

**2. OWENS VALLEY OPERATIONS PLAN FOR
RUNOFF YEAR 2007-08**

2. Annual Owens Valley Operations Plan For Runoff Year 2007-08

This year's pumping program is consistent with the management strategy of the Water Agreement between the County of Inyo and the City of Los Angeles dated October 18, 1991. As stated in the Water Agreement: *"The overall goal of managing the water resources within Inyo County is to avoid certain described decreases and changes in vegetation and to cause no significant effect on the environment which cannot be acceptably mitigated while providing a reliable supply of water for export to Los Angeles and for use in Inyo County."*

This year's pumping program is also consistent with the Superior Court of the State of California court ordered sanctions in case number S1CVCV01-29768, Sierra Club and Owens Valley Committee vs. City of Los Angeles Department of Water and Power dated August 9, 2005 (Court Order). Based on the Court Order, LADWP will limit its groundwater pumping from the Owens Valley to 57,412 acre-feet per runoff year and supply 16,294 acre-feet of aqueduct water for recharging the groundwater aquifer in the Laws Wellfield. Additionally, LADWP will provide water to City-owned lands, Enhancement and Mitigation projects, and mitigation measures pursuant to Section IV.A of the Water Agreement.

It is anticipated that the Court Order will be lifted during the term of this pumping program, at which time the provisions of the Interim Management Plan (IMP) will be implemented. The IMP that was agreed to by ICWD and LADWP staff and endorsed by the Standing Committee on March 19, 2007 provides a simple methodology for preparing the Owens Valley annual pumping program for runoff years 2007-08, 2008-09, and 2009-10. Pumping in the Owens Valley will be managed with the goal of raising or maintaining average groundwater levels in each wellfield at the average measured water levels in early April 2007, subject to wellfield specific criteria described in section 2.2 of the IMP.

2.1 Owens Valley Runoff Forecast

The April 1, 2007 LADWP forecasted runoff from the Eastern Sierra Mountains is based on the actual snow survey of gauging stations located along the Eastern Sierra Mountain front. The long-term average Owens Valley runoff is 415,725 acre-feet based on 1956-2005 actual data. For the period of April 1, 2007 through March 31, 2008, the forecasted Owens Valley runoff is 241,300 acre-feet, or 58% of normal (Table 1). This includes runoff from streams in Long Valley, Round Valley, and the Owens Valley. Figure 1 shows Owens Valley runoff since the 1971 runoff year.

Table 1. Owens Valley runoff forecast for 2007-08 runoff year

2007 RUNOFF FORECAST
April 1, 2007

APRIL THROUGH SEPTEMBER RUNOFF

	MOST PROBABLE VALUE		REASONABLE MAXIMUM	REASONABLE MINIMUM	LONG-TERM MEAN (1956 - 2005)
	(Acre-feet)	(% of Avg.)	(% of Avg.)	(% of Avg.)	(Acre-feet)
MONO BASIN:	48,400	46%	58%	34%	104,277
OWENS VALLEY:	147,400	48%	61%	35%	305,985

APRIL THROUGH MARCH RUNOFF

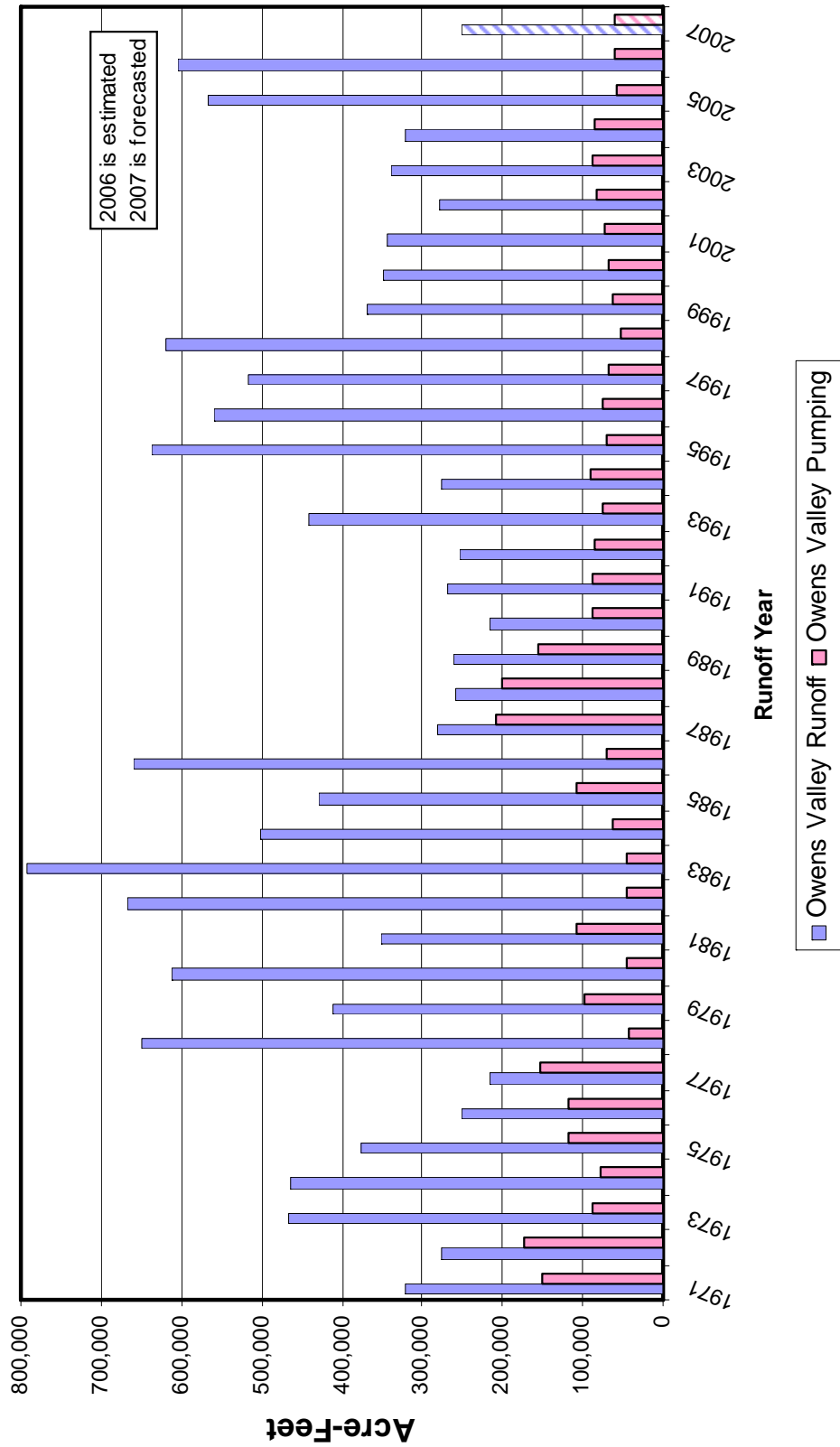
	MOST PROBABLE VALUE		REASONABLE MAXIMUM	REASONABLE MINIMUM	LONG-TERM MEAN (1956 - 2005)
	(Acre-feet)	(% of Avg.)	(% of Avg.)	(% of Avg.)	(Acre-feet)
MONO BASIN:	63,900	52%	65%	39%	122,557
OWENS VALLEY:	241,300	58%	71%	46%	415,725

MOST PROBABLE - That runoff which is expected if median precipitation occurs after the forecast date.

REASONABLE MAXIMUM - That runoff which is expected to occur if precipitation subsequent to the forecast is equal to the amount which is exceeded on the average once in 10 years.

REASONABLE MINIMUM - That runoff which is expected to occur if precipitation subsequent to the forecast is equal to the amount which is exceeded on the average 9 out of 10 years.

Figure 1 - Owens Valley Runoff and Pumping



2.2 Owens Valley Groundwater Production

LADWP has prepared a 2007-08 Annual Owens Valley Operations Plan based on the goals and principles of the Water Agreement and in compliance with the provisions of the Court Order and the IMP. The 2007-08 Annual Operations Plan focuses on meeting minimum needs and maintaining groundwater levels at April 2007 levels.

The amount of groundwater pumping allowed under the Water Agreement from each wellfield in the Owens Valley is determined based on the ON/OFF status of vegetation monitoring sites located throughout the Owens Valley (Section V of Water Agreement). Table 2 lists the ON/OFF status of all vegetation monitoring sites in the Owens Valley as of April 2007. According to the ON/OFF provisions, Table 3 shows that as of April 2007, approximately 140,300 acre-feet of water is available for groundwater pumping from Owens Valley wellfields. The 140,300 acre-feet of available pumping is from wells linked to vegetation monitoring sites with ON status and from exempt wells. Wells are categorically exempt when there is no impact on groundwater dependent vegetation or when they are used to supply town water systems, fish hatcheries, or approved Enhancement/Mitigation projects. Table 3 lists a breakdown of available pumping and proposed annual groundwater pumping by wellfield. Figure 2 shows the relationship between the allowed groundwater pumping under the Inyo/LA Water Agreement and the actual groundwater pumping from the Owens Valley for each runoff year since 1992.

As shown in Table 3, LADWP's planned pumping for 2007-08 runoff year under the court's order is limited to 56,194 acre-feet and 63,232 acre-feet under the IMP. This is less than half of the pumping allowed under the ON/OFF provisions of the Water Agreement. Figure 1 also shows actual Owens Valley Groundwater Pumping from the 1971 runoff year to the planned pumping for the 2007 runoff year.

Consistent with the goals of the Water Agreement, pumping in all areas is within the allowable limits and consistent with the groundwater mining provisions of the Green Book. Table 4 shows the latest update of the mining calculations based on the procedures described in the Green Book. As shown in this table, none of the wellfields in the Owens Valley will be in deficit by the end of the first half of the 2007-08 runoff year.

As stated earlier, ICWD and LADWP entered into an Interim Management Agreement for groundwater management during the next three years when the court's sanctions are lifted. Groundwater pumping in the Owens Valley will be managed with the goal of maintaining or raising average groundwater levels in each wellfield compared to the average measured groundwater levels in early April 2007. A number of representative monitoring wells in each wellfield are utilized to calculate the average wellfield groundwater levels. Table 5 lists the agreed upon monitoring wells in each wellfield that will be used for calculating average wellfield groundwater levels, measured groundwater levels as of April 2007, and forecasted water levels in April 2008 based on 2007-08 Owens Valley runoff and the proposed wellfield pumping volumes. The declining water levels reflected in Table 5 are due to the extremely low forecasted runoff and exempt well pumping as presented in Exhibit B of the IMP (Table 6).

Tables 7a and 7b detail planned pumping for the 2007-08 runoff year on a month-to-month basis for each wellfield. Planned monthly pumping prior to lifting of the Court Order sanctions is listed in 7a and monthly pumping after lifting of the Court's Order is listed in Table 7b. Pumping for town water systems, fish hatcheries, and E/M projects are included in that distribution. While this table provides the planned pumping amounts from each wellfield on a monthly basis, the actual pumping may differ depending on the condition of the operation equipment.

