2.0 EL PASO WATER SUPPLY

Municipal water supplies for the City of El Paso are groundwater from the Hueco and Mesilla Bolsons and surface water from the Rio Grande. The location of EPWU wells in the Hueco and Mesilla and the location of the two EPWU surface water treatment plants are shown on Figure 2-1.

Annual production from each of these sources is summarized in Figure 2-2, and the data are summarized in Table 2-1. Note that EPWU pumping in the Hueco peaked at about 80,000 acre-feet per year (AF/yr) in 1989. As a result of concerns raised over the long-term ability to continue this level of pumping, EPWU implemented the following strategy:

- Adopt a rate structure that increases the cost of water for high use
- Promote water conservation through various incentive programs
- Increase the use of Rio Grande Water
- Expand the reuse of reclaimed water

Note that EPWU pumping in the Hueco in 2002 was below 40,000 AF/yr for the first time since 1967. Furthermore, total demand has been declining slightly since the late 1990s. In 2002, eighty-four of the Hueco wells were operated and pumped 39,151 AF. Under these operating conditions, the well capacity of these wells was about 117 million gallons per day (mgd). Most of the pumping was in northeast El Paso and in the Airport area.

EPWU wells in the Mesilla Bolson are located in the Canutillo area and supply the west side of El Paso. In 2002, eighteen wells were operated and pumped 22,592 AF. Under these operating conditions, the well capacity of these wells was about 41 mgd.

The surface water plants have a combined capacity of 100 mgd. Under normal river flow conditions, the plants operate seven months during the year (i.e. during the irrigation season). EPWU is a customer of El Paso County Water Improvement District No.1, which receives water from the Rio Grande Project. Project water is primarily supplied for irrigation purposes.

Current total demand is about 120,000 AF/yr. Per capita demand has been reduced from about 225 gallons per person per day in the 1970s to about 153 gallons per person per day in 2002 (Figure 2-3).

The strategies implemented in the 1980s and 1990s outlined above have resulted in reduced Hueco Bolson pumping. However, due to the continued concern regarding brackish groundwater intrusion into wellfield areas, additional groundwater management steps are needed.

Table 2-1
Summary of EPWU Supply - 1967 to 2002
All Values in AF

Year	Hueco Pumping	Mesilla Pumping	Surface Water	Total Supply
1967	36,050	24,276	4,426	64,752
1968	40,649	16,147	10,111	66,907
1969	45,055	14,197	10,415	69,668
1970	39,951	19,370	8,631	67,951
1971	43,390	25,291	5,722	74,403
1972	50,190	23,626	2,426	76,243
1973	51,569	19,940	10,674	82,183
1974	52,798	17,596	13,281	83,675
1975	53,865	19,132	14,041	87,039
1976	55,236	18,011	14,680	87,927
1977	62,398	25,258	6,496	94,151
1978	66,212	26,821	4,840	97,873
1979	58,278	22,276	15,038	95,592
1980	58,213	20,917	20,929	100,059
1981	58,587	18,221	21,481	98,289
1982	67,612	19,743	18,922	106,277
1983	64,328	18,298	22,419	105,045
1984	65,309	17,979	20,769	104,058
1985	69,482	16,660	22,423	108,565
1986	67,776	15,822	25,588	109,186
1987	76,741	17,894	22,378	117,014
1988	75,572	18,338	23,448	117,359
1989	78,699	20,841	25,674	125,215
1990	72,332	16,920	29,812	119,064
1991	69,117	15,024	28,153	112,294
1992	68,965	12,956	40,810	122,731
1993	57,363	15,477	50,868	123,709
1994	53,187	20,526	58,667	132,380
1995	50,220	23,605	56,060	129,885
1996	56,711	26,019	46,219	128,948
1997	50,870	22,772	54,194	127,837
1998	49,398	24,509	57,794	131,700
1999	51,127	22,136	57,879	131,142
2000	59,410	24,682	42,329	126,421
2001	50,438	23,823	48,428	122,689
2002	39,151	22,591	58,743	120,485

