

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 Authority 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 to transfer budgeted operating fund revenue (commodity service charges) towards financing Rehabilitation and Replacement (R & R) projects.

BUDGET SUMMARY

	<u>FY 97</u>
<u>Revenues:</u>	
Water Fund Transfer	\$ 652,244
Sewer Fund Transfer	606,967
Facility Charges	<u>2,783,400</u>
 Total Revenue	 <u><u>\$4,042,611</u></u>
<u>Expenditures:</u>	
Water Supply	\$1,515,611
Water Distribution	460,000
Water Storage	320,000
Small System Acquisition	50,000
Water Transmission	300,000
Sewer System Improvements	1,197,000
Operational Facility Improvements	150,000
Capital Contingency	<u>50,000</u>
 Total Expenditures	 <u><u>\$4,042,611</u></u>

The FY 97-01 Capital Improvements Program 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. A brief description of the essential features of the six segments follows:

1. WATER SUPPLY

Well Facility Development - This is a modified project request. This project involves the development and construction of new well facilities to meet short-term water supply demands for the next five to ten years. The existing fund balance of \$304,870 is requested to be carried forward in the FY 97-01 CIP with an additional \$1,325,000 (\$425,000 in FY 99, \$450,000 each in FY 00 and 01) requested to complete this project.

Water Supply Escrow - This is a modified project request. This escrow account has been established to provide funding for new water supply projects in the future. This funding will allow the JCSA to explore other alternatives to meet the water demands of James City County in the future. The existing fund balance of \$732,584 is requested to be carried forward in the FY 97-01 CIP with an additional \$5,140,304 requested over the five-year CIP to maintain this escrow.

Well Facility Improvements - This is a new project. This request is to establish well facility improvements in the out years for system reliability. A total of \$890,000 is requested in FY 97-01 for this purpose.

Tank Coatings - This is a new project request. This request is to provide for water tank coating inspections and repairs to protect tank surfaces from corrosion and limit bacteria formation. A total of \$150,000 in FY 97 and \$100,000 in FY 98 is requested to complete this project.

Well (W-1) Owens Illinois Facility Upgrade - This is a modified project that involves the removal of an existing underground fuel tank and installation on an above ground tank. Additionally, a second production well will be constructed to connect to the existing well facility. Improvements will also be made to the booster pumps. The existing fund balance of \$213,797 is requested to be carried forward in the FY 97-01 CIP with an additional \$150,000 requested in FY 97 to complete this project.

Water Supply SCADA - This is a modified project request. SCADA is a Supervisory Control and Data Acquisition System. Funds for this project will enable the JCSA to compile historical data and assist in facility operations during normal conditions and emergencies. The existing fund balance of \$69,272 is requested to be carried forward in the FY 97-01 CIP with an additional \$1,150,000 (\$500,000 each in FY 97, FY 98, and in FY 99) requested to complete this project.

Well Production Improvements - This is a new project request. This request is to provide for increased well production by combining W-10 (Colby Road) and W-11 (Forest Glen) wells to double their production capacity. The existing fund balance of \$250,000 is requested to be carried forward with an additional \$50,000 in FY 97 and \$150,000 in FY 98.

Well (W-24), (W-27), and (W-38) Upgrades - This is a new project request. This project will enhance the reliability and production of the central water system. The upgrade includes a new well house, booster pumps, storage tanks and disinfection equipment at W-38. A waterline will be installed to connect W-27 to W-38. A total of \$575,000 (75,000 in FY 97, \$500,000 in FY 99) is requested to complete this project.

Racefield Well (W-29) Upgrade - This is a modified project request. This project will provide a back-up power source to increase system reliability. The upgrade will include the construction of a building enclosure, and for the installation of an auxiliary generator and automatic transfer switch. The existing fund balance of \$90,000 is requested to be carried forward in the FY 97-01 CIP with an additional \$50,000 requested in FY 97.

King's Village Well (W-31) Upgrade - This is a new project request. This project will provide a backup power source for system reliability and provide building to house disinfection equipment. A total of \$100,000 is requested for this project.

2. WATER DISTRIBUTION

James Terrace - This is a modified project request. This project provides for the replacement of old and undersized water mains in the James Terrace subdivision. The existing fund balance of \$179,000 is requested to be carried forward in the FY 97-01 CIP with an additional \$595,000 requested (\$215,000 in FY 97, \$260,000 in FY 98 and \$70,000 in FY 99, \$50,000 in FY 00) to complete this project.

Water System Improvements - 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 up sizing mains to enhance water distribution. A total of \$450,000 (\$50,000 in FY 98, \$200,000 in FY 99, \$100,000 in FY 00 and FY 01) is requested to complete this project.

The Colony Water Main - This is a modified project request. This project provides for the replacement of old and undersized water mains in The Colony subdivision. The existing fund balance of \$115,000 is requested to be carried forward in the FY 97-01 CIP with an additional \$40,000 requested to complete the project in FY 97.

