

Financing and Cost Analysis Program



Department of Public Works Wastewater Infrastructure Redevelopment Program

Approved
March 13, 2018



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

CERTIFIED MAIL 7017 1450 0000 7972 6914

City of Jackson
c/o Mr. Robert Miller
Director
Department of Public Works
P.O. Box 17
Jackson, Mississippi 39205-0017

Re: Financing and Cost Analysis Program
City of Jackson, Mississippi Consent Decree
Case No.: 3:12-cv-790 TSL-JMR

Dear Mr. Miller:

The U.S. Environmental Protection Agency Region 4 and the Mississippi Department of Environmental Quality (MDEQ) have reviewed the City of Jackson's (the City) Financing and Cost Analysis Program (FCAP), dated September 15, 2014, as well as your letter dated February 7, 2018. The EPA, after consultation with MDEQ, hereby approves the FCAP. The City shall update the EPA and MDEQ on the implementation of the FCAP in the Semi-Annual Reports.

If you have any questions, please contact Mr. Brad Ammons at (404) 562-9769 or via email at ammons.brad@epa.gov or Mr. Dennis Sayre at (404) 562-9756 or via email at sayre.dennis@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Maurice L. Horsey, IV", is positioned above the typed name.

Maurice L. Horsey, IV, Chief
Municipal & Industrial Enforcement Section
NPDES Permitting & Enforcement Branch

cc: Mr. Les Herrington, P.E.
Mississippi Department of Environmental Quality

Mr. Terry Williamson
City of Jackson

Department of Public Works



200 South President Street
Post Office Box 17
Jackson, Mississippi 39205-0017

February 7, 2018

CERTIFIED MAIL AND EMAIL

Mr. Brad Ammons
Clean Water Enforcement Branch
Water Protection Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, GA 30303
Ammons.Brad@epa.gov

Re: Jackson, Mississippi Wastewater Consent Decree Program
DOJ No. 90-5-1-1-09841
Financing and Cost Analysis Program (FCAP)

Dear Mr. Ammons:

The City of Jackson submitted to EPA a Financing and Cost Analysis Program (FCAP) on September 15, 2014 in accordance with Paragraph 43 of the Consent Decree. Because changes in City personnel and leadership occurred, EPA offered the City an opportunity to review, revise and resubmit the FCAP. On August 9, 2017, the City requested (via email) a six-month extension for this effort. This request was granted with the extension date of February 8, 2018.

I have reviewed the original FCAP document and have no material changes to make to it. The FCAP fairly reflects the processes and procedure currently in use or processes and procedures we seek to implement in the future relative to financing and cost analysis. Consistent with the adaptive management strategy presented in the FCAP, I will continue to review the financial processes and procedures as they exist and are being implemented to see that they continue to meet the City's needs.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Miller".

Robert Miller
Public Works Director

Department of Public Works



200 South President Street
Post Office Box 17
Jackson, Mississippi 39205-0017

Tony Yarber
Mayor of the City of Jackson

September 15, 2014

Chief, Environmental Enforcement Section
Environment and National Resources Division
U. S. Department of Justice
Box 7611 Ben Franklin Station
Washington, DC 20044-7611
Re: DOJ No. 90-5-1-1-09841

Brad Ammons
Environmental Engineer
Clean Water Enforcement Branch
Municipal & Industrial Enforcement Section
U. S. EPA Region 4
61 Forsyth St., S. W.
Atlanta, GA 30303

Karl Fingerhood
Environmental Enforcement Section
U. S. Department of Justice
Box 7611 Ben Franklin Station
Washington, DC 20044-7611

RE: City of Jackson
EPA Consent Decree
Financing & Cost Analysis Program

Dear Gentlemen:

Enclosed, please find the City's Financing & Cost Analysis Program. This program was developed and submitted by the City of Jackson in accordance with EPA Consent Decree dated March 1, 2013. Paragraph 43 of the Consent Decree requires the City to submit to EPA for review and approval the attached Financing & Cost Analysis Program.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Tony T. Yarber, Mayor
City of Jackson Mississippi

Cc: Les Herrington, P.E., Mississippi Department of Environmental Quality
Gus McCoy, Chief Administrative Officer, City of Jackson
Monica Joiner, City Attorney, City of Jackson
Kishia Powell, Director, Department of Public Works, City of Jackson
Mary D. Carter, Deputy Director of Public Works, City of Jackson
Terry Williamson, Legal Counsel, City of Jackson
Public Depository, Eudora Welty Public Library

City of Jackson
Wastewater Infrastructure Redevelopment
Program

Financing and Cost Analysis Program

August 31, 2014

Prepared for:

City of Jackson
Department of Public Works
P.O. Box 17
Jackson, MS 39205-0017

Prepared by:

WEI/AJA LLC
143A LeFleurs Square
Jackson, MS 39211

City of Jackson, Mississippi Financing and Cost Analysis Program

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.





Tony T. Yarber
Mayor



Date



Kishia L. Powell, Director
Department of Public Works



Date

Financing and Cost Analysis Program

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Acronyms

CCTV	Closed Circuit Television
CIP	Capital Improvement Plan
CMMS	Computerized Maintenance Management System
CMOM	Capacity, Management, Operations, and Maintenance
DOA	Department of Administration
DPW	Department of Public Works
EPA	U.S. Environmental Protection Agency
FCAP	Financing and Cost Analysis Program
GIS	Geographical Information System
IMS	Information Management System
MDEQ	Mississippi Department of Environmental Quality
O&M	Operation and Maintenance
WCTS	Wastewater Collection and Transmission System
WSBA	Water Sewer Business Administration

1.0 Introduction

As part of a Capacity, Management, Operations, and Maintenance (CMOM) program, the City of Jackson is required to develop a Financing and Cost Analysis Program (FCAP).

Concurrently, the City's Department of Public Works (DPW) has begun to reform its financial procedures to incorporate best practices and function as an effectively managed organization. To these ends, the DPW has established a Financing and Cost Analysis Program (FCAP), using an adaptive management strategy for implementation of required program criteria. The program incorporates revenue estimating, budgeting, costs analysis and customer rate setting such that the City can provide customers with the required level of service while meeting its regulatory requirements. This Financial and Cost Analysis Program document includes a description of the program elements.

Specifically, the FCAP meets the following criteria established by the Consent Decree:

- A process (including a schedule of implementation) that regularly analyzes, projects, plans, and finances management, operating, and maintenance costs of its Sewer System, including those management, operating, and maintenance costs associated with labor and equipment needed to properly implement the CMOM programs required pursuant to this Consent Decree.
- A process (including a schedule of implementation) that regularly analyzes, projects, plans, and finances capital improvements to its Sewer System, including those capital improvements required pursuant to this Consent Decree. Capital improvement financing shall be planned using, at a minimum, a five (5)-year planning horizon followed by annual updates.
- A process, including a schedule of implementation, to ensure that life cycle cost analysis is incorporated into its operations cost analyses, maintenance cost analyses, and management cost analyses for all Sewer System equipment and infrastructure.
- A process, including a schedule of implementation, to establish its annual budget and set customer rates that assures that the budget and rates are based on the programs referenced above

1.1 Regulatory Drivers

The FCAP is structured to meet the above criteria set forth by the Consent Decree between the City of Jackson, the United States, and the State of Mississippi entered on March 1, 2013. The following guidance documents were also consulted in establishing this Program:

- U.S. Environmental Protection Agency (EPA), *Guide for Evaluating Capacity, Management, Operations, and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems*, 2005; EPA, *Region 4 Guide to Collection and Transmission System Management, Operation, and Maintenance Programs*, 2011.
- Water Environment Federation, *Financing and Charges for Wastewater Systems*, WEF Manual of Practice No. 27, 2005.

1.2 Purpose and Goals

The purpose of the Financial and Cost Analysis Program (FCAP) is to track the sufficiency of funds for operations and maintenance, capital projects financing, and debt service coverage associated with the wastewater collection and transmission systems. Specifically, the processes in FCAP will aid in determining user rates, identifying projects and budgets in the Capital Improvement Plan (CIP), and allocating operation and maintenance budget funds to achieve the goals of sufficient funding and efficient funds management.

1.3 Program Resources

Currently, the DPW Deputy Director is primarily responsible for the Financial and Cost Analysis Program, in conjunction with other DPW and DOA staff. The Deputy Director coordinates DPW activities related to the financial analysis for each budget cycle.

Currently, the following DPW staff members are engaged in the Financial and Cost Analysis Program:

- Director
- Deputy Director
- Utility Manager
- Two (2) Fiscal Officers
- Administrative staff

1.4 Program Activities

The Financial Analysis Program encompasses the following activities:

- Budget development, monitoring, and cost analyses including:
 - Revenue projections
 - Budgetary obligations
 - Operations and maintenance (O&M) cost analysis and budget
- Capital Improvement Plan
- User rate analysis and establishment

The process focuses on meeting the financial needs of the Sewer System to provide the required level of service by DPW for its customers. All financial budgeting must be approved and adopted by the Mayor and City Council. Appropriate monitoring and reporting of costs is important to support requests made by the DPW annually in the budget planning cycle.

2.0 Budget Development, Monitoring, and Cost Analyses

Budget planning and approval is an annual process to project revenues and financial requirements for the City of Jackson, which operates on a fiscal year from October 1 through September 30. Each division begins its budgeting process in January for the upcoming fiscal year following the budget schedule in **Appendix A**. The City's Budget Office provides operational information (i.e. salary projections, fringe benefit costs, inflation factors, etc.) to each department's Fiscal Officer in March. The budget begins with non-discretionary items such as revenue bond debt service payments and operation and maintenance expense. The Deputy Director, with consultation from division managers and superintendents, determines budget priorities for discretionary items in March. Section requests are made in April and the Division requests are made to the Public Works Director in May. The Public Works Department submits its budget request to the City's Budget Office by May 30.

The General Bond Resolution approved by the City Council in 1993 and most recently amended in August 2012 (**Appendix B**) established a combined Water and Sewer System Revenue fund to which all annual revenues of the combined system are deposited. For purposes of system user rate analysis and projections, revenues are deposited into separate and distinct revenue account codes based on the source, i.e. sewer sales are posted to a different code than water sales as shown in **Appendix C**. Water and Sewer system expenses are also separate budget divisions; Division 520-Water Administrative, Division 521-Water Department and Division 522-Sewer System. An example of Division 522 Sewer System expense budget report is shown in **Appendix D**.

The sewer system budget is prepared, implemented, monitored, and adjusted where necessary in partnership with the Department of Administration.

2.1 Revenue Projections

The development of the sewer system's annual budget begins with a projection of revenues for the upcoming year. Revenue projections are evaluated using custom spreadsheets developed in-house and determined based on current revenue and historical and anticipated trends. A revenue trend analysis is based on monthly and average trends. The resulting annual revenue estimate is coordinated with the Department of Administration's Budget Office.

2.2 Budgetary Obligations

The City of Jackson's Code of Ordinances establishes that the Department of Administration is responsible for the functions of finance and management information systems for the City. The Water Sewer Utilities Division provides analyses to the Department of Administration each year regarding recommended revenue projections and recommended budgeted expenditures, based on prior years' history and recent trends. The Department of Administration's Budget Office submits to the Mayor and then to the City Council a recommended revenue and expenditure budget, for the fiscal year. Once the budget is adopted, the Water Sewer Utilities Division staff monitors revenues and expenditures monthly to ensure that business operations are within the projections. In general the City follows the budget schedule shown in **Appendix A**. Also shown in the attachment is the schedule for the development of the budget for the Water Sewer Utilities Division, particularly the sewer system budget.

With the establishment of the revenue estimate, the annual budget process begins. The budget (operating expenditures) is determined by first meeting the following budgetary obligations:

- Annual obligations for the funding of the debt service coverage
- Annual obligations for funding operating reserves required by the General Bond Resolution
- Indirect cost allocations, as provided by the Department of Administration's Budget Office:
 - estimated personnel cost
 - interdepartmental charges (i.e. general fund administrative charges, allocations for insurance and benefits, information system charges, Geographical Information System [GIS], facilities management, vehicle management, etc.).

Note that all water and sewer utilities expenses, both operating and capital costs, are paid from the Enterprise Fund for Water and Sewer. There are no charges to the Enterprise funds by the General Fund or other tax funds for water and sewer expenditures other than Indirect Costs, Redistributed Salary Costs and Franchise Fees.

Once revenues have been budgeted to meet these obligations, the capacity of the system to meet and provide services through staffing, acquisition of goods and services is determined. Sewer system budgets are allocated based on remaining revenue estimation for two functional areas: Operation and Maintenance (O&M) and CIP projects. Budget cost estimates are based on previous year spending and input from key personnel for each Section, as requested by the Deputy Director and Director. A review of the priority obligations and budgetary capacity is reviewed within the Department, after which a draft budget (O&M and CIP) is created for presentation to the Mayor and Chief Administrative Officer. Once accepted by the Mayor the proposed budget is presented to the City Council.

2.3 Operation and Maintenance Cost Analysis and Budget

Drafting the O&M budget requires knowledge of what cost inputs to consider and their corresponding priority. This cost analysis takes place throughout the year as well as during the budget development period.

The sewer system O & M expense budget is separated into nine (9) cost centers, or functions to effectively account for expenditures. The current budget structure is listed below:

- Div 522 SEWER SYSTEM – OPERATION & MAINTENANCE
 - Fcn 010 ADMINISTRATIVE
 - Fcn 015 MAINTENANCE SUPPLY
 - Fcn 020 OPERATION & MAINTENANCE
 - Fcn 025 SEWER EVALUATION SERVICES-SSES
 - Fcn 030 WASTEWATER TREATMENT-SAVANNA
 - Fcn 035 TRAHON TREATMENT FACILITY
 - Fcn 040 FIELD O & M TESTING (*INCLUDES LIFT STATIONS*)
 - Fcn 070 PRESIDENTIAL HILLS TREAT FACILITY
 - Fcn 080 FIXED CHARGES

Each cost center budget is separated into four (4) budget categories, or groups:

- Div 522 SEWER SYSTEM - OPER & MAINT.
 - Grp 610 PERSONAL SERVICES
 - Grp 620 SUPPLIES AND MATERIALS
 - Grp 630 OTHER SERVICES AND CHARGES
 - Grp 640 CAPITAL OUTLAY

During the fiscal year, the DPW monitors and evaluates revenues and expenditures on a monthly basis to ensure that the anticipated funding necessary to meet the sewer system's operational needs, debt obligations, and maintenance needs is available. Reserves and fiscal viability are monitored and discussed with the section managers and superintendents on a regular basis.

A regularly scheduled budget meeting is held on a quarterly basis to review the various budgets and fiscal concerns. Monthly analysis of both revenues and expenditures are provided to the Director, City Engineer, Utilities Manager and the Budget Office of the Department of Administration to ensure budgetary maintenance and compliance with bond covenants and restrictions.

The Water Sewer Business Administration (WSBA) (billing, revenue collection, and meter reading) also provides input regarding financial monitoring and analysis. The WSBA provides monthly water, sewer and sanitation reports for customers billed, sales and collections to the Deputy Director.

As a result of the various financial monitoring activities that take place throughout the year, the System major cost items are known. The major cost items in the O&M budget include recurring parameters such as:

- Wage & salary
- Overtime
- Equipment
- Financial impacts of outsourced activities (Contractual Services)
- Financial impacts imposed by departments or agencies outside the system

These recurring costs are tracked and stored in the following computerized databases:

- Cayenta® financial system (costs for services)
- Computerized maintenance management system (CMMS)
 - e-Portal® (Treatment facilities and lift stations)
 - Cayenta® (warehouse inventory);
 - CityWorks® (collection system work orders)
 - Kronos® (timekeeping - City Staff only)

In addition to the recurring parameters, other O&M costs typically include:

- Fuel costs
- Chemical costs
- Electrical costs
- Supplies and materials
- Repairs (parts and services)

The City of Jackson's Cayenta® financial system tracks water and sewer operation and maintenance costs by cost center and by line item for materials, labor, contractual services, equipment repairs and fuel expenditures, and related types of line item details. This cost data is incorporated into the financial model manually via spreadsheets. A direct reporting mechanism within Cayenta® provides the Department with targeted data capture abilities, which exports into an Excel spreadsheet, enhancing the effectiveness and efficiency of the cost analysis process. CMMS data capture functions are in the development process to identify and report targeted information helpful for cost analysis. These improvements will include work order tracking to include labor, supplies, material, and equipment costs.

