

**PURPOSE**

The Utility Capital Improvements Program Budget provides for the construction of wastewater systems and water transmission, distribution and supply facilities, to include the engineering and acquisition program for additional groundwater supplies. Other water and wastewater system improvements are financed by accumulated JCSA funds for rehabilitation, replacement, extensions and expansions.

**BUDGET COMMENTS**

This budget proposes to direct facility fees (the initial connection fees when a new house or business connects to the system) towards financing expansion projects and, as recommended by MFSG, to transfer budgeted operating fund revenue (commodity service charges) towards establishing a **Repair, Renewal, and Replacement (3R) Reserve**.

**BUDGET SUMMARY**

	FY 04 Budget	FY 05 Adopted	FY 06 Adopted
<u>Revenues:</u>			
Operating Fund Transfer	\$ 730,665	\$ 0	\$ 0
Water Fund Transfer "3R" (new)	0	185,165	441,693
Sewer Fund Transfer "3R" (new)	0	342,091	319,449
Water Facility Charges	1,644,342	1,509,480	1,701,000
Sewer Facility Charges	1,495,728	1,358,280	1,529,640
	<u>0</u>		<u>0</u>
Total Revenue	\$ <u>3,870,735</u>	\$ <u>3,395,016</u>	\$ <u>3,991,782</u>
<u>Expenditures:</u>			
Water Supply	\$ 580,735	\$ 385,165	\$ 591,693
Water Distribution	880,000	1,000,000	1,150,000
Water Storage	0	310,000	350,000
Water Transmission	200,000	200,000	0
Sewer System Improvements	1,710,000	1,064,851	1,575,089
Other Projects	500,000	435,000	325,000
Total Expenditures	\$ <u>3,870,735</u>	\$ <u>3,395,016</u>	\$ <u>3,991,782</u>

The FY 2005-2009 Capital Improvements Program (CIP) consists of six separate, but interrelated, segments of the utility program, all of which are important in keeping pace with County development. The proposed five-year plan defines an integrated program for the development of each of the six segments along parallel time frames, designed for adequate service to be provided in step with the County Comprehensive Plan and Strategic Management Plan. A brief description of the essential features of the six segments follows:

**1. WATER SUPPLY (105-100)**

Water Supply Reserve "3R" (1015) - This is a modified project request. This account has been established to provide funding for Repair, Replacement, and Rehabilitation (3R) projects. This funding will allow the JCSA to pay for unexpected major repairs and planned replacement or rehabilitation of equipment or other fixed assets. The existing fund balance of \$90,035 is requested to be carried forward in the FY 2005-2009 CIP. A total of \$5,579,726 is requested over the five-year CIP to maintain this reserve. Funds used for this account are for "3R" projects.

W-40 Chickahominy Upgrade (1130) - This is a modified project request. This project provides for the major repair or replacement of well facility pumps, upgrade booster pumps, and electrical controls. The existing fund balance of \$35,000 is requested to be carried forward in the FY 2005-2009 CIP. A total of \$100,000 is requested in FY 2005 to complete this project. This is a rehabilitation project.

Desalination Plant Upgrade (1155) - This is a modified project request. This project provides for the development and construction of additional water treatment skids for the Desalination Water Treatment Plant. This project also provides for the membrane replacements of existing water treatment skids. A total of \$1,000,000 is requested in FY 2008 and FY 2009 to complete this project. This is an expansion project.

Well Facility Demolition (XXXX) - This is a new project request. This project will require taking six well facilities off line, grouting the existing wells, removal of all pumps, water tanks and demolition of building structures. A total of \$200,000 is requested in FY 2005 and FY 2006 to complete this project. This is a replacement project.

Interconnects with City of Williamsburg (XXXX) - This is a new project request. This project will require the removal of water line isolation valve connections with the City of Williamsburg as per agreement. A total of \$100,000 is requested in FY 2006 and FY 2007 to complete this project. This is a replacement project.

**2. WATER DISTRIBUTION (105-110)**

Water System Improvements Escrow (1150) - This is a modified project request. This project will provide funds for water distribution improvements to include installing water mains to close distribution loops and increase water main sizes to enhance water distribution. The existing fund balance of \$41,445 is requested to be carried forward in the FY 2005-2009 CIP. An additional \$2,600,000 is requested over the next five years to complete this project. This is a rehabilitation project.