Toano Water Main - This is a modified project request. This project provides for the replacement of old and undersized water mains in the Toano area. The existing fund balance of \$113,500 is requested to be carried forward in the FY 97-01 CIP with an additional \$135,000 requested to complete the project (\$35,000 in FY 97, \$50,000 each in FY 98 and FY 99).

Pressure Reducing Valves - This is a modified project request. This project provides for the replacement of existing underground facilities with above ground facilities. Pressure reducing valves at St. George's Hundred, Greensprings Road, Neck-O-Land Road and Jamestown 1607 will be replaced. The existing fund balance of \$140,569 is requested to be carried forward in the FY 97-01 CIP with an additional \$140,000 requested to complete the project (\$70,000 in FY 97 and \$70,000 in FY 98).

Winston Terrace - This is a new project request. This project provides for the replacement of old and undersized water mains in the Winston Terrace subdivision. The total cost to complete this project is unknown at this time, however, \$20,000 is requested in FY 99 for design and engineering work and \$50,000 in FY 00 for construction.

Automatic Meter Reading System - This is a new project request. This project provides for the replacement of existing water meter registers with an encoder register that will improve meter reading 2-3 times faster and can shorten billing cycle. A total of \$550,000 spread over four years is requested to complete this project.

3. WATER STORAGE

Water Storage Escrow - This is a modified project request. This project provides for the construction of multiple size water storage tanks in the PSA in accordance with the Master Water Plan. The existing fund balance of \$390,000 is requested to be carried forward in the FY 97-01 CIP with an additional \$860,000 requested to complete the project (\$250,000 in FY 97, \$250,000 in FY 98, \$160,000 in FY 99, and \$100,000 in FY 00 and FY 01).

Altitude Valves - This is a modified project request. This project provides for the construction of above ground altitude valve facilities at the Eastern State water storage tank and the Toano water storage tank. The existing fund balance of \$70,000 is requested to be carried forward in the FY 97-01 CIP with an additional \$70,000 requested in FY 97.

4. SMALL WATER SYSTEMS ACQUISITIONS ESCROW

This project is an ongoing effort by the JCSA to buy and interconnect water systems in accordance with the Master Water Plan. The targeted private water systems are experiencing problems in maintenance and have fair to poor water quality, presenting both health and safety problems. The existing fund balance of \$150,000 is requested to be carried forward in the FY 97-01 CIP. A total of \$250,000 in additional funding (\$50,000 in each of the remaining years) is requested to fund this project.

5. WATER TRANSMISSION

Mooretown Road Water Main - This is a modified project request. The project involves the construction of an 8-inch water main along a portion of Mooretown Road near Ewell Industrial Park in York County and to connect to a developer's extension and an existing JCSA system in Raintree subdivision. The existing fund balance of \$85,000 is requested to be carried forward in the FY 97-01 CIP. \$50,000 is requested to complete this project in FY 98.

Centerville Road - This is a modified project request. The project involves the replacement of an 8-inch water main on Centerville Road and a 12-inch water main on Longhill Road. A total of \$100,000 is requested in FY 98 to complete this project.

Transmission Main Improvements - This is a new project. This project provides for the replacement of water transmission lines to convey large volumes of water through existing distribution system to enhance system pressures, fire flows, and water quality. A total of \$1,120,000 is requested over the five-year CIP.

Interconnects to Williamsburg - This is a new project request. The project involves the transfer of those subdivisions on Williamsburg water to the JCSA water system by FY 97. Subdivisions to be connected include Kingspoint, Kingswood, Lake Powell, Wickre Street and Monument Avenue. The existing fund balance of \$20,000 is requested to be carried forward in the FY 97-01 CIP with an additional \$100,000 requested in FY 97.

6. WASTEWATER IMPROVEMENTS

Inflow and Infiltration - This is a modified project request. The purpose of this project is to make repairs to the sanitary sewer system to eliminate extraneous water. The existing fund balance of \$12,449 is requested to be carried forward to FY 97-01 CIP with an additional \$300,000 requested over the five-year CIP to complete this project.

Lift Station 3-3 (Jamestown Road) Upgrade - This is a modified project request. The project will provide improvements to LS 3-3 located at 1567 Jamestown Road. Improvements will include the installation of two new dry pit submersible pumps and motors and all electrical controls. The existing balance of \$135,000 is requested to be carried forward in the FY 97-01 CIP with an additional \$20,000 requested in FY 97.

Sewer System Improvements - This is a modified project request. This project will provide funds for sewer system improvements during the next five years. The existing balance of \$31,905 is requested to be carried forward in the FY 97-01 CIP while an additional \$1,376,000 is required to complete this project.

Right-of-Way Clearing - This is a modified project that involves the clearing of brush and trees along approximately 60 miles of right-of-ways held by the JCSEA. This project helps reduce inflow and infiltration by eliminating threats to water and sewer lines such as root growth. An additional \$50,000 is requested in FY 98 and 00 to continue this project.