The City of Jackson's Cayenta® financial system provides for a high level of expenditure control through its Procurement module, in which requisitions and purchase orders require multiple levels of approval before being issued, and through which detailed expenditure reports by budget object code or by vendor are analyzed by the DPW financial staff month-to-month, both in comparison to contract limits and budgetary limits. The payroll module tracks wages, benefits and overtime expenditures by cost center and by employee, and these costs are also monitored closely month-to-month. The DPW financial staff prepares detailed monthly reports examining revenues received by category of revenue, and the expenditures and encumbrances for water and sewer operations and capital projects, and

prepare an evaluation to the Director of any variances noted in year-to-date or monthly trends in comparison to the annual projections.

Annual O&M cost budget estimates are completed by May for the following year. With the development of annual O&M budgets, the DPW is prepared to meet operations and maintenance funding demands in the most efficient manner, preparing and planning for changes in consumption, regulatory requirements, and other operational challenges.

Sewer system budget estimates are then compiled and reviewed with the appropriate deputy directors and DPW finance personnel to discuss funds available, needs, and amount that can be transferred to repair and replacement projects. This transfer of funds is required in part by the Municipal Code section 122-233:

This sewer service charge system will be reviewed annually and revised periodically to reflect actual treatment works operation and maintenance costs and debt service requirements including all outstanding state revolving fund loans, and any excess revenues collected from the users shall be applied to the costs of treatment works operation and maintenance for the next year and the rate shall be adjusted accordingly. Users of the treatment works system shall be notified annually of the costs associated with O&M and debt service.

After the total sewer system O&M budget is agreed to internally, the budget is provided to the Director for review and approval. From there, the budget is presented to the Mayor and Department of Administration for review and compilation. The total O&M budget is then provided to the City Council Budget Committee for review and approval.

It should be noted that plant O&M staff (contract operator) and collection system O & M staff separate costs based on corrective, preventative, and emergency activities. For budget estimation purposes, plant O & M staff uses the CMMS (e-Portal®) work orders/service requests to account for and plan for budgets. Collection system O & M staff uses historical expenditures and monitors service order requests to account for and plan for its budgets. As further development and implementation of CityWorks® is completed, staff will be able to project anticipated costs more accurately. Within the collection system CMMS, wastewater costs will be separated based on asset identifications associated with work orders. However, all of wastewater assets have not been identified and entered into the CMMS, GIS, and infrastructure asset management (system inventory) databases. These assets will be added as the work required by the West Bank Interceptor Work Plan, Sewershed Evaluation Plan and Gravity Line Preventative Maintenance Plan are implemented.

By the end of FY 2016, the FCAP, using CMMS and other computer-based technology, will track and report operation and maintenance costs by the type of activity; corrective, preventative, emergency, etc. In the meantime, these costs will continue to be approximated and manually tracked until the work order tracking system is fully implemented.

3.0 Capital Improvement Planning

As led by the City's Department of Planning, the DPW will re-establish its long-term capital improvement planning and funding strategies based on a 5-year planning horizon. Through the planning process, the DPW will analyze current and planned projects that are required for growth, maintenance, and regulatory demands. As part of the planning process, the City will develop financial plans for capital improvement needs that it has established through proper engineering studies and other sources. The CIP for the sewer system will be based on a 5-year estimate of project needs and will identify major system improvements, upgrades, and rehabilitation work. As future rehabilitation plans, including the Savanna WWTP Composite Correction Program, the West Bank Interceptor Rehabilitation Plan, and the WCTS Evaluation Report/Rehabilitation Plan, are approved by EPA, the DPW will incorporate the recommendations and schedules into the CIP. Until these plans are approved, the DPW will continue to use its best available estimates for the anticipated work in its CIP and rate projections. The DPW expects approval of the Composite Correction Program and the West Bank Interceptor Rehabilitation Plan in early FY 2016.

DPW's primary objective is to minimize the fiscal impact of large, one-time expenditures, while balancing long-term debt, O&M expenses, and revenues. The challenge of meeting the system needs of recurring maintenance and continued investment in the sewer system is facilitated through an annual review of the sewer system's capital budget and 5-year Capital Improvement Plan. This review includes establishment of and/or changes in priorities and new projects where applicable.

Until the City develops and adopts a formal CIP planning process, planning for capital improvements will involve coordination of DPW divisions responsible for streets, bridges, traffic, drainage, and water infrastructure, as well as the Engineering Division. The deputy directors and DPW Director first develop an initial project list with cost estimates, evaluating each project to include its fiscal impact on personnel and operating costs on the annual budget. Guided by the Consent Decree's compliance dates, they will then make a final selection and prioritize projects and funding. In some instances, it may be necessary to advance rehabilitation projects under the Consent Decree in order to coincide with other infrastructure projects or to take advantage of a unique funding opportunity. The proposed capital improvements costs will then be imported into the spreadsheet-based Sewer System User Rate projection where funding deficiencies can be readily determined during the 5-year horizon.

3.1 Life Cycle Cost Analysis

Cost analyses will incorporate life cycle depreciation and establish cost-effective points for replacement. For projects within a 5-year horizon, replacement points will also be included in the projected CIP financing. In addition, these replacement points are provided to the Water Sewer Utilities Division for inclusion in the CMMS. For Plant Operations, applicable replacement points will be provided for inclusion in their Information Management System (IMS).

Life cycle cost analysis and replacement at the optimal life-cycle point will be developed for all fleet equipment. In the meantime, the City will continue to use a 5 year or 5000 hour replacement point for heavy equipment and a 10 year or 150,000 mile replacement point for light vehicles. As the City's contract operator continues development of its e-Portal® system, optimal life-cycle replacement points for all major treatment plant and lift station equipment will be completed and incorporated into the CIP process.

3.2 CIP Funding Allocation

Once the total Sewer System O&M budgets are determined, remaining revenue estimate dollars and bond and/or loan funds are then allocated to CIP financing. This CIP budget addresses funding for projects with a 1-2 year funding requirement, as well as larger projects that may take 3-5 years to be completed. The CIP financing is reviewed and updated annually, as appropriate. The Wastewater Capital Improvement Plan budget is reviewed monthly, and is updated annually. In July of each year, the Department sends recommended updates to the DOA Budget Office for inclusion in the budget books that are prepared for the Mayor and City Council.

Determination of CIP funding allocations is based on the following activities:

- Analyze, project, plan, and finance capital improvement needs established through proper engineering study (such as condition assessments and through the asset management program)
- Identify recurring projects (annual contracts, assessment and determined deficiencies, etc.). Recurring projects may include Closed Circuit Television (CCTV), smoke testing, pipe relining, manhole rehabilitation, and engineering contracts
- Identify 5-year rolling projections to accommodate larger projects

Once the Deputy Director approves the annual CIP budget, it is then submitted to the Director for review and approval.

3.3 Budget Cycle

The City of Jackson's budget cycle typically starts in late March, with the Budget Office providing the operational information (i.e., salary projections, fringe benefit costs, inflation factors, etc.) to the various department's Fiscal Officers. The first or earliest required submittal (usually early August) would be the CIP budget and new operating budget programs (program modifications).

The CIP budget submittal requires that not only must the capital cost of the project be developed for the next five years, but that a project description, justification, and impact narrative must be presented. The cost classifications for the projects include planning/design, acquisition, construction, equipment, and "other." An evaluation of the project's impact on the needs for personnel, additional operating costs, and revenues or savings will also be required. The source of funds for the project must also be included.

When a project is estimated to exceed the current budget and appropriations for that project, the Water Sewer Utilities Division management staff will submit a budget amendment to the Department of Administration and Chief Administrative Officer for approval, either on a month-to-month or quarterly basis, or with the annual CIP updates and amendments, if the additional estimates were identified during the normal planning and project development process.

3.4 CIP Management

The City of Jackson will manage its Capital Improvement Plan using resources in the Engineering Division, with support from a program management team for the Consent Decree projects, until the City can adequately staff and train additional personnel. Use of the program management team in the interim will ensure that sufficient planning, budgeting, procurement and construction management expertise is available, and will ensure that general contractor capacity does not impede the City of Jackson's ability to bid, contract and manage the necessary volume of work.

The Water Sewer Utilities Division management staff prepares annual recommendations for safety, regulatory compliance, emergency preparedness, customer service, planned maintenance, and capital budget funding needs. The Budget Office reviews the recommendations, ensuring that projections for wages and benefits, staffing levels, insurance, financial reserves and related operational budgetary priorities are met, while also providing for the funding projected in the upcoming year's capital budget in the Capital Improvement Plan. These two departments' recommendations are then presented to the Chief Administrative Officer for review and approval.

4.0 User Rate Analysis and Establishment

Recommended user rates are established on an annual basis as required by the General Bond Resolution, as amended. The recommended rates are projected to cover all costs necessary to properly operate and maintain the Sewer System. The planning process is an effort to promote consistency and stability in establishing rates for the upcoming year and projecting rates for a 3–4 year cycle. Funding is thereby secured over an established period to address not only operations and maintenance, but capital infrastructure challenges and priorities. This process is designed to assure that revenue earned through customer rates satisfy operating and maintenance cost and capital financing obligations.

The City of Jackson monitors its revenues and expenditures monthly, to ensure that annual budgetary estimates are being met. Rate increases have been historically been approved once every three or four years. If revenues during that period are not sufficient to cover all operating and capital needs, then additional rate increases or other appropriate actions as required by the General Bond Resolution, Section 6.01, would be recommended. If revenues and expenditures are within the targets established for that period, then the rate model would be updated toward the end of the current three or four year rate cycle, with a recommendation to the Mayor and City Council for the following three or four year period. The operations and maintenance costs that impact customer rates include materials, labor, equipment, chemicals and supplies, contracted services, repairs and maintenance, and administrative costs.

A rate analysis is performed periodically using data derived during the budget development and monitoring process. An analysis is performed pursuant to the General Bond Resolution requirements (**Appendix E**) for the Combined System. Numerous assumptions such as anticipated rates for cost escalation or debt service can be readily incorporated into a rate analysis to run “what if” scenarios.

The categories of assumptions used in the rate analyses are as follows:

- Escalation factors (inflation, energy, fuel, labor escalation, customer growth factor, supplies/repairs & maintenance, interest on fund balances excluding bond proceeds or construction funds)
- Projected revenues by type
- Projected operation and maintenance costs
- Debt service, debt service coverage requirements and structure of issues
- Fund balances at the beginning of the forecast period
- Reserves
- Capital Improvement Program funding

This spreadsheet-based sewer system rate analysis includes tabs for data entry, O&M, CIP, and other rate variables (**Appendix F**). The following steps are used to determine recommended customer rates:

- Base year costs are established.
- The model applies costs over 4-5 years with growth parameter percentages.
- The model incorporates projected 5-year CIP financing with current and estimated revenue inputs.
- Assumptions for current and projected growth needs for revenue and CIP financing are applied.

The rate model calculates what rates would be needed to meet current and projected revenue needs for budgeting purposes over the next 5 years. The model is updated periodically, or more often based on major projects that are moving forward. The 5-year rate structure projection is reviewed by the Mayor and submitted to the City Council for review.

5.0 FCAP

5.1 Program Implementation

The City currently has procedures and systems in place to adequately monitor and project annual revenue and operating costs for the Sewer System. The General Bond resolution requires that the revenues and expenses are routinely monitored and sets forth actions to be taken in the event that revenues are determined to be insufficient. As stated in Section 1.0, the City will use an adaptive management approach to implement the program.

Appendix A

Budget Cycle Schedule

City of Jackson, MS

Calendar for Upcoming Fiscal Year's Budget

January 1 – February 28	Develop Public Policy Initiative areas. Quarterly Review of Budget Performance.
March 1-31	Department of Administration to meet with department directors, deputies, and budget chair of City Council. City Council will adopt and prioritize Public Policy Initiatives.
April 1-30	Budget Office will provide training on inputting budget into Oracle budget module. Disseminate budget forms and documents. Quarterly Review of Budget Performance.
May 1 – June 30	All departments must submit budget requests by May 30. Budget Office will consolidate all budget requests. Budget Office will follow-up with departments as needed. Director of Administration, Budget staff, and CAO will meet with Mayor to review the proposed budget draft. Budget Office will submit a consolidated budget to Mayor.
July 1-31	Mayor will conduct budget review meetings with all departments. Mayor will present proposed budget to City Council.
August 1-31	City Council to conduct budget hearings with departments. City Council to issue notice of public hearing on proposed budget. City Council and Mayor review anticipated tax levy needs.
September 1-30	Hold public hearing(s) and set appropriate tax levies. Adopt budget by September 15. Publish adopted city budget for general public review.

Water Sewer Utilities Division Calendar for Upcoming Fiscal Year's Budget

January 1- 31	Quarterly Review of Budget Performance with Deputy Director. Sections begin development of proposed Budget. Begin development of proposed Regional billings.
February 1- 28	Update revenue forecast for Water and Sewer sales. Determine required equipment replacement and projected costs. Determine projected infrastructure capital repair/replacement costs.
March 1- 31	Deputy Director to meet with Division Managers and Superintendents to establish upcoming Budget priorities. Update revenue forecast for Water and Sewer sales. Receive Wastewater facilities Contract Operations proposed budget.
April 1- 30	Quarterly Review of Budget Performance with Director. Review proposed Contract Operations budget. Sections submit proposed Budgets to Deputy Director. Update revenue forecast for Water and Sewer sales. Submit proposed Regional billings to Deputy Director. Submit Water and Sewer Rate Analysis based on proposed Budget to Deputy Director.
May 1-31	Update revenue forecast for Water and Sewer sales. Revise Rate Analysis as required. Submit proposed Division budget to Director by May 15.
June 1-30	Update revenue forecast for Water and Sewer sales. Revise Rate Analysis as required. Budget Office follow-up with Department/Division as needed.
July 1- 31	Quarterly Review of Budget Performance with Director. Update revenue forecast for Water and Sewer sales. Revise Rate Analysis as required. Proposed Division Budget review with Mayor.
August 1-31	Update revenue forecast for Water and Sewer sales. Revise Rate Analysis as required. Department budget hearing with City Council.
September 1-30	Adopt budget including any required rate adjustments by September 15.

Appendix B

General Bond Resolution Amendment August 2012

**AMENDMENT AND SUPPLEMENT TO THE
GENERAL BOND RESOLUTION**

**RESOLUTION AMENDING AND SUPPLEMENTING THE GENERAL
BOND RESOLUTION OF THE CITY OF JACKSON, MISSISSIPPI
ADOPTED ON MARCH 11, 1993, AS PREVIOUSLY AMENDED AND
SUPPLEMENTED BY AMENDMENTS AND SUPPLEMENTS TO THE
GENERAL BOND RESOLUTION ADOPTED ON MARCH 16, 2004 AND
JULY 18, 2011; AND FOR RELATED PURPOSES.**

WHEREAS, the City Council (the "Governing Body") of the City of Jackson, Mississippi (the "Municipality"), acting for and on behalf of the Municipality, heretofore adopted on March 11, 1993, a resolution (the "Original General Bond Resolution") combining the water and sewer facilities of the Municipality into a combined water and sewer system and authorizing the issuance from time to time of water and sewer system revenue bonds of the Municipality for one or more of the purposes specified therein; and

WHEREAS, the Governing Body, acting for and on behalf of the Municipality, heretofore adopted on March 16, 2004, a resolution (the "2004 Resolution") amending and supplementing the Original General Bond Resolution; and

WHEREAS, the Governing Body, acting for and on behalf of the Municipality, heretofore adopted on July 18, 2011, a resolution (the "2011 Resolution" and together with the Original General Bond Resolution and the 2004 Resolution, the "General Bond Resolution"); and

WHEREAS, the Governing Body has determined there is a need to further amend and supplement the General Bond Resolution.

**NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED BY
THE GOVERNING BODY OF THE MUNICIPALITY, ACTING FOR AND ON
BEHALF OF THE MUNICIPALITY, AS FOLLOWS:**

SECTION 1. The terms used in this resolution, unless the context herein shall require otherwise, shall have the same meaning given in Section 1.01 of the General Bond Resolution.

SECTION 2. This resolution is adopted pursuant to Section 21-27-11 *et seq.*, Mississippi Code of 1972, as amended and supplemented.

Approval for Agency:

	<u>Initials</u>	<u>Date</u>
DIVISION HEAD/MANAGER	_____	_____
DEPARTMENT DIRECTOR	_____	_____
FINANCE	_____	_____
BUDGETED ___ YES ___ NO	ACCT# _____	
EBO	_____	_____
LEGAL	_____	_____
CAO	_____	_____
MAYOR'S OFFICE	_____	_____

ITEM # _____

AGENDA DATE _____

BY: UNGER, JOHNSON, TEEUWISSEN

SECTION 3. Section 1.01 of the General Bond Resolution is hereby amended by deleting the following definitions:

"AAA Refunded Municipals" shall mean noncallable, refunded obligations issued by any municipality or public body located in the United States of America, with respect to which Government Obligations have been deposited in amounts sufficient to pay all principal of and interest on such obligations as the same shall mature and become due and payable.

"Annual Principal and Interest Requirement" shall mean, with respect to a Series of Bonds and a Fiscal Year, the aggregate of the principal of the Bonds maturing or subject to mandatory redemption during such Fiscal Year and all interest on the Bonds due and payable during such Fiscal Year. In computing the Annual Principal and Interest Requirement, any Variable Rate Bonds shall be assumed to bear interest for future periods with respect to which no rate has been established at the average of the Bankers Trust Co., TENR during the immediately preceding twelve (12) month period, plus 1.50%, or if the Bankers Trust Co. TENR is no longer published, the average of such other short term index which is regularly published by the Bond Buyer (or comparable publication) during the immediately preceding twelve (12) month period, plus 1.50%. If the Municipality shall have entered into one or more agreements under which it will receive payments calculated on a notional amount equal to the principal amount of certain Bonds and will make payments calculated on the same notional amount, in computing the Annual Principal and Interest Requirement, such Bonds shall be assumed to bear interest for the period during which any such agreement is to be in effect at the rate to be paid by the Municipality pursuant to such agreement (with, if applicable, deductions for any amount to be received by the Municipality pursuant to such agreement), and all computations with respect to such agreements which are based other than on fixed rates shall be made as set forth above with respect to Variable Rate Bonds.

"Depreciation Fund" shall mean the Water and Sewer Depreciation Fund provided for in Section 6.03(d) of this General Bond Resolution.

"Financial Guaranty Agreement" shall mean a Financial Guaranty Agreement between the Municipality and MBIA providing for, amount other things, reimbursement to MBIA of amounts drawn under an MBIA Bond.

"MBIA" shall mean Municipal Bond Investors Assurance Corporation, a stock insurance company incorporated under the laws of the State of New York.

"MBIA Bond" shall mean a surety bond issued by MBIA and held in the Debt Service Reserve Account pursuant to Section 6.03(b)(2) hereof.

"Prior Bonds" shall mean:

- (A) the City of Jackson, Mississippi, Water Works System Revenue Bonds, 1986 Series A;
- (B) the City of Jackson, Mississippi, Sewer System Revenue Bonds, 1987 Series A;
- (C) the City of Jackson, Mississippi, Sewer System Revenue Bonds, 1987 Refunding Series;

(D) the City of Jackson, Mississippi, Sewer System Revenue Bonds, 1988 Series A; and

(E) the Prior Lien Bonds.

"Prior Lien Bonds" shall mean (a) the City of Jackson, Mississippi, Sewer System Revenue Bonds, 1987 Series 1971, and (b) the City of Jackson, Mississippi, Sewerage System Revenue Bonds, Series 1976-I.

SECTION 4. Section 1.01 of the General Bond Resolution is hereby amended by modifying or adding the following definitions to read as follows in appropriate alphabetical order:

"Account" or "Accounts" shall mean any one or more of the accounts created and established pursuant to this General Bond Resolution

"Annual Debt Service Requirement" shall mean for any Fiscal Year the sum of all amounts required to pay: principal due and payable during such Fiscal Year (at maturity or upon mandatory redemption other than redemption pursuant to mandatory sinking fund payments); any amounts required to be deposited into a sinking fund during such Fiscal Year; the amount of any mandatory sinking fund redemptions in such Fiscal Year (but only to the extent such payment required to be made during such Fiscal Year is not required to be funded prior to such year); and interest due and payable during such Fiscal Year on all Bonds and any Subordinate Indebtedness outstanding.

In computing the Annual Debt Service Requirement, unless otherwise provided in a Series Resolution, any Variable Rate Bonds shall be assumed to bear interest for future periods with respect to which no rate has been established at 120% of the SIFMA Index for tax-exempt Bonds and 120% of the LIBOR Index for taxable Bonds for the previous twelve (12) month period. If the Municipality shall have entered into one or more agreements under which it will receive payments calculated on a notional amount equal to the principal amount of certain Bonds and will make payments calculated on the same notional amount, in computing the Annual Debt Service Requirement, such Bonds shall be assumed to bear interest for the period during which any such agreement is to be in effect at the rate to be paid by the Municipality pursuant to such agreement (with, if applicable, deductions for any amount to be received by the Municipality pursuant to such agreement), and all computations with respect to such agreements which are based other than on fixed rates shall be made as set forth above with respect to Variable Rate Bonds.

"Code" shall mean the Internal Revenue Code of 1986 in effect on the date of issuance of the Tax-Exempt Bonds and the Tax-Exempt City Bond, and the applicable regulations or rulings promulgated or proposed thereunder, and any successor thereto, as such may be amended from time to time and the Regulations promulgated thereunder.

"Depository Agreement" shall mean the Depository Agreement between the Municipality and the Depository providing for the deposit of a portion of the Revenues in a manner consistent with the provisions of this General Bond Resolution.

"Fiscal Year" shall mean the period commencing on the first day of October of any year and ending on the last day of September of the following year or any other fiscal year selected by the Municipality or required by applicable law.

"Interest Payment Date" shall mean such date or dates as shall be specified in or computed in accordance with the Series Resolution for a Series of Bonds.

"Maximum Annual Principal and Interest Requirement" shall mean, with respect to a Series of Bonds, an amount equal to the Maximum Annual Debt Service Requirement for any Fiscal Year.

"Principal Payment Date" shall mean such date or dates or shall be specified in or computed in accordance with the Series Resolution for a Series of Bonds.

"Rate Stabilization Fund" shall mean the Rate Stabilization Fund provided for in Section 6.03(e) of this General Bond Resolution.

"Refunded Municipals" shall mean noncallable, refunded obligations issued by any municipality or public body located in the United States of America, with respect to which Government Obligations have been deposited in amounts sufficient to pay all principal of and interest on such obligations as the same shall mature and become due and payable.

"Reserve Account Requirement" shall mean, as of any date of calculation for the Debt Service Reserve Account or subaccount therein, an amount equal to the lesser of (1) Maximum Annual Debt Service Requirement for all outstanding Bonds secured thereby, (2) 125% of the Annual Debt Service Requirement for all outstanding Bonds secured thereby, or (3) the maximum amount of Bond proceeds which may be deposited to the Debt Service Reserve Account without subjecting the same to yield restriction under the Code, or causing interest on any of the Bonds secured thereby (other than taxable Bonds) to be included in gross income for purposes of federal income taxation or otherwise violating applicable provisions of the Code; provided, however, the Municipality may establish by a Series Resolution a different Reserve Account Requirement with respect to any particular Series of Bonds, which Reserve Account Requirement may be \$0.00. In computing the Reserve Account Requirement in respect of a Series of Bonds that constitutes Variable Rate Bonds, the interest rate on such Bonds shall be assumed to be (A) if such Variable Rate Bonds have been outstanding for at least 12 months prior to the date of calculation, the highest of (i) the actual rate of interest on the date of calculation, (ii) the average interest rate borne by such Variable Rate Bonds for the 12-month period immediately preceding each date of calculation, and (iii) the Bond Buyer Revenue Bond Index most recently published prior to the time of calculation, and (B) if such Variable Rate Bonds have not been outstanding for at least 12 months prior to the date of calculation, the higher of (i) the actual rate of interest on the date of calculation, and (ii) the Bond Buyer Revenue Bond Index most recently published prior to the time of calculation. The Reserve Account Requirement shall be calculated as of October 1 of each year with respect to the next succeeding Fiscal Year.

"Series Resolution" shall mean an order or resolution adopted by the Governing Body of the Municipality pursuant to this General Bond Resolution authorizing a Series of Bonds or Subordinate Indebtedness.

"Subordinate Indebtedness" shall mean any bonds, notes, loan agreements or other evidences of indebtedness issued from time to time secured by the Revenues on a basis subordinate to the pledge of Revenues in favor of the Bonds.

"Surplus Fund" shall mean the Water and Sewer System Surplus Fund provided for in Section 6.03(f) of this General Bond Resolution.

SECTION 5. Section 3.03 of the General Bond Resolution is hereby amended to read as follows:

SECTION 3.03. CONDITIONS PRECEDENT TO AUTHENTICATION AND DELIVERY OF A SERIES OF NEW MONEY BONDS. Except as provided in Section 3.04 hereof, the applicable Series Paying Agent shall authenticate and deliver to or upon the order of the Municipality, Bonds of a Series authorized to be issued pursuant to this General Bond Resolution and a Series Resolution for the purposes recited in Sections 3.02(b)(1) and 3.02(b)(2) only upon delivery to the applicable Series Paying Agent of:

(a) A copy of this General Bond Resolution and the applicable Series Resolution, each certified by an Authorized Officer; provided, however, that a certified copy of this General Bond Resolution need only be delivered to the applicable Series Paying Agent upon the delivery of the initial Series of Bonds;

(b) The written order of the Municipality as to the delivery of such Bonds signed by an Authorized Officer describing such Bonds to be authenticated and delivered, designating the purchaser or purchasers to whom such Bonds are to be delivered, and stating the purchase price of such Bonds;

(c) The amount (which amount may include a bond insurance policy, surety bond or letter of credit), if any, required for deposit in the Debt Service Reserve Account so that the balance on deposit in such Account shall at least equal the Reserve Account Requirement, calculated immediately after the delivery of such Series of Bonds;

(d) A certificate of the Municipality and an Independent Consulting Engineer to the effect that:

(1) The Municipality is current in all deposits into the various Funds and all payments theretofore required to have been deposited or made by it under the provisions of this General Bond Resolution or any existing Series Resolution or Resolutions;

(2) the amount of the Adjusted Net Revenues, computed on the basis of the Net Revenues during any twelve (12) consecutive months of the eighteen (18) months immediately preceding the delivery of such Series of Bonds, will be at least equal to one hundred twenty percent (120%) of the Maximum Annual Debt Service Requirement after issuance of such Series of Bonds. Adjusted Net Revenues shall be calculated in accordance with the following considerations:

(A) If such Series of Bonds is being issued for the purpose of acquiring operating utility properties having an earnings record, the Independent Consulting Engineer shall estimate the effect on the Net Revenues of the acquisition of such utility properties and the integration thereof into the System, and the Net Revenues for such consecutive twelve-month

period shall be adjusted to give effect to such estimate. Any such estimate shall be based upon the operating experience and records of the Municipality during any period in which the System has been operated by the Municipality (if applicable) and upon any available financial statements and records relating to the earnings of such utility properties to be acquired.

(B) If any changes have been made and are in effect at the time of the adoption of the Series Resolution authorizing the issuance of such Series of Bonds in the schedule of rates and charges imposed by the Municipality for services furnished by the System which were in effect during any part of the consecutive twelve-month period referred to in this subsection (d)(2), Net Revenues for such consecutive twelve-month period shall be adjusted to reflect any change in such Net Revenues which would have occurred if the schedule of rates and charges in effect at the time of the adoption of the Series Resolution authorizing the issuance of such Series of Bonds had been in effect during that portion of such consecutive twelve-month period in which such schedule was not in effect.

(C) If such Series of Bonds is being issued for the purpose of the constructing or otherwise acquiring improvements or additions to the System and, in the opinion of such Independent Consulting Engineer, such improvements or additions will result in increases in Net Revenues of the System, in computing Adjusted Net Revenues, Net Revenues shall be increased by the amount of such expected increase, as estimated by such Independent Consulting Engineer.

(e) A Certificate of an Authorized Officer stating that no Event of Default hereunder, and no event which with notice or lapse of time or both would become an Event of Default hereunder, has occurred and is continuing;

(f) An opinion of Nationally Recognized Bond Counsel to the effect that: this General Bond Resolution and the Series Resolution authorizing the Series of Bonds have been duly adopted by the Municipality; that this General Bond Resolution and such Series Resolution are valid, binding and enforceable (subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' right and the exercise of judicial discretion in accordance with general principles of equity) obligations of the Municipality; that this General Bond Resolution and such Series Resolution create a valid and binding pledge of and lien on the Net Revenues, enforceable (in accordance with the terms of this General Bond Resolution and such Series Resolution, subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' right and the exercise of judicial discretion in accordance with general principles of equity) for the security of the Bonds, on a parity with other Bonds (if any) to be issued under this General Bond Resolution and that the Bonds of such Series have been duly and validly authorized and delivered and are valid, legal and binding special obligations of the Municipality, payable from the sources provided therefor in this General Bond Resolution and such Series Supplement; and

(g) Such further documents and moneys as may be required by the provisions of the Series Resolution.

(h) Nothing provided for or required by this Section 3.03 shall prevent the Municipality from issuing Subordinate Indebtedness on such terms as provided for in the Series Resolution for such Subordinate Indebtedness.

SECTION 6. Section 3.04 of the General Bond Resolution is hereby amended to read as follows:

SECTION 3.04. CONDITIONS PRECEDENT TO AUTHENTICATION AND DELIVERY OF A SERIES OF REFUNDING BONDS. The applicable Series Paying Agent shall authenticate each Series of Refunding Bonds and deliver such Refunding Bonds to the Municipality or upon its order only upon the receipt by the applicable Series Paying Agent of:

(a) The documents referred to in paragraphs (a), (b), (c) and (f) of Section 3.03 hereof;

(b) Irrevocable instructions to the applicable Series Paying Agent (or escrow agent designated by the Municipality in the Series Resolution), to pay when due or to redeem such of the Bonds to be refunded on such date or dates specified in such instructions;

(c) Either (i) moneys in an amount sufficient to effect payment of the principal amount or the applicable Redemption Price of the Bonds to be refunded, together with accrued interest on such Bonds to the redemption date or maturity date, as the case may be, which moneys shall be held by the applicable Series Paying Agent or the escrow agent designated by the Municipality in a separate account irrevocably in trust for and assigned to the respective Holders of the Bonds to be refunded, or (ii) Government Obligations or Refunded Municipals, the principal of and interest on which when due, together with the moneys, if any, deposited with the applicable Series Paying Agent or such escrow agent at such time, will be sufficient to pay when due the principal amount or the applicable Redemption Price of the Bonds to be refunded, together with accrued interest on such Bonds to the redemption date or maturity date, as the case may be;

(d) The amount, if any, necessary for deposit in the Debt Service Reserve Account so that the balance on deposit in such account shall at least equal the Reserve Account Requirement, calculated immediately after the delivery of such Series of Refunding Bonds;

(e) A certificate providing that the requirements of Sections 31-15-1 *et seq.*, Mississippi Code of 1972, as amended, or Sections 31-27-1 *et seq.*, Mississippi Code of 1972, as amended, or other applicable law setting forth requirements for Refunding Bonds have been satisfied; and

(f) Such further documents and moneys as may be required by the applicable Series Resolution.

