tributary Area Below Lake Mead	0.4	0.4	0.4	0.4	0.4	
	Mainstream Areas	27.3	27.6	27.9	28.2	28.3	
	TOTAL	27.7	27.9	28.3	28.5	28.7	
Nevada	Tributary Area Above Lake Mead	2.4	2.7	3.0	3.4	3.7	
	Tributary Area Below Lake Mead	1.4	1.4	1.4	1.4	1.3	
	Virgin River	11.4	12.0	12.7	13.4	14.1	
	Muddy River	12.1	12.4	12.6	13.0	13.3	
	Mainstream Areas	1,431.8	1,493.8	1,558.2	1,631.8	1,699.8	
	TOTAL	1,459.2	1,522.3	1,588.0	1,662.9	1,732.3	
New Mexico	Gila River	4.9	4.8	4.8	4.7	4.7	
	Little Colorado River	57.5	56.6	56.0	55.9	55.5	
	Mainstream Areas	-	-	-	-	_	
	TOTAL	62.4	61.4	60.7	60.6	60.3	
Utah	Tributary Area Above Lake Mead	4.1	4.2	4.2	4.3	4.4	
	Virgin River	95.3	100.1	105.2	111.8	120.2	
	Mainstream Areas	_	_	_	_	_	
	TOTAL	99.5	104.2	109.4	116.1	124.6	
Lower	Tributary Area Above Lake Mead	57.5	59.6	61.9	64.6	67.4	
Colorado River	I i ibatai y Aica Bolow Lake Mcaa	56.3	58.6	61.2	64.5	67.9	
System	Gila River	4,650.6	4,759.1	4,866.5	5,001.1	5,168.4	
	Little Colorado River	262.8	265.8	268.4	271.6	274.5	
	Bill Williams River	5.9	6.1	6.3	6.5	6.8	
	Virgin River	113.2	119.0	125.3	133.3	143.0	
	Muddy River	12.1	12.4	12.6	13.0	13.3	
	Mainstream Areas	1,695.8	1,762.2	1,832.3	1,913.4	1,989.3	
	TOTAL	6,854.2	7,042.8	7,234.6	7,467.9	7,730.7	

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