CONSENT DECREE

PROGRESS REPORT

VOLUME 14

2005

FOURTEENTH QUARTERLY REPORT

APRIL 1, 2005 THROUGH JUNE 30, 2005

MOBILE AREA WATER & SEWER SYSTEM

July 2005

STATEMENT OF CERTIFICATION

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.

W. Malcolm Steeves, P.E.

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SECTION I: SUMMARY

SECTION I: SUMMARY

1. Reporting Requirements

On January 24, 2002, the Board of Water and Sewer Commissioners of the City of Mobile entered into a Consent Decree (CD) with the United States, the State of Alabama and Mobile Bay Watch, Inc. (MBW). The following progress report consolidates the quarterly reporting requirements described in CD Paragraphs 44 and 98 regarding the following: (1) status of work performed; (2) unpermitted discharge information; (3) water quality monitoring data; and (4) the status of the Supplemental Environmental Projects (SEPs). Additionally, this report includes the semi-annual analysis of wastewater collection and transmission systems and wastewater treatment facilities required by CD Paragraph 21.

2. Report Organization

Water Quality Monitoring Program data and Grease Control Program Tables can be found on the MAWSS website, www.mawss.com, and are not included with this report. There are no narratives in Section II of this report for projects that have been completed for more than one year. Additionally, projects that were initially delayed but have subsequently been completed for more than one year are also removed from the report.

This report is divided into the following sections:

Section I: Summary – describes the reporting requirements of the CD, the report structure and includes a report summary.

Section II: Performance of Consent Decree Work – provides information described in CD Paragraph 98:

- CMOM measures pursuant to the CD implemented or discontinued during the previous quarter,
- Description of the status of compliance with the Consent Decree, and
- Summary of Sanitary Sewer Overflows (SSOs) during previous quarter.

Section III: Water Quality Monitoring – provides information regarding the status of the Water Quality Monitoring Program as required by CD Paragraph 38.

Section IV: Supplemental Environmental Projects – describes progress of planning and implementation of each SEP as required by CD Paragraph 44.

Section V: Civil Penalties – describes progress of paying Civil Penalties as required by CD Paragraph 53.

Appendix A-1: Table of Sanitary Sewer Overflows and Unpermitted Discharges – provides a listing of all sanitary sewer overflows and unpermitted discharges that occurred during the quarter as required by CD Paragraph 98.

Appendix A-2: Analysis of Wastewater Collection and Transmission Systems and WWTFs – provides trend information with regard to Unpermitted Discharges and SSOs as required by CD Paragraph 21.

3. Report Summary

This status report is the fourteenth quarterly report required by the Consent Decree (CD) and covers the period from April 1 to June 30, 2005.

3.1 Status of Compliance

All CMOM programs required by the CD have been submitted to the EPA for approval in accordance with the CD schedule.

3.1.1 EPA Approved Programs

Water Quality Monitoring (CD Chapter IX)

On December 19, 2003, the EPA, having reviewed the Board's July 27, 2002 response to EPA comments, approved the Water Quality Monitoring Plan (WQMP). On July 29, 2004, the Board requested approval from the EPA to make minor changes to the Water Quality Monitoring Plan based on an evaluation of the results from the first year of implementation. These changes will result in significant cost savings without compromising the goals of the Plan. Further information regarding the WQMP can be found in Section III of this report.

3.1.2 Status of Implementation

The Board continues to proceed with implementation of the CMOM programs. The Board is continuously reviewing and modifying its programs to find ways to be more effective in reducing SSOs. Additional information regarding the implementation of each program can be found in Section II of this report.

SECTION I: SUMMARY

Supplemental Environmental Projects (CD Chapter X)

Service lateral replacements required by SEP 1 were completed on December 19, 2003. SEP 2 money has been paid to the Forever Wild Land Trust and is complete. On August 4, 2003, MAWSS transferred the remaining funds in SEP 3 ($30,985.60) not used by the Alabama Forest Resources Center to the Forever Wild Land Trust for acquisition of property in the Dog River watershed. SEP 3 is considered complete. On February 2, 2004, MAWSS transferred funds in the amount of $50,089.35 from the SEP 4 escrow account to Mobile Bay Watch. All four SEPs are now considered complete. A completion report on SEP 1 was recently sent to the EPA on January 26, 2005.

Appendix B

During the second quarter of 2005, $83,500 was distributed to a special account for Appendix B penalties. The Board has submitted three claims of Force Majeure to the EPA for 89 SSOs that occurred due to severe storms in April of 2005. Appendix B penalties resulting from these 87 SSOs account for $79,500 of the total amount distributed.

An annual project to replace private laterals using a portion of funds from the Appendix B account as stipulated by the Consent Decree is scheduled to be bid in July 2005.

Civil Penalties (CD Chapter XI)

The Civil Penalties, $99,000 to the United States and $15,000 to Alabama, have been paid.

Delays in Completion

Upgrades to the Bricord Lift Station, the remaining lift station scheduled for 2004, were substantially complete on February 14, 2005. On December 8, 2004 the Board requested an extension of the deadline to February 15.

On April 4, 2005 the lift station renovation project for the remaining eight stations was bid. The low bid was $352,735 over the engineer's estimate of $970,000, which was the project's budget. Contractors that decided not to bid reported scheduling problems with other projects. The two contractors that submitted a bid stated that the high cost was due to the short completion schedule for the job.

The Board decided to rebid the project and extend the performance (construction) period by two months in order to bring bid amounts closer to the engineer's estimate. On April 19, 2005 the Board submitted a request to the EPA to extend the deadline for completion of upgrades to the remaining eight lift stations from December 31, 2005 to March 31, 2006.

SECTION I: SUMMARY

Since the project is an upgrade of equipment that is currently operational, the Board determined that the extension would not be detrimental to collection system performance.

The rebid project was awarded to Hughes Plumbing and Utility Contractors, Inc. and a Notice to Proceed letter was issued on July 18, 2005. The contract has a 240 day performance period.

Submittal of the Force Main Action Plan was delayed past the December 31, 2004 original schedule until January 18, 2005. Under the Plan, force main inventory data and head loss characteristics were evaluated to determine future maintenance tasks. The gathering of data for this task proved to be more difficult and time consuming than initially anticipated.

The Eslava Creek Lift Station upgrade was bid on August 16, 2004 and awarded to Hughes Plumbing and Utility Contractors, Inc. The contractor experienced a delay in receiving permits from the City of Mobile due to new flood zone requirements. In order to meet these requirements, flood-proofing measures had to be designed for the electrical building. With the measures approved, the contractor received the necessary permits on June 27, 2005. Alabama Power installed electrical service on July 7, 2005 and the fourth pump and new generator were immediately placed in service, five weeks after the original May 31, 2005 schedule.

3.1.3 Program Submittals

To date, the Board has submitted all program reports in accordance with the CD schedule. The following presents the dates of program submittals, EPA comments, and the Board's responses:

<u>December 21, 2001 Program Submittals</u>

- Short-Term Collection and Transmission Systems Capacity Assurance Program (CAP)
- Short-Term CAP for WWTPs
- Preliminary Industrial Storm Water Discharge Report
- Reporting, Notification, and Record Keeping Program

<u>January 31, 2002 Program Submittal</u>

- Proposed SEP 1 project locations

<u>February 28, 2002 Program Submittals</u>

- Short-Term CAP for WWTPs – Follow-up Report

SECTION I: SUMMARY

- Capacity Assurance – Decentralized Wastewater Treatment Systems
- Legal Support Programs for Sewer System (Ordinances)
- Water Quality Monitoring Program

April 29, 2002 Program Submittal

- Short-Term Pump Station Certification
- Lift Station Action Plan
- First Quarter 2002 CD Status Report (Volume 1)

May 1, 2002 EPA Program Comments to Submittal Dated December 21, 2001

- Short-term Collection and Transmission Systems Capacity Assurance Program (CAP)
- Short-term CAP for WWTPs
- Preliminary Industrial Storm Water Discharge Report

May 2, 2002 EPA SEP 1 Comments to Submittal Dated January 31, 2002

May 10, 2002 Responses to EPA SEP 1 Comments of May 2, 2002

May 29, 2002 Responses to EPA Comments of May 1, 2002

- Short-Term Collection and Transmission Systems CAP
- Short-Term CAP for WWTPs
- Preliminary Industrial Storm Water Discharge Report

May 29, 2002 Program Submittals

- Grease Control Program
- Proposed Grease Ordinance
- Service Contract for Eating Establishments

May 30, 2002 EPA Program Comments to Submittal Dated January 31, 2002

- Water Quality Monitoring Program

June 27, 2002 Response to EPA Comments of May 30, 2002

- Water Quality Monitoring Program

July 30, 2002 Second Quarter & Semi-Annual CD Status Report (Volume 2)

July 31, 2002 Program Submittals

- Long-Term Capacity Assurance Program for Wastewater Collection and Transmission Systems

SECTION I: SUMMARY

- Long-Term Capacity Assurance Program for WWTPs
- Legal Support Programs for Sewer System and Wastewater Treatment Facilities (All Other Necessary Ordinances)
- Operations Contingency Plan for WWTPs
- Contingency Plan for Eslava Creek, Halls Mill, and Virginia Street Lift Stations and Force Mains
- Contingency Plan for Wastewater Collection and Transmission Systems
- Pump Station Operation Program
- Corrosion Control Program
- Pump Station Preventative Maintenance Program
- Force Main Preventative Maintenance Program
- Gravity Line Preventative Maintenance Program
- Maintenance of Rights of Way Program
- Coordination with the City of Mobile and Other Governmental Bodies

August 7, 2002 Program Corrections

- Correct CD Quarterly Report Volume 2 regarding implementation of Water Quality Monitoring Program February 28, 2002.
- ADS Report on the flow monitoring of 20 private satellite collection systems was furnished to supplement information provided in July 31 submittal of Long Term Collection System Capacity Assurance Program. Schedules for implementing the remaining flow monitoring of private satellite collection systems were provided in the Long Term Collection System Capacity Assurance Program. Results of the aforementioned ADS report were not placed in the Program and were provided as an attachment to the August 7 submittal.

August 9, 2002 Program Modifications

- Due to the long-term plan to remove the Ziebach WWTP from service and the high cost of relocating the recycle stream, MAWSS proposed an alternative to apply the total cost of $78,650 of relocating the recycle stream to either additional SEP 1 private property lateral replacements or additional rehabilitation work in the Ziebach area.

SECTION I: SUMMARY

August 20, 2002 Corrections to August 9 Letter

- The post script to the August 9, 2002 letter should have stated that Williams WWTP fourth clarifier, which is required to treat the additional flows from the Ziebach WWTP following the Ziebach WWTP decommissioning, has been bid and awarded.
- A feasibility study for wastewater storage at the Board's Halls Mill, Eslava Creek, and Virginia Street lift stations is required to determine the need for and the effectiveness of such storage facilities at the aforementioned locations.
- Any product trials needed as identified in Montgomery Watson Harza corrosion control project (Task 2 and 3) report would occur after 9/31/02.

August 26, 2002 EPA Response to August 9, 2002 Program Modifications

- The EPA agreed to the request to apply the cost of relocating the solids handling recycle stream at the Ziebach WWTP to either additional SEP1 private property lateral replacements or additional rehabilitation. The EPA requested that they receive notification of the specific plan to apply the additional funds.