SECTION 7. Section 4.01 of the General Bond Resolution is hereby amended to read as follows:

SECTION 4.01. AUTHORIZATION OF REDEMPTION. Bonds of a Series shall be subject to redemption prior to maturity as provided in the applicable Series Resolution.

SECTION 8. Section 5.01 of the General Bond Resolution is hereby amended to read as follows:

SECTION 5.01. BONDS SECURED BY PLEDGE OF NET REVENUES OF THE SYSTEM. The payment of the principal of, premium, if any, and interest on the Bonds shall be

secured equally and ratably by a pledge of a sufficient amount of the Net Revenues required to pay such amounts when due. A sufficient amount of the Net Revenues is hereby irrevocably pledged to pay the principal of, premium, if any, and interest on the Bonds and to make the payments into the Bond Fund hereinafter established and all other payments provided for in this General Bond Resolution, as the same become due and payable. Each Series of Bonds, regardless of the time or times of the issuance, shall rank equally (and share ratably) with respect to the lien on the Net Revenues of the System, and the source of and security for payment therefrom without preference of any Bonds over any other Bonds. A Series Resolution may provide for a Series of Bonds with a pledge of Net Revenues subordinate to other Bonds issued under this General Bond Resolution.

SECTION 9. Section 6.01 of the General Bond Resolution is hereby amended to read as follows:

SECTION 6.01. RATE COVENANT. (a) The Municipality shall at all times fix, establish, maintain, charge and collect rates, fees and charges for the use or the sale of the output, capacity or service of the System which shall be sufficient to produce Net Revenues in each Fiscal Year at least equal to the greater of:

(1) 120% of the sum of the annual Debt Service Requirement on the Bonds in such Fiscal Year. Net Revenues in such Fiscal Year will be increased for amounts deposited to the Revenue Fund from the Rate Stabilization Fund and will be decreased for amounts deposited to the Rate Stabilization Fund from the Revenue Fund; or

(2) 100% of the sum of:

(A) the Annual Debt Service Requirement on the Bonds and all Subordinate Indebtedness in such Fiscal Year,

(B) the amounts required to be paid during such Fiscal Year into any Debt Service Reserve Fund and the Contingent Fund, and

(C) the amount of all other charges and liens whatsoever payable out of Revenues during such Fiscal Year, not otherwise provided for in this subsection (2).

(b) The Municipality shall adopt a rate ordinance which shall provide Revenues in each Fiscal Year sufficient to satisfy the requirements of this Section 6.01. To the extent permitted by applicable law: that aforesaid rate ordinance shall also provide for a penalty charge for non-payment of bills within a specified number of days after their due date and discontinuance of service upon non-payment of bills within a specified number of days after their due date, and the Municipality shall discontinue the supplying of the services and facilities of the System for non-payment of bills for such services and facilities within such time period and will not restore the services and facilities of the System to any of such delinquent users until payment in full of all delinquent charges, including reasonable charges for restoration of services.

(c) If the Revenues in any Fiscal Year as shown by the Municipality's audit are less than the total amount set forth in subsection (a) of this Section, then it shall, as promptly as possible, request an Independent Consulting Engineer to make recommendations as to a revision of such rates, fees and charges or methods of operating the System which will result in producing the required amount in the following Fiscal Year. Upon receipt of such recommendations the

Municipality shall, subject to applicable requirements imposed by law, immediately revise such rates, fees and charges and take such other actions respecting the methods of operation of the System as shall in its discretion be deemed necessary.

SECTION 10. Section 6.03 of the General Bond Resolution which is hereby amended to reads as follows:

SECTION 6.03. DISPOSITION OF REVENUES: ESTABLISHMENT OF FUNDS.

The Municipality will set aside, allocate and deposit moneys from the Revenue Fund into the separate Funds as hereinafter provided. Such sums shall, to the extent that funds credited to the Revenue Fund are sufficient for such purpose, be set aside, allocated, and deposited by the appropriate officer of the Municipality without further direction of or action by the Governing Body in the following manner and order of priority:

(a) Operation and Maintenance Fund. From the moneys in the Revenue Fund there shall first be apportioned, set aside and deposited into a fund hereby established and designated as the Water and Sewer System Operation and Maintenance Fund (the "Operation and Maintenance Fund"), on or before the fifteenth (15th) day of each calendar month, beginning with the first calendar month following delivery of the first Series of Bonds, an amount which, when added to any moneys then on deposit in the Operation and Maintenance Fund, shall be equal to the estimated Operating Expenses of the System for the next succeeding calendar month. The estimates of Operating Expenses referred to above shall be based upon the operating budget provided for in Section 8.06 of this General Bond Resolution. Moneys in the Operation and Maintenance Fund shall be disbursed from time to time as needed for the operation and maintenance of the System.

(b) Bond Fund. From the moneys in the Revenue Fund there shall next be delivered to the Depository, for crediting to a fund hereby established and designated as the Water and Sewer System Bond Fund (the "Bond Fund"), the amounts required for the following accounts in the Bond Fund to be funded in the order listed:

(1) Debt Service Account. There shall be delivered to the Depository for crediting to an account hereby established for the payment of principal of, premium, if any, and interest on the Bonds and designated as the Water and Sewer System Debt Service Account (the "Debt Service Account"): (a) on or before the fifteenth (15th) day of each calendar month, beginning with the first calendar month following delivery of the first Series of Bonds, Revenues equal to one-sixth (1/6th) of the interest to come due on all Fixed Rate Bonds on the next Interest Payment Date with respect to Fixed Rate Bonds, one-twelfth (1/12th) of the principal to come due (by maturity) on all Fixed Rate Bonds on the next Principal Payment Date with respect to Fixed Rate Bonds; provided that the first deposit following delivery of a Series of Bonds shall be in an amount which will cause the balance credited to the Debt Service Account, together with future payments required pursuant to this subsection, to be sufficient on the next Interest Payment Date and the next Principal Payment Date to pay the principal and interest due and payable on such dates; (b) on such dates as shall be specified in any Series Resolution authorizing the issuance of Variable Rate Bonds, such amounts as shall be specified in (or computed in accordance with) such Series Resolution; (c) on or before the last Business Day prior to any Interest Payment Date or Principal Payment Date, such additional sum and only such sum as is necessary to make the payment of interest or principal and interest due on such Interest Payment Date or Principal Payment Date; and (d) on such dates as shall be specified in any Series Resolution providing for

sinking fund payments, such amounts as shall be specified in (or computed in accordance with) such Series Resolution.

(2) Debt Service Reserve Account. A. If required by a Series Resolution, there shall next be delivered to the Depository, for crediting to the Water and Sewer System Debt Service Reserve Account (the "Debt Service Reserve Account") hereby established, on or before the fifteenth (15th) day of each calendar month, beginning with the first calendar month following any month in which the balance credited to the Debt Service Reserve Account does not equal the Reserve Account Requirement, whether as a result of decline in the value of the investments on deposit therein or a withdrawal therefrom of both, one-twelfth (1/12) of the amount needed to restore the balance credited to the Debt Service Reserve Account to the Reserve Account Requirement. Such deposits shall be made each month until the balance credited to the Debt Service Reserve Account again equals the Reserve Account Requirement; provided, that no such deposits shall be made until all required payments have been made in full into the Debt Service Account, including any deficiencies for prior payments.

B. In computing the balance at any time credited to the Debt Service Reserve Account, the amount which may be drawn under any surety bond, insurance policy or letter of credit described below shall be included. The surety bond, insurance, policy or letter of credit shall be payable (upon the giving of notice as required thereunder) on any due date on which moneys will be required to be withdrawn from the Debt Service Reserve Account and applied to the payment of principal of or interest on any Bonds, if (and to the extent that) such withdrawal cannot be met by amounts on deposit in the Debt Service Reserve Account. The insurer providing any such surety bond or insurance policy shall be an insurer whose municipal bond insurance policies insuring the payment, when due, of the principal of and interest on municipal bond issues result in such issues initially being rated investment grade by Moody's Investors Service, Inc. ("Moody's") or by Standard & Poor's Corporation ("S&P") or who holds initially an investment grade rating or by A. M. Best & Company or, if A. M. Best & Company is not at the time rating insurance companies, another comparable nationally recognized insurance rating agency. The issuer of any such letter of credit shall be a bank or trust company who initially holds an investment grade rating by Moody's or by S&P, and the letter of credit itself shall initially be rated investment grade by Moody's or by S&P. If a disbursement is made pursuant to this paragraph, only such amount as may at the time be drawn under such surety bond, insurance policy or letter of credit shall be included in computing the balance credited to the Debt Service Reserve Account and the Municipality shall be obligated to restore the balance credited to the Debt Service Reserve Account as provided in Subsection A above by either: (a) causing such surety bond, insurance policy or letter of credit to be reinstated; (b) providing one or more other surety bonds, letters of credit or insurance policies meeting the requirements of this paragraph; (c) depositing funds into the Debt Service Reserve Account; or (d) any combination of the foregoing. In the event that the rating attributable to any insurer providing any surety bond or insurance policy or any bank or trust company providing any letter of credit held as above provided in the Debt Service Reserve Account shall fall below investment grade, the Municipality shall use its best efforts to replace, as soon as reasonably possible, such surety bond, insurance policy or letter of credit with a surety bond, insurance policy or letter of credit which shall meet the above requirements.

C. If the Debt Service Reserve Account contains cash and/or investments in addition to one or more insurance policies, surety bonds and/or letters of credit, the cash and/or investments shall be utilized completely before any draw is made on any insurance policy, surety

bond or letters of credit. If the Debt Service Reserve Account contains more than a single surety bond, insurance policy or letter of credit, draws on each shall be made on a pro rata basis unless otherwise provided by the applicable Series Resolution.

D. The Debt Service Reserve Account shall be used for, and only for the purpose of paying maturing principal of or interest on the Bonds, as due, when the moneys in the Debt Service Account are insufficient therefor and for no other purpose, except that any moneys on deposit in the Debt Service Reserve Account may be invested or reinvested as provided herein.

E. No further payments into the Debt Service Account or into the Debt Service Reserve Account shall be required when the aggregate amount of funds in both the Debt Service Account and the Debt Service Reserve Account are at least equal to the aggregate principal amount of the Bonds then outstanding, plus the amount of interest then due or to become due on the Bonds then outstanding, or when the Bonds shall be deemed fully paid within the meaning of Section. 10.01 hereof.

(c) Subordinate Bond Fund. There shall next be apportioned, set aside and deposited into a fund hereby established and designated as the Water and Sewer System Subordinate Bond Fund (the "Subordinate Bond Fund"), such amount as may be necessary to pay the principal of, premium, if any, and interest on any Subordinated Indebtedness pursuant to the Series Resolution issuing any such Subordinate Indebtedness. The Municipality may create such Accounts within the Subordinate Bond Fund as deemed necessary including a Subordinate Debt Service Account and a Subordinate Debt Service Reserve Account. The terms and provisions of such Accounts shall be set forth in the applicable Series Resolution.

(d) Contingent Fund. There shall next be apportioned, set aside and deposited into a fund hereby established and designated as the Water and Sewer System Contingent Fund (the "Contingent Fund") on or before the fifteenth (15th) day of each calendar month, beginning with the first calendar month following delivery of the Bonds, such amount as shall be necessary in order for the balance credited to the Contingent Fund to equal two (2) months budgeted operating expenses, based on the budget for the then current year, at which amount the Contingent Fund shall be maintained by such future deposits therein (or withdrawals therefrom) as provided above and as may be necessary for that purpose. The Contingent Fund shall be used for the purpose of defraying costs arising in the operation and maintenance of the System to the extent that moneys shall not be available therefor in the Operation and Maintenance Fund, including the construction of reasonable and proper improvements, betterments and extensions thereto upon written certification by the Consulting Engineer to the Governing Body certifying the necessity for such expenditure and concurring in the necessity for such expenditure from the Contingent Fund; provided, however, that in the event the funds otherwise established by this General Bond Resolution for the payment of the principal of and interest on the Bonds or any Subordinate Indebtedness should be insufficient for said purpose, then and in that event, to the extent of any such insufficiency, the amount necessary to pay accruing interest and to provide for the payment of the principal as set forth in paragraphs (b) and (c) of this Section shall be drawn from the Contingent Fund and shall be used, together with funds otherwise available, to pay such accruing interest and to provide for the payment of principal as set forth in paragraphs (b) and (c) of this Section.

(e) Rate Stabilization Fund. There shall next be apportioned, set aside and deposited into a fund hereby established and designated as the Water and Sewer System Rate Stabilization Fund (the "Rate Stabilization Fund"), such amount as the Municipality shall annually determine to be appropriate. The Governing Body may, from time to time, (i) transfer amounts or deposit in the Rate Stabilization Fund to any other Fund or Account including the Revenue Fund; (ii) use such amounts to purchase or redeem Bonds, (iii) use such amounts to otherwise provide for the payment of Bonds or interest thereto or (iv) use such funds to make any other lawful payments; provided, however, that in the event the funds otherwise established by this General Bond Resolution for the payment of the principal of and interest on the Bonds or any Subordinate Indebtedness should be insufficient for said purpose, then and in that event, to the extent of any such insufficiency, the amount necessary to pay accruing interest and to provide for the payment of the principal as set forth in paragraphs (b) and (c) of this Section shall be drawn from the Contingent Fund and shall be used, together with funds otherwise available, to pay such accruing interest and to provide for the payment of principal as set forth in paragraphs (b) and (c) of this Section.

(f) Surplus Fund. There shall next be apportioned, set aside and deposited into a fund hereby established and designated as the Water and Sewer System Surplus Fund (the "Surplus Fund"), such amount as the Municipality shall determine to be appropriate. The Surplus Fund shall be used for the purpose of paying the cost of replacing such parts of the System as may need replacement in order to keep the System operating in an economical and efficient manner, provided, however, that in the event the funds otherwise established by this General Bond Resolution for the payment of the principal of and interest on the Bonds or any Subordinate Indebtedness should be insufficient for said purpose, then and in that event, to the extent of any such insufficiency, the amount necessary to pay accruing interest and to provide for the payment of the principal as set forth in paragraphs (b) and (c) of this Section shall be drawn from the Surplus Fund, and shall be used together with funds otherwise available to pay such accruing interest and to provide for the payment of principal as set forth in paragraphs (b) and (c) of this Section.

(g) The moneys in the foregoing funds shall be held separate and apart from all other funds of the Municipality and shall be applied in the manner provided. Any surplus Revenues remaining after all deposits required by this Section 6.03 have been made may be used by the Municipality for any lawful purpose, including but not limited to purposes pertaining to the System.

(h) If in any month the Revenues are insufficient to deposit the required amount in any of the funds as hereinbefore provided, the insufficiency shall not, for so long as all principal of and interest on the Bonds shall be paid in full as due, constitute a default or event of default hereunder but the deficiency shall be made up in the subsequent payment or payments in addition to the payments which would otherwise be required to be made into such funds in subsequent months; provided, however, that any deficiency in a deposit to the Debt Service Account and the Debt Service Reserve Account shall be made up before any further payment is made in the Contingent Fund, the Rate Stabilization Fund or the Surplus Fund.

(i) The investments of moneys in the Debt Service Reserve Account shall be valued at the market value thereof annually on the last Business Day of each Fiscal Year of the Municipality, and the Municipality shall provide documentation to the Depository with respect to such valuation with fifteen (15) days of such valuation. If the market value of said investments

is less than the Reserve Account Requirement, the Municipality shall make the deposits to the Debt Service Reserve Account required by paragraph (b)(2) of this Section. If the market value of such investments is greater than the Reserve Account Requirement, the amount of money in excess of the Reserve Account Requirement may, at the direction of an Authorized Officer of the Municipality, be paid into the Revenue Fund.