The planned pumping may be increased to provide freeze protection for the Los Angeles Aqueduct during cold temperatures in winter months. Due to the freezing conditions in the winter of 2006-07 runoff year, LADWP pumped a number of wells in the southern part of Owens Valley to protect the Los Angeles Aqueduct from freezing. As a result, total Owens Valley pumping for 2006-07 was approximately 1,218 acre-feet more than the Court-mandated level of 57,412 acre-feet. In accordance with the Court Order, the pumping from the Bishop Wellfield (shown in Table 3) will be reduced by the actual amount of pumping in 2006-07 above 57,412 acre-feet to offset the additional pumping for freeze protection in the 2006-07 runoff year.

To remain consistent with the Court Order, the current pumping program will be set at 56,194 acre-feet (57,412 acre-feet minus 1,218 acre-feet) for the 2007-08 runoff year (Table 7a). Full water allotment will be provided to all in-valley uses throughout the Owens Valley and 16,294 acre-feet of aqueduct water will be provided for recharging the groundwater aquifer in the Laws Wellfield starting in December of 2007.

Following the anticipated lifting of the Court Order governing the Owens Valley pumping, the total planned Owens Valley groundwater pumping for the 2007-08 runoff year will be 63,232 acre-feet (Table 7b). This number is consistent with the provisions of the Water Agreement, the IMP, and the Court Order requirement that the amount of freeze protection pumping that causes total pumping to go over the court's mandated pumping level of 57,412 acre-feet will be reduced from the following year's pumping. Pumping tests such as the Reinhackle Spring operational test in the Bairs-George Wellfield or the initial operation of production well W416 in the Lone Pine Wellfield, if agreed to by ICWD and LADWP, will be in addition to the above planned pumping total.

The following is a discussion of the planned pumping program by wellfield. Figures 3, 4, and 6 through 10 locate LADWP's Owens Valley pumping wells by wellfields. These figures show the location of production wells, monitoring wells, and vegetation monitoring sites in each area.

Table 2 - Soil / Vegetation Water Balance Calculations According to Green Book for April 2007

Site	Oct 2006 Soil AWC (cm)	50% Annual Precip. (cm)	Proj. soil AWC	Oct. 2006 Veg. Water Req./ Water Req. for Well Turn-On (cm)	Oct 2006 Status	April 2007 soil AWC (cm)	April 2007 Status	Soil AWC Req. for Well Turn-On (cm)
L1	105.8	7.9	113.7	20.3/NA	ON	96.7	ON	NA
L2	39.5	7.9	47.4	9.9/NA	ON	42.4	ON	NA
L3	35.2	7.9	43.1	35/NA	ON	38.6	ON	NA
BP1	10.6	NA	10.6	16.0/22.9H	OFF	12.2	OFF	22.9H, OFF 10-97
BP2	0.6	NA	0.6	26.5/28.4	OFF	3.8	OFF	28.4, OFF 7-98
BP3	18.8	7.6	26.4	15.4/NA	ON	26.2	ON	NA
BP4	43.5	8.2	51.7	14.3/NA	ON	53.9	ON	NA
TA3	6.5	NA	6.5	20.6/25.9	OFF	6.2	OFF	25.9, OFF 7-98
TA4	12.5	NA	12.5	24.6/23.2	OFF	17.3	OFF	23.2, OFF 10-98
TA5	19.4	8.2	27.6	8.3/NA	ON	20.8	ON	NA
TA6	7.1	NA	7.1	29.7/26.8H	OFF	7.1	OFF	26.8H, OFF 7-96
TS1	0.9	NA	0.9	27.4/20.4H	OFF	0.7	OFF	20.4H, OFF 10-96
TS2	6.7	NA	6.7	17.0/19.5	OFF	7.9	OFF	19.5, OFF 7-98
TS3	31.7	7.3	39	34.6/NA	ON	57.7	ON	NA
TS4	25.8	NA	25.8	55.4/47.9	OFF	41.3	OFF	47.9, OFF 10-03
IO1	20.0	NA	20	47.8/42.2	OFF	23.7	OFF	42.2, OFF 10-98
IO2	2.5	NA	2.5	11.0/14.8	OFF	2.1	OFF	14.8, OFF 7-05
SS1	10.5	NA	10.5	29.4/39.3	OFF	16.3	OFF	39.3, OFF 7-05
SS2	2.3	NA	2.3	15.8/13.4	OFF	2	OFF	13.4, OFF 7-03
SS3	12.9	NA	12.9	29.8/37.7	OFF	20.9	OFF	37.7, OFF 10-03
SS4	0.7	NA	0.7	14.9/15.9	OFF	0.9	OFF	15.9, OFF 7-05
BG2	27.9	NA	27.9	22.2/33.7	OFF	32.2	OFF	33.7, OFF 10-05

H - These values of soil water required for well turn-on were derived using calculations based on percent cover that were routinely performed in the past. The values have not been updated to conform to the Greenbook equations in section III.D.2, p. 57-59.

**Table 3 - Available Pumping Capacity According to Monitoring Sites with
ON Status and Planned Pumping for Runoff Year 2007-2008**

Wellfield	Monitoring Site	Associated Production Wells	Available Capacity (AF)	Planned Pumping under Court order (AF)	Planned Pumping under IMP (AF)
Laws	L1	247, 248, 249, 398	12,670		
	L2	236**, 239, 243, 244	10,492		
	L3	240, 241, 399, 376, 377	9,195		
	L5*	245, 387, 388	9,412		
	Exempt	236**, 354, 365, 413	3,337		
	Wellfield Pumpage		45,106	8,900	8,900
Bishop	All wells	140, 371, 406, 407, 408, 410, 411, 412	12,000		
	Wellfield Pumpage		12,000	3,744	10,782
Big Pine	BP3	222, 223, 231, 232	4,851		
	BP4	331	7,530		
	Exempt	218, 219, 330, 332, 341, 352, 415	25,486		
	Wellfield Pumpage		37,867	20,400	20,400
Taboose	TA5	349	10,570		
Aberdeen	Exempt	118	1,810		
	Wellfield Pumpage		12,380	900	900
Thibaut	TS3	103, 104, 382EM	2,968		
Sawmill	Exempt	351, 356	12,598		
	Wellfield Pumpage		15,566	12,500	12,500
Indep. - Oak					
	Exempt	59, 60, 61, 65, 357, 383EM, 384EM,	13,973		
	Wellfield Pumpage		13,973	6,700	6,700
Symmes					
Shepherd	Exempt	402EM	1,350		
	Wellfield Pumpage		1,350	1,300	1,300
Bairs					
Georges	Exempt	343	500		
	Wellfield Pumpage		500	500	500
Lone Pine	Exempt	344, 346, 390	1,231		
	Other	416	335		
	Wellfield Pumpage		1,566	1,250	1,250
Owens Valley Total			140,308	56,194	63,232

Figure 2 - Owens Valley Pumping Allowed under Water Agreement and Actual Pumping

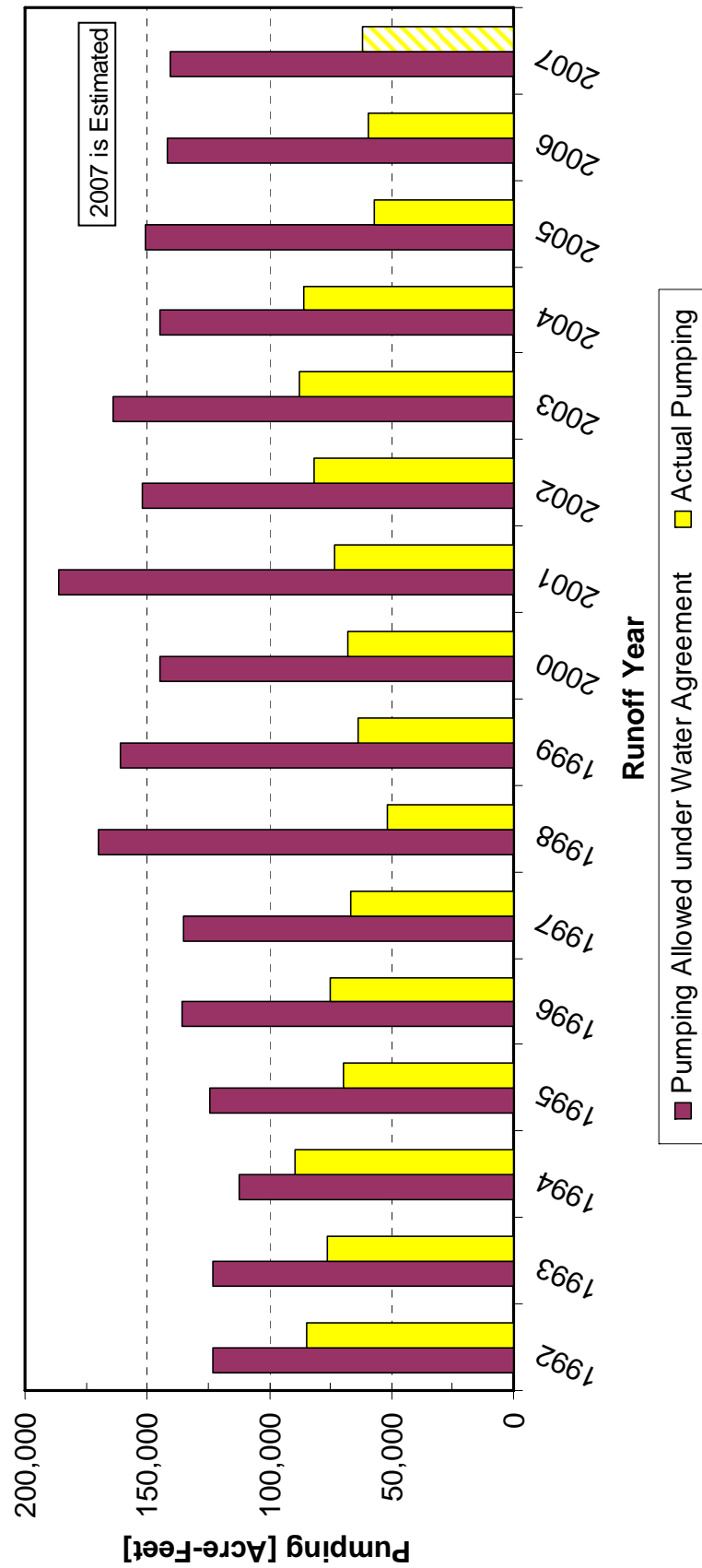


Table 4 – Summary of Recharge and Pumping in AF for Water Year 1988-2006 and Estimated Apr-Sep 2007 Pumping Limit