Raleigh Square Waterline (1260) - This is a modified project request. This project will allow for the replacement and upgrade of a water distribution system serving the neighborhood. The existing fund balance of \$120,000 is requested to be carried forward in FY 2005-2009 CIP with an additional \$300,000 requested to complete this project in FY 2005. This is a replacement project.

Kingswood Area Waterline (1280) - This is a modified project request. This project will allow for the replacement and upgrade of a water distribution system serving the neighborhood. The existing fund balance of \$25,000 is requested to be carried forward in FY 2005-2009 CIP with an additional \$850,000 in FY 2005-2007 requested to complete this project. This is a replacement project.

White Oaks Water System (1300) - This is a new project request. This project will allow for the replacement and upgrade of the water distribution system serving the neighborhood. The existing fund balance of \$142,000 is requested to be carried forward in FY 2005-2009 CIP with an additional \$700,000 in FY 2005-2006 requested to complete this project. This is a replacement project.

Riverview Plantation (XXXX) - This is a new project request. This project will allow for the replacement and upgrade of a water distribution system serving the neighborhood. The current system does not meet fire flow protection requirements. A total of \$500,000 is requested in FY 2005-2009 to complete this project. This is an expansion project.

Zonal Isolation (XXXX) - This is a new project request. This project will provide for the installation of valves, fire hydrants, and backflow prevention devices to be able to isolate the Central Water System in the event of contamination in one of the zone areas and prevent the spread of any contaminants to other zones. This is one of the initiatives identified to provide more security to the Central Water system. A total of \$250,000 is requested in FY 2005-2009 to complete this project. This is an expansion project.

### 3. WATER STORAGE (105-120)

Season's Trace Water Tank (1250) - This is a new project request. This project provides for the construction of a water storage tank at Season's Trace. The existing tank does not fall within the current hydraulic grade line and storage capacity needs to be increased to meet future needs as the water system expands. A total of \$2,000,000 is requested over FY 2005-2007 to complete this project. This is a replacement project.

Stonehouse Area Storage Tank (XXXX) - This is a new project request. This project provides for the construction of an elevated water storage tank in the northern end of the County to enhance fire flow capabilities, to meet peak demand, and stabilize pressure fluctuations as the demands on the JCSA water system increases in the Stonehouse Area. A total of \$600,000 is requested over FY 2008-2009 to complete this project. This is an expansion project.

Tank Ventilation (XXXX) - This is a new project request. This project provides for the installation of a tank ventilation system on each water storage tank that will prevent some of the radioactive material from entering the tank in the event of discharge from the Surry Power Plant. This is one of the initiatives identified to provide more security throughout the JCSA water system. A total of \$160,000 is requested over FY 2005-2006 to complete this project. This is an expansion project.

### 4. WATER TRANSMISSION (105-140)

Riverview Plantation Transmission (1525) - This is a new project request. This project will allow for the installation of a water transmission main from W-28 (Wexford Hills) water system to the Riverview Plantation area. The existing fund balance of \$400,000 is requested to be carried forward in the FY 2005-2009 CIP. An additional \$200,000 is requested in FY 2005 to complete this project. This is an expansion project.

Governor's Land Transmission (XXXX) - This is a new project request. This project provides for the installation of a water transmission main from Monticello Road extended to John Tyler Highway (Route 5). This water main will enhance fire flows and reduce pressure fluctuations in

the Governor's land area. A total of \$400,000 is requested in FY 2008-2009 to complete this project. This is an expansion project.

Neck-O-Land Water Main (XXXX) - This is a new project request. This project provides for the installation of a water transmission main along Neck-O-Land Road to enhance fire flow capabilities in that area. A total of \$300,000 is requested in FY 2008-2009 to complete this project. This is an expansion project.

## 5. WASTEWATER IMPROVEMENTS (105-150)

Sewer System Reserve "3R" (XXXX) - This is a new project request. This account has been established to provide funding for Repair, Replacement, and Rehabilitation (3R) projects. This funding will allow the JCSA to pay for unexpected major repairs and planned replacement or rehabilitation of equipment or other fixed assets. A total of \$6,039,234 is requested over the five-year CIP to maintain this reserve. Funds used for this account are for "3R" projects.