September 16, 2002 Board Response to EPA August 26, 2002 Comments

- The Board will apply the cost for relocating the recycle stream at the Ziebach WWTP to replace a minimum of 39 laterals in the Ziebach area.

September 17, 2002 EPA Program Comments

- The Board received EPA comments and conditional approval of the Grease Control Program.

September 27, 2002 Response to EPA September 17, 2002 Comments

- The Grease Control Program is being modified from the initial submittal to the EPA to address comments received from the EPA and the Alabama Restaurant Association.

October 30, 2002 Third Quarter CD Status Report (Volume 3)

November 26, 2002 Passage of Grease Control Ordinance

- The City of Mobile passed the Septage and Grease Hauler Ordinance requiring manifests for documenting proper disposal methods and disposal locations.

December 18, 2002 Letter to the EPA

- Identified delays for the Florida Street and Kerr McGee Lift Station projects as a result of property acquisition issues.

SECTION I: SUMMARY

- Identified completion dates for software upgrades to record data related to the parshall flume modifications and installation of dissolved oxygen sensors at the Williams WWTP.
- A request to relocate the Public Document Repository to the new Dennis Moore Training Facility was made.

January 30, 2003 Fourth Quarterly CD Status Report (Volume 4) & Semi-Annual Analysis

February 17, 2003 Annual Summary Pursuant to CD Paragraph 21

- An annual summary of unpermitted discharges and overflows pursuant to Paragraph 21 was submitted to the EPA, ADEM, and Mobile Bay Watch. The information was also placed in the Public Document Repository and provided on the MAWSS website.

February 28, 2003 Program Submittal

- The Unscheduled Maintenance Program was submitted on February 28, 2003, completing all CMOM program submittals required by the Consent Decree.

April 29, 2003 Fifth Quarterly CD Status Report (Volume 5)

May 22, 2003 Letter to the EPA

- Request to extend completion schedule for coating of wet wells under the Lift Station Action Plan from May 30, 2003 to July 31, 2003 due to investigations into more effective coating products. Request to limit the number of wet wells coated from ten to five.
- Request to extend the schedule by one year for building removal and renovations at 13 lift stations due to the addition of items outside the original recommendations that will allow for better monitoring, maintenance, and emergency response.
- Request to extend completion date of 90-day corrosion control field trial from June 30, 2003 to October 30, 2003. It was determined that the trial was outside the scope of the current annual contract and, therefore, required bidding of a new contract.
- Request to decrease the cleaning frequency of Cycle 5 and 6 category sewer lines. It was noted that, should sewer lines in these cycles be found to require more frequent cleaning, they can be reassigned to more frequent cleaning cycles such as Cycle 3 or 4.

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July 23, 2003 Letter to the EPA

- Request for EPA to consider Force Majeure regarding 116 of the 122 overflows that reached waters of the State or United States during three large and intense rain events that occurred on May 18, June 6, and June 30 of 2003.

July 30, 2003 Sixth Quarterly CD Status Report (Volume 6) & Semi-Annual Analysis

September 25, 2003 Letter to the EPA

- Request to reverse the schedule of the Eslava Creek and Halls Mill Lift Station upgrades as stated in the *Pump Station Preventative Maintenance Program* submitted to the EPA on July 31, 2002. Under the proposed schedule swap, the Halls Mill Lift Station upgrades will be moved up to 2004 to expedite upgrades to the stand-by generator to address the vulnerability of the lift station to power outages. The Eslava Lift Station upgrades are under design and will be completed in 2005.

October 30, 2003 Seventh Quarterly CD Status Report (Volume 7)

December 22, 2003 Letter to the EPA

- The Board presented findings from the feasibility study regarding the storage of wastewater in the event of catastrophic failure at the Eslava Creek, Halls Mill, and Virginia Street Lift Stations and force mains. The study concluded that the cost of constructing a facility far exceeds the benefit of such an endeavor.

- The letter also notified the EPA that one of the two isolation valves recommended in the *Contingency Plan for Eslava Creek, Halls Mill, and Virginia Street Lift Stations and Force Mains* already exists. The second recommended isolation valve will not be installed due to the cost required to relocate two 36 inch and 48 inch force mains.

December 29, 2003 EPA Approval of Water Quality Monitoring Plan

- The EPA gave final approval for the Board's Water Quality Monitoring Plan. The Plan is being implemented and is posted in the Public Document Repository and on the MAWSS website.

SECTION I: SUMMARY

January 30, 2004 EPA Eighth Quarterly CD Status Report (Volume 8)

April 27, 2004 EPA Ninth Quarterly CD Status Report (Volume 9)

July 29, 2004 EPA Tenth Quarterly CD Status Report (Volume 10)

- In the cover letter accompanying the report, the Board requested minor changes to the Water Quality Monitoring Plan. Additionally, the Board informed the EPA of the project to reroute the Faye Lane Lift Station force main and the impact this would have on the previously submitted schedule to renovate nine other lift stations. Four of the five lift station renovations scheduled for 2004 will be rescheduled for completion by December 31, 2005 along with four other lift stations previously scheduled for 2005.

October 27, 2004 EPA Eleventh Quarterly CD Status Report (Volume 11)

- In the cover letter accompanying the report, the Board requested that the EPA grant Force Majeure status for all SSOs resulting from Hurricane Ivan. Abandonment of the Ziebach WWTP due to safety concerns resulted in the bypass of 1.1 million gallons of untreated flow into Mobile Bay. Additionally, there were eight other overflows attributed to Hurricane Ivan, seven of which were the result of power outages at lift stations.

- The cover letter also requested an extension of the December 31, 2004 deadline for initial investigations of Private Sanitary Sewer Collection Systems (PSSCSs) to June 30, 2005. The additional time will allow the Board more flexibility in working with customers in regard to scheduling smoke testing.

December 8, 2004 Letter to the EPA

- In a previous letter to the EPA dated July 29, 2004, the Board requested approval from the EPA to reschedule the deadline to the end of 2005 for all of the remaining lift station upgrades with the exception of the Bricord Lift Station. Emergency repairs to an interceptor sewer required the contractor to shift resources from the Bricord Lift Station project, delaying its completion. As a result, the Board requested approval from the EPA to extend the completion date of the Bricord Lift Station upgrades to February 15, 2005.

SECTION I: SUMMARY

January 18, 2005 Submittals to the EPA

- The Board submitted the *Operations and Maintenance Procedures for the Halls Mill Creek and Eslava Force Mains*. A previous feasibility study referenced in a letter to the EPA on December 31, 2003 determined that storage of wastewater from the Halls Mill Creek, Eslava Creek, and Virginia Street Lift Stations was cost prohibitive. As a result, upgrades to the lift stations and an improved O&M program for the force main was pursued.

- The Board submitted the Lift Station Force Main Action Plan. Development of the plan was an action item identified in the Force Main Preventative Maintenance Program submitted to the EPA on July 31, 2002.

January 26, 2005 Submittals to the EPA

- The Board submitted the SEP 1 Completion Report to the EPA as required by Paragraph 43 of the Consent Decree.

- SEPs 2, 3, and 4 were considered completed under the terms of the Consent Decree at the time funds were transferred to the respective parties. Summaries of these SEPs were included in the cover letter to the SEP 1 Completion Report submittal.

January 27, 2005 Twelfth Quarterly CD Status Report (Volume 12)

- In the cover letter accompanying the report, the Board informed the EPA that it had recently authorized a ten percent rate increase and the borrowing of $25 million from the State Revolving Fund to accelerate collection system rehabilitation and other capital projects. Also, the Board stated that it may request an extension to the Consent Decree deadline after evaluating overflow reductions in 2005.

April 6, 2005 Letter to the EPA

- Request for EPA to consider Force Majeure regarding 54 overflows that reached waters of the State or United States as the result of a severe storm event that occurred on April 1, 2005. The storm event measured over 11 inches in certain areas of the MAWSS service area, indicating a 50 year rain event.

April 7, 2005 Letter to the EPA

- Request for EPA to consider Force Majeure regarding 11 overflows that reached waters of the State or United States as the result of a heavy rain event measuring 3.68 inches

in 9 hours. The impact of this storm on the collection systems was exacerbated by the previous April 1 storm event which had created flood conditions and high groundwater levels.

- The letter also relayed information from the Coastal Weather Research Center (CWRC) regarding a Force Majeure request for rain events of May 18 to July 1 of 2003. The official rainfall total during this 44 day period (29.63 inches) was the second largest over that duration since records were first kept in 1871.

April 8, 2005 Letter to the EPA

- Follow-up to the April 7 letter increasing the total number of overflows requested for Force Majeure status to 12.

April 19, 2005 Letter to the EPA

- The Board submitted a request to extend the deadline for completion of upgrades to the remaining eight lift stations from December 31, 2005 to March 31, 2006. The initial bid of the project was significantly over the engineer's estimate due to a short completion schedule. The time extension allowed the Board to rebid the project with a longer completion schedule thus reducing the cost. Since the upgrades were for equipment that is currently operational, the Board determined that the extension would not be detrimental to collection system performance.

April 7, 2005 Letter to the EPA

- Request for EPA to consider Force Majeure regarding 11 overflows that reached waters of the State or United States as the result of a heavy rain event measuring 3.68 inches in 9 hours. The impact of this storm on the collection systems was exacerbated by the previous April 1 storm event which had created flood conditions and high groundwater levels.

April 27, 2005 EPA Thirteenth Quarterly CD Status Report (Volume 13)

May 2, 2005 Letter to the EPA

- Request for EPA to consider Force Majeure regarding 21 overflows that reached waters of the State or United States as the result of a severe storm event that occurred on April 29 and 30, 2005. Rain gauges recorded as much as 6.19 inches of rainfall in a 24 hour period. The highest intensity recorded was 5.0 inches in two hours, a 50 year storm event.

SECTION I: SUMMARY

May 3, 2005 Letter to the EPA

- Submission of article from the Mobile Register providing information regarding widespread flooding as a result of the May 2 storm event. The article further cited the fact that April 2005 was the third wettest April in 164 years.

SECTION II: PERFORMANCE OF WORK
(CD CHAPTER VIII)

SECTION II: PERFORMANCE OF CONSENT DECREE WORK

1. System Capacity Assurance Program (SCAP) (CD Paragraph 20)

1.1 Short-Term Capacity Assurance Program for New Connections

The *Short-Term Collection and Transmission Systems Capacity Assurance Report* and the *Short-Term Capacity Assurance Program for WWTPs* was submitted to the EPA on December 21, 2001. On February 28, 2002, a follow-up report was submitted to the EPA identifying WWTP Capacity Improvement Projects. Comments regarding the program were received from the EPA on May 2, 2002. On May 29, 2002, MAWSS submitted responses to the EPA's comments.

1.1.1 Program Implementation

1.1.1.1 Wastewater Collection and Transmission Systems

Requests for new connections continue to be passed through Volkert and Associates for collection system capacity evaluation.

1.1.1.2 Wastewater Treatment Plants (WWTPs)

C.C. Williams WWTP

Reduction of Industrial Loads (December 18, 2002)
Industrial Pretreatment contracts with reduced industrial loads requirements went into effect on January 1, 2003.

Installation of Online Dissolved Oxygen (DO) Meters (January 15, 2003)
Dissolved Oxygen continues to be monitored. DO is adequate for current peak flows to the plant.