Water Year	OWENS VALLEY Runoff Percent	LAWS		BISHOP		BIG PINE		TABOOSE-THIBAUT		IND-STYM-BAIRS		LONE PINE		OWENS VALLEY	
		Recharge	Pumping	Recharge	Pumping	Recharge	Pumping	Recharge	Pumping	Recharge	Pumping	Recharge	Pumping	Recharge	Pumping
1988	68%	12,539	38,025	36,728	10,900	20,629	40,830	23,906	61,545	27,168	43,234	11,295	1,655	134,265	196,189
1989	64%	12,757	38,167	36,453	11,961	19,762	35,915	23,128	54,284	26,747	34,728	10,991	1,668	129,837	176,723
1990	55%	11,580	27,988	34,198	11,432	17,604	29,666	19,777	33,480	23,406	20,124	9,989	1,658	116,554	124,348
1991	59%	11,132	13,691	34,868	11,519	18,729	21,168	21,087	29,136	25,846	10,390	10,408	1,303	122,070	87,207
1992	57%	10,839	8,907	34,688	11,326	18,392	24,345	20,518	23,761	25,195	14,154	10,420	1,626	120,072	84,119
1993	99%	19,778	7,541	44,445	8,404	27,580	22,627	35,068	19,424	40,061	11,689	15,509	1,519	182,441	71,204
1994	60%	12,026	21,206	35,793	10,193	19,430	24,962	21,977	23,557	28,106	14,878	11,554	1,281	128,885	96,077
1995	137%	28,115	7,053	55,397	4,799	38,758	21,970	46,375	17,121	55,103	12,631	22,296	1,037	246,044	64,611
1996	123%	12,588	11,535	50,754	9,153	33,228	24,331	42,097	19,906	51,113	12,382	19,757	1,106	209,537	78,413
1997	125%	15,237	8,349	49,949	9,606	33,474	24,002	42,837	21,774	52,100	9,461	19,962	1,128	213,559	74,320
1998	139%	28,195	470	55,309	7,159	40,065	23,729	46,845	16,496	55,605	7,946	20,341	1,365	246,361	57,165
1999	95%	18,546	1,697	42,388	8,672	28,013	21,832	32,426	16,700	41,090	8,424	15,481	2,141	177,944	59,466
2000	80%	11,102	3,974	39,539	10,804	23,213	20,212	27,567	23,143	37,015	8,497	14,344	1,036	152,780	67,666
2001	77%	12,239	2,295	38,772	10,176	22,695	26,785	27,960	17,247	33,469	8,685	13,520	1,942	148,674	67,130
2002	63%	11,184	3,480	35,514	10,839	19,715	26,885	22,495	25,288	28,820	10,279	12,103	1,345	129,831	78,116
2003	75%	11,454	5,786	38,486	11,407	21,883	25,885	26,166	27,387	32,455	14,281	13,088	1,179	143,532	85,925
2004	71%	11,138	7,412	37,149	11,777	21,126	26,149	25,044	25,159	29,771	15,730	11,357	1,119	135,586	87,366
2005	120%	18,389	3,841	47,471	7,093	32,686	19,423	40,500	18,674	46,441	18,585	17,191	1,128	202,678	68,744
2006	138%	35,336	2,892	54,337	5,667	39,650	20,685	47,757	15,707	53,873	9,944	19,980	1,119	250,935	56,014
2007(a)	62%	10,457	1,747	33,566	2,289	18,192	10,157	22,670	7,772	24,989	2,978	10,312	263	120,186	25,206
(b) TOTAL		314,672	216,056	835,804	185,176	514,826	491,558	618,201	497,561	738,372	289,040	289,897	26,618	3,311,772	1,706,009
Estimated Apr-Sep 2007 Pumping Limit			98,616		650,628		23,268		120,640		449,332		263,279		1,605,763

(a) Estimated Recharge for the 2007 Water Year, Approximate Pumping for First Half of Water year 2007 (Oct-Mar).

(b) Estimated 20 Year Total for Recharge; actual 19.5 Year Total for Pumping.

Table 5 – Measured Depth-To-Water in April 2007, and forecasted for April 2008 in selected monitoring wells

Well Field	Monitoring Well	Measured April 2007 DTW (ft)	Forecasted April 2008 DTW (ft)	Change DTW from April 2007 (ft)
Laws	T436	-5.0	-8.1	-3.1
	T490	-10.0	-12.2	-2.2
	T492	-22.9	-31.9	-9.0
	Average	-12.7	-17.4	-4.7
Big Pine	T425	-15.1	-16.8	-1.7
	T426	-11.8	-12.9	-1.0
	Average	-13.5	-14.9	-1.4
Taboose-Aberdeen	T418	-9.4	-9.1	0.3
	T419	-6.6	-5.8	0.7
	T421	-33.3	-34.0	-0.7
	T502	-8.3	-9.8	-1.5
	Average	-14.4	-14.7	-0.3
Thibaut-Sawmill	T413	-10.3	-12.2	-1.8
	T415	-19.2	-20.0	-0.8
	Average	-14.8	-16.1	-1.3
Independence-Oak	T407	-10.1	-10.3	-0.3
	T408	-2.3	-2.7	-0.4
	T409	-2.7	-5.9	-3.2
	Average	-5.0	-6.3	-1.3
Symmes-Shepherd	T401	-22.7	-22.6	0.1
	T403	-7.3	-6.9	0.4
	T404	-5.4	-5.1	0.3
	T447	-36.1	-36.2	-0.2
	Average	-17.9	-17.7	0.2
Bairs-George	T398	-2.5	-3.7	-1.2
	T400	-4.4	-4.6	-0.2
	Average	-3.5	-4.2	-0.7

Table 6***Exhibit B***

List of Exempt Owens Valley Wells for this Agreement

WELL NUMBER	WELL FIELD	REASON
354 ¹	Laws	Town Supply
413 ²	Laws	Town Supply and Laws Museum E/M Project Irrigation Well
236	Laws	Irrigation Water (to supplement irrigation water supply from Well 365 when necessary)
341 ¹	Big Pine	Town Supply
352 ²	Big Pine	Town Supply
415 ^{2 3}	Big Pine	Town Supply
357 ¹	Independence-Oak	Town Supply
384 ²	Independence-Oak	Town Supply
344 ¹	Lone Pine	Town Supply
346 ²	Lone Pine	Town Supply
330	Big Pine	Fish Spring Hatchery
332	Big Pine	Fish Spring Hatchery
351	Thibaut-Sawmill	Blackrock Fish Hatchery
356	Thibaut-Sawmill	Blackrock Fish Hatchery
401	Independence-Oak	Water for irrigation in Independence-Oak Wellfield
59	Independence-Oak	Water for irrigation in Independence-Oak Wellfield
60	Independence-Oak	Water for irrigation in Independence-Oak Wellfield
65	Independence-Oak	Water for irrigation in Independence-Oak Wellfield
383E/M	Independence-Oak	Water for irrigation in Independence-Oak Wellfield
384E/M	Independence-Oak	Water for irrigation in Independence-Oak Wellfield
61	Independence-Oak	Water for irrigation in Independence-Oak Wellfield
365	Laws	Water for irrigation in Laws Wellfield
245	Laws	Water for irrigation in Laws Wellfield
387	Laws	Water for irrigation in Laws Wellfield
388	Laws	Water for irrigation in Laws Wellfield
402E/M	Symmes-Shepherd	Water for E/M Project in Symmes-Shepherd Wellfield
390E/M	Lone Pine	Water for E/M Project in Lone Pine Wellfield
343	Bairs-Georges	Irrigation Water in Bairs-Georges Wellfield in Below Average Runoff Years

Note 1: Primary town supply well

Note 2: Backup town supply well

Note 3: Usage for the Big Pine Ditch system to be consistent with evaluation and approval of such use by the Technical Group

Note: This is Exhibit B, "List of Exempt Owens Valley Wells for this Agreement," an attachment to the 3/07 Standing Committee-approved Interim Management Plan (IMP).

Table 7a - Planned Monthly Wellfield Pumping for 2007-08 Runoff Year in AF while the Court Order is in Effect

Month	Laws	Bishop	Big Pine	Taboose- Aberdeen	Thibaut- Sawmill	Indep.- Oak	Symmes- Shepherd	Bairs- George	Lone Pine	TOTAL
April	900	1,500	1,700	75	1,050	1,000	200	0	190	6,615
May	900	1,000	1,700	75	1,050	1,050	200	0	190	6,165
June	900	744	1,700	75	1,050	1,050	200	100	190	6,009
July	900	500	1,700	75	1,050	1,050	200	100	190	5,765
August	900	0	1,700	75	1,050	1,050	200	125	190	5,290
September	900	0	1,700	75	1,050	900	200	125	190	5,140
October	800	0	1,700	75	1,050	100	100	50	20	3,895
November	700	0	1,700	75	1,050	100	0	0	20	3,645
December	600	0	1,700	75	1,000	100	0	0	20	3,495
January	600	0	1,700	75	1,000	100	0	0	15	3,490
February	200	0	1,700	75	1,050	100	0	0	15	3,140
March	600	0	1,700	75	1,050	100	0	0	20	3,545
Total	8,900	3,744	20,400	900	12,500	6,700	1,300	500	1,250	56,194

Table 7b - Planned Monthly Wellfield Pumping for 2007-08 Runoff Year in AF after the Court Order is Lifted

Month	Laws	Bishop	Big Pine	Taboose- Aberdeen	Thibaut- Sawmill	Indep.- Oak	Symmes- Shepherd	Bairs- George	Lone Pine	TOTAL
April	900	1,500	1,700	75	1,050	1,000	200	0	190	6,615
May	900	1,500	1,700	75	1,050	1,050	200	0	190	6,665
June	900	1,500	1,700	75	1,050	1,050	200	100	190	6,765
July	900	1,500	1,700	75	1,050	1,050	200	100	190	6,765
August	900	1,500	1,700	75	1,050	1,050	200	125	190	6,790
September	900	1,500	1,700	75	1,050	900	200	125	190	6,640
October	800	200	1,700	75	1,050	100	100	50	20	4,095
November	700	200	1,700	75	1,050	100	0	0	20	3,845
December	600	200	1,700	75	1,000	100	0	0	20	3,695
January	600	200	1,700	75	1,000	100	0	0	15	3,690
February	200	200	1,700	75	1,050	100	0	0	15	3,340
March	600	782	1,700	75	1,050	100	0	0	20	4,327
Total	8,900	10,782	20,400	900	12,500	6,700	1,300	500	1,250	63,232

Laws Wellfield (Figure 3)

Monitoring sites L1, L2, and L3 are in ON status. Production wells controlled by these monitoring sites have an available production capacity of 32,357 acre-feet. Wells linked to monitoring site L5 have a capacity of 9,412 acre-feet. Green Book designated exempt wells within the Laws Wellfield have a capacity of 3,337 acre-feet. Therefore, the total available pumping capacity in the Laws Wellfield is 45,106 acre-feet. Well W236, associated with monitoring site L2 is used partially along with W365 as an exempt well to provide irrigation water.