SECTION 11. Section 6.04 of the General Bond Resolution is hereby amended to read as follows:

SECTION 6.04. INVESTMENT OF MONEYS ON DEPOSIT IN THE FUNDS.

The moneys at any time on deposit in any fund provided for by this General Bond Resolution, including the Construction Fund and the Refunding Fund hereinafter established, not immediately required for disbursement for the purposes for which such funds are established, shall be invested in such instruments or investments as are permissible under applicable law of the State of Mississippi. The income received on the investment of any such moneys, other than money credited to the Refunding Fund and the Construction Fund, shall be credited to the Revenue Fund and applied to the purposes for which the Revenue Fund is established. The income received on the investment of any proceeds of Bonds (and earnings thereon) credited to the Refunding Fund and the Construction Fund shall be credited and applied in such manner as shall be directed in the Series Resolution authorizing issuance of such Bonds, or, in the absence of any such direction in such Series Resolution, shall be credited to the Revenue Fund and applied to the purposes for which the Revenue Fund is established.

SECTION 12. The Introducing Paragraph of Section 8.11 of the General Bond Resolution is hereby amended to read as follows:

SECTION 8.11. CONTRACTS FOR SERVICE WITH OTHER SYSTEMS AND PERSONS. To the extent allowed by applicable law, the Municipality may contract with any public agency or other Person to provide water or sewer services (or both); provided that either:

(A)(1) such contracts shall require the contracting party to pay to the Municipality, in addition to other amounts payable pursuant to such contract, at least once during each Fiscal Year, an amount not less than adequate to reimburse the Municipality for the costs attributable to the operation and maintenance of those portions of the System which are used to provide such water or sewer (or both) services (or with respect to portions of the System which are not used exclusively to provide such water or sewer (or both) services, a portion of such costs based upon such reasonable allocation method as the Municipality shall establish) and an allocable portion of the debt service payments on Bonds issued by the Municipality which are properly attributable to financing the costs of the facilities used to provide such services (or with respect to facilities which are not used exclusively to provide such water or sewer (or both) services, a portion of such debt service based upon such reasonable allocation method as the Municipality shall establish); and (2) such payment shall be deposited into the Revenue Fund at least annually and treated as Revenues of the System; or

(B)(1) the Municipality shall allocate, from amounts payable by such contracting party, an amount not less than adequate to reimburse the Municipality for the costs attributable to the operation and maintenance of those portions of the System which are used for to provide such water or sewer (or both) services (or with respect to portions of the system which are not used exclusively to provide such water or sewer (or both) services, a portion of such costs based upon

such reasonable allocation method as the Municipality shall establish) and an allocable portion of the debt service payments on Bonds issued by the Municipality which are properly attributable to financing the costs of the facilities used to provide such services (or with respect to facilities which are not used exclusively to provide such water or sewer (or both) services, a portion of such debt service based upon such reasonable allocation method as the Municipality shall establish), (2) such amount shall be deposited into the Revenue Fund as soon as legally available to the Municipality for such deposit, and shall be deemed Revenues of the System upon deposit into the Revenue Fund.

Nothing contained herein shall be interpreted or construed to grant to the Holders of the Bonds any lien upon, or rights with respect to, moneys payable by such contracting parties other than amounts to be deposited into the Revenue Fund as provided above, or to prevent the Municipality from pledging amounts payable pursuant to such contracts or to require that the Municipality allocate payments received from such contracting parties to amounts to be deposited into the Revenue Fund as provided above, prior to allocating such payments to any other obligations of such parties under such contracts.

SECTION 13. Section 9.02 of the General Bond Resolution is hereby amended to read as follows:

SECTION 9.02. REMEDIES. The Holders of not less than 25% of the aggregate principal amount of the outstanding Bonds may, upon an Event of Default, by suit, action, mandamus, or other proceedings at law and in equity enforce and compel performance by the appropriate official or officials of the Municipality of any or all of the acts and duties to be performed by the Municipality under the provisions of this General Bond Resolution. If there is a default in the payment of the interest on and principal of any of the Bonds, any court having jurisdiction in the proper action may, upon petition of any Bondholder, appoint a receiver to administer and operate the System with power to fix rates and collect charges sufficient to provide for the payment of all Bonds outstanding to the payment of which the Net Revenues of the System are pledged and to pay the expenses of operating and maintaining the System and to apply the Revenues of the System in conformity with the provisions of the Act and of this General Bond Resolution. The Holders of the Bonds in an aggregate principal amount of not less than 25% of the Bonds then outstanding may appoint a trustee for such Holders of all outstanding Bonds issued under this General Bond Resolution with authority to represent such Bondholders in any legal proceedings for the enforcement and protection of the rights of such Bondholders. The costs incurred by any Bondholder in bringing such legal proceedings to enforce the provisions of this General Bond Resolution, including attorneys' fees, and costs of any receiver or trustee appointed pursuant to this Section, and all other costs incurred in bringing such legal proceedings, and enforcing the remedies provided for in this Section shall, if such Bondholders shall prevail, be expenses of the System and shall be payable from the Revenues.

SECTION 14. Section 10.01 of the General Bond Resolution is hereby amended to read as follows:

SECTION 10.1. DEFEASANCE OF BONDS. If the Municipality shall pay or cause to be paid, or there shall otherwise be paid, to the Holders of a Series of Bonds the principal of, premium, if any, and interest due or to become due thereon, at the times and in the manner stipulated therein and in the applicable Series Resolution or Resolutions, then the pledge of any Net Revenues, and other moneys and securities pledged under this General Bond Resolution and

all covenants, agreements and other obligations of the Municipality to the Bondholders, shall thereupon cease, terminate and become void and be discharged and satisfied.

Bonds of a Series or interest installments thereof for the payment or redemption of which moneys shall have been irrevocably set aside and held in trust by the applicable Series Paying Agent or the Depository (through deposit by the Municipality of funds for such payment or redemption or otherwise) shall be deemed to have been paid within the meaning and with the effect expressed in the first paragraph of this Section 10.01. Any outstanding Bonds of a Series shall, prior to the maturity or redemption date thereof, be deemed to have been paid within the meaning and with the effect expressed in the first paragraph of this Section 10.01 if (a) in case any of said Bonds are to be redeemed on any date prior to their maturity, the Municipality shall have adopted a resolution or order irrevocably directing the call and redemption of such Bonds on said date; (b) there shall have been deposited with the applicable Series Paying Agent or the Depository either moneys in an amount which shall be sufficient, or Government Obligation and/or Refunded Municipals, the principal of and the interest on which when due will provide money which, together with the moneys, if any, deposited with said Series Paying Agent or the Depository at the same time, shall be sufficient, without reinvestment, to pay when due the principal or Redemption Price, if applicable, and interest due and to become due on said Bonds on and prior to the redemption date or maturity date thereof, as the case may be; and (c) in the event said Bonds are not by their terms subject to redemption within the next succeeding 60 days, the Municipality shall have adopted a resolution or order irrevocably directing the call and redemption of such Bonds on such date and directing the applicable Series Paying Agent to give notice to the Holders of such Bonds that the deposit required by (b) above has been made with the applicable Series Paying Agent or the Depository and that said Bonds are deemed to have been paid in accordance with this Section and stating such maturity or redemption date upon which moneys are to be available for the payment of the principal or Redemption Price, as applicable, on said Bonds. Neither investments nor moneys deposited with a Series Paying Agent or the Depository pursuant to this Section nor principal interest payments on any such investments shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal or interest payments on the Bonds; provided, that the earnings on such investments deposited with a Series Paying Agent or Depository, if not then needed for such purpose, may to the extent practicable and legally permissible, be reinvested in investments of the type allowed in (b) above maturing at times and in amounts sufficient to pay when due interest and the principal or Redemption Price, as applicable, on the payment dates or redemption date of such Bonds, as the case may be, and earnings from such reinvestments may be paid over to the Municipality, as received by the Series Paying Agent or the Depository, free and clear of any trust, lien or pledge.

Anything in this General Bond Resolution to the contrary notwithstanding, any moneys, held by a Series Paying Agent or the Depository in trust for the payment and discharge of any of the Bonds of a Series which remain unclaimed for five years after the date when such Bonds have become due and payable, either at their stated maturity dates or by call for earlier redemption, if such moneys were held by said Series Paying Agent or the Depository at such date, or for five years after the date of deposit of such moneys if deposited with said Series Paying Agent or the Depository after the said date when such Bonds became due and payable, shall be presumed abandoned if the requirements of the Uniform Disposition of Unclaimed Property Act, codified at Section 89-12-1 *et seq.*, Mississippi Code of 1972, as amended, are satisfied with respect thereto, and said Series Paying Agent or the Depository shall thereafter dispose of such moneys in the manner prescribed in said act. Any such moneys which are not

presumed abandoned at the end of such five-year period shall, at the written request of the Municipality, be repaid by said Series Paying Agent or the Depository to the Municipality, and said Series Paying Agent or the Depository shall thereupon be released and discharged with respect to such moneys.

SECTION 15. Section 11.01 of the General Bond Resolution is hereby amended to read as follows:

SECTION 11.01. DEPOSITORY AGREEMENT. (a) Consistent with the provisions of this General Bond Resolution, the Municipality shall, from time to time, enter into a Depository Agreement with a qualified Depository; (b) such Depository shall be a banking corporation or association organized under the banking laws of the United States of America or State of Mississippi and shall have trust powers in Mississippi, and shall have a capital and surplus of not less than \$75,000,000; and (c) such Depository Agreement shall be approved by the Governing Body and executed by the Mayor and the Clerk.

SECTION 16. Section 12.02(a) of the General Bond Resolution is hereby amended to read as follows:

SECTION 12.02(a). MODIFICATION OR AMENDMENT. (a) No material modification or amendment of this General Bond Resolution or of any resolution amendatory hereof or supplemental hereto, may be made without the consent in writing of the Holders of not less than a majority in principal amount of the Bonds then outstanding; provided, however, that no modification or amendment shall permit a change in the maturity of the Bonds or a reduction in the rate of interest thereon, or affect the unconditional promise of the Municipality to fix, maintain and collect fees, rentals and other charges for the System sufficient to pay principal of and interest on the Bonds, or to pay the interest and principal on the Bonds, as the same mature and become due, from the Net Revenues of the System, or reduce such percentage of Holders of the Bonds required above the such modification or amendment, without the consent of the Holders of all the Bonds affected thereby.

SECTION 17. Section 12.02(f) of the General Bond Resolution which reads as follows is hereby deleted:

(f). So long as any Series of Bonds is insured by MBIA, MBIA shall be given notice of any amendment or supplement to this General Bond Resolution made pursuant to paragraph (b) of this Section 12.02, and a copy of any amendment, supplement or modification to this General Bond Resolution to which MBIA has consented shall be provided to Standard and Poor's Corporation.

SECTION 18. Section 12.07 of the General Bond Resolution which reads as follows is hereby deleted.

SECTION 12.07. NOTICES TO MBIA. So long as any Series of Bonds is insured by MBIA, any notice required by this General Bond Resolution to be given to the Municipality, the Bondholders, the Depository or any Series Paying Agent (including but not limited to notice of redemption of Bonds pursuant to Article IV hereof, notice of default pursuant to Article IX hereof, and notice of defeasance pursuant to Article X hereof) shall also be given to MBIA.

SECTION 19. A new Section 12.07 is hereby added to the General Bond Resolution to read as follows:

SECTION 12.07. SUBORDINATE INDEBTEDNESS. The Municipality shall be authorized to issue, from time to time, Subordinate Indebtedness, provided the terms of such Subordinate Indebtedness are consistent with this General Bond Resolution. In connection with the issuance of such Subordinate Indebtedness, the related Series Resolution may establish such Funds and Accounts determined to be necessary in connection with such Subordinate Indebtedness.

SECTION 20. The amendments set forth in Sections 3, 5, 6, 7, 11, 12, 13, 14, 15, 17 and 18 of this Resolution shall take effect immediately upon passage.

SECTION 21. The amendments set forth in Sections 4, 8, 9, 10, 16 and 19 of this Resolution shall take effect upon the consent in writing of the holders of two-thirds or more in principal amount of the Bonds then outstanding as provided for in Section 12.02 of the General Bond Resolution.

SECTION 22. In the event any provisions of this resolution shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof.

SECTION 23. Except as otherwise expressly provided hereunder, the provisions of this resolution and all rights and obligations of the parties hereunder shall be governed by and construed in accordance with the laws of the State of Mississippi and to the extent they preempt such laws, the laws of the United States of America.

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Appendix C

Revenue Report

GL787

Fund 030 Revenue

Report Format 019

Period 9 ending June 30, 2014

Transaction status 1
Rounding to Whole Dollars

Account		Budget Adopted	Actuals for Current Per.	Actuals Cur. Year-to-Date	Actuals for Last Y-T-D	% to Cur Budget	% to Bud Last Yr.	Balance To Collect
WATER/SEWER REVENUE FUND								
WATER/SEWER FUND - O & M ONLY								
LICENSES AND PERMITS								
30 4220	SEWER CONNECTION P	58,550	5,600	52,055	52,253	88.9	89.2	6,495
Typ 0420	LICENSES AND PERMITS	58,550	5,600	52,055	52,253	88.9	89.2	6,495
INTEREST EARNED ON INVESTMENTS								
30 4911	INTEREST EARNED ON	88,000		1				87,999
30 4912	INT EARNED ON CHEC	150,000						150,000
30 4913	INTEREST EARNED ON	25,000		6,282	13,793	25.1	55.2	18,718
Typ 0490	INTEREST EARNED ON INVESTMENTS	263,000		6,283	13,793	2.4	5.2	256,717
SALES TO CUSTOMERS								
30 5311	WATER CHARGES	33,896,693	3,007,014	22,022,320	18,831,025	65.0	55.6	11,874,373
30 5312	WATER CHARGES-TRIA	264,884	311-	213,206	176,108	80.5	66.5	51,678
30 5313	METER CHARGES				35			
30 5315	DEVELOPMENT CHARGE	35,560	10,440	21,770	19,891	61.2	55.9	13,790
30 5317	METER INSTALLATION	134,568	13,226	93,071	90,572	69.2	67.3	41,497
30 5319	SEWER CHARGES	34,221,091	3,080,766	22,554,506	11,549,566	65.9	33.8	11,666,585
30 5320	SEWER CHARGES-TRIA	179,487	1,498-	228,837	114,680	127.5	63.9	49,350-
30 5321	MISCELLANEOUS	691,246	61,827	581,480	356,212	84.1	51.5	109,766
30 5322	MISC-TRIANGLE	8,730	1,280	15,245	9,537	174.6	109.2	6,515-
30 5323	MADISON COUNTY WAT	395,000		199,316	272,998	50.5	69.1	195,684
30 5342	SERVICE CONNECTION	150,539	33,480	46,290	86,049	30.8	57.2	104,249
30 5368	W RANKIN METRO SEW	4,185,494	435,692	3,701,353	1,902,659	88.4	45.5	484,141
30 5373	RIDGELAND WEST SEW				15,133			
30 5380	MADISON CO SEWER R	1,946,367	290,545	1,307,451	939,693	67.2	48.3	638,916
30 5385	FOREST WOODS UTILI	35,000						35,000
30 5393	LEACHATE DISPOSAL				116,625			
Typ 0530	SALES TO CUSTOMERS	76,144,659	6,932,460	50,984,847	34,480,785	67.0	45.3	25,159,812
OTHER REVENUES(5400-5800)								
30 5428	SALE OF SCRAP META				960			
Typ 0540	OTHER REVENUES(5400-5800)				960			
APPLIED FUND BALANCE								
30 5899	APPLIED FUND BALAN	2,144,437						2,144,437
Typ 0580	APPLIED FUND BALANCE	2,144,437						2,144,437
OPERATING TRANSFERS IN								
30 5912	TRANSFERS IN/FROM	173,553		173,552	57,251	100.0	33.0	1
Typ 0590	OPERATING TRANSFERS IN	173,553		173,552	57,251	100.0	33.0	1
Cmg 511	WATER/SEWER FUND - O & M ONLY	78,784,199	6,938,060	51,216,737	34,605,041	65.0	43.9	27,567,462
Fnd 030	WATER/SEWER REVENUE FUND	78,784,199	6,938,060	51,216,737	34,605,041	65.0	43.9	27,567,462
	Report Final Totals	78,784,199	6,938,060	51,216,737	34,605,041	65.0	43.9	27,567,462