Wright Smith, Jr. WWTP

Reduction of Industrial Loads (December 18, 2002)
Industrial Pretreatment contracts with reduced industrial load requirements went into effect on January 1, 2003.

GAF Corporation continues to work with a consultant to complete plant modifications in order to comply with their 900 pounds per day BOD loading limitation. MAWSS continues to review the possibility of diverting flows

from the GAF Corporation to the C.C. Williams WWTP in order to allow an increase in their loading limitation. Mobile Paperboard is also working on plant modifications; however, they have been in compliance with their new loading limits for the past year.

Operational Modifications to Enhance Primary Chemical Treatment (August 31, 2002)

A ferric chloride dosing facility has been installed at the Smith WWTP. A review of historical data has determined that the optimum schedule for dosing is when plant flows exceed 20 mgd.

1.2 Long-Term Capacity Assurance Program for New Connections

Reports for both the Long-Term Capacity Assurance Program for Wastewater Collection and Transmission Systems and the Long-Term Capacity Assurance Program for WWTPs were submitted to the EPA for approval on July 31, 2002. Under the Long-Term CAP, hydraulic modeling uses flow data to determine the impact of proposed future connections on system capacity as defined by the Short-Term CAP.

1.2.1 Wastewater Collection and Transmission Systems

1.2.1.1 Permanent Flow Monitoring

Long term (permanent) flow monitors and rain gauges have been installed in accordance with the dates provided in the Long Term CAP for the collection and transmission systems. A total of 67 long term flow monitors and ten rain gauges are being used in the system.

Long term flow monitoring data is used to prioritize the locations at which temporary flow monitoring studies are needed. There are a total of 51 temporary flow meters installed throughout the collection systems. These flow monitors allow better isolation of I/I sources by monitoring smaller areas. The majority of these portable flow meters are currently in the Eslava Basin.

1.2.1.2 Identification of Collection System Capacity

Volkert and Associates, Inc. last performed a recalibration of the collection system hydraulic model in March 2005. The recalibration incorporated flow

monitoring data up to August 2004. The model indicated significant capacity improvements in some areas of the collection systems as identified below. Volkert is currently working on a new recalibration of the model with current flow data.

New requests for service continue to be routed from the Board to Volkert for collection system capacity assessment.

Three Mile Creek Basin

There are currently 10 portable flow meters installed in the Three Mile Creek basin to further isolate I/I sources.

The recently recalibrated model shows that capacity issues are present in the Conti and Demouy area of the Basin. A significant portion of the manholes and main lines in this area have previously been lined. MAWSS continues to replace or rehabilitate public laterals in the area to further reduce I/I. 100 laterals are scheduled to be lined with Cured-In-Place-Pipe (CIPP).

FEMA denied the Board's appeal of their decision to disallow construction of a new lift station near Ridge Road to address overflows in the area. The needed location of the lift station is on property purchased by FEMA as part of the Flood Insurance Program. After further efforts to negotiate with FEMA, the Board determined that an alternative location for the lift station was necessary. As a result, the Board purchased a permanent easement in the backyard of an adjacent property for the new lift station. It is anticipated that the project will bid in August of 2005.

Since April 1, 2005, the Board has received five new applications for connections in the Three Mile Basin for a total capacity of 6,280 gpd. During this period, 12 applications for the basin were reviewed and approved for a total of 57,750 gpd. Since program implementation in August 2002, 134 requests for connection have been approved adding 670,490 gpd in the Three Mile Basin.

Halls Mill Creek Basin

Previous model calibrations had indicated that portions of the 18-inch diameter Second Creek Interceptor sewer and the 10-inch diameter interceptor sewer

SECTION II: PERFORMANCE OF CONSENT DECREE WORK

along Airport Boulevard are near capacity. Installation of manhole inflow dishes and rehabilitation of manhole castings along the Second Creek Interceptor has removed over 1.0 mgd of I/I. MAWSS staff continues to perform above ground inspections in the area to identify I/I sources. Two significant I/I contributors have been repaired.

The recent recalibration of the model found significant capacity improvements along the Second Creek Interceptor. The lower portion of the interceptor still shows capacity issues, however. The model continues to show capacity concerns along the 10-inch diameter Airport Boulevard interceptor.

Since April 1, 2005, 27 new applications for connection have been received requesting capacity for a total of 186,969 gpd. During this period, 23 applications were reviewed and approved for a total of 70,094 gpd. Since the program implementation, 224 requests for connection have been approved for a total of 1.892 mgd in added peak flow.

Eslava Creek Basin

Previous model calibrations identified capacity concerns along the lower portions of the Eslava Creek Interceptor sewer and the Bolton Branch Interceptor sewer. MAWSS is continuing with flow monitoring, I/I investigations, video inspection and hydraulic cleaning to improve the performance of this basin. There are currently, a total of 40 flow meters installed within the Basin.

The recent model recalibration shows that capacity issues on the Bolton Branch and Eslava Creek Interceptor sewers have been resolved. Surcharge conditions are still indicated on the Eslava Creek Interceptor during the design storm but the extent is well below the Board's definition of full capacity as described in the Capacity Assurance Program.

MAWSS is continuing with other projects within the Eslava Creek Basin that will eliminate I/I and improve capacity. The gravity sewer along Parkway Drive was replaced during the third quarter of 2004. Additional dye testing is being conducted on the 36-inch interceptor that is upstream of Bolton Branch

to identify sources of I/I. Previous I/I removal projects have banked approximately 549,000 gpd in added capacity.

The Faye Lane Lift Station renovation project is complete. The Faye Lane Lift Station force main discharge has been rerouted from its previous location upstream of the Eslava Lift Station to the Halls Mill and Eslava 36-inch/48-inch force main. It is estimated that as much as 4 MGD can be removed from the Eslava Lift Station during heavy rains.

Since April 1, 2005, 9 new applications for connection have been received requesting a total capacity of 7,702 gpd of peak flow. During this period, 9 applications for the basin were reviewed and approved for a total of 7,702 gpd of additional peak flow. Since the implementation of the program, 98 requests for connection have been approved to allow an additional 342,048 gpd of peak flow.

Virginia Street Basin

The Board is continuing to determine if upgrades will be required at the Water Street Lift Station to address the future capacity needs of the RSA Tower under construction. Recent flow data suggests that inflow sources may be present in the Water Street area. I/I investigations are currently being planned to locate the sources of this inflow. Following identification and repair of these I/I sources, the Water Street Lift Station will be reassessed to determine if upgrades will be necessary.

Since April 1, 2005, two requests for connection have been received and subsequently approved for a total of 1,250 gpd of additional peak flow. Since program implementation, 25 requests for connection have been approved based on the available capacity and capacity gained from I/I removal. The total amount of peak flow approved for these connections is 152,094 gpd.

Ziebach WWTP Basin

The WWTP has capacity limitations at wet weather peak flows. Single home capacity requests have been accepted based upon repairs made in the basin.

The recent model recalibration found areas with capacity issues not previously identified. MAWSS is currently performing I/I inspection and repair activities

in these areas. A recent review of permanent flow meter data suggests the repairs have resulted in reduced flow rates during comparable rain events.

During the past quarter, the Board completed hydraulic cleaning and video inspection on 5,640 LF of the 30-inch and 36-inch Perch Creek Interceptor sewer. Cleaning activities removed approximately 300 tons of debris.

A project is ongoing to upgrade the existing Perch Creek Lift Station and re-route the force main to the 48-inch Eslava Creek Lift Station force main discharging to the Williams WWTP. The project is anticipated to be completed in September 2005.

Since April 1, 2005, three requests for connection to allow a total of 1,875 gpd of added peak flow were received and approved based in part on I/I removal from repair work. Since the implementation of the program, 52 requests have been approved based on the available capacity and capacity gains from I/I removal. The total amount of peak flow approved for these connections is 57,860 gpd.

Theodore Area Basin

During the third quarter of 2004, routine above ground inspections found a cave-in above a gravity sewer line on Inn Road due to a failed pipe connection at a manhole. This area was draining surface water into the sewer system. Repair work has been completed resulting in the removal of approximately 943,000 gallons of flow during heavy rains.

Since April 1, 2005, seven applications for connection have been received requesting capacity for a total of 3,350 gpd of peak flow. During this period, five applications for the basin were reviewed and approved for a total of 3,125 gpd. Since program implementation, 96 requests for connection have been approved to allow an additional peak flow contribution of 973,489 gpd.

Eight Mile Creek Basin

This basin's capacity is limited by the capacity of the lower Three Mile Trunk and the Smith WWTP. Capacity gains in the lower Three Mile Trunk have been realized through cleaning and I/I removal.

SECTION II: PERFORMANCE OF CONSENT DECREE WORK

Installation of approximately 11,780 LF of a new 6-inch and 8-inch diameter force main along Schillinger Road was completed on April 3, 2005 to increase capacity in the Semmes area.

Since April 1, 2005, the Board has received one application for connection requesting capacity for 2,200 gpd. During this period, three applications for the basin were reviewed and approved for a total of 37,825 gpd in additional peak flow. Since the implementation of the program, 32 requests for connection have been approved adding 303,894 gpd of peak flow.

1.2.1.3 Information Management System for Calculating the Net (Cumulative) Increase or Decrease in Wastewater Volume

Volkert and Associates continues to maintain the "Capacity Bank" for the Board's wastewater collection and transmission systems. New requests for service are routed through the Board's Mapping and Connections Department and then to Volkert for capacity analysis.

1.2.1.4 Identification and Elimination or Reduction of Industrial and Other Stormwater Discharges

A report on Industrial Stormwater Discharges was submitted to the EPA on December 21, 2001. On May 2, 2002, MAWSS received comments from the EPA regarding the program. MAWSS submitted responses to these comments on May 29, 2002.

Industrial and Non-Industrial Private Sanitary Sewer Systems

The Board smoke tested 65 Mobile County Schools in the summer of 2004. Information regarding defects that were identified was delivered to the School Board for corrective action. All repairs have been made with the exception of those identified at Murphy High School. MAWSS is waiting on the School Board for more information regarding a completion schedule for these repairs.

The Board decided to smoke test private sanitary sewer systems at no expense to the customer. This decision follows the intent of the Board to build partnerships with private sanitary sewer customers by working in a cooperative effort to address inflow sources. On October 27, the Board requested from the

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EPA an extension of the December 31, 2004 deadline to June 30, 2005 for initial investigations of these properties in order to allow more time to work with customers to schedule smoke testing activities.

Letters were delivered to all Industrial and Non-Industrial Private Sanitary Sewer Collection Systems (PSSCSs) requesting Right of Entry for smoke testing activities. The customer is required to repair any defects found as a result of the smoke tests.

The Board is still working with five PSSCS who have not yet granted MAWSS access for smoke testing. The Mobile Airport Authority will only allow MAWSS forces to conduct the smoke tests at night. This work should be completed in August 2005. Two other PSSCS are located at Brookley Field, Mobile Aerospace Engineering and Teledyne, Inc. A letter is being delivered to them requesting access for smoke testing. Another industry, Kimberly Clark has not granted access to MAWSS. The Board has decided not to investigate their PSCCS due to the fact that their discharge is metered and billed accordingly. MAWSS is monitoring this flow monthly and will take further action if unusually high flows are observed during wet months. The Board is continuing efforts to gain access to Glenn Valley Apartments for testing. The Board's attorney has advised that a second letter should be delivered that states, should the apartments not allow MAWSS to smoke test at the Board's cost, the Board will install a flow monitor on their discharge at their cost.