According to the terms of the IMP, monitoring wells T436, T490, and T492 will be used to calculate the average groundwater level in the Laws Wellfield. Even though vegetation monitoring sites L1, L2, and L3 are in ON status, none of the wells associated with these monitoring sites will be pumped in the 2007-08 runoff year because of the Depth-To-Water criteria of the IMP. The pumping minimum in the Laws Wellfield is 8,900 acre-feet this year to supply the town water system, all E/M projects, and irrigated lands in this wellfield. IMP exempted wells (Table 6) will be utilized to provide water for these uses. Therefore, the planned groundwater pumping from the Laws Wellfield is 8,900 acre-feet for the 2007-08 runoff year. With this planned groundwater pumping, the average groundwater level in Laws Wellfield is forecasted to drop 4.7 feet by April 2008 as shown in Table 5.

Bishop Wellfield (Figure 4)

Pumping in the Bishop Wellfield is governed by the provisions of the Hillside Decree and is exempt from the provisions of the IMP. The provisions of the Hillside Decree limits LADWP's annual groundwater extractions (pumping and flowing) from the Bishop Cone to the total amount of water used on City-owned lands on the Bishop Cone, including conveyance losses, during that year. Currently, total uses on City-owned land within the Bishop Cone is approximately 25,000 acre-feet per year. The total available pumping capacity in the Bishop Wellfield is approximately 12,000 acre-feet. The planned groundwater pumping from the Bishop Wellfield is 3,744 acre-feet under the Court Order and 10,782 acre-feet under the IMP for the 2007-08 runoff year.

Figure 5 shows water use on the City owned land in comparison to the groundwater extractions (flowing and pumping) on Bishop Cone for runoff years 1996 to present. The average annual water use on the City-owned land was 23,100 acre-feet, the average discharge from flowing wells was 5,200 acre-feet, and the average pumping was 9,500 acre-feet. Therefore, LADWP could pump an average of approximately an additional 8,400 acre-feet per year of groundwater in Bishop Cone as provided for in the Hillside Decree. The above calculated water use does not include the amount of conveyance losses on Bishop Cone. LADWP is in the process of evaluating conveyance losses within Bishop Cone to be included in future Bishop Cone audits.

As stated earlier, under the Court's Order, the 2007-08 runoff year planned pumping from the Bishop Wellfield will be reduced by the actual amount of Owens Valley

pumping in 2006-07 above 57,412 acre-feet (approximately 1,218 acre-feet) to offset the additional amount of pumping for freeze protection in 2006-07 runoff year. This reduction for the freeze protection offset will occur in the planned pumping in the Bishop Wellfield for both the Court Ordered pumping plan and the IMP pumping plan.

Big Pine Wellfield (Figure 6)

Monitoring sites BP3 and BP4 are in ON status. Production wells controlled by BP3 have an available production capacity of 4,851 acre-feet. Production well W331, controlled by monitoring site BP4, has a production capacity of 7,530 acre-feet. Green Book designated exempt wells W218, W219, town supply wells, and the Fish Spring Fish Hatchery wells in the Big Pine Wellfield have a combined capacity of 25,486 acre-feet. Therefore, the total available capacity in the Big Pine Wellfield is 37,867 acre-feet.

According to the IMP, monitoring wells T425 and T426 will be used to calculate the average groundwater level in Big Pine Wellfield. Even though monitoring sites BP3 and BP4 are in ON status, none of the wells associated with these monitoring sites will be pumped in 2007-08 runoff year because of the Depth-To-Water criteria of the IMP. The required pumping from the Big Pine Wellfield includes supplying Fish Spring Fish Hatchery and the town water system on a year-round basis. IMP exempted wells (Table 6) will be utilized to provide water for these uses. The planned groundwater pumping from the Big Pine Wellfield is 20,400 acre-feet in the 2007-08 runoff year. With 20,400 acre-feet of pumping and a 58% forecasted Owens Valley runoff, the average groundwater level in the Big Pine Wellfield is forecasted to drop 1.4 feet by April 2008 as shown in Table 5.

According to the mining calculations shown in Table 4, the pumping limit for the Big Pine Wellfield during the first half of the 2007-08 runoff year is 23,268 acre-feet. As the planned pumping during this period is 10,200 acre-feet, the pumping limit will not be reached during the first half of the 2007-08 runoff year. Similarly, with a total amount of 20,400 acre-feet planned for pumping from the Big Pine Wellfield, groundwater mining will not be an issue in the Big Pine Wellfield in this runoff year.

Figure 3

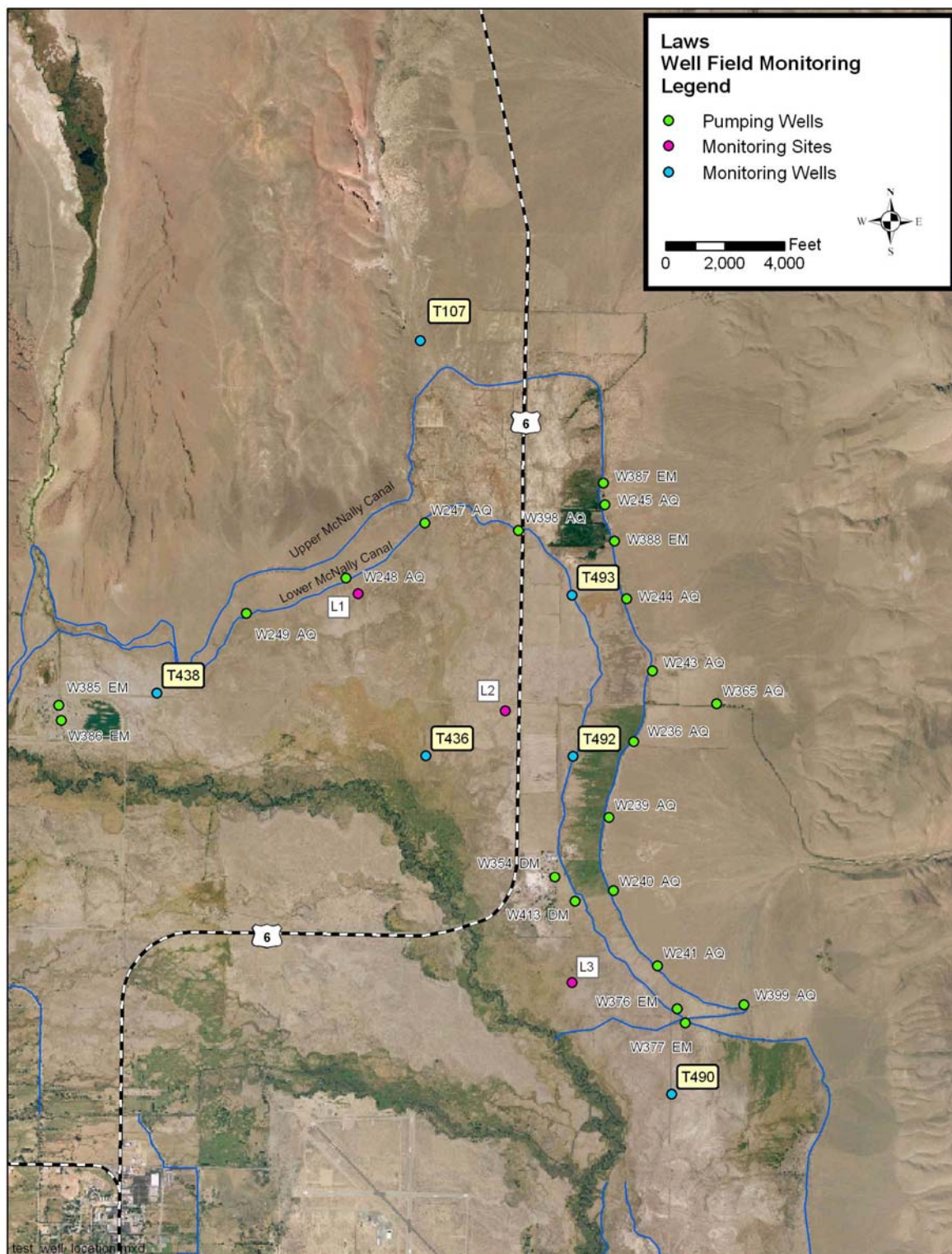


Figure 4

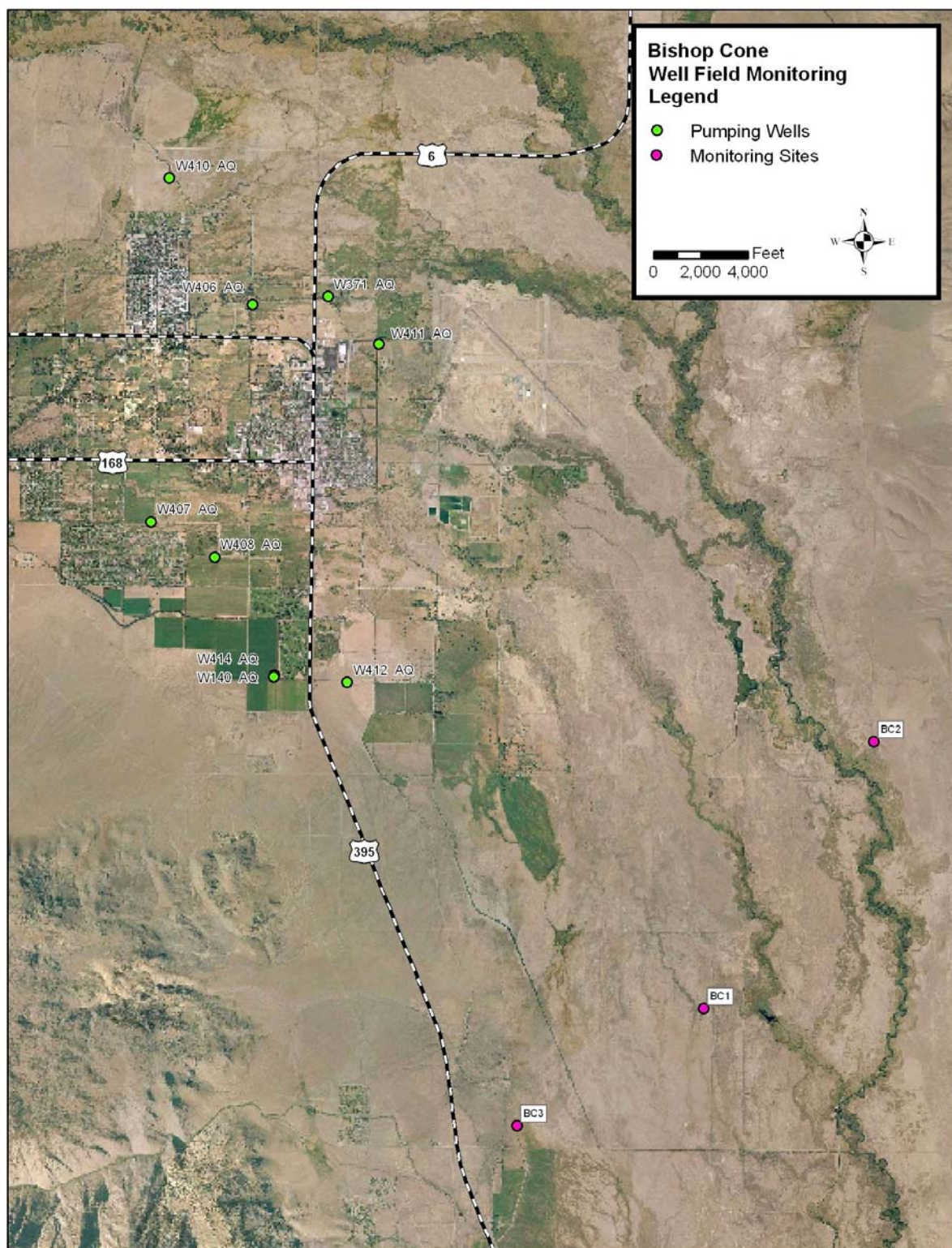


Figure 5 - Water Use on Los Angeles Owned Land, Pumping, and Flowing on Bishop Cone

