

**City of Portsmouth
Fiscal Year 2010-2011 Adopted Budget**

**Capital Improvements
Sewer**

Project Title	Appropriated	FY 2010	Un-Appropriated Subsequent Years				5 Year	CIP
	To Date	Adopted	FY 2011	FY 2012	FY 2013	FY 2014	Total	Total
Miscellaneous Improvements - Sewer	1,662,500	2,194,516	2,969,000	-	-	-	5,163,516	6,826,016
Sanitary Sewer Overflow Elimination Program	5,100,000	3,500,000	3,750,000	4,000,000	4,500,000	8,000,000	23,750,000	28,850,000
Sewer Cave-in Repair	3,478,763	656,000	675,000	700,000	725,000	750,000	3,506,000	6,984,763
Suction Well Rehabilitation	7,018,290	-	3,136,000	2,776,000	3,647,000	3,647,000	13,206,000	20,224,290
Williams Court Outlet Sewer Rehabilitation	675,000	575,000	-	-	-	-	575,000	1,250,000
Total Project Cost	17,934,553	6,925,516	10,530,000	7,476,000	8,872,000	12,397,000	46,200,516	64,135,069
Debt Funding								
Public Utilities General Obligation Bonds	17,704,553	4,731,000	7,561,000	7,476,000	8,872,000	12,397,000	41,037,000	58,741,553
Other Funding								
Sale of Timber	230,000	-	-	-	-	-	-	230,000
Transfers								
Transfer from Public Utilities Fund	-	2,194,516	2,969,000	-	-	-	5,163,516	5,163,516
Total Funding	17,934,553	6,925,516	10,530,000	7,476,000	8,872,000	12,397,000	46,200,516	64,135,069

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**Capital Improvements
Sewer**

Project: 19207 **Title:** Miscellaneous Improvements - Sewer **Status:** Proposed

Comprehensive Plan Information

Project Location

CIE Project: **Plan Reference:** **District:**
LOS/Concurrency: **Project Need: Growth, Other** **Location: Undefined**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2010	Non-Appropriated Programmed CIP Funding				Future Funding
			FY 2011	FY 2012	FY 2013	FY 2014	
6,826,016	1,662,500	2,194,516	2,969,000	0	0	0	0

Description and Scope

The Department of Public Utilities is responsible for the operation and maintenance of 61 wastewater pumping stations. This project provides major equipment, controls and pump replacement for five of the major pumping stations.

Rationale

Funding Strategy

Project Map

Schedule of Activities

**VARIOUS
LOCATIONS
CITYWIDE**

Project Activities	From - To	Amount
Project Management	07/04 - 06/05	6,826,016
Total Budgetary Cost Estimate:		6,826,016

Means of Financing

Funding Source	Amount
Public Utilities General Obligation Bonds	1,662,500
Transfer from Public Utilities Fund	5,163,516
Total Programmed Funding:	6,826,016
Future Funding Requirements:	0

**City of Portsmouth
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**Capital Improvements
Sewer**

Project: 19507 **Title:** Sanitary Sewer Overflow Elimination Program **Status:** Adopted

Comprehensive Plan Information

Project Location

CIE Project: N/A **Plan Reference:** CC Vision - Neighborhood **District:**
LOS/Concurrency: N/A **Project Need:** N/A **Location:** Citywide

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2010	Non-Appropriated Programmed CIP Funding				Future Funding
			FY 2011	FY 2012	FY 2013	FY 2014	
28,850,000	5,100,000	3,500,000	3,750,000	4,000,000	4,500,000	8,000,000	0

Description and Scope

The objective of this program is to markedly reduce the overflows of sewage caused by the infiltration or inflow of ground or rain water into Portsmouth's sanitary sewer system as required by the Federal Clean Water Act and under the conditions of a voluntary consent order negotiated by the Hampton Roads localities with the State Department of Environmental Quality.

Rationale

This project is a result of a voluntary consent order with the State Department of Environmental Quality. The capacity of wastewater components such as mains and pump stations is finite. Infiltration and inflow of ground or rain water takes up the capacity of these components reserved for wastewater, and can cause sewage overflow. This can result in increased maintenance and capacity costs to customers, and poses a potential health risk to the public.

Funding Strategy

The first step in this program will be to conduct a city-wide Sanitary Sewer System Evaluation Study (SSES) to identify, categorize and prioritize sanitary sewer deficiencies and the necessary actions, phasing, and costs to correct them. This 18-24 month process will be followed by phased, multi-year corrective activities. FY2014 will see significant increases due to start up of projects mandated once the SSES is approved.

Operating Budget Impacts

Project will reduce the annual maintenance requirements, provide for reliable operations and reduce the potential for sanitary sewage overflows.

Project Map

Schedule of Activities

**MAP NOT
APPLICABLE**

Project Activities	From - To	Amount
Project Management	07/06 - 06/08	1,850,000
Design	07/06 - 06/13	2,700,000
Construction	07/08 - 06/13	24,300,000

Total Budgetary Cost Estimate: 28,850,000

Means of Financing

Funding Source	Amount
Public Utilities General Obligation Bonds	28,850,000

Total Programmed Funding: 28,850,000
Future Funding Requirements: 0

**City of Portsmouth
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**Capital Improvements
Sewer**

Project: 19307 **Title: Sewer Cave-in Repair** **Status: Adopted**

Comprehensive Plan Information

Project Location

CIE Project: N/A **Plan Reference: CC Vision - Neighborhood** **District:**
LOS/Concurrency: N/A **Project Need: N/A** **Location: Citywide**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2010	Non-Appropriated Programmed CIP Funding				Future Funding
			FY 2011	FY 2012	FY 2013	FY 2014	
6,984,763	3,478,763	656,000	675,000	700,000	725,000	750,000	0

Description and Scope

The Department of Public Utilities is responsible for the operation & maintenance of approximately 436 miles of sewer mains, manholes, force mains, valves, sewer laterals and other sewage collection components. 72% of Portsmouth's sewage system is at the end of its useful engineering life. This project provides for the replacement and or rehabilitation of minor segments of the failing sewage system, using both in-house forces and outside contractors.