Six PSSCSs chose to conduct I/I investigations in-house. These customers were required to submit an I/I inspection plan along with a schedule that completes the I/I inspection and provides of a report of the findings by March 31, 2005. All but one has complied with this requirement. The Board is awaiting the results of the I/I investigations from Benders Shipyard.

I/I investigations have been completed for 133 Industrial and Non-Industrial PSSCSs. The investigations found seven customers with I/I defects. All repairs have been completed with the exception of the Greyhound Bus Station and Murphy High School.

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1.2.2 Wastewater Treatment Plants (WWTPs)

Several projects related to long-term capacity assurance are in progress. Completion dates for each project are in parentheses.

1.2.2.1 C.C. Williams WWTP

Infiltration and Inflow (I/I) Reduction Program

Work is ongoing to reduce influent flows to the plant by removing collection system I/I. During the past quarter, closed circuit television inspection (CCTV) was performed on 199,525 feet of pipe. Inspections continue to find sources of I/I. The Board has in place annual contracts for CIPP, manhole rehabilitation, point repairs, and public lateral replacement. The contracts in addition to in-house forces are being used to make repairs to the collection system.

See Section 1.2.1.2 for information regarding the recent removal of I/I from the C.C. Williams WWTP Collection System.

1.2.2.2 Bill Ziebach WWTP

Infiltration and Inflow (I/I) Reduction Program

Work is ongoing to reduce influent flows to the plant by removing collection system I/I. During the past quarter, closed circuit television inspection (CCTV) was performed on 7,804 feet of pipe. Inspections continue to find sources of I/I. The Board has in place annual contracts for CIPP, manhole rehabilitation, point repairs, and public lateral replacement. The contracts in addition to in-house forces are being used to make repairs to the collection system.

See Section 1.2.1.2 for information regarding the recent removal of I/I from the Bill Ziebach WWTP Collection System.

Modify Perch Creek Lift Station (January 9, 2004)

Modifications to the Perch Creek Lift Station include increasing capacity and rerouting the force main to discharge into the Halls Mill/Eslava force main which transmits flow to the Williams WWTP. This work will allow the Ziebach WWTP to be removed from service.

Due to the long length of the force main in the Perch Creek Lift Station Project, easements had to be obtained from many property owners and the Mobile

Airport Authority (MAA). Unfortunately, condemnation was required for several easements and it took months to negotiate an easement from MAA. In final negotiations with MAA, the force main alignment had to be altered. These easement acquisitions delayed the completion of the Project and, ultimately, the removal of the Ziebach WWTP from service for 12 months.

The Project was bid in three phases so that each phase could begin construction as easements were acquired. Although this phased approach moved the Project along quicker than waiting until all easements were finalized before bidding, the Project was still delayed. The start of Phase A, force main construction, was delayed four months due to long delivery times on pipe. Phase A experienced another delay during construction due to an unforeseen easement issue. Work on Phase A is substantially complete. Phase B, also force main construction, is complete. Work in Phase C began in May 2005. It is not known if the easement issues surrounding the Phase A work will ultimately delay the overall project completion beyond September 2005.

Remove Ziebach WWTP From Service (March 26, 2004)

Following completion of the Perch Creek Lift Station modifications, the Ziebach WWTP will be removed from service. Decommissioning the Ziebach WWTP will allow abandonment of the Ziebach NPDES discharge permit in 2005.

1.2.2.3 Wright Smith, Jr. WWTP

Infiltration and Inflow (I/I) Reduction Program

Work is ongoing to reduce influent flows to the plant by reducing collection system I/I. During the past quarter, closed circuit television inspection (CCTV) was performed on 122,846 feet of pipe to determine sources of I/I. Inspections continue to find sources of I/I. The Board has in place annual contracts for CIPP, manhole rehabilitation, point repairs, and public lateral replacement. The contracts in addition to in-house forces are being used to make repairs to the collection system.

See Section 1.2.1.2 for information regarding the recent removal of I/I from the Smith Basin.

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Plan to Relocate Effluent Discharge (December 18, 2002)

This project will be developed according to a work plan for an EPA sponsored special projects grant. The work plan and grant application have been submitted to the EPA. The plan includes comparison of alternatives to the previously proposed discharge to the abandoned International Paper (IP) outfall and further meetings with residents from area neighborhoods. The plan also includes preparation of an inter-local agreement between interested wastewater utilities. Utility organizations associated with Mobile, Prichard, and Chickasaw, Alabama were asked to be the initial participants; however, only Chickasaw and Mobile are currently sharing the effort. The first joint meeting with Chickasaw and Mobile Sewer Boards was held April 5, 2005 to review the progress of the regional wastewater program.

Proposed Regional WWTP on the International Paper (IP) Site

The schedules for the closure and future use of this site for a regional wastewater treatment plant are on hold, perhaps indefinitely. International Paper Company has withdrawn from the previously reported memorandum of understanding. Regional facility siting will now be based on a selection of alternatives to be developed in the EPA sponsored special projects grant program.

2. Sanitary Sewer Overflow (SSO) Reporting, Notification & Record Keeping Program (CD Paragraph 21)

2.1 Program Development

The *Sanitary Sewer Overflow Reporting, Notification and Record Keeping Program* was submitted to the EPA on December 21, 2001.

2.2 Program Implementation

The Board continues to report overflows to ADEM, the MS4 Storm Water Authority (Mobile Engineering), Bay Watch, the Mobile County Health Department and the local media per guidelines set forth in the program submittal.

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2.2.1 SSO Information Summary

During the second quarter of 2005 there were 135 sanitary sewer overflows (SSOs). Of this amount, 113 reached waters of the State or US Waters. The remaining overflows were contained or returned to the collection system.

Per negotiations with Mobile Bay Watch, $53,309.20 was paid on January 7, 2005 to Waterkeeper Alliance on MBW's behalf. Appendix B penalties totaling $83,500 were incurred during the second quarter of 2005. The Board has submitted three claims of Force Majeure to the EPA for 89 SSOs that occurred due to severe storms in April of 2005. Appendix B penalties resulting from these 87 SSOs account for $79,500 of the total amount distributed.

Tables listing the overflow occurrences during the past quarter can be found in Appendix A-1.

Seven storm events met the severe natural event criteria described by CD Paragraph 23a, *Contingency Planning Process*.

Severe Natural Event (April 1, 2005)

During this event, the largest volume of rainfall recorded was 11.67 inches. Rainfall intensities of 1.99 inches in one hour and 1.09 inches over 15 minutes exceeded the criteria for severe natural events described in CD Paragraph 23a. Fifty-four (54) overflows totaling 601,425 gallons were attributed to this storm event.

On April 6, 2005, the Board submitted a request to the EPA to consider a Force Majeure status for these overflows. The 24-hour rainfall total indicated that this storm was a 50 year event.

Severe Natural Event (April 6, 2005)

During this event, the largest volume of rainfall recorded was 3.69 inches. Rainfall intensities of 1.71 inches in one hour and 0.85 inches over 15 minutes exceeded the criteria for severe natural events described in CD Paragraph 23a. Fourteen (14) overflows totaling 250,575 gallons were attributed to this storm event.

Following this event, the Board again requested that the EPA consider a Force Majeure status for these overflows. Flood conditions and high groundwater from

the April 1, 2005 storm event exacerbated the impact of the intense rainfall from this storm event.

Severe Natural Event (April 11-12, 2005)

During this event, the largest volume of rainfall recorded was 2.08 inches. Rainfall intensities of 1.65 inches in one hour and 0.72 inches over 15 minutes exceeded the criteria for severe natural events described in CD Paragraph 23a. Two overflows totaling 2,225 gallons were attributed to this storm event.

Severe Natural Event (April 30, 2005)

During this event, the largest volume of rainfall recorded was 6.19 inches. Rainfall intensities of 3.57 inches in one hour and 1.12 inches over 15 minutes exceeded the criteria for severe natural events described in CD Paragraph 23a. Twenty-one (21) overflows totaling 196,525 gallons were attributed to this storm event.

On May 2, 2005, the Board submitted a request to the EPA to consider a Force Majeure status for these overflows. The highest intensity recorded was 5.0 inches over two hours, indicating another 50 year storm event. With this storm event, April 2005 was the third wettest April in the past 164 years.

Severe Natural Event (May 31, 2005)

During this event, the largest volume of rainfall recorded was 4.21 inches. Rainfall intensities of 1.37 inches in one hour and 0.91 inches over 15 minutes exceeded the criteria for severe natural events described in CD Paragraph 23a. Despite the intense rainfall, no overflows were attributed to this storm event.

Severe Natural Event (June 6, 2005)

During this event, the largest volume of rainfall recorded was 2.49 inches. Rainfall intensities of 1.36 inches in one hour and 0.79 inches over 15 minutes exceeded the criteria for severe natural events described in CD Paragraph 23a. One overflow totaling 2,700 gallons was attributed to this storm event.

Severe Natural Event (June 11, 2005)

During this event, the largest volume of rainfall recorded was 4.35 inches. Rainfall intensities of 1.40 inches in one hour and 0.64 inches over 15 minutes exceeded the

criteria for severe natural events described in CD Paragraph 23a. Despite the intense rainfall, no overflows were attributed to this storm event.

3. Legal Support Programs for Sewer System and Wastewater Treatment Facilities (CD Paragraph 22)

3.1 Ordinance Program

In 2002, the Board submitted information to the EPA demonstrating that ordinances would not be necessary to implement the following programs: the Short-Term Capacity Assurance Program; the SSO Reporting; Notification, and Record Keeping Program; and the Water Quality Monitoring Program. An ordinance was necessary to implement the Grease Control Program. The ordinance requiring septage and grease haulers to maintain manifests documenting proper disposal methods and locations was passed by the Mobile City Council on November 26, 2002.

3.2 Grease Control Program

3.2.1 Program Development

The Grease Control Program, developed by Thompson Engineering, was submitted to the EPA for approval on May 29, 2002. On September 17, 2002, the EPA provided conditional approval of the Board's Grease Control Program. A response to the EPA's comments was submitted on September 27, 2002. The response identified changes to the original program submitted to the EPA to address the concerns of the EPA and the Alabama Restaurant Association.

3.2.2 Program Implementation

The Board continues to initiate grease control contracts with food service facilities (FSFs). Through June 30, 2005, a total of 1067 contracts have been mailed. Four hundred and seventy-three (473) FSFs have been removed from the program because investigations by MAWSS staff determined that these facilities did not prepare food on site, changed ownership, or closed since the contract was mailed. Five hundred and ninety-four (594) FSFs remain in the program and have returned signed contracts.

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3.3 Maintenance of Adequate Legal Staff

The Board continues to retain the Atchison Firm, PC to assist the Board in interpreting and fulfilling the obligations under the CD. The firm has adequate resources and personnel to meet the needs of the Board in this regard.