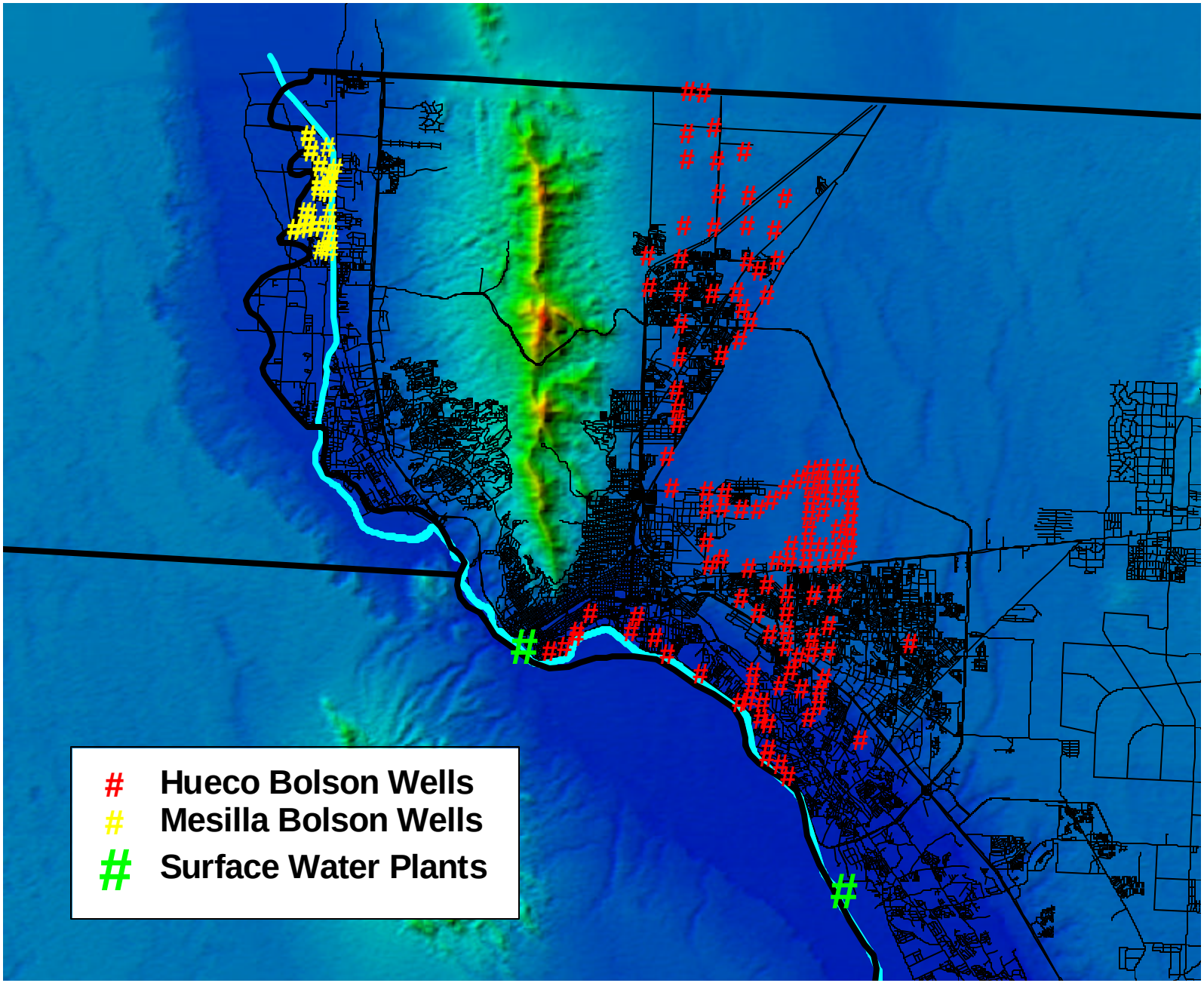

Figure 2-1
Well and Water Plant Locations

Figure 2-2