Rationale

Sanitary sewer failures disrupt service to customers, cause overflows which create public health and environmental problems and cause the overlying streets and property to fail.

Funding Strategy

This is an on-going project that is necessary for the proper operation of the system due to failures caused by age and deterioration.

Operating Budget Impacts

Project will reduce the annual maintenance requirements, provide for reliable operations and reduce the potential for sanitary sewage overflows.

Project Map

Schedule of Activities

**VARIOUS
LOCATIONS
CITYWIDE**

Project Activities	From - To	Amount
Construction	07/06 - 06/13	6,984,763

Total Budgetary Cost Estimate: 6,984,763

Means of Financing

Funding Source	Amount
Public Utilities General Obligation Bonds	6,754,763
Sale of Timber	230,000

Total Programmed Funding: 6,984,763
Future Funding Requirements: 0

**City of Portsmouth
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**Capital Improvements
Sewer**

Project: 19007 **Title: Suction Well Rehabilitation** **Status: Adopted**

Comprehensive Plan Information

Project Location

CIE Project: N/A **Plan Reference: CC Vision - Neighborhood** **District:**
LOS/Concurrency: N/A **Project Need: N/A** **Location: Undefined**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2010	Non-Appropriated Programmed CIP Funding				Future Funding
			FY 2011	FY 2012	FY 2013	FY 2014	
20,224,290	7,018,290	0	3,136,000	2,776,000	3,647,000	3,647,000	0

Description and Scope

The Department of Public Utilities is responsible for the operation & maintenance of an extensive wastewater collection system, of which 72% is at the end of its useful engineering life. Included in the wastewater collection system is 10 miles of vacuum sewer piping and 29 sewer suction wells, which serve the older Downtown, Midtown, Westhaven and Glenshellah portions of the City. This project provides for replacement and/or rehabilitation of the vacuum sewer piping and suction wells.

Rationale

- The vacuum sewer system ranges in age from 52 to 77 years old and exposure to a harsh wastewater environment has caused extensive deterioration of this system.
- Planned, phased expenditures are necessary to maintain this system's operation and prevent failure which could have both public health and environmental consequences.

Funding Strategy

This is an on-going project that will continue until the vacuum lines and suction wells have been rehabilitated and/or replaced. A Master Plan Study to set the range of rehabilitation costs and priorities was completed in FY '03-'04. A pilot program to replace one section of the system, refining rehabilitation methods and costs was performed in FY04-05. A phased rehabilitation and/or replacement of the system over the next 7 year period begins in FY 05-06.

Operating Budget Impacts

Project will reduce the annual maintenance requirements, provide for reliable operations and reduce the potential for sanitary sewage overflows.

Project Map

Schedule of Activities

**VARIOUS
LOCATIONS
CITYWIDE**

Project Activities	From - To	Amount
Construction	07/06 - 06/13	20,224,290

Total Budgetary Cost Estimate: 20,224,290

Means of Financing

Funding Source	Amount
Public Utilities General Obligation Bonds	20,224,290

Total Programmed Funding: 20,224,290
Future Funding Requirements: 0

**City of Portsmouth
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**Capital Improvements
Sewer**

Project: 19009 **Title: Williams Court Outlet Sewer Rehabilitation** **Status: Adopted**

Comprehensive Plan Information **Project Location**

CIE Project: N/A **Plan Reference: CC Vision - Neighborhood** **District:**
LOS/Concurrency: N/A **Project Need: N/A** **Location: Behind the former Cradock High School, 4300 GWH**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2010	Non-Appropriated Programmed CIP Funding				Future Funding
			FY 2011	FY 2012	FY 2013	FY 2014	
1,250,000	675,000	575,000	0	0	0	0	0

Description and Scope

This project involves rehabilitation of the 27-inch concrete sewer main which conveys wastewater from the Williams Court area to the Camden Avenue Pump Station. Rehabilitation to involve lining of approx. 3000 LF of sewer and associated manholes.

Rationale

Investigation of the sewer line during cleaning operations show that the top of the concrete pipe has eroded away due to the release of hydrogen sulfide gas during turbulent wastewater flow. If left unchecked, resulting sanitary sewer overflows would have major public health and environmental issues.

Funding Strategy

Funding to come from Public Utilities General Obligation Bonds.

Operating Budget Impacts

Project would minimize operating costs for Public Utilities.

Project Map **Schedule of Activities**

Project Activities	From - To	Amount
Design	07/08 - 06/09	100,000
Construction	07/08 - 06/11	1,000,000
Total Budgetary Cost Estimate:		1,250,000
Means of Financing		
Funding Source	Amount	
Public Utilities General Obligation Bonds	1,250,000	
Total Programmed Funding:		1,250,000
Future Funding Requirements:		0