Fuel Tank Replacements - This is a modified project that involves the replacement of underground fuel storage tanks with above ground tanks to conform with Federal and State requirements. The existing fund balance of \$174,741 is requested to be carried forward in the FY 97-01 CIP. An additional \$150,000 (\$50,000 in FY 97, and \$100,000 in FY 98) is requested to continue this project.

Lift Station 6-8 (Depot Street) Upgrade - This is a modified project request. The project will provide for the complete rehab to LS 6-8 located at 122 Depot Street in Toano. The existing fund balance of \$72,640 is requested to be carried forward in the FY 97-01 CIP. An additional \$495,000 is requested to complete this project in FY 97-99.

Lift Station 5-4 (Franks Truck Stop) Generator - This is a new project request. The project provides for the replacement of existing portable generator and installation of permanent generator. A total of \$90,000 is requested in FY 98 to complete this project.

Odor Control System - This is a modified project request. The project will provide for the installation of an odor control system of Lift Stations 1-3, 3-3, 4-4, and several lift stations in Kingsmill. A total of \$125,000 is requested over FY 97 and FY 98 to complete this project.

Lift Station 1-4 (Somerset Court) Upgrade - This is a modified project request. The project will provide for a complete rehab to LS 1-4 located at 22 Somerset Court in Windsor Forest. A total of \$255,000 (\$25,000 in FY 96 and \$230,000 in FY 97) is requested to complete this project.

Longhill Gravity Main - This is a modified project request. This project provides for the extension of mandatory gravity sewer which eliminates the need for additional lift stations, force mains, and reduce the number of existing lift stations. The existing fund balance of \$75,000 is requested to be carried forward in the FY 97-01 CIP with an additional \$346,000 requested in FY 98 and 99.

Lift Station 1-7 (Thomas Jefferson) Upgrade - This is a modified project request. The project will provide for a complete rehab to LS 1-7 located in the vicinity of Thomas Jefferson Inn. The existing fund balance of \$25,000 is requested to be carried forward in the FY 97-01 CIP with an additional \$20,000 requested in FY 97.

Lift Station 3-4 (Lake Powell) Upgrade - This is a new project request. The project will provide improvements to LS 3-4 located at 2159 Lake Powell Road. Improvements will include repair to the auxiliary generator and automatic transfer switch for facility reliability. A total of \$25,000 is requested in FY 97 to complete this project.

Lift Station 3-1 (Canham Road) Upgrade - This is a new project request. The project will provide improvements to LS 3-1 located at 113 Canham Road. Improvements will include the installation of two new dry pit submersible pumps and motors and all electrical controls. A total of \$170,000 is requested in FY 97 to complete this project.

Lift Station 4-4 (Jamestown Road) Upgrade - This is a modified project request. The project will provide improvements to LS 4-4 located at 1594 Jamestown Road. Improvements will include installation of a new auxiliary generator and automatic transfer switch for facility reliability. The existing fund balance of \$50,000 is requested to be carried forward in the FY 97-01 CIP with an additional \$90,000 requested in FY 97.

Lift Station 8-3 (Neck-O-Land) Upgrade - This is a new project request. The project will provide improvements to LS 8-3 located on Neck-O-Land Road. A total of \$40,000 is requested in FY 97 to complete this project.

Lift Station 2-3 (Jamestown Island) Rehab - This is a new project request to replace the existing generator. A request of \$35,000 is needed in FY 97 to complete this project.

Lift Station 7-7 (Kingsmill) Rehab - This is a new project request to replace the existing generator. A request of \$40,000 is needed in FY 97 to complete the project.

Lift Station 7-2 (Burton Woods) Rehab - This is a new project request to replace an existing generator. A request for \$28,000 is made in FY 97 to complete this project.

Tutter's Neck Force Main - This is a new project that involves the replacement of approximately 350 linear feet of failing 6-inch sewer force main on Tutter's Neck in Kingsmill. \$210,000 is requested to complete this project in FY 98.

Lift Station Facility Upgrade - This is a new project request. This project is established to provide funds for future Lift Station improvements. Specific projects have not been identified. A total of \$1,500,000 (\$500,000 each in FY 99-01) is requested for this project.

7. OTHER PROJECTS

Tewning Road Facility - This is a modified project to upgrade the Utility Operations facilities located at Tewning Road. Improvements will include parking area asphalt. The existing fund balance of \$57,101 is requested to be carried forward in the FY 97-01 CIP. An additional \$50,000 is requested in FY 97 to complete this project.

Heavy Equipment - This is a new request to replace several heavy equipment items. Scheduled equipment replacement includes a Trencher in FY 98, an JET/VAC in FY 98. All Terrain Vehicle and CAB Truck in FY 00 and Mini JET/VAC in FY 01. \$481,000 is requested to fund this equipment.

Tewning Road Expansion - This is a modified project request. The purpose of this project is to escrow funds for expansion of Tewning Road facilities. Tewning Road activities have no room for expansion. Continued growth will require acquisition of additional land and new operational facilities. The existing fund balance of \$100,000 is requested to be carried forward in the FY 97-01 CIP. An additional \$500,000 is requested for this five year plan.