EPWU Supply

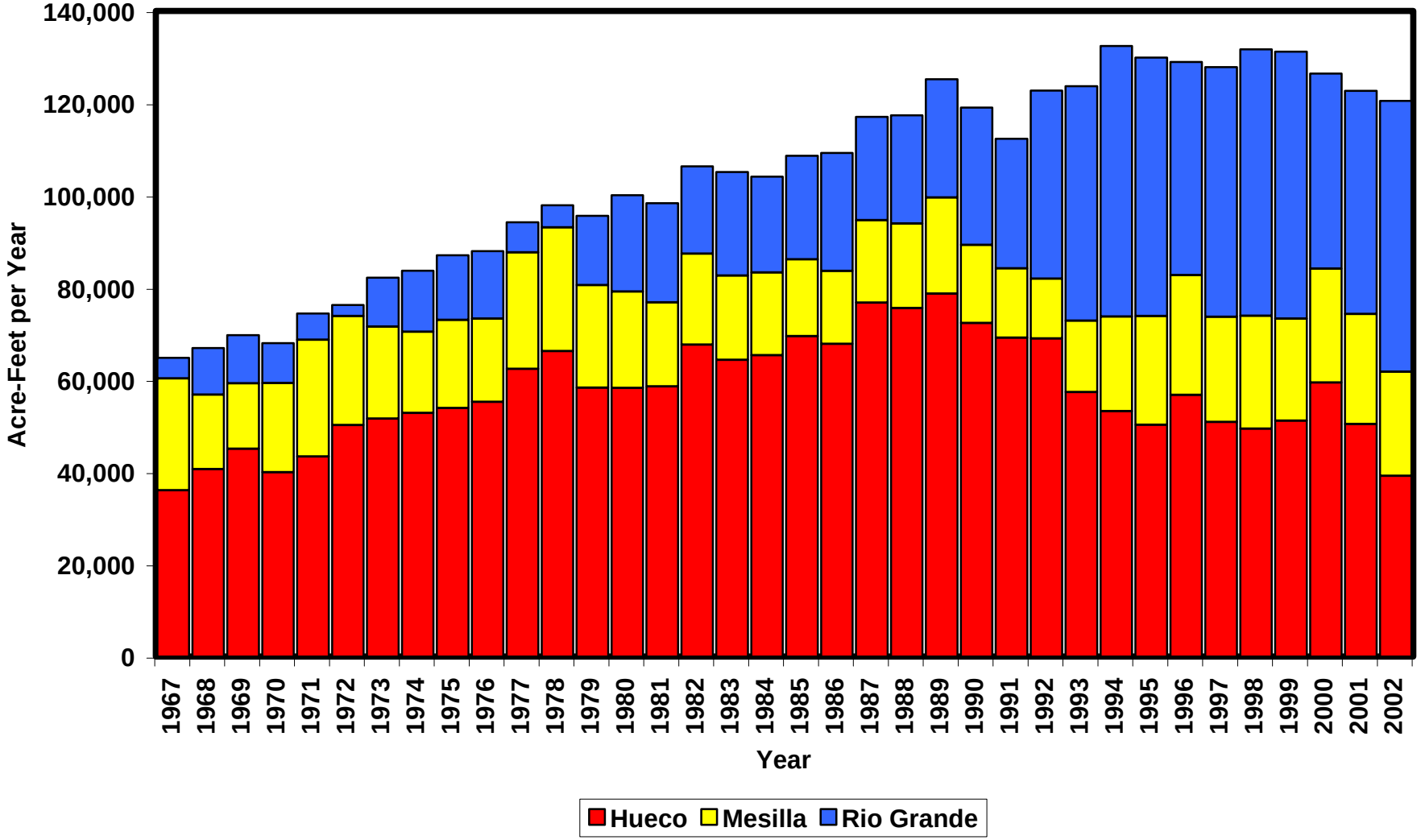

Figure 2-3
EPWU Per Capita Demand