

Large Diameter Water Pipe Rehabilitation Program

(P113803)

CategoryWSSCDate Last Modified09/17/24SubCategoryWater Bi-CountyAdministering AgencyW.S.S.C.Planning AreaCountywideStatusPlanning Stage

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY24	Est FY25	Total 6 Years	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	Beyond 6 Years
Planning, Design and Supervision	51,229	-	4,748	46,481	5,554	6,675	7,991	8,520	8,818	8,923	-
Construction	374,822	-	53,061	321,761	43,054	46,655	49,962	54,507	61,893	65,690	-
Other	54,134	-	5,781	48,353	5,987	6,670	8,047	8,973	9,289	9,387	-
TOTAL EXPENDITURES	480,185	-	63,590	416,595	54,595	60,000	66,000	72,000	80,000	84,000	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY24	Est FY25	Total 6 Years	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	Beyond 6 Years
WSSC Bonds	480,185	-	63,590	416,595	54,595	60,000	66,000	72,000	80,000	84,000	-
TOTAL FUNDING SOURCES	480,185	-	63,590	416,595	54,595	60,000	66,000	72,000	80,000	84,000	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 26 Request	54,595	Year First Appropriation	FY11
Cumulative Appropriation	627,653	Last FY's Cost Estimate	630,569
Expenditure / Encumbrances	-		
Unencumbered Balance	627,653		

PROJECT DESCRIPTION

The purpose of this program is to plan, design and rehabilitate or replace Large Diameter Water Transmission Mains that have reached the end of their useful life. Condition Assessment and or corrosion monitoring is performed on metallic pipelines, including ductile iron, cast-iron and steel, to identify areas requiring replacement or rehabilitation. The PCCP Inspection and Condition Assessment Program identifies individual pipe sections that require repair or replacement for maintenance purposes to assure the continued safe and reliable operation of the pipeline. The program also identifies mains that require the replacement of an increased number of pipe sections in varying stages of deterioration that are most cost effectively accomplished by the replacement or rehabilitation of long segments of the pipeline for the entire pipeline. Rehabilitation or replacement of these mains provides value to the customer by minimizing the risk of catastrophic failure and ensuring a safe and reliable water supply. The Program includes installation of Acoustic Fiber Topic Monitoring equipment in order to accomplish these goals. *Expenditures for Large Diameter Pipe Rehabilitation Are Expected to Continue Indefinitely.

PROJECT JUSTIFICATION

Utility Wide Master Plan, (December 2007); 30 Year Infrastructure Plan (2007). Specific Date: WSSC has approximately 960 miles of larger diameter water main ranging from 16-inch to 96-inch diameter. This includes 350 miles of cast-iron, 225 miles of ductile iron, 35 miles of steel and 350 miles of PCCP. Of the 350 miles of PCCP, 150 miles are 36-inch and larger, and 55 miles or greater than 54-inch or larger. The inspection program includes internal visual and sounding, sonic/ultrasonic and electromagnetic testing to establish the condition of each pipe section and determine if maintenance repair, rehabilitation, or replacement are needed.

OTHER

The project scope was developed for the FY 2011 CIP at a total project cost of \$60,000.00. Expenditures are schedule projections shown in Block B above are Order of Magnitude estimates and are expected to change based upon the results of the inspections and condition assessments. Additional costs associated with inspection/monitoring and emergency repairs are included in the operating budget.