

Preliminary COA Drought Response Decision Matrix

Demand Management

COA Water Management Strategy Description	STRATEGY YIELD (AC-FT)	Water Supply Benefit						Economic Impacts				Environmental Impacts				Social Impacts				Implementability				Risk of Alternative Supplies		Final	Comments				
		30%						20%				15%				10%				15%				10%		100%	Not complete. Dummy values.				
		Supply Volume	Drought Resilience	Improved Reliability and Utilization of Existing Supplies	Quality Compatibility with Existing Distribution Systems	Local Control (resilience)	Diversification	Unit Cost* (\$/Acre-Ft)	Treatment Need/Cost	Energy Intensity	Energy Generation	Impacts on Other Water Supplies	Instream Flow	Endangered/Threatened Species Impact	Wetlands	Water Quality	Imagine Austin Plan	Balances Economic and Environmental Impacts with Community Interests	Recreation	Required External Adoption	Land Acquisition	Timing of Implementation	Regulatory Approval	Political Opposition	Public Acceptance	Legal Uncertainties	Dependence on Climatic Conditions (Variability of Yield)	Hydrologic Storage- Potential Environmental Release			
Conservation - (Drought Response)																															
Stage 3 ^{A*}	17,000 - 19,000							A*																			Strategy is already in place by AWU.				
Stage 3 Interim (Hand Watering Only) ^{A*}	33,000 - 36,000							A*																			Strategies already in place by AWU. Task Force supports Stage 3 Interim phase. Combined storage triggers need to be determined for each drought response.				
Stage 4 ^{A*}	42,000 - 45,000							A*																							
Conservation ^{B*} - (Demand Management)																															
Mandatory Toilet Retrofit on Residential Resale	952 - 952	2						{\$35} - \$630				2				-1				-1				2		1.3					
{Mandatory Toilet Changeout for Commercial & Multifamily Buildings – Point in Time}	{358} 402	2						{\$25} - \$187				2				-1				-1				2		1.3					
Limit irrigated area in new residential development	1,289 - 1,289	2						{\$51} - \$873				2				2				2				2		2.0					
Require new facilities to capture A/C condensate for reuse	31 - 31	2						{\$203} - \$2,400				2				2				2				2		2.0					
Require retrofit of existing cooling towers to meet efficiency standards	73 - 73	2						{\$215} - \$1,027				2				2				1				2		1.9					
Require home audits at time of sale	{192} - 589	2						{\$129} - \$1,270				2				2				2				2		2.0					
Mandatory irrigation audits for high users	371 - 371	1						\$404 - {\$656}				2				-1				2				2		1.4					
Implement smart meters for residential customers	4,910 - 4,910	1						{\$1,389} - \$1,401				-1				-1				-1				-1		0.0					
Additional staff for marketing reclaimed water program	78 - 78	2						{\$58} - \$961				2				2				1				2		1.9					
Water budget rates (applied to irrigation-only meters)	1,000 - 1,000	2						N/A				N/A				2				2				2		2.0					
Hot water on demand incentives	{0.31} - 11	1						\$1,415 - {\$3,524}				-1				2				2				2		1.1					
Provide rebates for 0.8gpf toilets	{185} - 292	2						{\$163} - \$1,098				2				2				2				2		2.0	Example of significant difference in ranking if select low end of range versus midpoint (Robbins vs. AWU #s)				
Direct Reuse - (Demand Management)	1580 - 1930	2						{\$635} - {\$1,421}				1				0				2				1				1		1.3	
Regulatory																															
Building code modifications	-																														
Plumbing code modifications	-																														
Incentives for conservation programs	-																														
Incentives for rainwater harvesting systems	-																														
Stormwater management incentives/programs	-																														
Land use management incentives/programs	-																														
Gray water use programs/incentives	-																														
Developers/industry bring their own water	-																														
Participate in LCRA Management Plan process	-																														
Water pricing structures	-																														
Enter into drought stages earlier	-																														

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<i>Behavioral</i>	Incentives for conservation programs	-																											
	Incentives for rainwater harvesting systems	-																											
	Gray water use incentives	-																											
	Consumption comparison average on water bill	-																											

Notes:
 {x} = Values as provided by Water Resources Planning Task Force Member
 * Unit Cost Supply Basis of \$/Acre-Ft at 95th percentile. Economic impact rankings based on low end of range.
 A* - Drought Contingency Plan (DCP) Stage 3 and 4 implementation costs are included in the current Austin Water O&M budget. However, these costs do not address the community costs/impacts of additional restrictions. Estimated reductions are for total reductions off of the estimated demand under Stage 2.
 B* - Strategies previously identified within 2007 Conservation Task Force and 140 GPCD Plan. For strategies using debt financing, Total Cost/AF represents the first year's O&M plus the average annual cost (debt service), divided by the annual maximum yield. It does not represent a continuing annual cost past the implementation period. For strategies not using debt financing, Total Cost/AF represents the total O&M cost, divided by the annual maximum yield. It does not represent a continuing annual cost past the implementation period.