



Large Diameter Water Pipe Rehabilitation Program

(P113803)

Category	WSSC	Date Last Modified	08/23/19
SubCategory	Water Bi-County	Administering Agency	W.S.S.C.
Planning Area	Countywide	Status	Planning Stage

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	58,925	-	6,472	52,453	8,301	8,314	8,826	9,154	8,708	9,150	-
Construction	386,082	-	32,893	353,189	44,552	53,324	60,651	62,773	64,970	66,919	-
Other	44,502	-	3,936	40,566	5,286	6,165	6,949	7,193	7,367	7,606	-
TOTAL EXPENDITURES	489,509	-	43,301	446,208	58,139	67,803	76,426	79,120	81,045	83,675	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
WSSC Bonds	489,509	-	43,301	446,208	58,139	67,803	76,426	79,120	81,045	83,675	-
TOTAL FUNDING SOURCES	489,509	-	43,301	446,208	58,139	67,803	76,426	79,120	81,045	83,675	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 21 Request	58,139	Year First Appropriation	FY11
Appropriation FY 22 Request	-	Last FY's Cost Estimate	433,056
Cumulative Appropriation	309,835		
Expenditure / Encumbrances	-		
Unencumbered Balance	309,835		

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.