4. Contingency Plan for Sewer Systems and Wastewater Treatment Facilities (CD Paragraph 23)

4.1 Wastewater Collection and Transmission Systems

4.1.1 Program Development

The *Contingency Plan for Wastewater Collection and Transmission Systems* was submitted for EPA approval on July 31, 2002. In addition to the Contingency Plan described above, the *Contingency Plan for Eslava Creek, Halls Mill, and Virginia Street Lift Stations and Force Mains* was also submitted for EPA approval on July 31, 2002. This program provides contingency planning for the Board's three primary lift stations.

4.1.2 Program Implementation

4.1.2.1 Preparedness Committee

The Assistant Director meets each week with engineering and the appropriate operations staff to discuss any unpermitted discharges, including those resulting from severe natural events, that occurred in the previous week. Performance of the wastewater systems and staff are reviewed to decide a course of action that will focus on preventing the unpermitted discharges in the future. The resulting actions may include repairs, preventive maintenance, further investigation of the cause, re-assessment of I/I investigation locations, and/or changes in operations procedures including how we respond to emergency situations.

4.1.2.2 Capital Improvements

A number of capital improvements have been completed to eliminate or minimize collection and transmission failures during emergencies and severe

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natural events. Ongoing improvements are presented below. Scheduled completion dates are in parentheses.

Feasibility Study to evaluate on-site wastewater storage at the three primary pump stations (June 30, 2003)

A feasibility study for the storage of wastewater at the Halls Mill, Eslava Creek, and Virginia Street Lift Stations concluded that the cost of constructing adequate containment far exceeds the benefit of such an endeavor. The risk of a catastrophic failure of one of the aforementioned stations or the PCCP force main is minimal.

Coupons taken from the wall of the PCCP force main indicate that it is in good condition. The coating of the PCCP where it is exposed above ground is complete. During the first quarter of 2005, three additional locations were tapped on the force main to inspect the wall of the pipe and to install air release valves. All field work and investigations regarding transient flows in the force main are complete. The Board is following the recommendations of the report with regard to the installation of 12 automatic air release valves (ARVs) along with the additional installation of two air vacuum valves on the Eslava/Halls Mill Lift Station Force Main. Repairs to the pile bents supporting the force main creek crossings have been completed

The *Operations and Maintenance Procedures for the Halls Mill Creek and Eslava Creek Force Main* was submitted to the EPA on January 18, 2005. The Board continues to further decrease the risk of lift station failure by installing standby pumps, adding generating capacity, by-pass piping, and other upgrades to the three lift stations. The Virginia Street Lift Station upgrades are complete. The Halls Mill Lift Station Upgrades are complete. The Eslava Creek Lift Station upgrade project was delayed beyond the May 31, 2005 completion schedule due to new flood zone requirements established by the City of Mobile. Work was completed on July 7, 2005.

Installation of Automatic Vehicle Locating (AVL) System (December 31, 2003)

AVL units have been installed in vehicles and are linked to a computer and display screen in the Dispatch Center.

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Halls Mill Creek and Eslava Creek Pump Station Contingency Projects (July 1, 2005)

The Halls Mill Creek Lift Station upgrade was completed on October 29, 2004. The Eslava Creek Lift Station upgrades were bid on August 16, 2004 and awarded to Hughes Plumbing and Utility Contractors, Inc. The contractor experienced a delay in receiving permits from the City of Mobile due to new flood zone requirements. In order to meet these requirements, a removable, gasketed door weir had to be installed in the electrical building to address the building's flood potential. With this redesign approved, the contractor received the necessary permits on June 27, 2005. Alabama Power installed electrical service on July 7, 2005 and the fourth pump and new generator were immediately placed in service.

Installation of emergency backup systems for pumps greater than 15 horsepower (December 31, 2005)

The previous plan to install emergency backup equipment at all pump stations greater than 15 horsepower (HP) continues to be evaluated. Two stations with 15 HP motors do not warrant auxiliary power. The IP Lift Station flow is less than 1,000 gpd due to the closing of the IP Plant. Balcon Construction, Inc. recently completed the installation of a generator quick connect, bypass pump connections, and new 60 Hp pumps and controllers at the QMS Lift Station. This station has a history of vandalism and, therefore, a permanent generator would be at risk of damage or theft. Following the re-evaluation of the plan, the Board added four stations with motors less than 15 HP to the program.

13 auxiliary diesel pumps were installed in 2004. The Board has scheduled the installation backup systems to 13 lift stations in 2005. The project was awarded Hughes Plumbing and Utility Contractors, Inc. during the past quarter. The contractor is currently working on the concrete foundations for the pumps.

4.2 Wastewater Treatment Plants

The *Operations Contingency Plan for WWTPs* was submitted for EPA approval on July 31, 2002.

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4.3 Preparedness Training Program

Each week the Assistant Director meets with engineering and operations staff to discuss any unpermitted discharges, including those resulting from severe natural events. The performance of the wastewater systems and staff are reviewed to determine if procedures need to be created or modified to address deficiencies. Employees are then trained on the new or revised procedures.

5. Pump Station Operation Program (CD Paragraph 24)

The *Pump Station Operation Program* was submitted to the EPA on July 31, 2002.

5.1 Scheduled Pump Station Operation Program

The Pump Station Operation Program is being used to track operation schedules, priorities, record keeping forms, and performance measures. A computer program is being used to generate work orders based on lift station run times.

The program to upgrade the pump station SCADA systems is complete. Further information regarding the status of this project can be found in Section 8.1 of this report.

5.2 Emergency Pump Station Operation Program

The Emergency Pump Station Operation Program was incorporated in the overall Pump Station Operation Program identified above.

6. Corrosion Control Program (CD Paragraph 25)

6.1 Program Development

The Corrosion Control Program was submitted to the EPA on July 31, 2002. The program emphasizes field investigations by Montgomery Watson Harza (MWH) and modifications to the Board's standard specifications and pretreatment program.

6.2 Program Implementation

Tasks identified in the Corrosion Control program are currently being implemented.

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Reduction of Industrial Loads

All industries currently under contract have submitted information regarding yard piping diagrams, a list of corrosive compounds, their storage, and the possible use of alternative compounds. Chloride loadings from industries are limited through the industrial pretreatment program to ensure chloride concentrations within the collection systems remain below 500 mg/l. The Board has determined that the primary contributors to hydrogen sulfide induced corrosion are long force mains rather than particular industries. This type of corrosion will be addressed by the Board and industries found to contribute sulfides to these locations will either be charged an equitable share of the treatment or will be required to install their own hydrogen sulfide treatment system. Currently, no sulfides or sulfates limit has been set for industries.

Chemical Addition

On August 11, 2004, the Board began using US Filter's Bioxide at the Faye Lane, Abilene, Florida Street, Columbus Street, and Ghent Street Lift Stations to address odor and corrosion.

A biofilter will be installed at the Eslava Creek Lift Station to control odors. The biofilter will be bid in July 2005, following completion of recent renovations at the lift station.

Monitoring and Preventive Maintenance

Lift stations are continuing to be monitored for H2S and odors.

7. Grease Control Program (CD Paragraph 26)

7.1 Program Development

The Grease Control Program was submitted to the EPA on May 29, 2002. The EPA provided conditional approval on September 17, 2002.

7.2 Program Implementation

During the second quarter of 2005, 20 FSFs were visited (initial visit) to review grease trap size requirements and provide training in grease disposal. Since the start of the program, 580 initial visits have been completed.

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After the initial visit, FSFs that do not have the required grease trap capacity are required to submit action plans that provide details and a schedule for addressing undersized grease traps. Nine action plans were approved this past quarter.

During the quarter, the Pretreatment Department inspected 405 FSFs for compliance. Seven of these facilities were in violation of the Grease Control Program and received fines totaling $1,900.

Monthly compliance sampling was conducted at 25 FSFs. Thirteen (13) of those sampled had results greater than the 200 mg/l limit. Fines resulting from monthly compliance sampling totaled $2,600. To date, 49 FSFs have completed 12 months of sampling. This quarter, six FSFs had 12 month averages under the 140 mg/l limit and are now considered to be in compliance and subject to quarterly inspections and random sampling. Two FSFs exceeded the 140 mg/l limit during the past quarter. Letters were sent to these FSFs advising them of the findings and requiring them to submit new action plans.

Inspectors performed training at 22 area schools. Thus far, inspectors have visited 30 schools to perform training in grease disposal.

The Board continues to inform the public of the adverse impact of grease on collection system performance. Door hangers are being placed in areas where video inspection of the sanitary sewer indicates grease control education is needed. MAWSS continues to explore the possibility of an education program to be presented to elementary students explaining the problems associated with fats, oils, and grease and how to properly dispose of these items. The Board has hired a public affairs manager to develop programs that will educate the public about water and sewer issues. Further, money has been allocated to install several grease collection receptacles within the MAWSS service area. Sites for these collection receptacles continue to be evaluated.

7.3 Grease Control Compliance Table

The Grease Control Compliance Table can be found on the MAWSS website at www.mawss.com/consentdecreedocs.htm. The table lists FSFs under contract, the dates of the initial visits, required grease trap size, actual grease trap size, and enforcement actions. The dates on which FSFs are inspected are not included in the table unless there is an enforcement action taken.

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8. Pump Station Preventative Maintenance Program (CD Paragraph 27)

8.1 Short-Term Pump Station Certification

Montgomery Watson Harza completed the evaluation of 116 lift stations as required in the CD. The findings are presented in the *Inspection and Evaluation of Lift Stations* report. The evaluation report was submitted to the EPA on April 29, 2002 with the required certification and a schedule for addressing the recommendations made by MWH.

The recommendations were incorporated into a Lift Station Action Plan. Tasks to address the recommendations were grouped according to priority rating. Most of the tasks have previously been completed. Ongoing tasks are presented below. Scheduled completion dates are in parentheses.

Clean Lift Stations (July 15, 2002)

MAWSS staff continues to clean lift stations. A combination cleaning truck is permanently assigned to the Lift Station Operations and Maintenance Department. During the past quarter, 34 lift stations were cleaned.

Consultant Category 3 Priority Tasks (December 31, 2002)

Consultant Category 3 Priority Tasks that are of an electrical nature were completed under the same project for Category 4 tasks mentioned above. With the exception of Halls Mill, Eslava, and Virginia Street Lift Stations, wet well lining work was completed by August 2003. Wet well lining work at the Virginia Street Lift Station was completed in addition to other upgrade work in the fourth quarter of 2003.

Halls Mill Creek Lift Station upgrades are complete. These upgrades included lining of the wet well, a new generator and a fourth pump to serve as a backup, and the expansion of the electrical control building. Additionally, bypass connections and magnetic flow meters have been installed at the force main for this station and the Eslava Creek Lift Station.

The Eslava Creek Lift Station Category 3 Priority Tasks are being addressed as part of a project to upgrade the station. The Eslava Creek Lift Station renovations project was bid on August 16, 2004. The project has been delayed past the May 31, 2005 completion

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schedule due to delays in permitting. The Board anticipates completion of the project in July 2005

Consultant Category 2 Priority Tasks (revised March 31, 2006)

Consultant Category 2 Priority Tasks involves building removal and major lift station renovations to thirteen stations. The renovations include improvements to access for maintenance and installation of electromagnetic flow meters and bypass quick connections in the force mains. On May 22, 2003, the Board requested approval to extend the deadline for renovations to April 30, 2005. Four of these were completed by the end of 2003. The request stated that five more stations would be renovated in 2004 and that the remaining four would be completed in 2005.