Appendix D

Sewer System Operations and Maintenance Expense Report

GL787

Sewer System

Report Format 020

Period 9 ending June 30, 2014

Transaction status 1

75% of year completed

Account		Budget	Actual Per. Expenditures	YTD Actual Expenditures	Encumbrances	Unencumbered Balance	% Cur Bud Encumbered
WATER/SEWER OP & MAINT FUND							
SEWER SYSTEM - OPER & MAINT.							
ADMINISTRATIVE							
PERSONAL SERVICES							
31 522106111	SALARIES	358,665.00	20,079.04	196,489.36		162,175.64	54.8
31 522106112	TEMP OR PART-TIME SAL & W	37,284.00				37,284.00	
31 522106114	OVERTIME	3,000.00	113.01	2,000.61		999.39	66.7
31 522106115	REDISTRIBUTED SALARIES &	64,500.00-				64,500.00-	
31 522106131	FICA TAXES	24,735.00	1,210.16	11,218.31		13,516.69	45.4
31 522106132	GROUP INSURANCE	15,648.00	627.74	6,212.77		9,435.23	39.7
31 522106133	EMPLOYERS PENSION CONTRIB	62,834.00	3,200.42	29,679.40		33,154.60	47.2
31 522106136	MEDICARE TAX PAYMENTS	5,785.00	283.01	2,623.69		3,161.31	45.4
Grp 610	PERSONAL SERVICES	443,451.00	25,513.38	248,224.14		195,226.86	56.0
SUPPLIES AND MATERIALS							
31 522106212	CHEM,DRUGS,MED & LAB SUPP	150.00		8.14		141.86	5.4
31 522106215	FUEL USAGE	8,200.00	45.81	312.37		7,887.63	3.8
31 522106216	TIRE, TUBES & BATTERIES	150.00				150.00	
31 522106217	UNIFORMS & WORK CLOTHING	50.00		21.95		28.05	43.9
31 522106218	OFFICE SUPPLIES	600.00	32.16	32.16	50.43	517.41	13.8
31 522106219	PRINTING SUPPLIES	100.00				100.00	
31 522106220	OIL & LUBE - PRIVATIZATIO	150.00	43.68	43.68		106.32	29.1
31 522106222	MAPPING & DRAFTING SUPPLI	200.00				200.00	
31 522106223	DRAFTING TOOLS	100.00				100.00	
31 522106230	HAND TOOLS	300.00		73.38		226.62	24.5
31 522106232	PHOTO & MICROFILM SUPPLIE	50.00				50.00	
31 522106233	SAFETY SUPPLIES	200.00		56.80		143.20	28.4
31 522106299	OTHER OPERATING SUPPLIES	500.00	70.17-	349.12	49.99	100.89	79.8
31 522106312	PAINTS, OILS, & GLASS	1,000.00		508.59		491.41	50.9
31 522106316	MOTOR VEHICLE REPAIR MATE	1,300.00	1.79	823.78		476.22	63.4
31 522106317	OTHER REPAIR & MAINT MATE	690.00				690.00	
31 522106318	BOOKS & PERIODICALS(NOT L	50.00			7.00	43.00	14.0
Grp 620	SUPPLIES AND MATERIALS	13,790.00	53.27	2,229.97	107.42	11,452.61	17.0
OTHER SERVICES AND CHARGES							
31 522106413	ENGINEERING & ARCHITECTUR	13,000.00				13,000.00	
31 522106417	ENG. U.S. GEOLOGICAL SURV	45,000.00				45,000.00	
31 522106419	OTHER PROFESSIONAL SERVIC	39,410.00		18.00		39,392.00	.1
31 522106421	POSTAGE, P O BOX RENT, ET	150.00	31.72	112.66		37.34	75.1
31 522106422	FREIGHT EXPRESS & TRUCKIN	200.00				200.00	
31 522106423	AUTO LICENSE TITLES	20.00				20.00	
31 522106435	MAP PRINTING & PHOTO DEV	100.00				100.00	
31 522106441	NEWSPAPERS & PERIODICALS	100.00				100.00	
31 522106443	DUES, MEM. REGIS FEES, TU	1,000.00		870.00		130.00	87.0
31 522106454	TELEPHONE	10,000.00	56.87	466.56		9,533.44	4.7
31 522106465	AUTO + TRUCK GARAGE + OTH	175.00				175.00	
31 522106473	TRAVEL EXPENSE - OUT OF C	2,500.00		583.05		1,916.95	23.3
31 522106474	AIR TRAVEL	500.00		445.00		55.00	89.0
31 522106481	MEDICAL,DRUG TEST, HOSPIT	150.00				150.00	
31 522106485	CONTRACT CONSTRUCTION	53,840.00				53,840.00	
31 522106514	RENTAL OF EQUIPMENT	1,600.00				1,600.00	

GL787

Sewer System

Report Format 020

Period 9 ending June 30, 2014

Transaction status 1

75% of year completed

Account		Budget	Actual Per. Expenditures	YTD Actual Expenditures	Encumbrances	Unencumbered Balance	% Cur Bud Encumbered
WATER/SEWER OP & MAINT FUND							
SEWER SYSTEM - OPER & MAINT.							
ADMINISTRATIVE							
OTHER SERVICES AND CHARGES							
31 522106516	UNIFORMS,RUGS ETC. RENTAL	200.00				200.00	
<hr/>							
Grp 630	OTHER SERVICES AND CHARGES	167,945.00	88.59	2,495.27		165,449.73	1.5
<hr/>							
CAPITAL OUTLAY							
31 522106847	DATA PROCESSING EQUIPMENT	5,000.00				5,000.00	
31 522106868	AUTOMOBILES + PICKUP TRUC	17,500.00				17,500.00	
31 522106916	LEASE PURCHASE AUTOS	6,540.00		3,269.99		3,270.01	50.0
<hr/>							
Grp 640	CAPITAL OUTLAY	29,040.00		3,269.99		25,770.01	11.3
<hr/>							
Fcn 010	ADMINISTRATIVE	654,226.00	25,655.24	256,219.37	107.42	397,899.21	39.2
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MAINTENANCE SUPPLY							
PERSONAL SERVICES							
31 522156111	SALARIES	236,585.00	13,732.51	135,840.56		100,744.44	57.4
31 522156112	TEMP OR PART-TIME SAL & W		1,530.40	4,686.85		4,686.85	
31 522156114	OVERTIME	32,000.00	2,661.23	22,858.77		9,141.23	71.4
31 522156131	FICA TAXES	16,652.00	1,068.42	9,359.87		7,292.13	56.2
31 522156132	GROUP INSURANCE	6,888.00	402.48	3,875.28		3,012.72	56.3
31 522156133	EMPLOYERS PENSION CONTRIB	42,302.00	2,762.28	24,306.21		17,995.79	57.5
31 522156136	MEDICARE TAX PAYMENTS	3,895.00	249.87	2,189.07		1,705.93	56.2
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Grp 610	PERSONAL SERVICES	338,322.00	22,407.19	203,116.61		135,205.39	60.0
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SUPPLIES AND MATERIALS							
31 522156212	CHEM,DRUGS,MED & LAB SUPP	800.00	59.05	573.21		226.79	71.7
31 522156213	CLEANING & SANITATION SUP	600.00		334.61	249.84	15.55	97.4
31 522156215	FUEL USAGE	20,000.00	1,218.36	10,646.73	125.00	9,228.27	53.9
31 522156216	TIRE, TUBES & BATTERIES	2,000.00				2,000.00	
31 522156217	UNIFORMS & WORK CLOTHING	450.00	16.14	130.72		319.28	29.1
31 522156218	OFFICE SUPPLIES	3,000.00		1,997.66		1,002.34	66.6
31 522156220	OIL & LUBE - PRIVATIZATIO	500.00		213.68		286.32	42.7
31 522156230	HAND TOOLS	300.00		114.58		185.42	38.2
31 522156233	SAFETY SUPPLIES	300.00		26.18		273.82	8.7
31 522156234	COMPUTER SUPPLIES	1,200.00		399.99		800.01	33.3
31 522156240	NON-CAPITALIZED EQUIPMENT	1,500.00		399.00		1,101.00	26.6
31 522156299	OTHER OPERATING SUPPLIES	1,100.00	108.06	469.56		630.44	42.7
31 522156311	BUILDING MATERIALS	500.00	219.08	219.08		280.92	43.8
31 522156312	PAINTS, OILS, & GLASS	300.00		24.48		275.52	8.2
31 522156313	STRUCTURAL STEEL & RELATE	350.00				350.00	
31 522156315	ELECTRICAL MATERIALS	1,500.00		422.77		1,077.23	28.2
31 522156316	MOTOR VEHICLE REPAIR MATE	27,400.00	519.72	7,481.47	2,259.88	17,658.65	35.6
31 522156317	OTHER REPAIR & MAINT MATE	5,000.00		879.89		4,120.11	17.6
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Grp 620	SUPPLIES AND MATERIALS	66,800.00	2,140.41	24,333.61	2,634.72	39,831.67	40.4
<hr/>							
OTHER SERVICES AND CHARGES							
31 522156419	OTHER PROFESSIONAL SERVIC	1,050.00		15.00		1,035.00	1.4

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Transaction status 1

75% of year completed

Account	Budget	Actual Per. Expenditures	YTD Actual Expenditures	Encumbrances	Unencumbered Balance	% Cur Bud Encumbered
WATER/SEWER OP & MAINT FUND						
SEWER SYSTEM - OPER & MAINT.						
MAINTENANCE SUPPLY						
OTHER SERVICES AND CHARGES						
31 522156423	AUTO LICENSE TITLES	50.00			50.00	
31 522156443	DUES, MEM. REGIS FEES, TU	600.00			600.00	
31 522156454	TELEPHONE	2,500.00	57.09	500.23	1,999.77	20.0
31 522156456	PAGERS	300.00			300.00	
31 522156465	AUTO + TRUCK GARAGE + OTH	1,000.00			1,000.00	
31 522156472	EMPLOYEE AUTO ALLOWANCE	1,000.00			1,000.00	
31 522156481	MEDICAL, DRUG TEST, HOSPIT	2,000.00			2,000.00	
31 522156514	RENTAL OF EQUIPMENT	5,000.00		821.80	4,178.20	16.4
31 522156516	UNIFORMS, RUGS ETC. RENTAL	3,000.00		472.50	2,527.50	15.8
31 522156735	ADJUSTMENTS AND ALLOWANCE			5,263.21	5,263.21-	
Grp 630	OTHER SERVICES AND CHARGES	16,500.00	57.09	7,072.74	9,427.26	42.9
CAPITAL OUTLAY						
31 522156846	OFFICE EQUIPMENT FURNITUR	2,400.00			2,400.00	
31 522156847	DATA PROCESSING EQUIPMENT	2,600.00			2,600.00	
31 522156876	LAWN + GARDEN EQUIPMENT	400.00			400.00	
Grp 640	CAPITAL OUTLAY	5,400.00			5,400.00	
Fcn 015	MAINTENANCE SUPPLY	427,022.00	24,604.69	234,522.96	2,634.72	189,864.32
OPERATION & MAINTENANCE						
PERSONAL SERVICES						
31 522206111	SALARIES	627,369.00	35,573.04	365,957.05	261,411.95	58.3
31 522206112	TEMP OR PART-TIME SAL & W	71,640.00	1,603.36	16,799.51	54,840.49	23.5
31 522206113	WAGES	529,625.00	25,266.10	282,001.25	247,623.75	53.3
31 522206114	OVERTIME	240,000.00	13,219.58	164,024.56	75,975.44	68.3
31 522206131	FICA TAXES	95,403.00	5,019.78	47,901.04	47,501.96	50.2
31 522206132	GROUP INSURANCE	71,232.00	3,022.62	32,245.09	38,986.91	45.3
31 522206133	EMPLOYERS PENSION CONTRIB	242,354.00	12,967.30	124,257.76	118,096.24	51.3
31 522206136	MEDICARE TAX PAYMENTS	22,312.00	1,173.99	11,202.80	11,109.20	50.2
Grp 610	PERSONAL SERVICES	1,899,935.00	97,845.77	1,044,389.06	855,545.94	55.0
SUPPLIES AND MATERIALS						
31 522206211	AGRI + BOT-SEED FERT ETC	5,000.00			1,015.00	20.3
31 522206212	CHEM, DRUGS, MED & LAB SUPP	31,860.00	1,637.30	15,067.86	16,792.14	47.3
31 522206213	CLEANING & SANITATION SUP	10,000.00	54.55	2,832.83	411.45	32.4
31 522206215	FUEL USAGE	260,560.00	21,402.46	197,816.07	62,743.93	75.9
31 522206216	TIRE, TUBES & BATTERIES	4,000.00	6.26	84.10	432.00	12.9
31 522206217	UNIFORMS & WORK CLOTHING	9,000.00	569.88	4,842.17	4,157.83	53.8
31 522206218	OFFICE SUPPLIES	11,000.00		5,209.18	5,684.26	48.3
31 522206220	OIL & LUBE - PRIVATIZATIO	5,000.00	213.81	1,177.99	3,822.01	23.6
31 522206226	COMMUNICATION SUPPLIES	3,000.00			3,000.00	
31 522206230	HAND TOOLS	5,000.00	233.35	1,730.46	3,269.54	34.6
31 522206231	COMPUTER SOFTWARE	3,000.00			3,000.00	
31 522206232	PHOTO & MICROFILM SUPPLIE	1,000.00			1,000.00	
31 522206233	SAFETY SUPPLIES	8,000.00	64.62	1,057.06	6,942.94	13.2

