Recommended COA Drought Response Decision Matrix

DEMAND MANAGEMENT

	COA Water Management Strategy Description	STRATEGY YIELD (AC-FT/YEAR)	Cumulative Yield (Ac-Ft)	WATER SUPPLY PROJECT EVALUATION CRITERIA																																Final	Comments
				Water Supply Benefit							Economic Impacts				Environmental Impacts					Social Impacts			Implementability							Risk of Alternative Supplies							
				25%							20%				20%					10%			15%							10%							100%	
				Supply Volume	Drought Resilience	Improved Reliability and Utilization of Existing Supplies	Quality Compatibility with Existing Distribution Systems	Local Control (resilience)	Diversification		Unit Cost* ($/Ac-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						
Optimize Existing Supplies via Efficiency & Conservation	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									$630																										
	{Mandatory Toilet Changeout for Commercial & Multifamily Buildings – Point in Time}	*{358}* 402									$187																										
	Limit irrigated area in new residential development	1,289 - 1,289									$873																										
	Require new facilities to capture A/C condensate for reuse	31 - 31									$2,400																										
	Require retrofit of existing cooling towers to meet efficiency standards	73 - 73									$1,027																										
	Require home audits at time of sale	*{192}* - 589									$1,270																										
	Mandatory irrigation audits for high users	371 - 371									$404																										
	Implement smart meters for residential customers	4,910 - 4,910									$1,401																										
	Additional staff for marketing reclaimed water program	78 - 78									$961																										
	Water budget rates (applied to irrigation-only meters)	1,000 - 1,000									N/A																										
	Hot water on demand incentives	*{0.31}* - 11									$1,415																										
	Provide rebates for 0.8 gpf toilets	*{185}* - 292									$1,098																										
	Other - *(Demand Management)*																																				
	Leak Detection	1,000 - 1,000									N/A																										
	Decentralization (WW/Reuse/Reclaimed/Net Zero Systems)	1,000 - 1,000									N/A																										
	Direct Reuse; Completion of Core Reuse System	1580 - 1930									$729																										
Regulatory	Building code modifications	-																																		
	Plumbing code modifications	-																																		
	Stormwater management programs/incentives	-																																		
	Land use management programs/incentives	-																																		
	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	-																																		
Behavioral	Incentives for conservation programs	-																																		
	Incentives for rainwater harvesting systems	-																																		
	Water Education Initiatives																																			
	Consumption comparison average on water bill	-																																		

Notes:

{x} =Values as provided by Water Resources Planning Task Force Member

** For projects involving capital costs, $/Acre-Ft represents the first year's O&M plus the average annual cost (25-yr debt service) to achieve the maximum annual AF yield, divided by the annual maximum yield. For projects that involve only O&M cost, $/Acre-Ft represents the total O&M cost to achieve the maximum annual AF yield, divided by the annual maximum yield. Continuing annual costs past the implementation period are not considered.*

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.*