It was later determined that flows to the Eslava Creek Lift Station could be reduced by as much as 4 MGD during heavy rain events by rerouting the force main of the Faye Lane Lift Station (FLLS) to discharge to the Halls Mill and Eslava 36-inch/48-inch force. The pumps at the FLLS required upgrades to accommodate the rerouting of the force main. Consequently, a general renovation of the station was required. On July 29, 2004 the Board requested the EPA approve diverting funds from four of the five lift stations initially scheduled for 2004 in order to complete FLLS renovations. The Faye Lane Lift Station is now discharging directly to the Eslava Lift Station Force Main. All other upgrades at the lift station are complete.

Upgrades to the Bricord Lift Station, the remaining lift station scheduled for 2004, were completed on February 14, 2005. The contractor that was awarded the project, Roland Pugh Construction, also has the Board's annual contract for making scheduled and emergency repairs in easements. An emergency repair project on a 15 inch interceptor in the Three Mile Creek Basin required the contractor's resources that were previously available for the Bricord Lift Station. Consequently, the Board asked for approval to delay the Bricord Lift Station upgrades to February 15, 2005.

On April 4, 2005 the lift station renovation project for the remaining eight stations was bid. The low bid was $352,735 over the engineer's estimate of $970,000, which was the project's budget. Contractors that decided not to bid reported scheduling problems with other projects. The two contractors that submitted a bid stated that the high cost was due to the short completion schedule for the job.

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The Board decided to rebid the project and extend the performance (construction) period by two months in order to bring bid amounts closer to the engineer's estimate. On April 19, 2005 the Board submitted a request to the EPA to extend the deadline for completion of upgrades to the remaining eight lift stations from December 31, 2005 to March 31, 2006. Since the project is an upgrade of equipment that is currently operational, the Board determined that the extension would not be detrimental to collection system performance.

The rebid project was awarded to Hughes Plumbing and Utility Contractors, Inc. and a Notice to Proceed letter was issued on July 18, 2005. The contract has a 240 day performance period. The Board saved $227,000 by rebidding the contract and increasing the performance period.

In-House Category 1 Priority Tasks (December 31, 2004)

In-House Category 1 Priority Tasks include less critical improvements to lift station devices. This work includes installation of safety hatches as well as minor electrical work. To date, a total of 28 safety hatches have been installed. All safety hatches have been installed with the exception of those that will be installed as part of major lift station renovation projects.

Consultant Category 1 Priority Tasks (December 31, 2004)

Category 1 Priority tasks are complete. Work to install lift station lighting was completed by the end of 2004.

Halls Mill, Eslava, and Virginia Street Lift Station Upgrade Schedule (July 1, 2005)

The schedule for upgrades of these lift stations was presented in the Pump Station Maintenance Program submitted to the EPA in August 2002. The Virginia Street Lift Station renovations were completed at the end of 2003. On September 25, 2003, the Board sent a letter to the EPA outlining the proposal to swap the schedule of the Eslava and Halls Mill Lift Station upgrades in order to complete the Halls Mill Lift Station upgrades in 2004. As stated previously, upgrades to the Halls Mill Lift Station are complete.

The Eslava Creek Lift Station upgrades were bid on August 16, 2004 and awarded to Hughes Plumbing and Utility Contractors, Inc. The contractor experienced a delay in receiving permits from the City of Mobile due to new flood zone requirements. In order

to meet these requirements, a removable, gasketed door weir had to be installed in the electrical building to address the building's potential for flooding. With this redesign approved, the contractor received the necessary permits on June 27, 2005. Alabama Power installed electrical service on July 7, 2005 and the fourth pump and new generator were immediately placed in service, five weeks after the original May 31, 2005 schedule.

8.2 Electrical Maintenance Program

Procedures for maintenance of electrical components have been developed and were included in the *Pump Station Preventative Maintenance Program* submitted to the EPA for approval on July 31, 2002. A database to track the performance of electrical maintenance is complete and in use.

8.3 Mechanical Maintenance Program

Procedures for maintenance of mechanical components have been developed and were also included in the *Pump Station Preventative Maintenance Program* submitted on July 31, 2002. A database to track the performance of mechanical maintenance is complete and in use.

9. Force Main Preventative Maintenance Program (CD Paragraph 28)

Development of the *Force Main Preventative Maintenance Program* was submitted to the EPA for approval on July 31, 2002.

9.1 Air Release Valve Maintenance Program

The Air Release Valve Maintenance Program has been developed. The program identifies the necessary personnel and equipment, documents procedures, and identifies maintenance performance measures. There are 26 force mains that have air release valves (ARVs). At this time, all of these have been inspected.

As previously stated, MAWSS is following the recommendations of the transient flow study regarding the installation of ARVs and air vacuum valves along the Halls Mill and Eslava Force Main. The Board plans to purchase 12 ARVs in 2005 along with two air vacuum valves (AVVs) for installation on the Halls Mill and Eslava Force Main. During

the past quarter, two ARVs were installed, bringing the total installed this year to 5. The Board has recently received bids for the remaining ARVs and AVVs.

9.2 Valve Exercise Program

The Valve Exercise Program was developed to establish scheduling and procedures for the routine exercise of force main gate valves. Valves have been identified at 183 lift stations. Valves will be exercised annually.

9.3 Program Implementation

Several tasks identified in the Force Main Preventative Maintenance Program are complete. Ongoing tasks are presented below with scheduled completion dates in parentheses.

Force Main Inventory (December 31, 2003)

All force mains were located by the end of 2003. The wooded easements for force mains were cleared. Force main materials, sizes, locations, lengths, and age were determined in the inventory.

Initial inspection and maintenance of force mains (December 31, 2004)

All force mains have been visually inspected from above ground to determine if any leakage from the force mains was evident. No leakage was identified. Walking the force mains to inspect for leaks will be a maintenance item performed at least once each year.

The 36-inch/48-inch Halls Mill Creek and Eslava Creek Lift Stations force main and the Pinto Island lift Station force main, which passes under Mobile River, have been identified as the force mains with the most critical needs for maintenance and/or replacement.

The Halls Mill and Eslava Lift Stations force main is constructed of pre-stressed concrete cylinder pipe (PCCP) and has been extensively evaluated to determine its condition. All pipe joints exposed above ground have been sounded and repaired where necessary. All pipe exposed above ground has been coated for protection. A long line close interval survey of the force main was performed by Allied Corrosion to determine if any of the reinforcing steel or end rings of the pipe were exposed to soil. No such defects were found. Coupons were taken from the pipe at strategic locations to inspect the inner wall

of the pipe and determine if deterioration from hydrogen sulfide corrosion was significant. All coupons pulled including those pulled during the recent installation of air release valves have indicated that no significant corrosion is present. A project to replace damaged pilings supporting the force main at Eslava Creek, Baker Street, and Yeend Street is complete. The Board is also following the recommendations of the transient flow study in order to protect the force main from water hammer.

The Pinto Island force main was recently replaced because a bulkhead on the east side of Mobile River where the force main rises at the river bank had been damaged repeatedly by barges and/or ships. The new force main was directionally drilled HDPE pipe and was aligned to rise far enough away from the river bank to eliminate the need for a bulkhead. The project began on January 3, 2005 following the verification of the location of a fiber optic cable and was completed on March 16, 2005.

Lift Station Force Main Action Plan (December 31, 2004)

In accordance with an action item on page 9 of the above report, the *Lift Station Force Main Action Plan* was submitted to the EPA on January 18, 2005. The report detailed the means to evaluate the Board's oldest lift station force mains as well as identified maintenance activities for the Board's 4-inch to 16-inch diameter lift station force mains. Completion of the report was originally scheduled for the end of 2004. The gathering of data for this task proved to be more difficult and time consuming than initially anticipated.

During the field investigations that were conducted for the development of the plan, it was determined that the Martin Drive Lift Station force main warranted replacement. Work to replace the force main was completed during the past quarter.

10. Gravity Line Preventative Maintenance Program (CD Paragraph 29)

10.1 Program Development

Development of the Gravity Line Preventative Maintenance Program was submitted to the EPA for approval on July 31, 2002.

SECTION II: PERFORMANCE OF CONSENT DECREE WORK

10.2 Program Implementation

During the past quarter, MAWSS cleaned approximately 482,600 feet of gravity sewer and conducted television inspection on approximately 330,200 feet of pipe.

The two additional combination cleaning trucks were purchased during the first quarter of 2005 bringing the total to 10 combination cleaning trucks and one jet rodder unit. Four of the units are dedicated to cleaning sewer lines not previously cleaned, two are dedicated to SSO response and other work order related issues, one unit is dedicated to the Lift Station Department for cleaning of wet wells, one unit is dedicated to cleaning inverted siphons, and the remaining two are dedicated to customer response items.

Additionally, four new video trailers purchased by the Board were placed in service during the past quarter. One camera has the ability to video laterals from within the sewer main. Two of the trailers have replaced two older units, allowing the older units to serve as standby units in the event a unit goes out of service.

The Board continues to use contractors to clean and inspect large diameter sewer lines. During the past quarter, MAWSS contracted the hydraulic cleaning of 19 large diameter inverted siphons. This work removed over 350 tons of debris. Additionally, the Board completed hydraulic cleaning and television inspection of 4,500 LF of the upper portion of the Three Mile Interceptor sewer. In the Ziebach basin, contractors completed cleaning of 5,640 LF of the 30-inch and 36-inch Perch Creek Interceptor sewer, removing approximately 300 tons of debris.

On April 18, 2005 the Board bid the video inspection of approximately 190,000 LF of gravity sewer lines greater than or equal to 12-inches in diameter. An in-line camera will be used to quickly assess the condition of the pipe. Once the project is complete, all gravity sewer lines greater than or equal to 12-inches in diameter will have been inspected by video.

Video from television inspection activities continues to be downloaded to a network server database. The videos are readily accessible to all departments that need the information through a link with the sanitary sewer GIS.

SECTION II: PERFORMANCE OF CONSENT DECREE WORK

11. Maintenance of Rights-of-Way Program (CD Paragraph 30)

11.1 Program Development

The Maintenance of Rights-of-Way Program has been implemented since 2001. Program documentation was submitted to the EPA for approval on July 31, 2002.

11.2 Program Implementation

Four contractors are cutting grass at all MAWSS facilities, including treatment plants and lift stations.

During the past quarter, a contractor removed approximately 600 downed trees resulting from Hurricane Ivan from sewer line easements. The Board anticipates implementing herbicide treatments along sewer line easements beginning in September 2005.

Gravity Sewer Easements

During the past quarter, 19,513 LF of gravity sewer easement was cleared.

Force Main Easements

During the past quarter, 2,740 LF of force main easement was cleared

Confirm Sewer Line Stream Crossings

Following development of the GIS for the collection systems, GPS features collected in the field were overlaid with the previously developed hydrology layer to create a map layer of stream crossings. Initially, 2,509 stream crossing were identified in the GIS. This total included sewer line crossings under drainage ditches. MAWSS has determined that there are 37 aerial stream crossings. Initial visual inspection of these crossings was completed in the fourth quarter of 2004. Damaged or deteriorated pilings that were identified have been repaired or replaced. A crew has been assigned to conduct quarterly inspection of aerial sewer lines.

In addition to aerial stream crossings, there are a total of 199 depressed sewers under streams or storm drains. Depressed sewers are routinely cleaned as part of the Gravity Line Maintenance Program.

