

**RMP Implementation Plan - WWTP Reliability Upgrade Projects**

All cost estimates are provided in U.S. 2011 dollars.

February 2016

Project Name	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13		
<b>Town Branch WWTP</b>															
TB WWTP-1	Headworks	\$1,480,500	\$919,500											\$2,400,000	
TB WWTP-2	Primary Clarifier Equipment			\$1,159,990	\$2,415,010									\$3,575,000	
TB WWTP-3	Aeration Basins						\$2,050,000	\$2,400,000						\$4,450,000	
TB WWTP-4	Final Clarifier Equipment	\$2,500,000									\$1,185,000	\$1,185,000		\$4,870,000	
TB WWTP-5	RAS Pump Station								\$550,000					\$550,000	
TB WWTP-6	WAS Pump Station												\$40,000	\$40,000	
TB WWTP-7	Gravity Thickeners				\$300,000	\$350,000								\$650,000	
TB WWTP-8	Disinfection										\$100,000			\$100,000	
TB WWTP-9	Non-Potable Water PS										\$35,000			\$35,000	
TB WWTP-10	Primary Digesters		\$1,526,400	\$1,470,000	\$528,600									\$3,525,000	
TB WWTP-11	Secondary Digesters / Sludge Holding					\$500,000	\$500,000							\$1,000,000	
TB WWTP-12	Dewatering				\$1,140,000	\$1,660,000								\$2,800,000	
TB WWTP-13	Scum Facility							\$400,000						\$400,000	
TB WWTP-14	Site									\$200,000		\$200,000	\$200,000	\$600,000	
TB WWTP-15	Design			\$407,500	\$510,545	\$262,026	\$305,000	\$128,050	\$100,000	\$35,540	\$241,165	\$253,040	\$112,134	\$2,355,000	
<b>Town Branch Totals</b>		<b>\$2,500,000</b>	<b>\$1,480,500</b>	<b>\$2,853,400</b>	<b>\$3,140,535</b>	<b>\$4,645,636</b>	<b>\$2,815,000</b>	<b>\$2,678,050</b>	<b>\$2,900,000</b>	<b>\$585,540</b>	<b>\$441,165</b>	<b>\$1,573,040</b>	<b>\$1,497,134</b>	<b>\$240,000</b>	<b>\$27,350,000</b>
<b>West Hickman WWTP</b>															
WH WWTP-1	Influent Pump Station <sup>1</sup>			\$1,080,000	\$1,080,000									\$2,160,000	
WH WWTP-2	Raw Sewage Pump Station <sup>1</sup>			\$1,630,000	\$1,630,000									\$3,260,000	
WH WWTP-3	Leaping Weir <sup>1</sup>				\$260,000									\$260,000	
WH WWTP-4	BPR Improvements					\$1,740,000	\$1,740,000							\$3,480,000	
WH WWTP-5	Zone 1 Aeration	\$1,196,000												\$1,196,000	
WH WWTP-6	Zone 2 Aeration	\$1,200,000		\$589,000										\$1,789,000	
WH WWTP-7	Clarifier Flow Distribution					\$240,000								\$240,000	
WH WWTP-8	Disinfection								\$140,000					\$140,000	
WH WWTP-9	Dechlorination								\$120,000					\$120,000	
WH WWTP-10	Final Effluent PS						\$1,400,000	\$1,400,000						\$2,800,000	
WH WWTP-11	Return Activated Sludge Pumping									\$280,000				\$280,000	
WH WWTP-12	Waste Activated Sludge Pumping										\$120,000			\$120,000	
WH WWTP-13	Waste Sludge Holding				\$179,500									\$179,500	
WH WWTP-14	Waste Sludge Thickening											\$890,000		\$890,000	
WH WWTP-15	Belt Press Replacement							\$1,250,000						\$1,250,000	
WH WWTP-16	Dewatering										\$380,000			\$380,000	
WH WWTP-17	Scum Facility				\$576,000									\$576,000	
WH WWTP-18	Non-potable Water System				\$320,000									\$320,000	
WH WWTP-19	Emergency Electrical Power									\$780,000				\$780,000	
WH WWTP-20	Odor Control Facilities <sup>1</sup>	\$1,019,400		\$570,000	\$570,000									\$2,159,400	
WH WWTP-21	Road Repair												\$400,000	\$400,000	
WH WWTP-22	Design		\$75,000			\$748,800	\$823,425	\$621,475	\$299,425	\$374,595	\$353,595	\$224,595	\$224,595	\$224,595	\$3,970,000
<b>West Hickman Totals</b>		<b>\$3,415,400</b>	<b>\$75,000</b>	<b>\$0</b>	<b>\$3,869,000</b>	<b>\$5,364,300</b>	<b>\$2,803,425</b>	<b>\$3,761,475</b>	<b>\$2,949,425</b>	<b>\$634,595</b>	<b>\$1,413,595</b>	<b>\$724,595</b>	<b>\$1,114,595</b>	<b>\$624,595</b>	<b>\$26,750,000</b>
<b>Town Branch Totals</b>		<b>\$2,500,000</b>	<b>\$1,480,500</b>	<b>\$2,853,400</b>	<b>\$3,140,535</b>	<b>\$4,645,636</b>	<b>\$2,815,000</b>	<b>\$2,678,050</b>	<b>\$2,900,000</b>	<b>\$585,540</b>	<b>\$441,165</b>	<b>\$1,573,040</b>	<b>\$1,497,134</b>	<b>\$240,000</b>	<b>\$27,350,000</b>
<b>Total WWTP RMP Expense</b>		<b>\$5,915,400</b>	<b>\$1,555,500</b>	<b>\$2,853,400</b>	<b>\$7,009,535</b>	<b>\$10,009,936</b>	<b>\$5,618,425</b>	<b>\$6,439,525</b>	<b>\$5,849,425</b>	<b>\$1,220,135</b>	<b>\$1,854,760</b>	<b>\$2,297,635</b>	<b>\$2,611,729</b>	<b>\$864,595</b>	<b>\$54,100,000</b>
<b>WWTP RMP Projects per FY (not design)</b>		<b>4</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>11</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>3</b>	<b>3</b>	

Notes  
 1. These projects will be included with the construction of the Phase 1 WWS at the WWTP