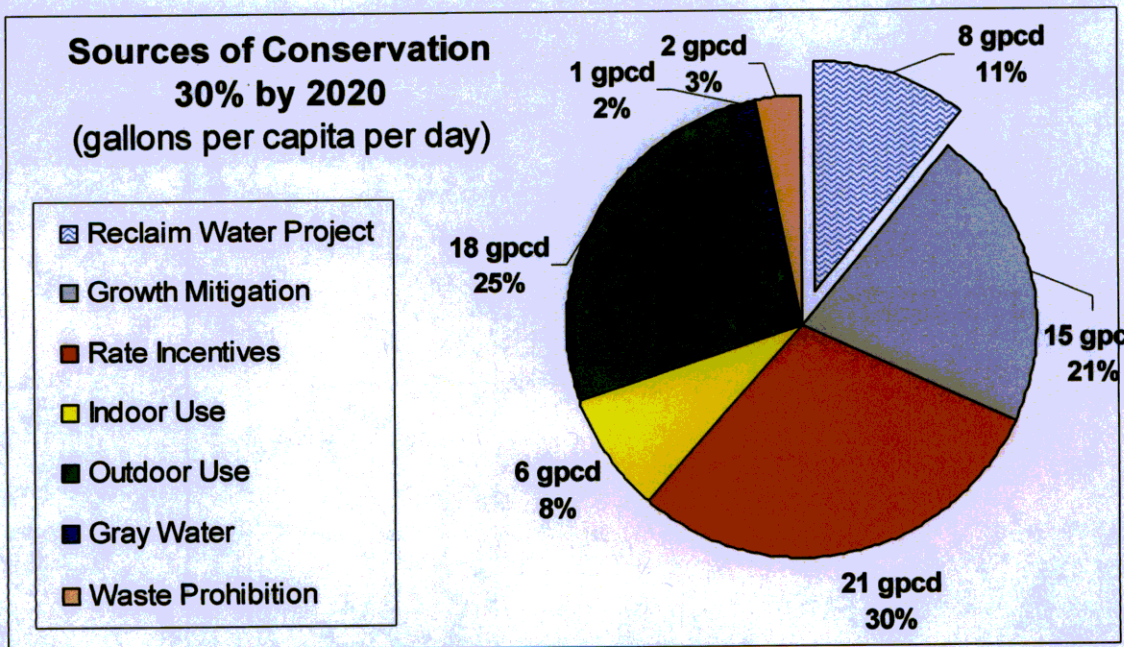
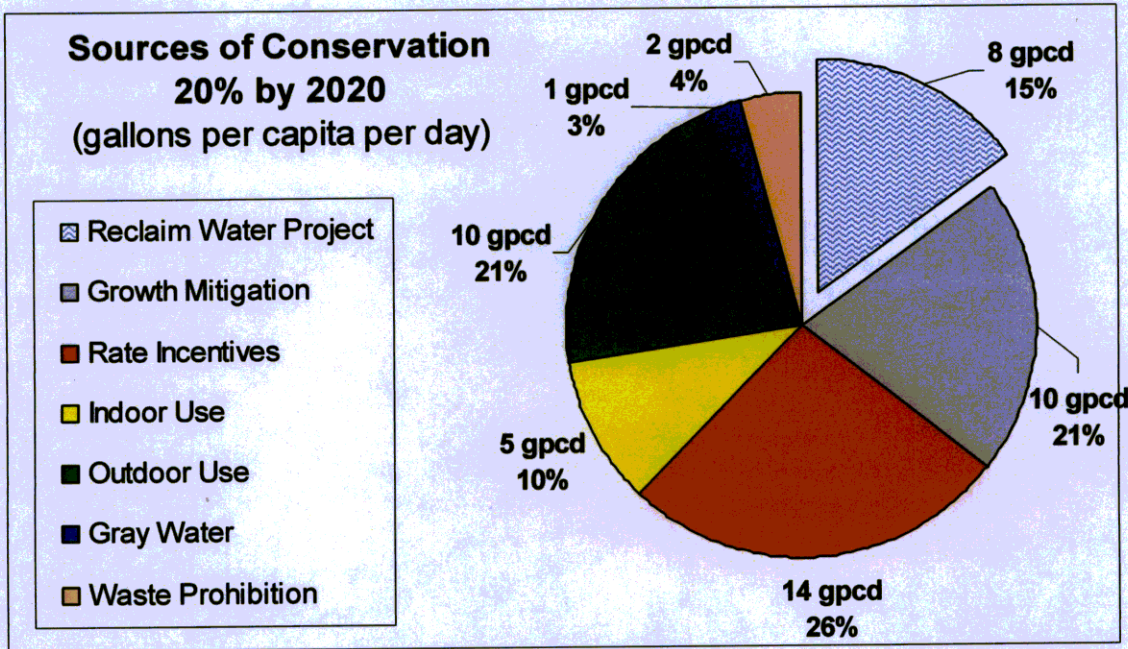