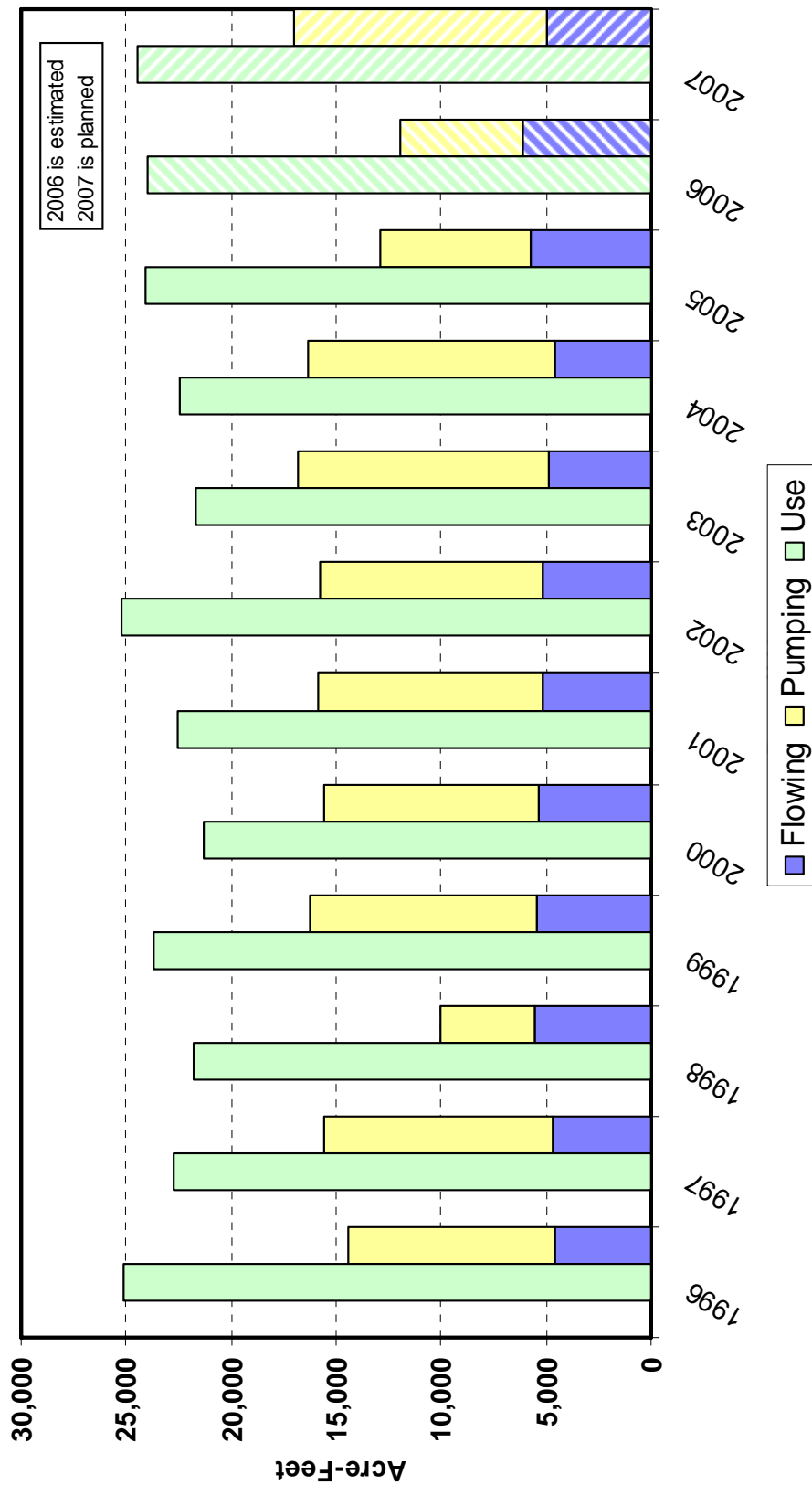
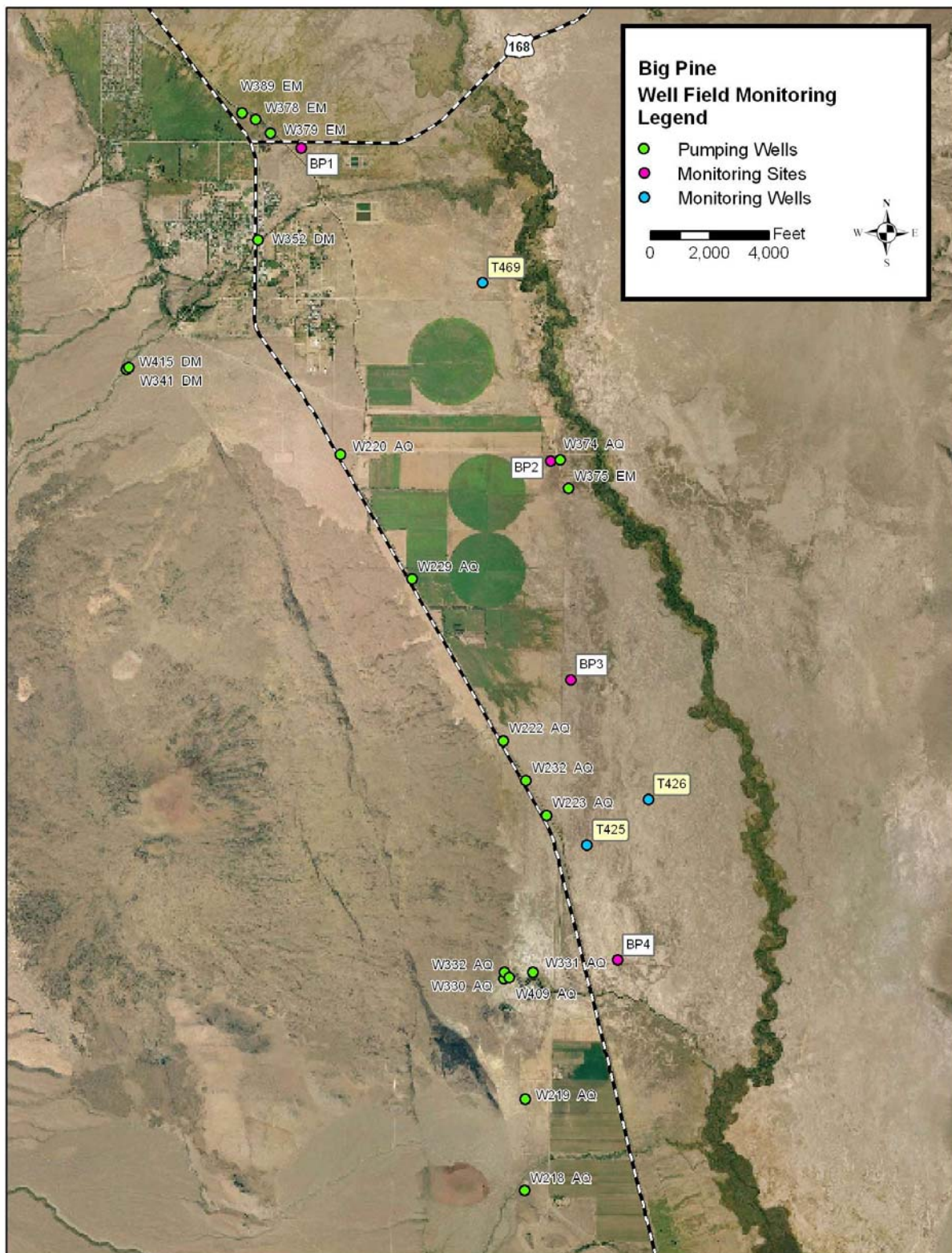


Figure 6



Taboose-Aberdeen Wellfield (Figure 7)

Monitoring site TA5 is in ON status. Production well W349 is controlled by this monitoring site and has an available pumping capacity of approximately 10,570 acre-feet. Green Book exempted well W118 in the Taboose-Aberdeen Wellfield has a capacity of 1,810 acre-feet. Therefore, the total available groundwater pumping capacity in the Taboose-Aberdeen Wellfield is 12,380 acre-feet.

According to the IMP, monitoring wells T418, T419, T421, T502 will be used to calculate the average groundwater level in the Taboose-Aberdeen Wellfield. Even though monitoring site TA5 is in ON status, production well W349 will not be pumped continuously because of the Depth-To-Water criteria of the IMP. Instead, operation of W349 will be set on a timer to maintain the water level in a pond adjacent to the Owens River. Production well W349 is expected to pump approximately 900 acre feet during the 2007-08 runoff year. With the planned pumping of 900 acre-feet from the Taboose-Aberdeen Wellfield and a 58% forecasted Owens Valley runoff, the average April 2008 groundwater level in the Taboose-Aberdeen Wellfield is forecasted to drop by 0.3 feet compared to the average measured wellfield groundwater level in April 2007 as shown in Table 5.

Thibaut-Sawmill Wellfield (Figure 8)

Monitoring site TS3 is in ON status. Production wells controlled by this monitoring site have an available pumping capacity of 2,968 acre-feet. Green Book exempted wells W351 and W356 supplying Blackrock Fish Hatchery have a capacity of 12,598 acre-feet and 8,110 acre-feet respectively. Therefore, a total capacity of 15,566 acre-feet is available in the Thibaut-Sawmill Wellfield.