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75% of year completed

Account	Budget	Actual Per. Expenditures	YTD Actual Expenditures	Encumbrances	Unencumbered Balance	% Cur Bud Encumbered
WATER/SEWER OP & MAINT FUND						
SEWER SYSTEM - OPER & MAINT.						
OPERATION & MAINTENANCE						
SUPPLIES AND MATERIALS						
31 522206234	COMPUTER SUPPLIES	2,000.00		1,023.00	977.00	51.2
31 522206240	NON-CAPITALIZED EQUIPMENT	2,000.00			2,000.00	
31 522206299	OTHER OPERATING SUPPLIES	19,000.00	213.36	2,480.51	3,321.19	30.5
31 522206311	BUILDING MATERIALS	45,000.00	2,220.97	20,200.34	986.60	47.1
31 522206312	PAINTS, OILS, & GLASS	1,000.00		53.23	946.77	5.3
31 522206313	STRUCTURAL STEEL & RELATE	8,000.00			8,000.00	
31 522206314	PLUMBING FIXTURES & SUPPL	550.00			550.00	
31 522206315	ELECTRICAL MATERIALS	1,500.00		96.11	1,403.89	6.4
31 522206316	MOTOR VEHICLE REPAIR MATE	325,000.00	21,761.14	127,678.07	46,721.46	53.7
31 522206317	OTHER REPAIR & MAINT MATE	35,000.00	31.54	215.59	1,821.90	5.8
31 522206318	BOOKS & PERIODICALS(NOT L	900.00			268.50	29.8
31 522206319	GRAVEL	131,000.00	10,016.84	85,147.60		65.0
31 522206320	ASPHALT-ROUTINE MAINTENAN	96,000.00	780.68	26,324.30		27.4
31 522206332	PLASTIC PIPE & FITTINGS	90,000.00	2,535.98	17,444.77	66.00-	19.3
31 522206333	CONCRETE	11,800.00		535.75	624.25	9.8
31 522206335	CONCRETE PIPE	10,000.00			10,000.00	
31 522206336	PIPES & FITTINGS	40,000.00		158.68	7.20	.4
31 522206337	SAND	30,000.00	22.77	272.57		.9
31 522206338	MANHOLE & INLET CASTINGS	17,700.00	417.80	4,992.62		28.2
31 522206339	SUNDRY	10,000.00			10,000.00	
Grp 620	SUPPLIES AND MATERIALS	1,232,870.00	62,183.31	516,440.86	55,650.11	46.4
OTHER SERVICES AND CHARGES						
31 522206419	OTHER PROFESSIONAL SERVICE	45,000.00	500.00	5,472.00		12.2
31 522206421	POSTAGE, P O BOX RENT, ET	100.00	3.78	45.96		46.0
31 522206422	FREIGHT EXPRESS & TRUCKIN	6,900.00			74.24	1.1
31 522206423	AUTO LICENSE TITLES	1,000.00	80.00	90.00		9.0
31 522206431	OUTSIDE PRINTING SERVICES	1,500.00			1,500.00	
31 522206432	PRINT/BIND-BOOKS, CATALOG	1,800.00			1,800.00	
31 522206443	DUES, MEM. REGIS FEES, TU	1,500.00		49.00	60.00	7.3
31 522206454	TELEPHONE	8,494.00	22.98	670.60	90.00	9.0
31 522206455	CELLULAR PHONES	13,000.00	1,096.40	5,429.59		41.8
31 522206456	PAGERS	1,000.00	63.55	566.50		56.7
31 522206464	MACHINE/EQUIP MAINTENANCE	1,800.00			1,800.00	
31 522206465	AUTO + TRUCK GARAGE + OTH	5,000.00	450.00	2,855.00		57.1
31 522206467	REPAIR OF PERSONAL COMPUT	500.00			500.00	
31 522206472	EMPLOYEE AUTO ALLOWANCE	2,000.00			2,000.00	
31 522206473	TRAVEL EXPENSE - OUT OF C	3,000.00			3,000.00	
31 522206474	AIR TRAVEL	1,500.00			1,500.00	
31 522206481	MEDICAL,DRUG TEST, HOSPIT	3,000.00		262.00		8.7
31 522206485	CONTRACT CONSTRUCTION	45,000.00			9,200.00	20.4
31 522206489	CONTRACT LABOR	125,000.00	10,264.50	102,773.62		82.2
31 522206514	RENTAL OF EQUIPMENT	10,000.00	464.33	3,336.07		33.4
31 522206516	UNIFORMS,RUGS ETC. RENTAL	14,000.00	577.16	3,840.81		27.4
31 522206735	ADJUSTMENTS AND ALLOWANCE			501.28		501.28-
Grp 630	OTHER SERVICES AND CHARGES	291,094.00	13,522.70	125,892.43	9,424.24	46.5

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75% of year completed

Account		Budget	Actual Per. Expenditures	YTD Actual Expenditures	Encumbrances	Unencumbered Balance	% Cur Bud Encumbered
WATER/SEWER OP & MAINT FUND							
SEWER SYSTEM - OPER & MAINT.							
OPERATION & MAINTENANCE							
CAPITAL OUTLAY							
31 522206847	DATA PROCESSING EQUIPMENT	9,000.00		2,997.00	700.00	5,303.00	41.1
31 522206857	SAFETY EQUIPMENT	17,700.00				17,700.00	
31 522206865	MISC. NON-AUTO EQUIPMENT	142,000.00			2,337.04	139,662.96	1.7
31 522206868	AUTOMOBILES + PICKUP TRUC	74,000.00			17,545.00	56,455.00	23.7
31 522206872	TRACTORS TRAIL + HEAVY EQ	2,207,200.00		986,383.00	535,000.00	685,817.00	68.9
31 522206915	HEAVY EQUIPMENT LEASE PUR	559,802.00		298,857.24		260,944.76	53.4
Grp 640	CAPITAL OUTLAY	3,009,702.00		1,288,237.24	555,582.04	1,165,882.72	61.3
Fcn 020	OPERATION & MAINTENANCE	6,433,601.00	173,551.78	2,974,959.59	620,656.39	2,837,985.02	55.9
SEWER EVALUATION SERVICES-SSSES							
PERSONAL SERVICES							
31 522256111	SALARIES	192,678.00	13,262.47	119,700.10		72,977.90	62.1
31 522256113	WAGES	266,170.00	10,774.58	116,897.09		149,272.91	43.9
31 522256114	OVERTIME	95,000.00	8,995.83	73,547.96		21,452.04	77.4
31 522256131	FICA TAXES	37,438.00	2,019.57	17,920.44		19,517.56	47.9
31 522256132	GROUP INSURANCE	26,832.00	1,320.87	12,659.44		14,172.56	47.2
31 522256133	EMPLOYERS PENSION CONTRIB	95,106.00	5,355.11	47,709.73		47,396.27	50.2
31 522256136	MEDICARE TAX PAYMENTS	8,756.00	472.31	4,191.10		4,564.90	47.9
Grp 610	PERSONAL SERVICES	721,980.00	42,200.74	392,625.86		329,354.14	54.4
SUPPLIES AND MATERIALS							
31 522256212	CHEM,DRUGS,MED & LAB SUPP	25,000.00	1,135.46	11,600.26		13,399.74	46.4
31 522256213	CLEANING & SANITATION SUP	3,000.00	31.47	445.13		2,554.87	14.8
31 522256215	FUEL USAGE	51,500.00	667.58	24,083.04		27,416.96	46.8
31 522256216	TIRE, TUBES & BATTERIES	1,180.00	8.09	48.67		1,131.33	4.1
31 522256217	UNIFORMS & WORK CLOTHING	8,900.00	467.27	5,251.41		3,648.59	59.0
31 522256218	OFFICE SUPPLIES	1,000.00		7.59		992.41	.8
31 522256220	OIL & LUBE - PRIVATIZATIO	2,360.00		358.22		2,001.78	15.2
31 522256230	HAND TOOLS	7,540.00	6.11	2,329.01		5,210.99	30.9
31 522256233	SAFETY SUPPLIES	4,360.00	24.98	1,592.52		2,767.48	36.5
31 522256299	OTHER OPERATING SUPPLIES	4,720.00	522.09	2,732.21		1,987.79	57.9
31 522256311	BUILDING MATERIALS	12,390.00	1,111.37	6,742.71		5,647.29	54.4
31 522256312	PAINTS, OILS, & GLASS	4,000.00				4,000.00	
31 522256313	STRUCTURAL STEEL & RELATE	5,900.00	22.23	174.20		5,725.80	3.0
31 522256315	ELECTRICAL MATERIALS	2,950.00				2,950.00	
31 522256316	MOTOR VEHICLE REPAIR MATE	59,000.00	115.87	8,843.43	2,362.87	47,793.70	19.0
31 522256317	OTHER REPAIR & MAINT MATE	5,000.00			2,357.04	2,642.96	47.1
31 522256318	BOOKS & PERIODICALS(NOT L	880.00				880.00	
31 522256319	GRAVEL	9,000.00	2,318.80	8,449.94		550.06	93.9
31 522256332	PLASTIC PIPE & FITTINGS	29,000.00	1,160.39	20,872.12		8,127.88	72.0
31 522256333	CONCRETE	4,000.00				4,000.00	
31 522256339	SUNDRY	7,000.00				7,000.00	
Grp 620	SUPPLIES AND MATERIALS	248,680.00	7,591.71	93,530.46	4,719.91	150,429.63	39.5

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75% of year completed

Account		Budget	Actual Per. Expenditures	YTD Actual Expenditures	Encumbrances	Unencumbered Balance	% Cur Bud Encumbered
WATER/SEWER OP & MAINT FUND							
SEWER SYSTEM - OPER & MAINT.							
SEWER EVALUATION SERVICES-SSES							
OTHER SERVICES AND CHARGES							
31 522256419	OTHER PROFESSIONAL SERVIC	3,000.00		21.00	1,236.00	1,743.00	41.9
31 522256423	AUTO LICENSE TITLES	100.00				100.00	
31 522256435	MAP PRINTING & PHOTO DEV	1,000.00				1,000.00	
31 522256443	DUES, MEM. REGIS FEES, TU	2,000.00		45.00		1,955.00	2.3
31 522256465	AUTO + TRUCK GARAGE + OTH	2,000.00	175.00	250.00		1,750.00	12.5
31 522256481	MEDICAL,DRUG TEST, HOSPIT	2,000.00		60.00		1,940.00	3.0
31 522256489	CONTRACT LABOR	40,000.00	18,661.50	27,199.00		12,801.00	68.0
Grp 630	OTHER SERVICES AND CHARGES	50,100.00	18,836.50	27,575.00	1,236.00	21,289.00	57.5
CAPITAL OUTLAY							
31 522256847	DATA PROCESSING EQUIPMENT	9,000.00			1,077.92	7,922.08	12.0
31 522256865	MISC. NON-AUTO EQUIPMENT	42,000.00	102.78	102.78		41,897.22	.2
31 522256872	TRACTORS TRAIL + HEAVY EQ	1,240,000.00		273,607.00		966,393.00	22.1
31 522256884	MISC. AUTOMOTIVE EQUIPMEN	60,000.00				60,000.00	
31 522256915	HEAVY EQUIPMENT LEASE PUR	187,437.00		93,718.39		93,718.61	50.0
Grp 640	CAPITAL OUTLAY	1,538,437.00	102.78	367,428.17	1,077.92	1,169,930.91	24.0
Fcn 025	SEWER EVALUATION SERVICES-SSES	2,559,197.00	68,731.73	881,159.49	7,033.83	1,671,003.68	34.7
WASTEWATER TREATMENT-SAVANNA							
PERSONAL SERVICES							
31 522306115	REDISTRIBUTED SALARIES &	34,375.00				34,375.00	
Grp 610	PERSONAL SERVICES	34,375.00				34,375.00	
SUPPLIES AND MATERIALS							
31 522306215	FUEL USAGE	4,730.00				4,730.00	
31 522306218	OFFICE SUPPLIES	220.00				220.00	
31 522306220	OIL & LUBE - PRIVATIZATIO	165.00				165.00	
31 522306316	MOTOR VEHICLE REPAIR MATE	2,500.00			110.92	2,389.08	4.4
31 522306317	OTHER REPAIR & MAINT MATE	5,150.00				5,150.00	
Grp 620	SUPPLIES AND MATERIALS	12,765.00			110.92	12,654.08	.9
OTHER SERVICES AND CHARGES							
31 522306419	OTHER PROFESSIONAL SERVIC	37,450.00		3,765.50	1,127.50	32,557.00	13.1
31 522306423	AUTO LICENSE TITLES	55.00				55.00	
31 522306426	TIPPING FEES	570,000.00	24,766.25	418,161.05		151,838.95	73.4
31 522306435	MAP PRINTING & PHOTO DEV	110.00				110.00	
31 522306443	DUES, MEM. REGIS FEES, TU	1,000.00				1,000.00	
31 522306444	LEGAL ADS, ADVERTISING, E	500.00		51.93		448.07	10.4
31 522306453	GAS	16,000.00	141.13	3,398.95		12,601.05	21.2
31 522306454	TELEPHONE	1,100.00	30.21	235.11		864.89	21.4
31 522306465	AUTO + TRUCK GARAGE + OTH	100.00				100.00	
31 522306473	TRAVEL EXPENSE - OUT OF C	2,200.00				2,200.00	
31 522306474	AIR TRAVEL	500.00		430.95		69.05	86.2
31 522306491	CONTRACT OPERATIONS	10,505,285.00	1,125,335.18	6,514,261.91		3,991,023.09	62.0

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75% of year completed

Account		Budget	Actual Per. Expenditures	YTD Actual Expenditures	Encumbrances	Unencumbered Balance	% Cur Bud Encumbered
WATER/SEWER OP & MAINT FUND							
SEWER SYSTEM - OPER & MAINT.							
WASTEWATER TREATMENT-SAVANNA							
OTHER SERVICES AND CHARGES							
31 522306497	SLUDGE DISPOSAL	538,000.00	30,535.01	291,548.56		246,451.44	54.2
31 522306514	RENTAL OF EQUIPMENT	300,000.00		195,810.00		104,190.00	65.3
31 522306541	INSURANCE PREMIUM PAYMENT	9,064.00				9,064.00	
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Grp 630	OTHER SERVICES AND CHARGES	11,981,364.00	1,180,807.78	7,427,663.96	1,127.50	4,552,572.54	62.0
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CAPITAL OUTLAY							
31 522306847	DATA PROCESSING EQUIPMENT	93,650.00		37,242.50		56,407.50	39.8
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Grp 640	CAPITAL OUTLAY	93,650.00		37,242.50		56,407.50	39.8
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Fcn 030	WASTEWATER TREATMENT-SAVANNA	12,122,154.00	1,180,807.78	7,464,906.46	1,238.42	4,656,009.12	61.6
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TRAHON TREATMENT FACILITY							
SUPPLIES AND MATERIALS							
31 522356319	GRAVEL	2,000.00				2,000.00	
<hr/>							
Grp 620	SUPPLIES AND MATERIALS	2,000.00				2,000.00	
<hr/>							
OTHER SERVICES AND CHARGES							
31 522356419	OTHER PROFESSIONAL SERVIC	29,500.00		356.30	2,255.00	26,888.70	8.9
31 522356454	TELEPHONE	1,545.00	117.29	1,017.89		527.11	65.9
31 522356491	CONTRACT OPERATIONS	619,692.00	84,054.01	388,708.96		230,983.04	62.7
31 522356497	SLUDGE DISPOSAL	175,000.00				175,000.00	
<hr/>							
Grp 630	OTHER SERVICES AND CHARGES	825,737.00	84,171.30	390,083.15	2,255.00	433,398.85	47.5
<hr/>							
Fcn 035	TRAHON TREATMENT FACILITY	827,737.00	84,171.30	390,083.15	2,255.00	435,398.85	47.4
<hr/>							
FIELD O & M TESTING							
PERSONAL SERVICES							
31 522406115	REDISTRIBUTED SALARIES &	36,575.00				36,575.00	
<hr/>							
Grp 610	PERSONAL SERVICES	36,575.00				36,575.00	
<hr/>							
SUPPLIES AND MATERIALS							
31 522406215	FUEL USAGE	5,500.00	347.06	3,141.76		2,358.24	57.1
31 522406220	OIL & LUBE - PRIVATIZATIO	297.00		116.58		180.42	39.3
31 522406240	NON-CAPITALIZED EQUIPMENT	1,628.00				1,628.00	
31 522406299	OTHER OPERATING SUPPLIES	165.00				165.00	
31 522406316	MOTOR VEHICLE REPAIR MATE	2,100.00		248.31	160.36	1,691.33	19.5
31 522406317	OTHER REPAIR & MAINT MATE	7,000.00				7,000.00	
<hr/>							
Grp 620	SUPPLIES AND MATERIALS	16,690.00	347.06	3,506.65	160.36	13,022.99	22.0
<hr/>							
OTHER SERVICES AND CHARGES							
31 522406419	OTHER PROFESSIONAL SERVIC	30,000.00		970.82	1,127.50	27,901.68	7.0
31 522406451	ELECTRIC LIGHT AND POWER	9,590.00	1,299.26	7,668.66		1,921.34	80.0
31 522406452	WATER/SEWER - UTILITY SER	220.00		93.32		126.68	42.4