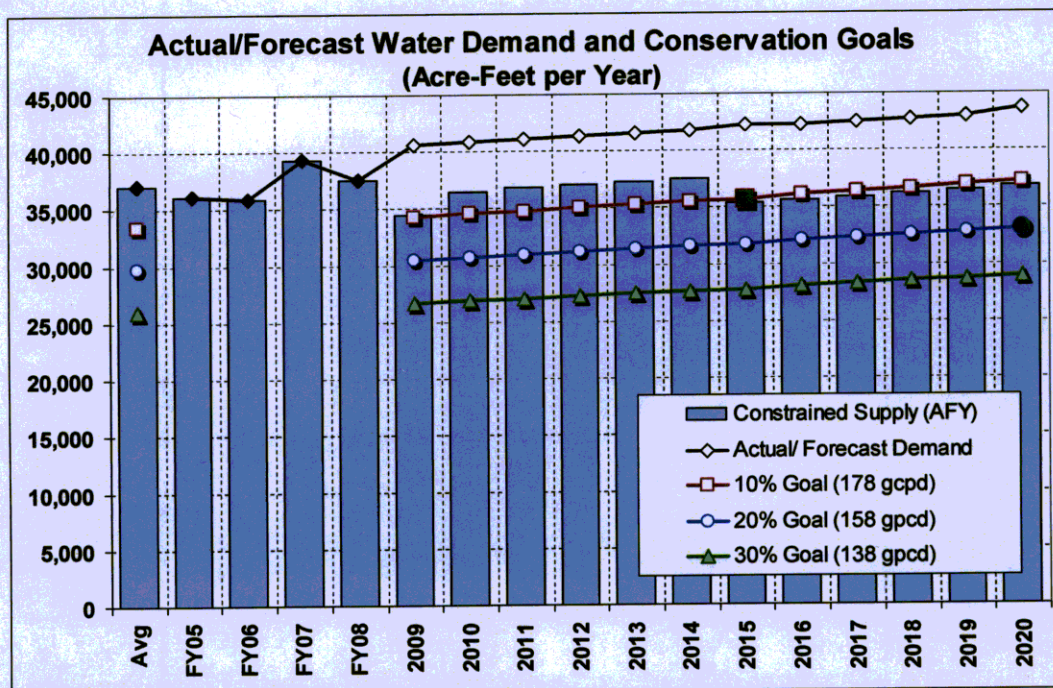
Comprehensive Water Conservation Plan

The following charts depict estimated cumulative sources of water conservation through the year 2020 to reduce the projected 2020 usage of 209 gallons per capita per day (gpcd) to 178 gpcd or 158 gpcd associated with 20% and 30% reductions from the 198 gpcd baseline consumption. The charts reflect staff's view that many approaches will be necessary, and that increased reliance on price signals through rates combined with outdoor conservation and growth mitigation will be of paramount importance as the reduction targets increase. **These water conservation estimates are preliminary in nature**, and will be further evaluated and quantified as part of the Comprehensive Water Conservation Plan and forthcoming WIRP process.



WATER DEMAND AND CONSERVATION GOALS

The following chart depicts historical and forecast water consumption, in acre-feet per year (AFY), along with lines depicting the water consumption corresponding to 10%, 20%, and 30% reductions from the City's Urban Environmental Accords (UEA) Base Year consumption of 198 gallons per capita per day (GPCD). The 10% by 2015 and 20% by 2020 targets are highlighted with solid bullets. The corresponding consumption goals are 178, 158, and 138 GPCD. Also, a forecast of "constrained water supply" is shown as vertical bars, reflecting the projected availability of local groundwater and MWD imports under a 10% curtailment requirement. In the event that MWD initiates such import restrictions, PWP will rely upon the Water Shortage Procedures Ordinance to reduce demand and will be subject to penalty charges for imports from MWD to meet demands in excess of those shown.