According to the IMP, monitoring wells T413 and T415 will be used to calculate the average water level in the Thibaut-Sawmill Wellfield. Even though monitoring site TS3 is in ON status, none of the wells associated with this monitoring site will be pumped in the 2007-08 runoff year because of the Depth-To-Water criteria of the IMP. The needed pumping in this wellfield for supplying the Blackrock Fish Hatchery is 12,500 acre-feet. IMP exempted wells (Table 6) will be utilized to provide water for this use. The planned groundwater pumping from the Thibaut-Sawmill Wellfield is 12,500 acre-feet for the 2007-08 runoff year. With the planned pumping of 12,500 acre-feet from Thibaut-Sawmill wellfield and a 58% of normal forecasted Owens Valley runoff, the average groundwater level in the Thibaut-Sawmill Wellfield is forecasted to drop 1.3 feet from the average measured wellfield groundwater level in April 2007 as shown in Table 5.

Independence-Oak Wellfield (Figure 8)

All vegetation monitoring sites in the Independence-Oak Wellfield remained in OFF status as of April 2007, resulting in no planned pumping from wells linked to these monitoring sites. Total available pumping capacity in Independence-Oak Wellfield from Green Book designated exempt wells is 13,973 acre-feet. Pumping from this

wellfield will be limited to exempt wells for supplying E/M projects and the town water system.

According to the IMP, monitoring wells T407, T408, and T409 will be used to calculate the average groundwater level in Independence–Oak Wellfield. None of the exempt wells in the Independence-Oak Wellfield will be pumped for LA Aqueduct supply because of the Depth-To-Water criteria of the IMP. The required pumping in this wellfield is 6,700 acre-feet for supplying the town water system and E/M projects in the wellfield. IMP exempted wells (Table 6) will be utilized to provide water for these uses. The planned groundwater pumping from Independence-Oak Wellfield is 6,700 acre-feet for the 2007-08 runoff year. With the planned pumping of 6,700 acre-feet from Independence-Oak Wellfield and a 58% of normal forecasted Owens Valley runoff, the average groundwater level in Independence-Oak Wellfield in April 2008 is forecasted to drop 1.3 feet compared to the average measured groundwater level in April 2007 as shown in Table 5.

Symmes-Shepherd Wellfield (Figure 8)

All vegetation monitoring sites in the Symmes-Shepherd Wellfield remained in OFF status as of April 2007, resulting in no planned pumping from wells linked to these monitoring sites. Green Book designated exempt well, W402, in the Symmes-Shepherd Wellfield, has an available capacity of 1,350 acre-feet. The planned groundwater pumping from the Symmes-Shepherd Wellfield is 1,300 acre-feet for the 2007-08 runoff year.

According to the IMP, monitoring wells T401, T403, T404, and T447 will be used to calculate the average water level in the Symmes-Shepherd Wellfield. IMP exempted production well W402 (Table 6) will be used for supplying an E/M project in this wellfield. Pumping 1,300 acre-feet from the Symmes-Shepherd Wellfield and a 58% forecasted Owens Valley runoff, the average April 2008 groundwater level in the Symmes-Shepherd Wellfield is forecasted to rise 0.2 feet compared to the average measured wellfield groundwater level in April 2007 as shown in Table 5.

Bairs-George Wellfield (Figure 8)

Vegetation monitoring site BG2 remained in OFF status as of April 2007, resulting in no planned pumping from wells linked to this monitoring site. As 2007-08 runoff year is forecasted to be a dry year, LADWP anticipates having to operate well W343 to provide supplemental water for irrigation purposes in this wellfield. The total planned pumping from W343 is expected to be 500 acre-feet. Operational testing related to Reinhackle Spring may resume if this monitoring site returns to ON status or if a testing protocol is agreed to by ICWD and LADWP.

According to the IMP, monitoring wells T398 and T400 will be used to calculate the average groundwater level in the Bairs-George Wellfield. Even if monitoring site BG2 changes to ON status, LADWP is not planning to operate any wells in the Bairs-Georges Wellfield during the 2007-08 runoff year, because of the Depth-To-Water

criteria of the IMP. IMP exempted well W343 (Table 6) will have to be utilized to provide supplemental irrigation water during this runoff year. With a planned pumping of 500 acre-feet from the Bairs-George Wellfield and a 58% of normal forecasted Owens Valley runoff, the average April 2008 groundwater level in the Bairs-George Wellfield is forecasted to drop 0.7 feet from the average measured groundwater level in April 2007 as shown in Table 5.

Lone Pine Wellfield (Figure 10)

LADWP is currently operating three wells in the Lone Pine area including the town supply wells W344 and W346 and well W390 to supply an E/M project east of town. These three wells pump approximately 1,250 acre-feet per year to meet the demand. As outlined in Section IV.B of the Green Book, LADWP desires to activate pumping well W416, which was drilled in 2002. Green Book guidelines provide for operation of a new well at full capacity for six months while monitoring water levels and vegetation. Data collected during the initial operation will then be utilized to develop a long-term operation plan for this production well. In response to ICWD's concerns, LADWP has drilled additional monitoring wells and is planning to limit the initial operation of well W416 to only one (1) month, pumping approximately 335 acre-feet. The needed pumping in this wellfield is about 1,250 acre-feet. The planned groundwater pumping from the Lone Pine Wellfield is 1,250 acre-feet for the 2007-08 runoff year does not include the anticipated 335 acre-feet pumping for testing W416, which will require agreement between ICWD and LADWP.

Figure 7

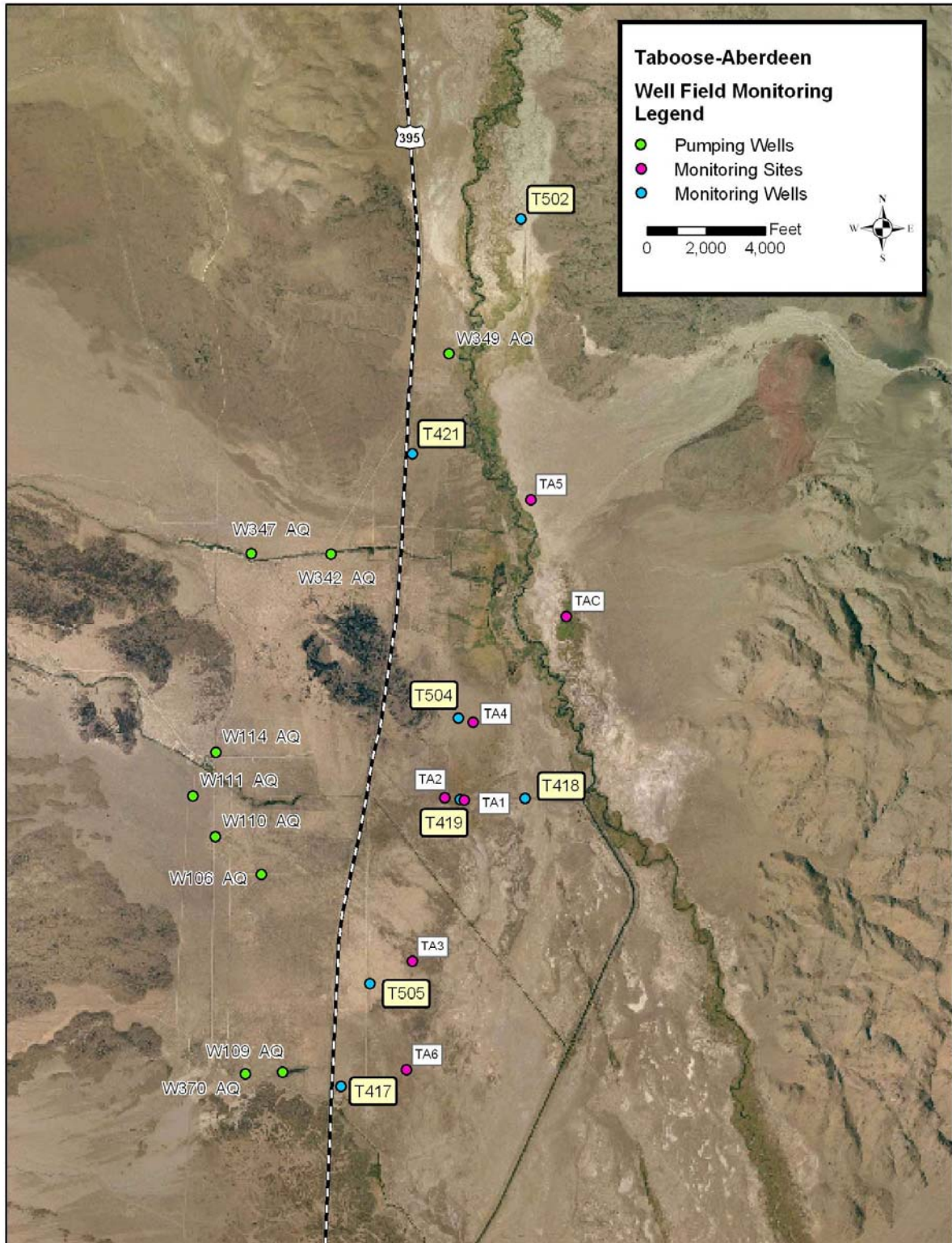


Figure 8

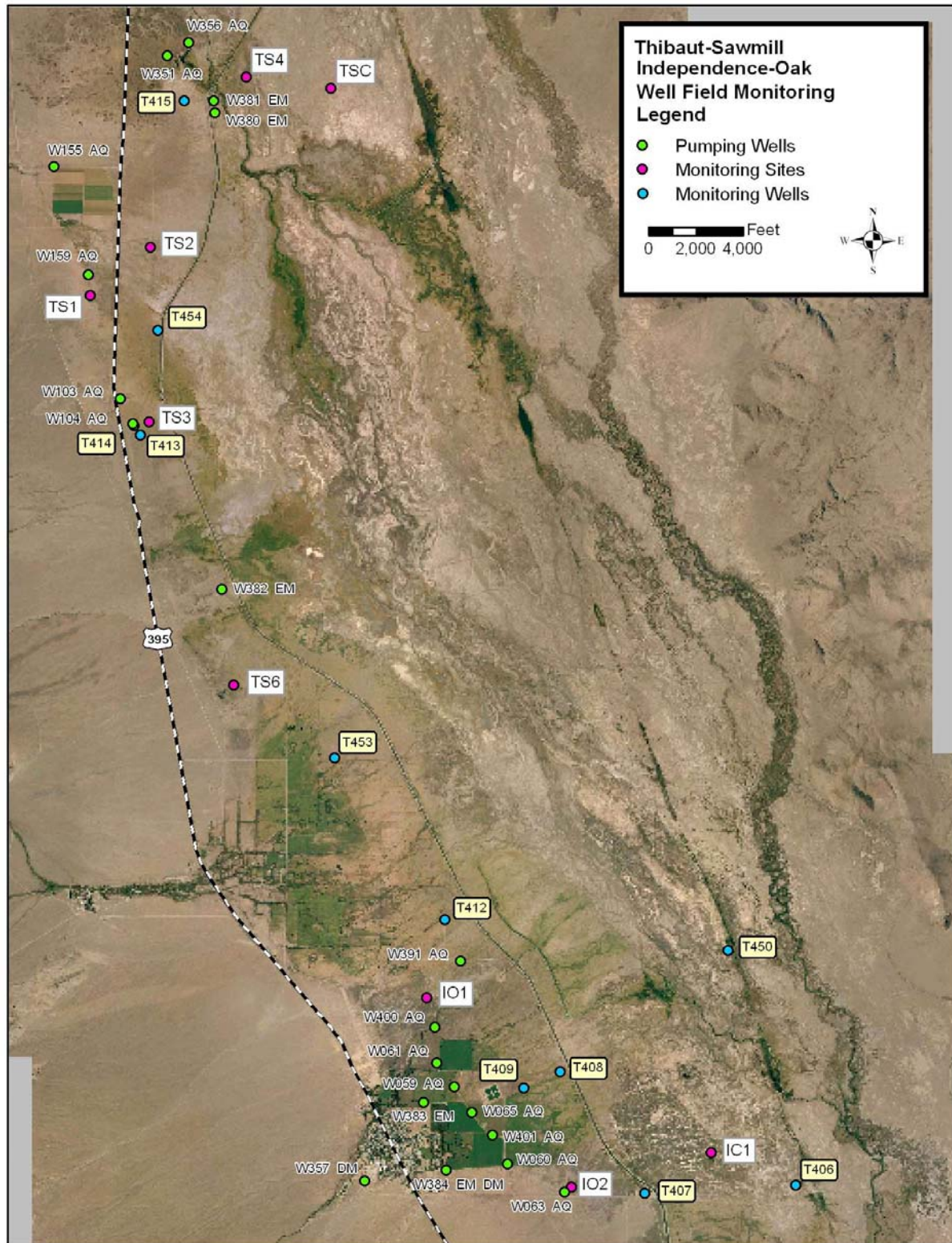


Figure 9

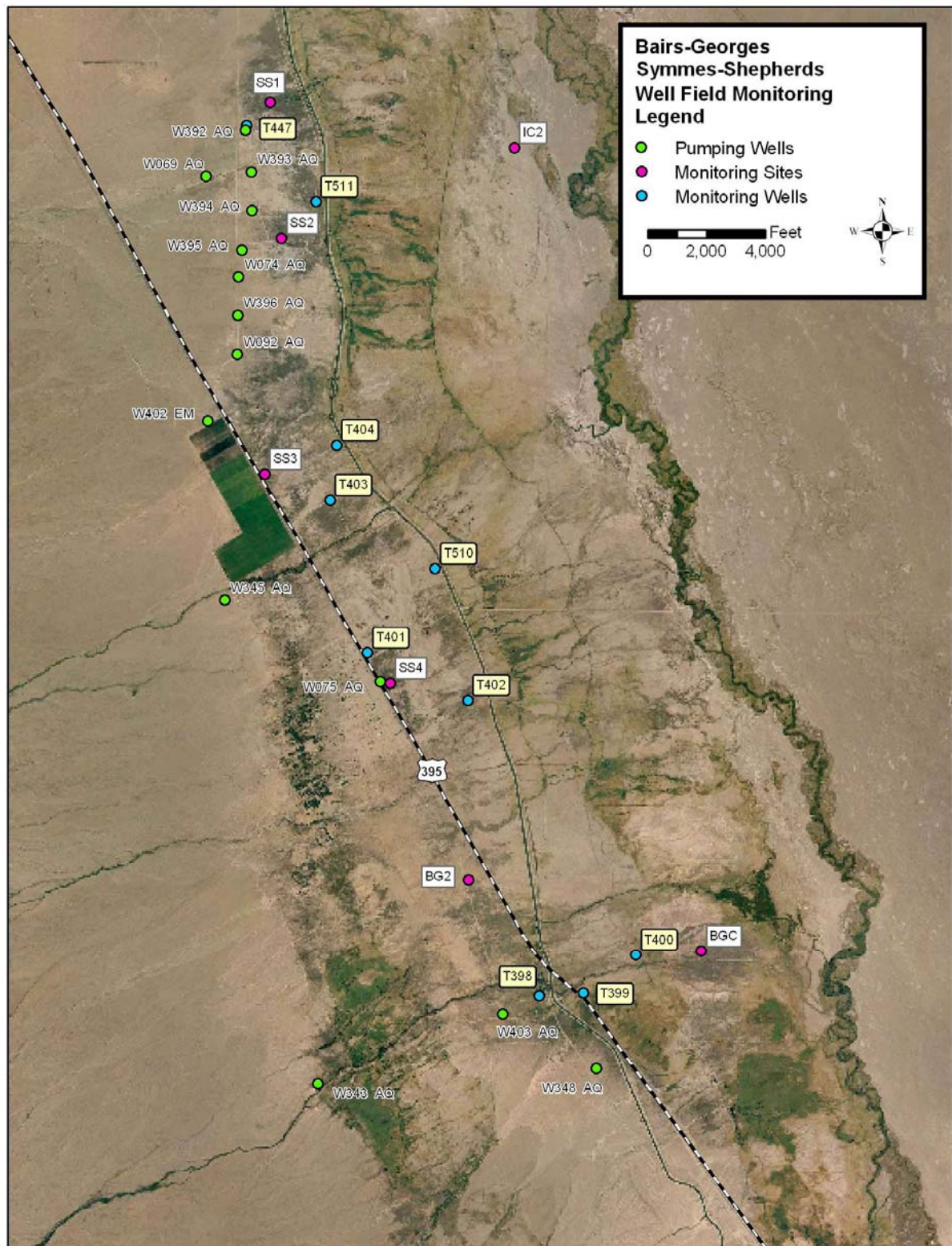
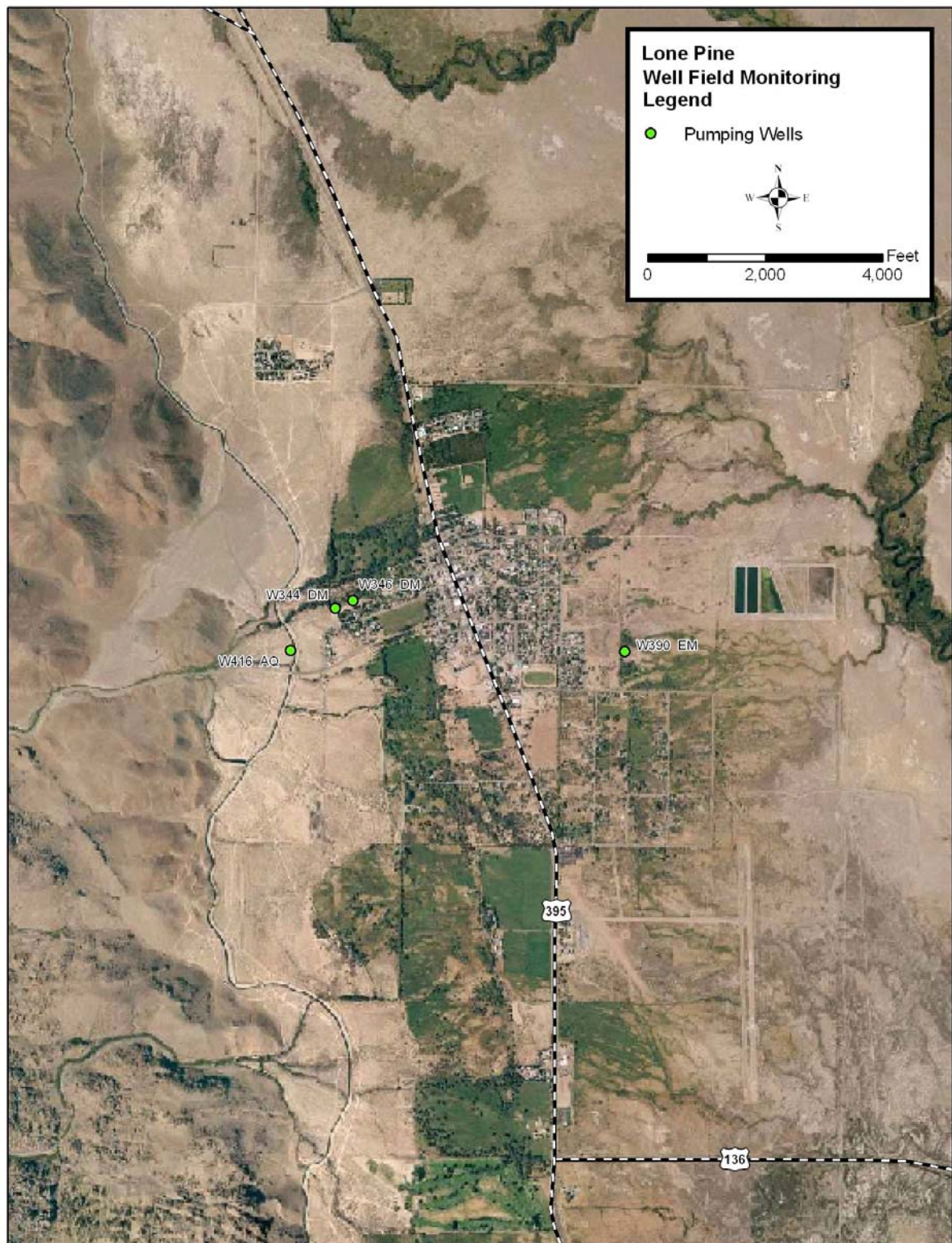


Figure 10



2.3 Owens Valley Uses (Including Enhancement/Mitigation Projects)

Similar to runoff years 1996-97 through 2006-07, full allotments will be available for most in-valley uses in 2007-08. LADWP leases will be provided with their normal allotted duty. Alfalfa and improved pasture E/M projects will receive the allotted duty of 5 acre-feet per acre. Native pasture E/M projects will receive the allotted duty of 3 acre-feet per acre. Some uses that are dependent on creek flows may not receive their full allotment because of the low forecasted runoff. Table 8 shows the historic (1981-82) uses and the planned monthly Owens Valley uses for 2007-08. The in-valley uses shown on Table 8 consist of irrigation, stock water, operations, recreation and wildlife projects, and E/M supply (with the LORP project usage shown separately). As shown in Table 8, LADWP plans to provide approximately 103,650 acre-feet for in-valley uses this runoff year.

The Water Agreement provides that “... *enhancement/mitigation projects shall continue to be supplied by enhancement/mitigation wells as necessary.*” Due to monitoring sites controlling some of the production wells supplying E/M projects being in OFF status, the amount of water supplied to E/M projects has exceeded the amount of water provided by E/M project supply wells. Table 9 shows the planned water supply to E/M projects and the forecasted imbalance between the E/M projects water use and the E/M project supply well pumping by the end of 2007-08 runoff year.

The planned E/M water use is expected to result in a shortfall of E/M pumping totaling approximately 24,450 acre-feet during the 2007-08 runoff year and a cumulative shortfall of approximately 186,008 acre-feet by the end of 2007-08 runoff year. This shortfall will be made up partially by pumping Los Angeles Aqueduct supply wells and/or by providing surface water from the Los Angeles Aqueduct.

