

Appendix N
Summary of Recommended Water Management Strategies in
the 2011 Brazos G Regional Water Plan

Appendix N-1: Summary of Recommended Water Management Strategies in the 2011 Brazos G Regional Water Plan

Region	Recommended Strategy	Capital Cost	First Decade of Water Strategy	First Decade Water Supply Volume (acre-foot/year)	First Decade Estimated Annual Average Unit Cost (\$/acre-foot/year)	Year 2060 Water Supply Volume (acre-foot/year)	Year 2060 Estimated Annual Average Unit Cost (\$/acre-foot/year)
G	ADDITIONAL CARRIZO AQUIFER DEVELOPMENT (INCLUDES OVERDRAFTING)	\$23,676,071.00	2010	1,481	\$584.74	6,963	\$182.11
G	ADDITIONAL EDWARDS-TRINITY (PLATEAU) AQUIFER DEVELOPMENT (INCLUDES OVERDRAFTING)	\$679,000.00	2010	114	\$587.72	114	\$70.18
G	ADDITIONAL GULF COAST AQUIFER DEVELOPMENT	\$31,630,000.00	2040	5,600	\$638.21	5,600	\$145.71
G	ADDITIONAL TRINITY AQUIFER DEVELOPMENT (INCLUDES OVERDRAFTING)	\$19,278,000.00	2010	723	\$264.18	2,025	\$552.94
G	AQUIFER STORAGE & RECOVERY (BRAZOS RIVER TO SEYMOUR AQUIFER)	\$38,625,000.00	2010	6,208	\$701.00	6,208	\$158.51
G	BELTON TO STILLHOUSE PIPELINE	\$36,038,000.00	2020	30,000	\$132.63	30,000	\$45.37
G	BOSQUE COUNTY REGIONAL PROJECT	\$5,150,000.00	2030	190	\$2,894.74	190	\$531.58
G	BRA SUPPLY THROUGH THE EWCRWTS	\$44,706,000.00	2010	4,601	\$1,679.77	6,958	\$429.52
G	BRA SWATS EXPANSION	\$39,971,000.00	2010	375	\$2,933.33	3,545	\$572.92
G	BRA SYSTEM OPERATIONS PERMIT	\$204,281,000.00	2010	750	\$2,808.00	84,899	\$314.08
G	BRUSHY CREEK RESERVOIR	\$18,553,000.00	2010	2,090	\$484.21	2,090	\$66.99
G	CEDAR RIDGE RESERVOIR	\$285,214,000.00	2020	23,380	\$1,167.54	23,380	\$241.49
G	CITY OF GROESBECK OFF-CHANNEL RESERVOIR	\$10,412,000.00	2050	1,755	\$564.67	1,755	\$564.67
G	CONJUNCTIVE MANAGEMENT OF CHAMPION WELL FIELD AND OAK CREEK RESERVOIR WITH SUBORDINATION AGREEMENT	\$0.00	2010	688	\$0.00	963	\$0.00
G	CORYELL COUNTY RESERVOIR (BRA SYSTEM)	\$37,489,000.00	2020	3,365	\$1,007.13	3,365	\$193.46
G	EXPANSION OF CHAMPION WELL FIELD	\$15,015,000.00	2010	1,000	\$1,643.00	1,000	\$334.00
G	FUTURE PHASES OF LAKE WHITNEY WATER SUPPLY PROJECT	\$110,843,000.00	2020	7,572	\$926.04	7,572	\$926.04
G	GROUNDWATER/SURFACE WATER CONJUNCTIVE USE (LAKE GRANGER AUGMENTATION)	\$643,928,000.00	2010	26,505	\$838.29	70,246	\$1,153.63
G	INCREASE TREATMENT CAPACITY	\$195,654,000.00	2010	15,176	\$546.31	58,435	\$293.81