Source: RMC 2008 Urban Water Management Plan Update and PWP
Population growth is estimated at an average 0.8% per year

Water Measurement Conversions:

- 1 Acre Foot = 435 HCF
- Hundred Cubic Feet (HCF) = 1 Billing Unit (BU)
- 1 HFC = 748 gallons/.00230 Acre Feet
- Acre Foot = 325,800 gallons

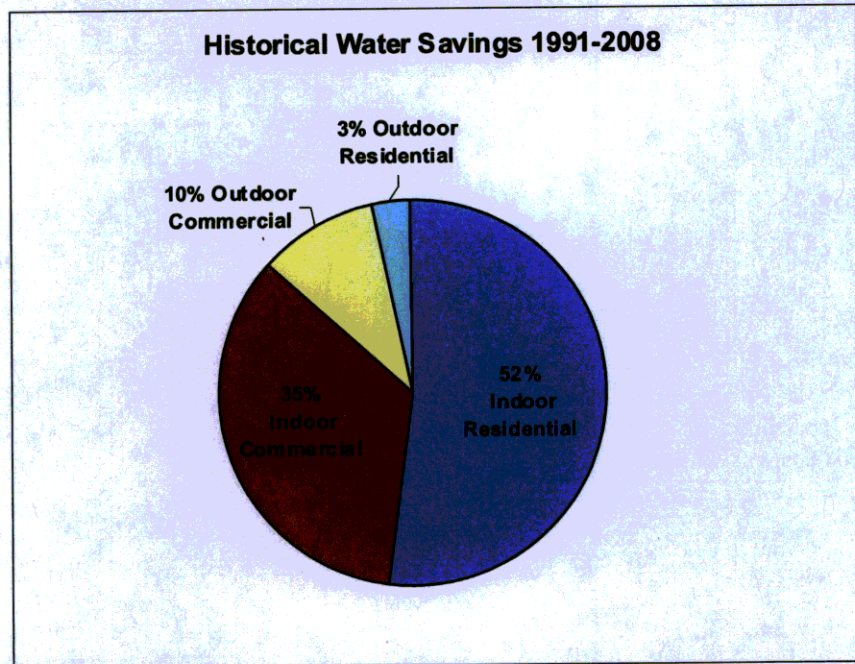
PWP has proposed an initial long term conservation target of 20% per capita reduction in potable water consumption by 2020, with an interim goal of 10% per capita reduction by 2015 in accordance with UEA Action Plan 21. These goals will be reviewed and refined as part of an integrated resource planning process, and implemented with a multi-faceted conservation approach outlined in this report.

Comprehensive Water Conservation Plan

PWP's targets for supplementing rebates are; new technologies, fixtures that exceed existing efficiency code requirements and devices that historically have not had a high level of participation.

The figure on the right depicts PWP's historical sources of water savings.

With PWP's focus now shifted to outdoor water use, a much higher percentage of future water savings is expected to result from irrigation and landscaping retrofits.



During the period of July 2008 through December 2008, PWP has saved an additional estimated 274 acre-feet as a result of the following rebate activity:

Residential Rebates		Commercial and Multi-Family Rebates	
438	High Efficiency Toilets	118	High Efficiency Toilets
219	High Efficiency Washers	21	High Efficiency Washers
4	Weather Based Irrigation Controllers	5	Weather Based Irrigation Controllers
10	Rotating Nozzles	263	Rotating Nozzles
		10	Zero Water Urinals
		303	Ultra Low Flow Toilets
		1	Pre-rinse Spray Head
		3	Cooling Tower Conductivity Controllers
		1	Waterbroom
		1	Synthetic Turf

All water savings estimates are based upon industry standards set for each measure. The State Department of Water Resources and Metropolitan Water District use these standards for calculating estimated water savings.

Pasadena's current FY2009 water conservation programs and incentives are shown in Attachment 4. In addition to these existing programs, PWP is investigating the potential to promote and incentivize additional innovative water efficient devices including: