

**Table P-1**  
**Preliminary Sizing and Cost Estimate for Cisterns on Public Sites**

Seq. No.	Site Name	Area Landscaped (Acres)	Area Hard (ft <sup>2</sup> )	Total Runoff (gal) <sup>1</sup>	Cistern to Capture All Runoff (gal) <sup>2</sup>	Assumed Cistern Size (gal)	Estimated Cistern Cost <sup>3</sup>	Total Runoff Captured <sup>4</sup>	Annual Runoff Captured	% Captured
G-7	Santa Monica City Hall	1.1	45,738	4,324,571	528,173	100,000	\$1 Mil	2,771,298	251,936	64%
G-8	County Courthouse	2.3	294,030	27,800,813	10,569,789	100,000	\$1 Mil	6,145,127	558,648	22%
G-9	Santa Monica Civic Auditorium	1.4	143,312	13,550,322	3,532,186	100,000	\$1 Mil	4,344,223	394,929	32%
G-14	Loyola Village Branch Library	3.4	145,926	13,797,440	1,709,308	100,000	\$1 Mil	6,027,522	547,957	44%
G-16	El Segundo City Hall	1.0	43,560	4,118,639	513,537	100,000	\$1 Mil	2,646,922	240,629	64%
P-2	Clover Park	10.8	117,612	11,120,325	871,638	100,000	\$1 Mil	6,724,639	611,331	60%
P-3	Virginia Avenue Park	5.3	40,511	3,830,334	289,329	100,000	\$1 Mil	3,334,377	303,125	87%
P-4	Schader and/or Park Dr. Park <sup>4</sup>	4.8	-	-	-	100,000	\$1 Mil	9,279,580	843,598	-
P-6	Douglas Park	3.5	82,328	7,784,228	707,953	100,000	\$1 Mil	4,927,941	447,995	63%
P-7	Memorial Park	9.0	98,446	9,308,124	729,869	100,000	\$1 Mil	6,084,533	553,139	65%
P-8	Marine Park	6.8	15,463	1,462,041	84,492	85,000	\$0.9 Mil	1,462,041	132,913	100%
P-9	Los Amigos Park	6.6	15,028	1,420,930	82,116	85,000	\$0.9 Mil	1,420,930	129,175	100%
P-10	Ocean View Park	0.4	17,424	1,647,456	205,415	100,000	\$1 Mil	1,427,548	129,777	87%
P-15	Joslyn Park	2.2	31,581	2,986,013	238,881	100,000	\$1 Mil	2,637,637	239,785	88%
P-16	Mary Hotchkiss Park <sup>4</sup>	2.9	-	-	-	100,000	\$1 Mil	7,721,570	701,961	-
P-17	Crescent Bay Park <sup>4</sup>	4.4	-	-	-	100,000	\$1 Mil	9,014,620	819,511	-
P-18	Christine Emerson Reed Park	5.6	60,984	5,766,095	451,960	100,000	\$1 Mil	4,490,095	408,190	78%
P-21	Del Rey Lagoon Park	3.8	18,513	1,750,422	122,712	100,000	\$1 Mil	1,720,904	156,446	98%
P-22	Westchester Golf and Recreation Center	20.1	97,139	9,184,565	642,766	100,000	\$1 Mil	6,426,635	584,240	70%
P-29	The Lakes at El Segundo Golf Course <sup>4</sup>	14.7	-	-	-	100,000	\$1 Mil	11,790,560	1,071,869	-
P-30	Constitution Park <sup>4</sup>	7.0	-	-	-	100,000	\$1 Mil	10,209,160	928,105	-
P-31	Westminster Park <sup>4</sup>	3.2	-	-	-	100,000	\$1 Mil	8,031,100	730,100	-
P-32	Oakwood Recreation Center	4.1	44,431	4,201,012	329,147	100,000	\$1 Mil	3,534,812	321,347	84%

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P-33	Penmar Recreational Park	11.5	125,453	11,861,680	929,885	100,000	\$1 Mil	6,967,423	633,402	59%
P-34	Barrington Recreation Center	1.2	13,068	1,235,592	96,849	100,000	\$1 Mil	1,235,592	112,327	100%
P-35	Rustic Canyon Recreation Center	5.9	283,140	26,771,153	3,470,468	100,000	\$1 Mil	8,367,362	760,669	31%
P-37	Temescal Canyon Park	2.7	39,204	3,706,775	296,756	100,000	\$1 Mil	3,151,398	286,491	85%
V-1	Between Clover Park and Santa Monica Airport	5.8	27,878	2,635,929	184,254	100,000	\$1 Mil	2,441,143	221,922	93%
V-7	Sepulveda Blvd and E Grand Ave <sup>4</sup>	0.7	-	-	-	100,000	\$1 Mil	3,823,650	347,605	-
V-8	E. Imperial Hwy & California St. <sup>4</sup>	2.6	-	-	-	100,000	\$1 Mil	7,384,080	671,280	-

## Notes:

- 1 The total runoff is the amount of runoff captured at the site in the 11-year study period.
- 2 This is the estimated volume to capture and reuse of the runoff generated at the site without returning runoff to the collection system.  
Approach for Cistern Analysis.  
Used the rainfall data at LAX from January 1990 to December 2001.  
There were 658 rain events during this period. The average rainfall was 15.3 inches per year.  
Of these events, 375 were very small (0.00 to 0.1 inches of total rainfall). These events were deleted from the database.  
The largest was 3.5 inches on 3 January 1995.  
It was assumed that 90 percent of the rain falling onto a roof would be captured (per TREE people web site information).  
It was assumed that irrigation would be stopped one day before a storm and could be started 2 days after a storm.  
The assumed irrigation demand was 2,300 gallons/day per acre for turf. This is an average demand calculated from recommendations prepared by the UC Ag Extension.
- 3 A cost of \$1 Mil per project was developed for TM 9.
- 4 Runoff captured during the study period for the assumed cistern size. Some would be used on the landscape during the study period and some would be in the cistern at the end of the period.
- 5 This site has no hardscaped area. Runoff would be imported. The theoretical amount that could be irrigated during the study period is calculated.