



Large Diameter Water Pipe Rehabilitation Program

(P113803)

Category	WSSC	Date Last Modified	08/16/17
SubCategory	Water Bi-County	Administering Agency	W.S.S.C.
Planning Area	Bi-County	Status	Planning Stage

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	45,049	-	4,421	40,628	6,441	6,569	6,701	6,835	6,971	7,111	-
Construction	382,146	-	46,253	335,893	44,628	48,538	53,170	61,756	63,268	64,533	-
Other	21,360	-	2,534	18,826	2,553	2,755	2,994	3,430	3,512	3,582	-
TOTAL EXPENDITURES	448,555	-	53,208	395,347	53,622	57,862	62,865	72,021	73,751	75,226	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
WSSC Bonds	448,555	-	53,208	395,347	53,622	57,862	62,865	72,021	73,751	75,226	-
TOTAL FUNDING SOURCES	448,555	-	53,208	395,347	53,622	57,862	62,865	72,021	73,751	75,226	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	53,622	Year First Appropriation	FY11
Appropriation FY 20 Request	-	Last FY's Cost Estimate	415,928
Cumulative Appropriation	215,828		
Expenditure / Encumbrances	-		
Unencumbered Balance	215,828		

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 and has 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.