

Preliminary COA Drought Response Decision Matrix

Subject to Change

27-May-14

Category	Option Description	Annual HL Benefit at 95th Pctl (ac-ft)		Water Rights/Supply Contract Req'd?	Coordinating Entities	Land Purchase Req'd?	Timing	Discharge Permit Req'd?	Drought Only Supply	Cost Basis Supply Quantity (ac-ft/yr)	Est. Capital Cost	Est. Annual Cost	Est. Unit Cost (Supply Basis) at 95th Pctl (\$/kgal)	Est. Unit Cost at 95th Pctl (\$/ac-ft)
		Low	High											
Demand-side Management	Water Conservation - Stage 3	17,000	19,000	N	N/A	N	If needed - is in DCP	N	Y	*(see footnote below)	\$0	*(see footnote below)	*(see footnote below)	*(see footnote below)
	Water Conservation - Stage 4	24,000	26,000	N	N/A	N	If needed - is in DCP	N	Y	*(see footnote below)	\$0	*(see footnote below)	*(see footnote below)	*(see footnote below)
	Direct Reuse - Completing the Core	TBD	TBD	N	N/A	N	5-7 yrs	N	N	TBD	\$41,395,000	\$1,275,000	TBD	TBD
Operational Improvements	Operate Longhorn Dam Lift Gates	2,000	4,000	N	LCRA, AE	N	<6 Mos.	N	Y	3,000	\$0	\$25,000	\$0.03	\$8
	Reduced Lake Evaporation (Long & LBL)	800	1,200	N	TCEQ, TPWD	N	<6 Mos.	N	Y	1,000	\$0	\$275,000	\$0.84	\$275
	Walter Long Off-Channel Storage (Existing Capacity)	1,000	4,000	??	LCRA, AE, TCEQ	N	<6 Mos.	N	Y	2,500	\$0	\$160,000	\$0.20	\$64
	Relocate SAR Discharge Above Austin Gauge - Existing Reclaimed System	0	1,000	N	TCEQ, LCRA	N	1-2 yrs	Y	Y	500	\$294,000	\$57,000	\$0.35	\$114
	Lake Austin Operation	0	5,000	N	LCRA	N	<6 Mos.	N	Y	2,500	\$0	\$25,000	\$0.03	\$10
Enhanced Operations	Automate Longhorn Dam Gates	4,000	7,000	N	LCRA, AE	N	1-2 yrs	N	N	5,500	\$750,000	\$80,000	\$0.04	\$15
	Walter Long Off-Channel Storage (Enhanced Capacity)	8,000	20,000	??	LCRA, AE, TCEQ	N	1-2 yrs	Y	Y	14,000	\$22,340,000	\$2,561,000	\$0.56	\$183
	Capture Local Inflows in Lady Bird Lake	1,000	3,000	N	N/A	N	1-2 yrs	N	Y	2,000	\$1,743,000	\$669,000	\$1.03	\$334
	Aquifer Storage and Recovery - Northern Edwards	4,000	4,000	N	TCEQ	Y	3-5 yrs	N	N	4,000	\$130,000,000	\$4,000,000	\$3.07	\$1,000
	Indirect Potable Reuse - SAR to Lady Bird Lake ²	20,000	20,000	??	TCEQ, LCRA	N	2-3 yrs	Y	Y	20,000	\$30,485,000	\$3,794,000	\$0.58	\$190
Alternative Groundwater Supplies	Existing BlueWater System ¹ (Treat and Deliver)	12,000	12,000	Y	BlueWater	N	1 yr	N	Y/N	12,000	\$26,448,000	\$18,310,000	\$4.68	\$1,526
	Forestar ¹	10,000	10,000	Y	Forestar	N	2-3 yrs	N	Y/N	???	???	???	???	???
	Northern Edwards Wellfield ¹	1,000	1,500	N	N/A	Y	2 yrs	N	N	1,200	\$7,624,000	\$517,000	\$1.32	\$431
	Vista Ridge ¹	50,000	50,000	Y	SAWS	N	3 yrs	N	Y	???	???	???	???	???
	HCPUA ¹	25,000	25,000	Y	HCPUA	N	2-3 yrs	N	Y	25,000	???	???	???	???
Other Mid- and Long-term Supplies	Down Dip Brackish Edwards ¹	5,000	10,000	Y	TCEQ, BSEACD	Y	5 - 10 yrs	Y	Y/N	7,500	\$90,000,000	\$13,000,000	\$5.32	\$1,733
	Reclaimed Water Infiltration	20,000	40,000	N	TCEQ	N	5 - 10 yrs	??	N	30,000	\$110,000,000	\$20,000,000	\$2.05	\$667
	Colorado Bed and Banks Permit ¹	40,000	70,000	Y	LCRA, TCEQ	Y	10 - 15 yrs	N	N	55,000	\$310,000,000	\$38,000,000	\$2.12	\$691

¹ These alternatives represent a treated water supply and would not incur the water treatment costs the other alternatives would require

² Yield and unit cost calculation assumes extremely reduced downstream environmental flow requirements

* 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.