Odor Control System (2045) - This is a modified project request. The project will provide for the installation of an odor control system at the most offensive lift stations. The existing fund balance of \$182,972 is requested to be carried forward in the FY 2005-2009 CIP. An additional \$160,000 is requested over the five-year CIP to complete this project. This is a rehabilitation project.

Sewer System Improvements (2100) - This is a modified project request. This project will provide funds for sewer system improvements during the next five years. The existing balance of \$207,052 is requested to be carried forward in the FY 2005-2009 CIP while an additional \$1,385,240 is required over the five-year CIP to complete this project. This is a rehabilitation project.

Lift Station Upgrades (2320) - This is a modified project request. This project will provide for the replacement of compressors at seven facilities as well as replacement of station electrical controls. The existing balance of \$160,000 is requested to be carried forward in the FY 2005-2009 CIP while an additional \$760,000 is required over the next four years to complete this project. This is a rehabilitation project.

Sewer Bridge Rehabilitation (2355) - This is a modified project request. This project provides for the replacement or repair of numerous aging sewer bridges that cross ravines to prevent the bridge from collapsing and creating sewer spills. The existing fund balance of \$277,344 is requested to be carried forward in FY 2005-2009 CIP with an additional \$125,000 requested to complete this project. This is a rehabilitation project.

Lift Station 1-5 Windsor Forest Upgrade (XXXX) - This is a new project request. This project will provide for new pumps, motors, and controls to accommodate increased flows and to allow for Supervisory Control and Data Acquisition (SCADA) System compatibility. A total of \$200,000 is requested in FY 2005 to complete this project. This is a replacement project.

Lift Station 3-9 Indigo Dam Road Upgrade (XXXX) - This is a new project request. This project provides for the replacement of an obsolete control building. A total of \$150,000 is requested in FY 2006 to complete this project. This is a replacement project.

Lift Station 1-9 & 4-6 Control Buildings (XXXX) - This is a new project request. This project provides for the replacement of obsolete control buildings. A total of \$210,000 is requested in FY 2006 to complete this project. This is a replacement project.

Lift Station 1-7 Control Building (XXXX) - This is a new project request. This project provides for the replacement of obsolete control building. A total of \$75,000 is requested in FY 2007 to complete this project. This is a replacement project.

Lift Station 2-5 & 2-6 Control Buildings (XXXX) - This is a new project request. This project provides for the replacement of obsolete control buildings. A total of \$185,000 is requested in FY 2008 to complete this project. This is a replacement project.

James Terrace Sewer Inspection (XXXX) - This is a new project request. This project will provide for the cleaning, television inspection, and evaluation reporting on the sewers in James Terrace (20,000 LF). A total of \$250,000 is requested in FY 2009 to complete this project. This is a replacement project.

## 6. OTHER PROJECTS (105-160)

Tewning Road Expansion (3005) - This is a modified project request. The JCSA/JCC complex located at Tewning Road continues to grow. These funds will be escrowed for the purchase of additional land. The existing balance of \$1,352,837 is requested to be carried forward in the FY 2005-2009 CIP while an additional \$1,250,000 is requested over the five-year CIP. This is an expansion project.

Heavy Equipment (3085) - This is a modified request to replace several heavy equipment items. Scheduled equipment includes a new position Industrial Electrician truck in FY 2005. One-ton Crane truck in FY 2006. Flush truck, Line truck, and two Dump trucks in FY 2007. Large Flush truck, Pump and Haul truck and a Line truck are projected for replacement in FY 2008. Pump and Haul truck and Back Hoe in FY 2009. The existing balance of \$208,804 is requested to be carried forward in the FY 2005-2009 CIP with an additional \$880,000 is requested over the five-year CIP. This is a replacement project.

Public Safety Radio System (XXXX) - This is a new project request. This project will provide 48 portable radios, 2 base stations and 6 charging banks to link to the Count's implementation of the regional 800-MHz radio system. A total of \$110,000 is requested in FY 2008 to complete this project. This is a replacement project.

Building E Rehabilitation (XXXX) - This is a new project request. This project will provide for limited interior modification, painting, and carpet replacement in FY 2005. It also provides for roof resurfacing in FY 2006. A total of \$50,000 is requested in FY 2005-2006 to complete this project. This is a rehabilitation project.