SECTION II: PERFORMANCE OF CONSENT DECREE WORK

12. Unscheduled Maintenance Program (CD Paragraph 31)

12.1 Program Development

The Board submitted the Unscheduled Maintenance Program to the EPA for approval on February 28, 2003. The Program documents the process for receiving and responding to customer complaints.

13. Coordination with the City of Mobile and Other Governmental Bodies (CD Paragraph 32)

13.1 Program Development

A report detailing the coordination responsibilities and activities relating to City, County, and State personnel was submitted to the EPA for approval on July 31, 2002.

13.2 Program Implementation

The Board continues to coordinate Right of Way (ROW) activities with the City. The Board's Mapping and Connections Department was moved under the Planning and Engineering Manager so that all new water and sewer projects could be tracked by one department and coordinated as necessary with the City, County, or State. The Board's construction inspectors and ROW representative to the City also work under the Planning and Engineering Manager. Additionally, a database application ensures sewer repair projects are properly permitted and completed within the permit schedule. The Board has personnel raising manholes in city street resurfacing projects.

SECTION III: WATER QUALITY MONITORING
(CD CHAPTER IX)

SECTION III: WATER QUALITY MONITORING

1. Establishing a Plan (CD Paragraph 33)

1.1 Program Development

The *Water Quality Monitoring Program* report was submitted to the EPA on February 28, 2002. Comments regarding the program were received from the EPA on May 30, 2002. MAWSS submitted responses to these comments on June 27, 2002. On December 19, 2003 the EPA accepted the responses and approved the program.

1.2 Program Implementation

The Water Quality Monitoring Program is fully implemented.

A web-based data archive for the Water Quality Monitoring Program has been developed by Barry Vittor & Associates, Inc. (BVA) to present data summaries and to facilitate the downloading of monitoring data.

The data along with a map of sampling locations can be accessed through both the MAWSS website at www.mawss.com/consentdecreedocs.htm and the Barry Vittor & Associates, Inc. website at www.bvaenviro.com. Monitoring data is provided and summarized on a monthly basis.

2. Routine Water Quality Monitoring (CD Paragraph 34)

2.1 Program Development

The procedures for routine water quality monitoring of the Halls Mill, Eslava, Three Mile, Eight Mile, Ziebach, and Muddy Creek drainage basins were included in the *Water Quality Monitoring Program* report.

2.2 Program Implementation

Barry Vittor and Associates, Inc. (BVA) is continuing the biweekly, routine water quality monitoring which was initiated in June 2003. Routine water quality monitoring is currently being conducted at 25 monitoring stations. At each station, water samples for fecal coliform bacteria determination are collected. Additionally, the following water quality parameters are measured using a YSI Multiprobe: Temperature (°C), Dissolved Oxygen (mg/l), Percent Dissolved Oxygen Saturation (%), Salinity (ppt), and pH. Any

SECTION III: WATER QUALITY MONITORING

station identified by BVA with consistently elevated fecal coliform concentrations will be investigated by MAWSS.

Dry background monitoring was completed on October 29, 2003. The data indicated considerable variation in fecal coliform concentrations among the 25 monitoring stations. Station 16 in the Halls Mill drainage had consistently higher fecal coliform counts than other stations in the drainage basin. Investigations in the area conducted by MAWSS found a damaged pipe that was subsequently repaired. A review by BVA of subsequent sampling from Station 16 determined that the repairs successfully lowered fecal coliform concentrations.

Any coliform datum collected from a station during routine (biweekly) monitoring which exceeds the 75th quartile is flagged for further investigative monitoring as set out in the *Water Quality Monitoring Program*. BVA returns to sample these stations on the second day. If concentrations remain high after the second visit, BVA returns five days later. If the initial sample exceeds previous sample levels or the third sampling visit determines that fecal coliform concentrations have not returned to background levels, MAWSS is notified by BVA to investigate the potential problem. BVA will also contact MAWSS when above threshold data are encountered to see if they can be explained by an SSO or other localized spill event. The data collected to date is presented on both the MAWSS website and BVA's website.

Wet background monitoring was completed on June 15, 2004. All 25 stations were sampled four times over a 24 hour period during a major storm event. The wet background data indicated considerable variation in fecal coliform concentrations among the 25 monitoring stations. All 25 monitoring stations exhibited increased levels of fecal coliform concentrations compared to dry background levels. This could indicate a natural build-up during dry conditions, which is washed into streams during rain events. BVA is contemplating the impact of storm drains on the fecal coliform concentrations of streams. Preliminary data indicates that fecal levels in many storm drains can be several times greater than background levels in streams.

Under contract with MAWSS, in 2005, the US Geological Survey published a Scientific Investigations Report 204-5302, Assessment of Water Quality, Benthic Invertebrates, and Periphyton in the Threemile Creek Basin, Mobile, Alabama, 1999-2003. Review of this document indicates that joint investigations with the City of Mobile, looking at both the

sanitary and storm drainage systems, may reveal the best opportunities to improve water quality in this creek. If further review and collaboration with the City of Mobile confirms this possibility, MAWSS will propose in the next quarterly progress report additional changes to the current monitoring program to respond to the new information.

3. Investigative Water Quality Monitoring (CD Paragraph 35)

3.1 Program Development

Investigative water quality monitoring procedures to determine the source of pollution indicated by public complaints or the Routine Water Quality Monitoring Program were included in the *Water Quality Monitoring Program* report.

3.2 Program Implementation

Dye testing of the Three Mile Basin Interceptor was completed in March 2004. It was determined that there were no apparent leaks in the 18-inch or greater trunk lines during dye testing. A full report on the dye testing of the Three Mile Basin Interceptor can be found on both the MAWSS and BVA web sites.

The Eslava Basin was divided into two sections due to its configuration. Dye testing of the 18-inch or greater trunk lines in west section of the Eslava Basin was completed in April 2004. The results indicated a leak in this area. MAWSS was already aware of the leak and was actively repairing the problem at the time of the dye testing. Follow-up dye testing conducted after the repairs were completed confirmed the source of the leak was repaired. This report is available at both the MAWSS and BVA web sites.

Dye testing of the 15-inch or greater trunk lines in the east section of the Eslava Basin was completed in June 2004. It was determined that there were no leaks in the 15-inch or greater trunk lines during dye testing. This report is available at both the MAWSS and BVA web sites. Initial dye testing of the Virginia Street trunk line began in September 2004 and was completed during November 2004. It was determined that there were no apparent leaks in the Virginia Street sewer lines during dye testing. This report is available at both the MAWSS and BVA web sites.

Dye testing of the Milk House Creek Interceptor was initiated in late October 2004 and completed in December 2004. It was determined that there were no apparent leaks in the

18-inch or greater trunk lines during dye testing. This report is available at both the MAWSS and BVA web sites.

4. Water Quality Monitoring for Spill Impact (CD Paragraph 34)

4.1 Program Development

Procedures for water quality monitoring to determine the impact of unpermitted discharges were included in the *Water Quality Monitoring Program* report.

4.2 Program Implementation

Water quality monitoring for spill impact began on February 1, 2004. Once a spill occurs, a spill assessment team of BVA and MAWSS personnel is immediately notified for rapid response to the spill site. If necessary, personnel from the Mobile County Health Department, ADEM, and the EPA are notified and/or consulted.

If the overflow enters waters and is of sufficient magnitude, the spill response team determines the number of downstream stations needed to characterize the spill (dependent on magnitude of spill, stream order and other physical parameters). Immediate water quality and fecal coliform sampling takes place at each station. A YSA Multiprobe is used to collect temperature, dissolved oxygen, percent dissolved oxygen saturation, pH, salinity, and conductivity data at each station.

The information collected during the site assessment will be evaluated to formulate a spill monitoring sampling plan. The spill monitoring plan will consist of further water quality monitoring to gauge the impacts to and recovery of the stream system to background levels. BVA has found that daily follow-up monitoring of spills is not necessary. It has been determined that most spills return to background levels within three to five days. Spill monitoring will now take place on day of the spill and on day five. If a spill does not return to background levels after five days, further monitoring would take place until background levels are reached. Spill assessment data collected during the past quarter can be found on the MAWSS website and BVA's website.

SECTION IV: SUPPLEMENTAL ENVIRONMENTAL PROJECTS (CONSENT DECREE CHAPTER X AND APPENDIX A)

SECTION IV: SUPPLEMENTAL ENVIRONMENTAL PROJECTS

The Board has completed the requirements for all four of the Supplemental Environmental Projects. On January 26, 2005 the Board submitted the SEP 1 Completion Report to the EPA. In the cover letter accompanying the report, the Board provided brief summaries of SEPS 2, 3, and 4. Further information regarding each of the SEPs is provided below.

1. SEP 1: Installation of New Private Residential Service Laterals in Low Income Areas within the Board's Service Area (CD Appendix A, Section I)

The Board has completed SEP 1. Lateral installations were completed on December 19, 2003. $2,000,621.51 (present value) was spent towards the project. A total of 755 laterals were installed.

Ziebach Mini-Basin ZB09, Sub-Basin B (January 31, 2004)

As stated in Paragraph 1.1.2.2 of this status report, an additional $78,650 was allocated to the replacement of a minimum of 39 service laterals in Ziebach Mini-Basin ZB09, Sub-Basin B. $78,650 was spent to replace 29 laterals and investigate 24 others. The number of laterals replaced was less than anticipated because the cost of restoring private property was much higher than expected. A SEP 1 completion report was submitted on January 26, 2005 as required by CD Paragraph 43. The report provides a details of SEP 1 quantities and an itemization of associated costs.

2. SEP 2: Acquisition of Environmentally Valuable Habitat in Mobile County Through the Forever Wild Program (CD Appendix A, Section II)

This SEP required the Board to place $300,000 into an escrow account prior to January 31, 2002, for later distribution to the Alabama Forever Wild Land Trust. On January 25, 2002, the Board deposited $300,000 into an interest bearing escrow account. On May 2, 2003, $300,817.31 was distributed to the Alabama Forever Wild Land Trust.

3. SEP 3: Acquisition of Environmentally Valuable Habitat in Mobile County, with a Preference for Property within the Dog River Watershed Area (CD Appendix A, Section III)

As required by this SEP, MAWSS placed $150,000 in an escrow account for the Alabama Forest Resources Center (AFRC) on January 25, 2002. On November 7, 2002 Mobile Bay

Watch requested approval from the US Justice Department for disbursement of $120,000 to the AFRC. On November 22, 2002, the US Justice Department approved the request. Subsequently, on November 27, 2002, the Board transferred $120,000 to the Alabama Forest Resources Center. The remaining funds in the escrow account were not requested by the AFRC during the time period required. Consequently, the remaining funds in the account, $30,985.60, were distributed to the Alabama Forever Wild Land Trust for acquisition of property in the Dog River watershed.

4. SEP 4: Creation and Maintenance of a Publicly Available Database of Water Quality Monitoring in the Mobile Delta (CD Appendix A, Section IV)

This SEP required the Board to place $50,000 into an escrow account prior to January 31, 2002, for later distribution to Mobile Bay Watch. On January 25, 2002 MAWSS deposited $50,000 into an escrow account for this SEP. On February 2, 2004, MAWSS transferred funds in the amount of $50,089.35 from the SEP 4 escrow account to Mobile Bay Watch for the purpose of developing a water quality database.

