

Data Request 71c

Table C-1: long-term average hydrologic inventory for the Mojave Basin

Table 5-2: 2005-2006 hydrologic inventory for the Mojave Basin

Source: Mojave Watermaster Annual Report for Water Year 2005-06

**--SAMPLE CALCULATION--
TABLE C-1 OF JUDGMENT**

**Mojave Basin Area Adjudication
Subarea Hydrological Inventory Based On
Long-Term Average Natural Water Supply and Outflow
and Current Year Imports and Consumptive Use
(All Amounts in Acre-Feet)**

| | <u>Este</u> | <u>Oeste</u> | <u>Alto</u> | <u>Centro</u> | <u>Baja</u> | <u>Basin Totals</u> |
|--|---------------|--------------|---------------------|---------------------|---------------------|---------------------|
| WATER SUPPLY | | | | | | |
| Surface Water Inflow | | | | | | |
| Gaged | 0 | 0 | 65,000 | 0 | 0 | 65,000 |
| Ungaged | 1,700 | 1,500 | 3,000 | 37,300 ¹ | 14,300 ² | 6,500 ³ |
| Subsurface Inflow | 0 | 0 | 1,000 | 2,000 | 1,200 | 0 ⁴ |
| Deep Percolation of Precipitation | 0 | 0 | 3,500 | 0 | 100 | 3,600 |
| Imports | | | | | | |
| Lake Arrowhead CSD | 0 | 0 | 1,500 | 0 | 0 | 1,500 |
| Big Bear ARWWA | 2,000 | 0 | 0 | 0 | 0 | 2,000 |
| TOTAL | 3,700 | 1,500 | 74,000 | 39,300 | 15,600 | 78,600 |
| CONSUMPTIVE USE AND OUTFLOW | | | | | | |
| Surface Water Outflow | | | | | | |
| Gaged | 0 | 0 | 0 | 0 | 8,200 | 8,200 |
| Ungaged | 0 | 0 | 37,300 ¹ | 14,000 ⁵ | 0 | 0 |
| Subsurface Outflow | 200 | 800 | 2,000 | 1,200 | 0 | 0 |
| Consumptive Use | | | | | | |
| Agriculture | 6,800 | 2,900 | 16,300 | 20,300 | 30,200 | 76,500 |
| Urban | 1,900 | 1,200 | 36,300 | 9,500 | 9,700 | 58,600 |
| Phreatophytes | 0 | 0 | 5,100 | 900 | 1,500 | 7,500 ⁶ |
| Exports | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 8,900 | 4,900 | 97,000 | 45,900 | 49,600 | 150,800 |
| Surplus / (Deficit) | (5,200) | (3,400) | (23,000) | (6,600) | (34,000) | (72,200) |
| Total Estimated Production (Current Year) ⁷ | 15,700 | 7,600 | 98,900 | 46,500 | 54,300 | 223,000 |
| PRODUCTION SAFE YIELD (Current Year) ⁷ | 10,500 | 4,200 | 75,900 | 39,900 | 20,300 | 150,800 |

¹ Estimated from reported flows at USGS gaging station, Mojave River at Victorville Narrows.

² Includes 14,000 acre-feet of Mojave River surface flow across the Waterman Fault estimated from reported flows at USGS gaging station, Mojave River at Barstow and 300 acre-feet of local surface inflow from Kane Wash.

³ Represents the sum of Este (1,700 af), Oeste (1,500 af), Alto (3,000 af) and Baja (300 af from Kane Wash).

⁴ Inter subarea subsurface flows do not accrue to the total basin water supply.

⁵ Estimated from reported flows at USGS gaging station, Mojave River at Barstow.

⁶ Estimated by Bookman-Edmonston.

⁷ For purposes of this Table, the current year is 1990.

TABLE 5-2

**SUBAREA HYDROLOGICAL INVENTORY BASED ON
LONG TERM AVERAGE NATURAL WATER SUPPLY AND OUTFLOW
AND 2005-06 IMPORTS AND CONSUMPTIVE USE**

(ALL AMOUNTS IN ACRE-FEET)

| WATER SUPPLY | Este | Oeste | Alto | Centro | Baja | Basin Totals |
|---|--------------|--------------|---------------------|---------------------|---------------------|---------------------|
| Surface Water Inflow | | | | | | |
| Gaged | 0 | 0 | 65,500 | 0 | 0 | 65,500 |
| Ungaged | 1,700 | 1,500 | 3,600 | 34,700 ¹ | 14,400 ² | 7,200 ³ |
| Subsurface Inflow | 0 | 0 | 1,175 | 2,000 | 1,200 | 0 ⁴ |
| Deep Percolation of Precipitation | 0 | 0 | 3,500 | 0 | 100 | 3,600 |
| Imports | | | | | | |
| Replacement Water Deliveries | 0 | 0 | 8,216 | 0 | 1 | 8,217 |
| Lake Arrowhead CSD | 0 | 0 | 1,504 | 0 | 0 | 1,504 |
| Big Bear Area RWA | 2,848 | 0 | 0 | 0 | 0 | 2,848 |
| TOTAL | 4,548 | 1,500 | 83,495 | 36,700 | 15,701 | 88,869 |
| CONSUMPTIVE USE AND OUTFLOW | | | | | | |
| Surface Water Outflow | | | | | | |
| Gaged | 0 | 0 | 0 | 0 | 8,200 | 8,200 |
| Ungaged | 0 | 0 | 34,700 ¹ | 14,000 ⁵ | 0 | 0 |
| Subsurface Outflow | 825 | 350 | 2,000 | 1,200 | 0 | 0 |
| Consumptive use | | | | | | |
| Agriculture | 4,200 | 1,200 | 1,700 | 6,300 | 14,500 | 27,900 |
| Urban ⁶ | 2,300 | 1,600 | 51,500 | 6,800 | 6,600 | 68,800 |
| Phreatophytes | 0 | 0 | 11,000 | 3,000 | 2,000 | 16,000 ⁷ |
| Exports | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 7,325 | 3,150 | 100,900 | 31,300 | 31,300 | 120,900 |
| Surplus / (Deficit) | (2,777) | (1,650) | (17,405) | 5,400 | (15,599) | (32,031) |
| Total Estimated Production (Current Year) ⁸ | 8,312 | 5,173 | 97,996 | 22,693 | 32,109 | 166,283 |
| PRODUCTION SAFE YIELD (Current Year)⁹ | 5,535 | 3,523 | 80,591 | 28,093 | 16,510 | 134,252 |

¹ Estimated from reported flows at USGS gaging station, Mojave River at Victorville Narrows.

² Includes 14,000 acre-feet of Mojave River surface flow across the Waterman Fault estimated from reported flows at USGS gaging station, Mojave River at Barstow, and 400 acre-feet of local surface inflow from Kane Wash and Boom Creek.

³ Represents the sum of Este (1,700 ac.ft.), Oeste (1,500 ac.ft.), Alto (3,600 ac.ft.) and Baja (400 ac.ft. from Kane Wash and Boom Creek).

⁴ Inter subarea subsurface flows do not accrue to the total basin water supply.

⁵ From reported flows at USGS gaging station, Mojave River at Barstow.

⁶ Includes consumptive use of "Minimals Pool".

⁷ From USGS Water-Resources Investigation Report 96-4241 "Riparian Vegetation and Its Water Use During 1995 Along the Mojave River, Southern California" 1996.

⁸ Based on Water Production Data for the 2005-06 Water Year.

Included in the production values are the estimated minimal producer's water use by Subarea.

⁹ For 2005-06 Water Year. Imported State Water Project water purchased by MWA is not reflected in the above table.