GL787

Sewer System

Report Format 020

Period 9 ending June 30, 2014

Transaction status 1

75% of year completed

Account		Budget	Actual Per. Expenditures	YTD Actual Expenditures	Encumbrances	Unencumbered Balance	% Cur Bud Encumbered
WATER/SEWER OP & MAINT FUND							
SEWER SYSTEM - OPER & MAINT.							
FIELD O & M TESTING							
OTHER SERVICES AND CHARGES							
31 522406454	TELEPHONE	2,750.00	30.21	253.03		2,496.97	9.2
31 522406464	MACHINE/EQUIP MAINTENANCE	21,500.00				21,500.00	
31 522406473	TRAVEL EXPENSE - OUT OF C	500.00				500.00	
31 522406491	CONTRACT OPERATIONS	1,433,000.00	87,335.11	415,533.07		1,017,466.93	29.0
Grp 630	OTHER SERVICES AND CHARGES	1,497,560.00	88,664.58	424,518.90	1,127.50	1,071,913.60	28.4
CAPITAL OUTLAY							
31 522406857	SAFETY EQUIPMENT	25,000.00				25,000.00	
Grp 640	CAPITAL OUTLAY	25,000.00				25,000.00	
Fcn 040	FIELD O & M TESTING	1,575,825.00	89,011.64	428,025.55	1,287.86	1,146,511.59	27.2
PRESIDENTIAL HILLS TREAT FAC							
OTHER SERVICES AND CHARGES							
31 522706451	ELECTRIC LIGHT AND POWER	600.00				600.00	
31 522706464	MACHINE/EQUIP MAINTENANCE	37,500.00				37,500.00	
31 522706491	CONTRACT OPERATIONS	273,151.00	11,973.32	63,224.13		209,926.87	23.2
Grp 630	OTHER SERVICES AND CHARGES	311,251.00	11,973.32	63,224.13		248,026.87	20.3
FIXED CHARGES							
PERSONAL SERVICES							
31 522806115	REDISTRIBUTED SALARIES &	201,479.00	15,596.43	87,513.66		113,965.34	43.4
Grp 610	PERSONAL SERVICES	201,479.00	15,596.43	87,513.66		113,965.34	43.4
OTHER SERVICES AND CHARGES							
31 522806488	INDIRECT COST	555,285.00	138,821.25	416,463.75		138,821.25	75.0
31 522806614	BANK SERVICE CHARGES	3,254.00				3,254.00	
31 522806619	REPAYMENT OF LOAN	1,745,279.00	133,227.36	1,170,399.86		574,879.14	67.1
31 522806722	CLAIMS AGAINST CITY	218,958.00		109,646.38		109,311.62	50.1
31 522806741	TO OTHER GOVERNMENT UNITS	675,000.00				675,000.00	
31 522806753	APPROPRIATIONS TO OTHER F19	478,973.00		2,146,248.56		17,332,724.44	11.0
31 522806787	W/S FRANCHISE FEE	344,330.00	86,082.50	258,247.50		86,082.50	75.0
Grp 630	OTHER SERVICES AND CHARGES	23,021,079.00	358,131.11	4,101,006.05		18,920,072.95	17.8
CAPITAL OUTLAY							
31 522806918	LEASE PURCHASE RADIOS, TO	150.00			91.30	58.70	60.9
Grp 640	CAPITAL OUTLAY	150.00			91.30	58.70	60.9
Fcn 080	FIXED CHARGES	23,222,708.00	373,727.54	4,188,519.71	91.30	19,034,096.99	18.0
Div 522	SEWER SYSTEM - OPER & MAINT.	48,133,721.00	2,032,235.02	16,881,620.41	635,304.94	30,616,795.65	36.4
Report Final Totals		48,133,721.00	2,032,235.02	16,881,620.41	635,304.94	30,616,795.65	36.4

Appendix E

Combined System Rate Analysis

Combined System Analysis

Proposed
FY 2015

REVENUE REQUIREMENTS FOR DEBT SERVICE OBLIGATIONS

System Revenue Bonds: Fund 210	2005 Refunding Series (Refunded 1999 Series)	2,527,045
System Revenue Bonds: Fund 211	2011 Series A (Refunding)	3,754,328
System Revenue Bonds: Fund 258	2012 Series A & B	5,453,150
System Revenue Bonds: Fund 220	2013 Series A	3,532,157
TOTAL DEBT OBLIGATIONS:		<u>\$15,266,680</u>

REVENUE REQUIREMENTS FOR OPERATIONS & MAINTENANCE EXPENSES

Water System:	22,840,751
Sewer System:	21,506,235
TOTAL OPERATION & MAINTENANCE EXPENSE:	<u>\$44,346,986</u>

TOTAL REVENUE REQUIREMENTS

Revenue required for Debt Service:	\$15,266,680
Revenue required for Operation & Maintenance:	\$44,346,986
TOTAL REVENUE REQUIREMENTS:	<u>\$59,613,666</u>

WATER OPERATING REVENUES:

Rate per CCF	\$3.21
Chargeable Consumption	9,414,123
Chargeable Consumption Revenue	\$30,219,334

SEWER OPERATING REVENUES:

Rate per CCF	\$4.47
Chargeable Volume	8,027,598
Chargeable Volume Revenue	\$35,883,364
	<u>\$66,102,698</u>

SOURCES OF ADDITIONAL INCOME:

Service Charge	5,190,590
Line rehabilitation Fees	
Fire Protection Fees	261,774
Service Connections	68,622
Privilege Fees	34,786
Meter Installation Fees	133,543
Miscellaneous	739,790
Bad Check Fee	0
Interest Earnings (Funds 30, 31,32, 33, 35 & 205 thru 211)	0
Sewer Connection Permits:	61,095
Transfer in from Solid Waste (Fund 009)	0
Transfer in from General Fund	0
Madison Co. Water Sales(began 5/6/04)	375,132
Transfers from Regional System Accounts	6,205,781

TOTAL SOURCES OF ADDITIONAL INCOME:	<u>\$13,071,113</u>
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TOTAL REVENUES:

User Charge Revenues:	\$66,102,698
Sources of Additional Income:	\$13,071,113

\$79,173,811

NET REVENUES (Total Revenues less O & M)

\$34,826,825

**COMBINED DEBT SERVICE
COVERAGE RATIO:**

$\frac{\text{Net Revenues}}{\text{Total Debt Service}}$

2.28

REVENUES REQUIRED FOR DISCRETIONARY DEBT SERVICE:

State Loan Repayment:	2,567,917
Gap Loan (MDEQ Agreed Order)	2,110,180
MDA Loan (Water System)	426,491
Capital Outlays (included in O & M accounts from FY '97 thru '08):	4,958,874
CIP & Contingency Allocation:	11,200,750
Transfer to General Fund (Franchise Fee):	830,597
Capital Lease Obligations (equipment):	1,556,159
Capital Lease Obligations (radio system):	0

TOTAL:	\$23,650,968
---------------	---------------------

REVENUES WHICH MUST BE DERIVED FROM SYSTEM USER CHARGE:

Debt Service Obligations:	\$15,266,680
Operation & Maintenance Revenue Requirements:	\$44,346,986
Discretionary Debt Service:	\$23,650,968

REQUIRED REVENUE TO BE DERIVED FROM SYSTEM USER CHARGE:	\$83,264,634
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Evaluation of Required User Rate:

Rate Stabilization Fund	\$0
Equipment Loan Proceeds(Add'l Income)	\$4,122,990
User Charge Revenues:	\$66,102,698
Additional Income	\$13,071,113
TOTAL REVENUE:	\$83,296,801

REQUIRED REVENUE:	\$83,264,634
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Favorable / (Unfavorable)	\$32,168
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COMBINED RATE TEST:

$\frac{\text{Total Revenues}}{\text{Required Revenue}}$	1.00
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Appendix F

User Rate Analysis

DRAFT SEWER SYSTEM USER CHARGE PROJECTION

	Adopted FY 2014	Proposed FY 2015	Projected FY 2016	Projected FY 2017	Projected FY 2018	Projected FY 2019
REVENUE REQUIREMENTS FOR DEBT SERVICE OBLIGATIONS						
Sewer System Revenue Bonds: Fund 210	1,263,298	1,263,523	1,265,255	1,266,130	1,267,380	1,270,980
Sewer System Revenue Bonds: Fund 211	115,985	116,009	116,019	115,944	115,892	115,924
Sewer System Revenue Bonds: Fund 258	175,750	175,591	175,647	175,650	175,432	175,249
Sewer System Revenue Bonds: Fund 220		1,804,668	2,997,056	3,791,609	3,793,206	3,792,631
Proj. System Revenue Bonds: FY 2016	0	0	1,754,764	1,754,764	1,754,764	1,754,764
Proj. System Revenue Bonds: FY 2018						2,880,236
Proj. System Revenue Bonds: FY 2024						
TOTAL DEBT SERVICE OBLIGATIONS:	\$1,555,033	\$3,359,791	\$6,308,742	\$7,104,097	\$7,106,673	\$9,989,784

REVENUE REQUIREMENTS FOR OPERATIONS & MAINTENANCE EXPENSES

522.10 Administrative	571,246	568,651	574,338	580,081	585,882	591,741
522.15 Maintenance Supply	421,622	415,922	420,081	424,282	428,525	432,810
522.20 Operation & Maintenance	3,442,899	3,306,640	3,339,706	3,373,103	3,406,834	3,440,903
522.25 Sewer Evaluation Services(Sewer System Assessment Program)	1,001,760	1,059,941	1,070,540	1,081,246	1,092,058	1,102,979
522.30 Savannah Wastewater Treatment	12,025,904	12,028,504	12,148,789	12,270,277	12,392,980	12,516,909
522.35 Trahon Wastewater Treatment	827,737	827,737	836,014	844,375	852,818	861,346
522.40 Field Operation & Maintenance	1,550,825	1,550,825	1,566,333	1,581,997	1,597,817	1,613,795
522.70 Presidential Hills Wastewater Treatment	311,251	311,251	314,364	317,507	320,682	323,889
522.80 Fixed Charges (Redistributed Salary Costs & Miscellaneous,)	1,655,722	1,436,764	1,436,764	1,436,764	1,436,764	1,436,764
EPA/MDEQ Compliance Costs(City)	460,000	2,624,000	2,634,000	2,584,000	2,584,000	2,584,000
TOTAL OPERATION & MAINTENANCE EXPENSE:	\$21,808,966	\$21,506,235	\$24,340,930	\$24,493,631	\$24,698,360	\$24,905,136

TOTAL REVENUE REQUIREMENTS

Revenue required for Debt Service:	1,555,033	3,359,791	6,308,742	7,104,097	7,106,673	9,989,784
Revenue required for Operation & Maintenance:	21,808,966	21,506,235	24,340,930	24,493,631	24,698,360	24,905,136
TOTAL REVENUE REQUIREMENTS:	\$23,363,999	\$24,866,026	\$30,649,672	\$31,597,729	\$31,805,034	\$34,894,920

DETERMINATION OF REVENUE TO BE DERIVED FROM SEWER USER CHARGE:
 OPERATING REVENUES BASED ON CHARGEABLE VOLUME(CV)
 AT CURRENT SEWER RATE:

(*) Assume 13% increase in CV from Meter Change out over 3 years from 2013

Existing Rate:	\$4.47	\$4.47	\$4.47	\$4.47	\$4.47	\$4.47
CV =	7,835,674	8,027,598	8,337,936	8,337,936	8,337,936	8,337,936

\$ 31,995,670 \$ 35,883,363 \$ 37,270,574 \$ 37,270,574 \$ 37,270,574 \$ 37,270,574

SOURCES OF ADDITIONAL INCOME:

Interest Earnings (Funds 30, 31, 32, 33, 35, & 206)	131,500	0	372,706	372,706	372,706	372,706
Sewer Connection Permits	58,550	61,095	75,000	75,000	75,000	75,000
Regional System Accounts (W. Rankin, E. Madison & Forest Woods)						
W. Rankin Utility Authority	4,185,494	4,682,376	3,612,324	3,783,921	3,452,597	4,162,024
E. Madison County Sewer Disposal System	1,743,267	1,946,367	1,832,375	1,914,741	1,755,706	2,096,231
Forest Woods Sewer System	35,000	112,783	113,611	114,447	115,291	116,144
Siwell Utility Sewer System(City of Byram)	0	0	0	286,117	288,228	290,360

TOTAL SOURCES OF ADDITIONAL INCOME:

\$6,153,811 \$6,802,621 \$6,006,015 \$6,546,931 \$6,059,526 \$7,112,464

TOTAL REVENUES:

User Charge Revenues:	31,995,670	35,883,363	37,270,574	37,270,574	37,270,574	37,270,574
Sources of Additional Income:	6,153,811	6,802,621	6,006,015	6,546,931	6,059,526	7,112,464
	\$38,149,481	\$42,685,984	\$43,276,589	\$43,817,505	\$43,330,100	\$44,383,038

NET REVENUES (Total Revenues less O & M)

16,340,515 21,179,749 18,935,659 19,323,874 18,631,740 19,477,902

**DEBT SERVICE
 COVERAGE RATIO:**

Net Revenues
 Total Debt Service

1051% 630% 300% 272% 262% 195%

REVENUES REQUIRED FOR DISCRETIONARY DEBT SERVICE:

	Adopted FY 2014	Proposed FY 2015	Projected FY 2016	Projected FY 2017	Projected FY 2018	Projected FY 2019
Total Loan Repayment:						
GO Loan Payment (Storm Cell)	2,144,503	2,110,180	2,075,857	2,041,533		
State Loan Repayment:	1,598,728	1,082,279	772,513	714,035	714,035	714,035
C280886-02		604,219	725,062	725,062	725,062	725,062
New loan # 4			300,092	300,092	300,092	300,092
C280838-02	64,916	389,496	389,496	389,496	389,496	389,496
C280886-03	0	5,881	11,762	11,762	11,762	11,762
New loan # 5			83,670	83,670	83,670	83,670
New loan # 6				599,225	599,225	599,225
New loan # 7					593,532	593,532
Capital Outlays	4,333,563	3,731,140	2,165,168	2,165,168	2,165,168	2,165,168
Consent Decree and Permit Compliance	11,456,750	11,200,750	7,345,400	7,276,933	5,206,350	3,975,850
Transfer to General Fund (Franchise Fee):	344,330	344,330	639,913	717,667	745,411	745,411
Capital Lease Obligations (equipment):	380,863	916,356	2,830,253	2,830,253	1,949,444	1,485,914
TOTAL:	\$20,323,653	\$20,384,631	\$17,339,186	\$17,854,897	\$13,483,248	\$12,388,443

REVENUES WHICH MUST BE DERIVED FROM SYSTEM USER CHARGE:

Debt Service Obligations:	1,555,033	3,359,791	6,308,742	7,104,097	7,106,673	9,989,784
Operation & Maintenance Revenue Requirements:	21,808,966	21,506,235	24,340,930	24,493,631	24,698,360	24,905,136
Discretionary Debt Service:	20,323,653	20,384,631	17,339,186	17,854,897	13,483,248	12,388,443
REQUIRED REVENUE TO BE DERIVED FROM SYSTEM USER CHARGE:	\$43,687,652	\$45,250,656	\$47,988,858	\$49,452,625	\$45,288,281	\$47,283,363

Evaluation of Required User Rate:

Balance Forward:						
Applied Fund Balance:	\$1,896,847					
Equipment Loan Proceeds(Add'l Income):	\$3,683,200	\$3,548,490	\$1,092,584	\$1,092,584	\$2,185,168	\$1,092,584
TOTAL REVENUE:	\$43,729,528	\$46,234,474	\$44,369,173	\$44,910,089	\$45,515,268	\$45,475,622
Additional to Required Reserves:	\$0	\$73,433	\$1,064,802	\$155,900	-\$613,230	\$233,258
REQUIRED REVENUE:	\$43,687,652	\$45,324,089	\$49,053,660	\$49,608,526	\$44,675,051	\$47,516,621
Favorable / (Unfavorable)	\$41,876	\$910,384	(\$4,684,487)	(\$4,698,436)	\$840,217	(\$2,040,999)

RATE TEST:

Total Revenues	1.00	1.02	0.90	0.91	1.02	0.96
Required Revenue						
Req'd Revenue - Add'l Income	\$4.32	\$4.36	\$5.03	\$5.03	\$4.37	\$4.71
Chargeable Volume						