

# FOOTHILL MUNICIPAL WATER DISTRICT STORMWATER CAPTURE AND RECHARGE PROJECTS

## Need For FOOTHILL Stormwater Capture and Recharge Projects

- Statewide water shortages will continue in California as result of Delta issues, Colorado River cutbacks and increased population.
- Local stormwater capture and recharge projects will increase the yield of groundwater basins and ultimately the reliability of water agencies during droughts and emergencies.
- Local stormwater capture and recharge reduces California’s dependence on imported water supplies from northern California and the Colorado River.

## Proposed Foothill Stormwater Capture and Recharge Program

- Program would increase the capture of and recharge of stormwater from by 1500 AF on average.
- Stormwater capture and recharge program is being developed by FMWD and its partners (1500 AFY average).
- Program would increase capture and recharge of stormwater water through rehabilitation of debris basins to capture more water and construction of off-channel infiltration galleries to replace demands on imported water supplies.
- Proposed Verdugo Basin and Raymond Basin recharge would reduce overdraft and increase water tables.
- System improvements include: debris basins – retrofitting outlet structures, regrading for berms, soil scarification for improved infiltration; infiltration galleries – surface intake structure, subsurface sediment trap, rubber dam and subsurface galleries with perforated infiltration piping.
- Construction of proposed project facilities is phased.

Expansion Phase	Phase 1	Phase 2	Phase 3	Phase 4	Total
Proposed Implementation Period (FY)	2010/2011	2011/2012	2012/2013	2013/2014	
Average Annual Recharge	340	540	430	190	1500
Anticipated Annual Increase in Production	300	490	390	150	1330
Anticipated Capital Costs (million)	1.7	3.0	0.3	1.0	6.0

*Please note that this data does not include the pump back project that is part of the FWC PIP.*

## Funding Sources

- State funding assistance provided through Propositions 50, 84 and if approved by voters in November 2010 funds through SBX7-2.
- Avoided cost of purchasing MWD imported water plus FMWD energy pumping costs (\$1,200 per AF x 1500 AF = \$1,800,000 annual savings)
- Local cost share is 50% of total capital budget:
 

Local Contribution:	\$3 million (50%)
State Contribution:	\$3 million (50%)
Total Cost:	\$6 million

## Foothill MWD

- FMWD provides wholesale imported water service to Altadena, La Canada and La Crescenta.
- Stormwater capture and recharge is being implemented in partnership with the Foothill Water Coalition and City of Pasadena, City of Glendale, Crescenta Valley Water District, Raymond Basin Management Board, ULARA Watermaster, and LA County Public Works.
- FMWD is a member agency of the Metropolitan Water District of Southern California.
- FMWD’s service area covers 22 square miles with current population estimated at 88,000.
- Total regional annual water demand currently averages 20,000 acre-feet per year (AFY).
- Approximately 57% of regional water supply is purchased imported water, 39% from groundwater, 3% from local stream flow and the remaining 1% is from recycled water.
- Drought proof supply benefits:
  - 5-10% increase in local supplies will result in more reliable and lower cost supplies for all the customers.
  - AB 32 compliance with regard California climate change regs for water and wastewater utilities
  - Restoration and environmental enhancement of local watersheds
  - Long term “sustainable water supplies” and eliminate long term overdraft of Verdugo and Raymond Basins