Releases to the Lower Owens River Project (LORP) from the intake facility commenced on December 6, 2006. These flows gradually increased and along with minimal releases from spillgates to the southern end. A flow of approximately 40 cfs is now maintained throughout the entire 62 mile stretch of Lower Owens River south of the intake structure. The releases at the LAA intake may be augmented through additional releases at the Independence, Blackrock, Georges, Locust, and Alabama spillgates to maintain a continuous flow of approximately 40 cfs in the river channel. Table 8 shows water use by the LORP on a monthly basis. This will result in a planned consumption of approximately 18,000 acre-feet of water by the Lower Owens River Project during the 2007-08 runoff year.

Table 8 - Historic (1981-82) and Projected (2007-2008) Water Uses in the Owens Valley [ac-ft]

Use	April		May		June		July		August		September		TOTAL	
	1981	2007	1981	2007	1981	2007	1981	2007	1981	2007	1981	2007	1981	2007
Irrigation	3,980	5,900	7,958	9,300	10,373	10,900	9,476	11,400	8,295	9,400	6,321	6,800	46,403	53,700
Stockwater	1,141	1,000	1,319	1,200	1,244	1,200	1,245	1,200	1,219	1,200	1,319	1,100	7,487	6,900
E / M	0	1,400	0	1,300	0	2,200	0	2,000	0	2,100	0	1,400	0	10,400
LORP Project	0	1,300	0	1,500	0	1,700	0	2,100	0	2,100	0	2,100	0	10,800
Rec. & Wildlife	379	400	804	800	1,180	1,100	1,455	1,200	1,381	900	1,406	800	6,585	5,000
Total/	5,500	10,000	10,081	14,100	12,777	17,100	12,176	17,900	10,895	15,700	9,046	12,000	60,475	86,800

Use	October		November		December		January		February		March		TOTAL	
	1981	2007	1981	2007	1981	2007	1982	2008	1982	2008	1982	2008	81-82	07-08
Irrigation	263	400	0	0	0	0	0	0	0	0	14	0	277	400
Stockwater	1,065	900	1,045	900	1,050	900	1,007	900	1,010	900	1,098	900	6,275	5,400
E / M	0	400	0	100	0	50	0	50	0	50	0	400	0	1,050
LORP Project	0	1,600	0	1,200	0	1,100	0	1,100	0	1,100	0	1,100	0	7,200
Rec. & Wildlife	781	700	713	500	565	500	478	400	342	300	447	400	3,326	2,800
Total/	2,109	4,000	1,758	2,700	1,615	2,550	1,485	2,450	1,352	2,350	1,559	2,800	9,878	16,850
													70,353	103,650

Table 9 - Owens Valley Groundwater Pumping for Production and E/M Wells (1984-2007)

Runoff Year (Apr-Mar)	Owens Valley Runoff (1) (% of normal)	Total Pumping (acre-feet)	Non-E/M Pumping (acre-feet)	E/M Pumping (acre-feet)	E/M Water Uses (acre-feet)	E/M Pumping & Use Imbalance (acre-feet)	Cumulative E/M Pumping & Use Imbalance (acre-feet)
1985/86	103	107,718	107,718	0	109		0
1986/87	158	69,887	69,887	0	12,696	(4)	0
1987/88	68	209,393	179,883	29,510	29,360		0
1988/89	62	200,443	171,012	29,431	30,872		0
1989/90	63	155,903	133,340	22,563	23,330		0
1990/91	52	89,061	70,974	18,087	17,949		0
1991/92	64	87,526	71,736	15,790	20,517	-4,727	-4,727
1992/93	61	84,135	70,370	13,765	18,357	-4,592	-9,319
1993/94	106	76,329	67,338	8,991	19,310	-10,319	-19,638
1994/95	66	89,153	78,143	11,010	20,812	-9,802	-29,440
1995/96	154	69,740	57,168	12,572	22,914	-10,342	-39,782
1996/97	135	74,817	57,894	16,923	23,949	-7,026	-46,808
1997/98	124	66,910	52,756	14,154	21,500	-7,346	-54,154
1998/99	149	51,575	47,354	4,221	19,672	(4)	-54,154
1999/00	89	63,699	59,366	4,333	24,450	-20,117	-74,271
2000/01	84	67,534	61,195	6,339	20,611	-14,272	-88,543
2001/02	83	72,536	69,242	3,294	21,815	-18,521	-107,064
2002/03	67	82,281	76,361	5,920	21,394	-15,474	-122,538
2003/04	81	87,726	80,728	6,998	21,116	-14,118	-136,656
2004/05	77	85,803	78,090	7,710	18,327	-10,617	-147,273
2005/06	136	56,806	51,735	5,071	19,356	-14,285	-161,558
2006/07 (2)	145	58,630	54,010	4,620	19,000	(4)	-161,558
2007/08 (3)	58	63,232	58,232	5,000	29,450	-24,450	-186,008

(1) Based on 1956-2005 average: 415,725 acre-feet

(2) estimated

(3) forecasted or planned

(4) surface water was available

2.4 Aqueduct Operations

Table 10 shows planned Los Angeles Aqueduct first-of-month reservoir storage levels and planned monthly Aqueduct deliveries to Los Angeles. Based on this plan, a total of 115,091 acre-feet will be exported from the Eastern Sierra to the City in the 2007-08 runoff year. This is the second lowest amount of water exported historically from the Eastern Sierra for use in the City of Los Angeles.

2.5 Water Exports to Los Angeles

Figure 11 provides a record of water supply exported from the Eastern Sierra, averaging 370,000 acre-feet per year from 1970 to present. Figure 12 shows the Los Angeles Aqueduct's contribution to the City of Los Angeles water supply relative to the total supply from 1970 to present. During the 2006-07 runoff year, approximately 62% of the water supply for the City of Los Angeles was provided by exports from the Eastern Sierra (Owens Valley and Mono Basin). Figure 12 also shows the forecasted water supply mix for the City of Los Angeles for the 2007-08 runoff year. It is estimated that imports from the Eastern Sierra will provide approximately 17% of water supply for the City of Los Angeles, groundwater pumping from San Fernando Valley will provide 13%, and purchased water from Metropolitan Water District of Southern California will provide the remaining 70% of the City's water supply. This lowest forecasted export to Los Angeles from the Eastern Sierra in the history is the result of very low runoff from this dry year, reduced groundwater pumping result from the IMP, and increasing water demands in the Owens Valley for the Owens Lake Dust Mitigation Program and the Lower Owens River Project.

**Table 10 - Planned Los Angeles Aqueduct Operations
for 2007-08 Runoff Year**

Month	Owens Valley Reservoir Storage (1st of Month) (acre-feet)	Aqueduct Deliveries to LA (acre-feet)
April	182,482	4,165
May	181,480	3,997
June	177,115	9,223
July	162,555	15,987
August	147,622	15,372
September	128,712	11,008
October	107,387	6,149
November	107,892	7,438
December	118,235	9,223
January	131,885	6,149
February	144,706	18,694
March	155,817	7,686
TOTAL		115,091

Figure 11 – Los Angeles Aqueduct Exports

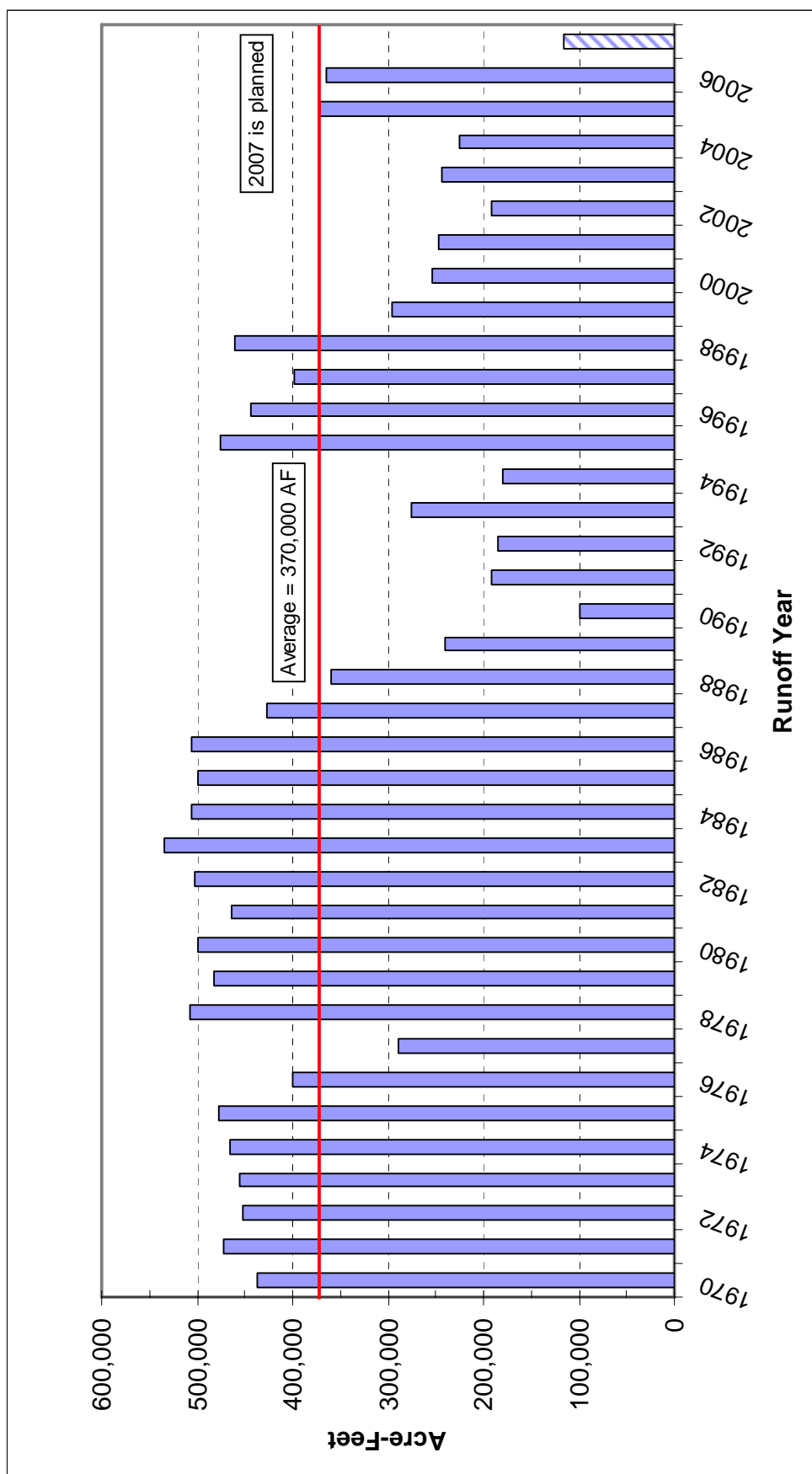


Figure 12 – Sources of Water for the City of Los Angeles

