Seaside Basin Aquifer Storage and Recovery (ASR) Projects

Summary of Selected Project Information

Site / Well Name	Injection Capacity[1] Gallons Per Minute (GPM)	Injection Capacity[1] Million Gallons Per Day (MGD)	Injection Capacity[1] Cubic Feet Per Second (CFS)	Injection Capacity[1] Acre-Feet Per Day (AFD)	Recovery Capacity[2] Gallons Per Minute (GPM)	Recovery Capacity[2] Million Gallons Per Day (MGD)	Recovery Capacity[2] Cubic Feet Per Second (CFS)	Recovery Capacity[2] Acre-Feet Per Day (AFD)	Estimated Long-Term Average Yield[3] Acre-Feet Per Year (AFY)	Water Right Permit No.[4]	Minimum Instream Flow Requirements to Allow Carmel River Diversions[5]
Water Project 1 (aka Phase 1)											
Santa Margarita ASR-1	1,250	1.8	2.8	5.5	2,500	3.6	5.6	11.0			
Santa Margarita ASR-2	1,750	2.5	3.9	7.7	3,500	5.0	7.8	15.5			
Total Capacity	3,000	4.3	6.7	13.3	6,000	8.6	13.4	26.5	920	20808A	See Permit 20808A, Tables A, B, and C
Water Project 2 (aka Phase 2)											
Middle School ASR-1	1,750	2.5	3.9	7.7	3,500	5.0	7.8	15.5			
Middle School ASR-2	1,750	2.5	3.9	7.7	3,500	5.0	7.8	15.5			
Total Capacity	3,500	5.0	7.8	15.5	7,000	10.1	15.6	30.9	1,000	20808C	See Permit 20808C, Table A
Water Projects 1 and 2 combined	**6,500**	**9.4**	**14.5**	**28.7**	**13,000**	**18.7**	**29.0**	**57.5**	**1,920**	**Annual Yield (rounded) 2,000 AFY**	

NOTES:

1. Individual well "Injection Capacity" values are based on available data regarding the actual or theoretical maximum sustained injection rates, and are subject to change with collection of additional empiral data from ongoing ASR operations. Example conversion from GPM to AFD: 3000 GPM/448.8 x 1.9835 = 13.3 AFD.
2. Individual well "Recovery Capacity" values are based on available data regarding the actual or theoretical maximum short-term recovery (i.e., pumping) rates, and are subject to change with collection of additional empirical data from ongoing ASR operations. Currently, each site is designed with only one well operated in recovery mode at a time, not simultaneously. Accordingly, the ***operational*** recovery capacity is 3,500 gpm for each site.
3. "Estimated Long-Term Average Yield" value for Water Project 1 site is based on water resources simulation modeling studies conducted by MPWMD as described in "MPWMD Aquifer Storage and Recovery Project Environmental Impact Report / Environmental Assessment" dated March 2006 (see Ch. 8). Value for Water Project 2 site has been extrapolated from Water Project 1 study analyses and has not been independently modeled. Combined Estimated Annual Yield for both site has been rounded to 2,000 AFY by MPWMD for planning purposes.
4. Water Right diversion limits:

	Permit 20808A	Permit 20808C
Maximum instantaneous rate	6.7 CFS (rounds to 3,000 GPM)	8.0 CFS (rounds to 3,600 GPM)
Maximum rate per day	13.3 AFD	15.9 AFD
Maximum annual volume	2,426 AFY	2,900 AFY
Season of diversion	12/1 of each year to 5/31 of succeeding year	12/1 of each year to 5/31 of succeeding year

5. Permit 20808A was issued 11/30/2007; Permit 20808C has not yet been issued, but is anticipated in 2011.

Distributed by staff at 7/19/11 meeting.