G	INTERCONNECTION OF CITY OF WACO SYSTEM WITH NEIGHBORING COMMUNITIES	\$14,652,000.00	2010	837	\$3,387.10	1,814	\$1,136.36
G	IRRIGATION WATER CONSERVATION	\$0.00	2010	3,390	\$235.42	7,041	\$227.71
G	LIMESTONE COUNTY CARRIZO-WILCOX AQUIFER DEVELOPMENT	\$18,458,000.00	2010	2,500	\$562.00	3,600	\$115.00
G	MANUFACTURING WATER CONSERVATION	\$0.00	2010	140	\$0.00	594	\$0.00
G	MIDWAY PIPELINE PROJECT (WEST CENTRAL BRAZOS DISTRIBUTION SYSTEM)	\$13,524,731.00	2010	843	\$2,046.14	843	\$647.92
G	MILLERS CREEK AUGMENTATION	\$46,948,000.00	2010	17,582	\$216.76	17,582	\$216.76
G	MINING WATER CONSERVATION	\$0.00	2010	340	\$0.00	973	\$0.00
G	MUNICIPAL WATER CONSERVATION	\$0.00	2010	4,873	\$475.00	21,347	\$474.99
G	NEW WATER TREATMENT PLANT	\$3,522,000.00	2010	224	\$2,178.57	224	\$808.04
G	NEW WEST LOOP REUSE LINE	\$5,495,500.00	2010	680	\$591.00	680	\$120.00
G	OAK CREEK RESERVOIR WITH SUBORDINATION AGREEMENT	\$0.00	2010	1,679	\$0.00	1,154	\$0.00
G	PHASE I LAKE WHITNEY WATER SUPPLY PROJECT	\$41,453,000.00	2010	2,128	\$2,851.50	2,128	\$1,153.20
G	PURCHASE WATER FROM CITY OF BRYAN	\$1,201,000.00	2010	1,500	\$262.00	1,500	\$192.00
G	RAISE LEVEL OF GIBBONS CREEK RESERVOIR	\$12,140,600.00	2020	3,870	\$237.47	3,870	\$28.94
G	REALLOCATION OF SOURCE	\$0.00	2010	35,928	\$0.00	52,628	\$0.00
G	REGIONAL SURFACE WATER SUPPLY TO WILLIAMSON COUNTY FROM LAKE TRAVIS	\$391,533,000.00	2010	34,148	\$1,308.40	44,459	\$938.46
G	REHABILITATE EXISTING WELLS	\$350,000.00	2020	1,100	\$30.00	1,100	\$30.00
G	RESTRUCTURE CONTRACT	\$0.00	2010	502	\$0.00	341	\$0.00
G	RUN-OF-RIVER WATER RIGHT FOR UNAPPROPRIATED FLOWS	\$0.00	2010	0	\$0.00	0	\$0.00
G	SOMERVELL COUNTY WATER SUPPLY PROJECT (PHASES 1-4)	\$29,923,000.00	2010	840	\$2,841.00	840	\$508.00
G	SOMERVELL COUNTY WATER SUPPLY PROJECT (PHASES 5-13)	\$74,228,000.00	2030	960	\$1,147.00	960	\$174.00
G	STEAM-ELECTRIC CONSERVATION	\$0.00	2010	2,114	\$0.00	11,803	\$0.00
G	STONEMALL, KENT, AND GARZA CHLORIDE CONTROL PROJECT	\$163,226,000.00	2020	0	\$0.00	0	\$0.00
G	STORAGE REALLOCATION OF FEDERAL RESERVOIRS - LAKE AQUILLA	\$11,447,000.00	2040	2,050	\$405.85	2,050	\$405.85
G	TURKEY PEAK RESERVOIR	\$50,227,000.00	2020	7,600	\$923.55	7,600	\$440.53
G	VOLUNTARY REDISTRIBUTION	\$6,391,000.00	2010	11,251	\$312.24	16,558	\$468.98
G	WASTEWATER REUSE	\$115,432,500.00	2010	17,043	\$340.14	70,087	\$316.79
G	CORYELL COUNTY RESERVOIR (BRA SYSTEM)*	\$14,399,000.00	2030	3,365	\$2,866.57	3,365	\$1,522.44

