

APPENDIX D

Water Demand Projections for Participating Cities and Prison Units

December 2013



Brazoria County Regional Water Facility Study
Water Demand Projections for Participating Cities and Prison Units

Entity	Water Demands (MGD)						
	2010	2015	2020	2025	2030	2035	2040
City of Alvin							
Average day water demand (based on gpcd)	2.64	2.81	2.97	3.13	3.30	3.46	3.62
Average day water demand (reported by city)	2.37	2.50	2.63	2.78	2.93	3.08	3.25
Maximum day water demand (city data & avg/max day ratio)	4.44	4.72	4.99	5.27	5.54	5.82	6.09
City of Angleton							
Average day water demand (based on gpcd)	1.49	1.73	2.00	2.32	2.69	3.12	3.62
Average day water demand (reported by city)	2.19	2.54	2.94	3.41	3.95	4.58	5.31
Maximum day water demand (city data & avg/max day ratio)	3.73	4.33	5.02	5.82	6.74	7.82	9.06
City of Brazoria							
Average day water demand (based on gpcd)	0.31	0.32	0.34	0.36	0.38	0.39	0.42
Average day water demand (reported by city)	0.28	0.29	0.31	0.33	0.34	0.36	0.38
Maximum day water demand (city data & avg/max day ratio)	0.31	0.33	0.34	0.36	0.38	0.40	0.42
City of Clute							
Average day water demand (based on gpcd)	1.24	1.30	1.35	1.40	1.46	1.52	1.58
Maximum day water demand (city data & avg/max day ratio)	2.00	2.08	2.17	2.25	2.35	2.44	2.54
City of Freeport							
Average day water demand (based on gpcd)	1.57	1.53	1.49	1.45	1.42	1.38	1.35
Average day water demand (reported by city)	1.67	1.63	1.59	1.55	1.51	1.47	1.44
Maximum day water demand (city data & avg/max day ratio)	1.90	1.85	1.81	1.76	1.72	1.68	1.63
City of Lake Jackson							
Average day water demand (based on gpcd)	5.19	5.40	5.91	6.53	6.97	7.52	7.70
Average day water demand (reported by city)	5.12	5.47	5.84	6.24	6.66	7.12	7.60
Maximum day water demand (city data & avg/max day ratio)	8.50	8.85	9.68	10.70	11.42	12.31	12.62
City of Manvel							
Average day water demand (based on gpcd)	0.59	0.85	1.24	1.81	2.63	3.83	5.57
Maximum day water demand (city data & avg/max day ratio)	0.78	1.13	1.65	2.40	3.50	5.09	7.41
City of Oyster Creek							
Average day water demand (based on gpcd)	0.20	0.20	0.21	0.21	0.22	0.22	0.23
Average day water demand (reported by city)	0.22	0.23	0.23	0.24	0.24	0.25	0.26
Maximum day water demand (city data & avg/max day ratio)	0.33	0.34	0.35	0.36	0.36	0.37	0.38

	Water Demands (MGD)						
Entity	2010	2015	2020	2025	2030	2035	2040
City of Pearland							
Average day water demand (based on gpcd)	16.93	19.26	21.66	24.07	26.47	28.87	31.28
Average day water demand (reported by city)	10.60	11.74	13.01	14.41	15.96	17.68	19.58
Maximum day water demand (city data & avg/max day ratio)	23.03	26.19	29.46	32.73	36.00	39.27	42.54
City of Richwood							
Average day water demand (based on gpcd)	0.31	0.35	0.41	0.47	0.54	0.58	0.64
Average day water demand (reported by city)	0.36	0.40	0.45	0.51	0.58	0.65	0.73
Maximum day water demand (city data & avg/max day ratio)	0.83	0.94	1.10	1.26	1.43	1.56	1.70
Brazoria County Prison Units							
TDCJ Clemens Unit (BWA Customer)							
- Maximum day water demand (reported by TDCJ)	0.46	0.46	0.46	0.46	0.46	0.46	0.46
TDCJ Wayne Scott Unit (BWA Customer)							
- Maximum day water demand (reported by TDCJ)	0.39	0.39	0.39	0.39	0.39	0.39	0.39
TDCJ Darrington Unit	0.76	0.76	0.76	0.76	0.76	0.76	0.76
TDCJ Ramsey, Stringfellow & Terrell Units	1.52	1.52	1.52	1.52	1.52	1.52	1.52
Total Average Day Water Demand (based on gpcd)	33.60	36.88	40.71	44.88	49.20	54.03	59.13
Total Maximum Day Water Demand (avg/max day ratio)	48.98	53.90	59.69	66.04	72.58	79.89	87.54