Appendix N-1: Summary of Recommended Water Management Strategies in the 2011 Brazos G Regional Water Plan (concluded)

Region	Recommended Strategy	Capital Cost	First Decade of Water Strategy	First Decade Water Supply Volume (acre-foot/year)	First Decade Estimated Annual Average Unit Cost (\$/acre-foot/year)	Year 2060 Water Supply Volume (acre-foot/year)	Year 2060 Estimated Annual Average Unit Cost (\$/acre-foot/year)
G	GROUNDWATER/SURFACE WATER CONJUNCTIVE USE (LAKE GRANGER AUGMENTATION)*	\$229,822,000.00	2040	33,814	\$865.00	39,710	\$863.96
G	INCREASE CURRENT CONTRACT*	\$0.00	2010	43	\$401.00	2,143	\$831.19
G	INCREASE TREATMENT CAPACITY*	\$13,951,000.00	2020	2,800	\$647.86	2,800	\$213.46
G	LIMESTONE COUNTY CARRIZO-WILCOX AQUIFER DEVELOPMENT*	\$0.00	2010	148	\$562.00	141	\$115.00
G	NEW WATER TREATMENT PLANT*	\$35,822,000.00	2020	8,400	\$627.14	8,400	\$255.00
G	STORAGE REALLOCATION OF FEDERAL RESERVOIRS - LAKE AQUILLA*	\$0.00	2040	375	\$0.00	999	\$0.00
G	TURKEY PEAK RESERVOIR*	\$0.00	2020	7,600	\$923.55	7,600	\$440.66
G	VOLUNTARY REDISTRIBUTION*	\$91,940,000.00	2010	3,529	\$860.18	30,757	\$471.93
G	WASTEWATER REUSE*	\$39,128,901.00	2010	9,232	\$436.09	11,760	\$106.89
* DENOTES STRATEGIES WITH SUPPLY VALUES INCLUDED IN OTHER STRATEGIES							

Appendix N-2: Summary of Alternative Water Management Strategies in the 2011 Brazos G Regional Water Plan

Region	ALTERNATIVE Strategy	Capital Cost	First Decade of Water Strategy	First Decade Water Supply Volume (acre-feet/year)	First Decade Estimated Annual Average Unit Cost (\$/acre-foot/year)	Year 2060 Water Supply Volume (acre-feet/year)	Year 2060 Estimated Annual Average Unit Cost (\$/acre-foot/year)
G	ADDITIONAL CARRIZO AQUIFER DEVELOPMENT (INCLUDES OVERDRAFTING)	\$212,042,000.00	2020	35,000	\$842.14	35,000	\$313.94
G	BRA SYSTEM OPERATIONS PERMIT	\$14,086,000.00	2020	1,530	\$943.14	1,530	\$139.87
G	INTERCONNECTION FROM ABILENE TO SWEETWATER	\$46,964,000.00	2010	4,000	\$2,365.25	4,000	\$1,342.00
G	LAKE AQUILLA AUGMENTATION	\$64,749,000.00	2020	5,000	\$552.00	5,000	\$232.00
G	LAKE PALO PINTO OFF-CHANNEL RESERVOIR	\$25,399,000.00	2020	3,110	\$804.41	3,110	\$91.96
G	SEDIMENT REDUCTION PROGRAM**	\$0.00	2010	0	\$0.00	0	\$0.00
G	POSSUM KINGDOM SUPPLY*	\$189,947,000.00	2020	12,400	\$2,076.77	12,400	\$741.37
* DENOTES STRATEGIES WITH SUPPLY VALUES INCLUDED IN OTHE STRATEGIES.							
** COSTS AND SUPPLY DEVELOPED HAVE NOT BEEN DETERMINED FOR THIS STRATEGY.							