SECTION V: CIVIL PENALTIES
(CONSENT DECREE CHAPTER XI)

SECTION V: CIVIL PENALTIES

1. Penalties to the United States (CD Paragraph 53)

$99,000 plus interest was electronically transferred from MAWSS to the US Justice Department on April 22, 2002 to fulfill the United States Civil Penalty requirements of the Consent Decree.

2. Penalties to the State of Alabama (CD Paragraph 53)

A certified check for $15,000 plus interest was sent certified mail to the Alabama Attorney General's Office on April 22, 2002 to fulfill the State of Alabama Civil Penalty requirements of the Consent Decree.

APPENDIX A-1: SSO AND UNPERMITTED DISCHARGE TABLES (CD PARAGRAPH 98)

APPENDIX A-1: SSO AND UNPERMITTED DISCHARGE TABLES

Table 1: Sanitary Sewer Overflows **Not Reaching Waters** of the State or United States (April 1, 2005 through June 30, 2005)

Related to Force Majeure Events

Related to Severe Natural Events (see Section II, 2.2.1)

OCCURANCE ID	COLLECTION SYSTEM	DISCHARGE DATE	CAUSE OF DISCHARGE	DURATION (HOURS)	ESTIMATED VOLUME (GAL.)	DISCHARGE SOURCE	DISCHARGE LOCATION	CORRECTIVE ACTION
099	SMITH	04/05/05	BLOCKAGE (GREASE)	1.25	80	MANHOLE	2914 BERKLEY AVE	PLACE ON CLEANING CYCLE
100	WILLIAMS	04/05/05	BLOCKAGE (GREASE)	2	120	MANHOLE	3851 GOVERNMENT BLVD	PLACE ON CLEANING CYCLE
101	WILLIAMS	04/06/05	BREAK	1.5	900	MANHOLE	3016 BROOKLINE DR	NO FURTHER ACTION
118	SMITH	04/11/05	BLOCKAGE (GREASE)	3.5	30	MANHOLE	2225 CRAFT CT	PLACE ON CLEANING CYCLE
119	SMITH	04/13/05	BREAK	2.75	170	FORCE MAIN	4275 BLACKWELL DR	POINT REPAIR
120	WILLIAMS	04/14/05	BREAK	10	600	MANHOLE	2601 CHARLESTON OAKS DR E	POINT REPAIR
150	WILLIAMS	05/03/05	3RD PARTY-BREAK	0.25	2	FORCE MAIN	6397 DAUPHIN ISLAND PKY	POINT REPAIR
153	WILLIAMS	05/06/05	3RD PARTY-BREAK	3	100	FORCE MAIN	5681 HWY 90	POINT REPAIR
154	SMITH	05/11/05	BLOCKAGE (ROOTS)	1	250	MANHOLE	5452 OLD SHELL RD	INSTALL MAIN LINE LINER
157	WILLIAMS	05/19/05	BLOCKAGE (GREASE)	15	5	MANHOLE	306 AZALEA RD	POINT REPAIR
160	SMITH	05/20/05	BLOCKAGE (GREASE)	0.75	50	MAIN LINE	1915 EOLINE ST	INSTALL MAIN LINE LINER
161	WILLIAMS	05/21/05	BLOCKAGE (GREASE)	0.5	15	PUBLIC SERVICE	2661 RALSTON RD	PLACE ON CLEANING CYCLE
162	DECENTRALIZED	05/22/05	3RD PARTY-BREAK	4.5	10	FORCE MAIN	13551 HARDEN COURT	POINT REPAIR
163	WILLIAMS	05/23/05	BLOCKAGE (GREASE)	0.5	60	MANHOLE	958 SENECA ST	POINT REPAIR
164	DECENTRALIZED	05/24/05	BREAK	1	10	FORCE MAIN	JAMES COPELAND DR LOT 209	POINT REPAIR
165	WILLIAMS	05/26/05	BREAK	0.5	600	MAIN LINE	1170 NEWBURY LN W	POINT REPAIR
167	WILLIAMS	06/05/05	BLOCKAGE (ROOTS)	0.25	20	MANHOLE	2101 KNOLLWOOD DR	POINT REPAIR
169	WILLIAMS	06/07/05	3RD PARTY-BREAK	1	200	FORCE MAIN	7323 DAUPHIN ISLAND PKWY N	POINT REPAIR
171	WILLIAMS	06/08/05	BLOCKAGE (GREASE)	1	30	SERVICE	2901 PLEASANT VALLEY RD	PLACE ON CLEANING CYCLE
174	WILLIAMS	06/11/05	BREAK	1	120	FORCE MAIN	3811 GULF CREEK CT	POINT REPAIR
175	WILLIAMS	06/12/05	BREAK	4	240	FORCE MAIN	7360 THEODORE DAWES RD	POINT REPAIR
179	ZIEBACH	06/15/05	3RD PARTY-BYPASS PUMP FAILURE	4.75	560	MANHOLE	4218 DAUPHIN ISLAND PKWY	ADDRESSED BYPASS PUMP REQUIREMENTS WITH CONTRACTOR

APPENDIX A-1: SSO AND UNPERMITTED DISCHARGE TABLES

Table 2: Unpermitted Discharges **Reaching** Waters of the State or United States (April 1, 2005 through June 30, 2005)

Related to Force Majeure Events
Related to Severe Natural Events (see Section II, 2.2.1)

OCCURANCE ID	COLLECTION SYSTEM	DISCHARGE DATE	CAUSE OF DISCHARGE	DURATION (HOURS)	ESTIMATED VOLUME (GAL.)	DISCHARGE SOURCE	DISCHARGE LOCATION	FLOW DESTINATION (STREAM)	CORRECTIVE ACTION
42	WILLIAMS	4/1/2005	INFIL/INFLOW	3	900	MANHOLE	1710 GULFFIELD DR	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
43	WILLIAMS	4/1/2005	INFIL/INFLOW	5.25	4725	MANHOLE	GULFFIELD DR W	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
44	WILLIAMS	4/1/2005	INFIL/INFLOW	5.25	3150	MANHOLE	1710 N GULFFIELD DR	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
45	WILLIAMS	4/1/2005	INFIL/INFLOW	6	36000	MANHOLE	1908 KENTWOOD DR	DOG RIVER	CONDUCT I/I REHAB IN AREA
46	WILLIAMS	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	2301 PEEK CT	DOG RIVER	CONDUCT I/I REHAB IN AREA
47	WILLIAMS	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	2331 DOG RIVER DR	DOG RIVER	CONDUCT I/I REHAB IN AREA
48	WILLIAMS	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	1724 DOGRIVER DR	DOG RIVER	CONDUCT I/I REHAB IN AREA
49	WILLIAMS	4/1/2005	INFIL/INFLOW	12	7200	MANHOLE	CLEARMONT AND DEMOUY	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
50	WILLIAMS	4/1/2005	INFIL/INFLOW	12	7200	MANHOLE	120 DEMOUY ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
51	WILLIAMS	4/1/2005	INFIL/INFLOW	3	9000	MANHOLE	OLD SHELL RD	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
52	WILLIAMS	4/1/2005	INFIL/INFLOW	12	7200	MANHOLE	CLEARMONT AND KENAN ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
53	WILLIAMS	4/1/2005	INFIL/INFLOW	8	3600	MANHOLE	MOHAWK ST AND ELIZABETH ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
54	WILLIAMS	4/1/2005	INFIL/INFLOW	12	4800	MANHOLE	MOHAWK ST & ELIZABETH ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
55	WILLIAMS	4/1/2005	INFIL/INFLOW	6	36000	MANHOLE	916 DUVAL ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
56	WILLIAMS	4/1/2005	INFIL/INFLOW	6	36000	MANHOLE	BROAD ST @ 1-10	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
57	WILLIAMS	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	1251 BASCOMB	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
58	WILLIAMS	4/1/2005	INFIL/INFLOW	5.5	30000	MANHOLE	150 CATHERINE ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
59	WILLIAMS	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	1255 BALTIMORE ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
60	WILLIAMS	4/1/2005	INFIL/INFLOW	3	1650	MANHOLE	399 LAKEVIEW DR W	MILKHOUSE CREEK	CONDUCT I/I REHAB IN AREA
61	WILLIAMS	4/1/2005	INFIL/INFLOW	3	18000	MANHOLE	1362 RIDGE RD	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
62	WILLIAMS	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	1270 BUCKER RD E (REAR)	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
63	WILLIAMS	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	1254 W BUCKER RD (BEHIND)	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
64	WILLIAMS	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	1256 BUCKER RD W	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
65	WILLIAMS	4/1/2005	INFIL/INFLOW	3	9000	MANHOLE	1100 GIMON CIR W (REAR)	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
66	WILLIAMS	4/1/2005	INFIL/INFLOW	3	18000	MANHOLE	1100 GIMON CIR W	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
67	WILLIAMS	4/1/2005	INFIL/INFLOW	7	21000	MANHOLE	1100 GIMON CIR	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
68	WILLIAMS	4/1/2005	INFIL/INFLOW	5	30000	MANHOLE	766 JOHNSTON AVE AT DITCH	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
69	WILLIAMS	4/1/2005	INFIL/INFLOW	3	18000	MANHOLE	1612 HURTEL ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
70	WILLIAMS	4/1/2005	INFIL/INFLOW	3	18000	MANHOLE	1150 GHENT ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
71	WILLIAMS	4/1/2005	INFIL/INFLOW	3	18000	MANHOLE	HOUSTON ST AND DUVAL	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA

APPENDIX A-1: SSO AND UNPERMITTED DISCHARGE TABLES

Table 2 Continued: Unpermitted Discharges Reaching Waters of the State or United States (April 1, 2005 through June 30, 2005)

Related to Force Majeure Events

Related to Severe Natural Events (see Section II, 2.2.1)

OCCURANCE ID	COLLECTION SYSTEM	DISCHARGE DATE	CAUSE OF DISCHARGE	DURATION (HOURS)	ESTIMATED VOLUME (GAL.)	DISCHARGE SOURCE	DISCHARGE LOCATION	FLOW DESTINATION (STREAM)	CORRECTIVE ACTION
72	WILLIAMS	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	257 ISLAND CT	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
73	WILLIAMS	4/1/2005	INFIL/INFLOW	6	42000	MANHOLE	CLUB	BOLTON BRANCH	CONDUCT I/I REHAB IN AREA
74	WILLIAMS	4/1/2005	INFIL/INFLOW	6	27000	MANHOLE	MCVAY AND NAVCO RD	BOLTON BRANCH	CONDUCT I/I REHAB IN AREA
75	WILLIAMS	4/1/2005	INFIL/INFLOW	6	36000	MANHOLE	1452 NAVCO RD	BOLTON BRANCH	CONDUCT I/I REHAB IN AREA
76	WILLIAMS	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	MCVAY AND NAVCO RD	BOLTON BRANCH	CONDUCT I/I REHAB IN AREA
77	SMITH	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	BIZZEL AVENUE	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
78	SMITH	4/1/2005	INFIL/INFLOW	6	7200	MANHOLE	LAKE DR - TRICENTENNIAL PARK	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
79	SMITH	4/1/2005	INFIL/INFLOW	6	7200	MANHOLE	TRICENTENNIAL PARK @ LAKE DR	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
80	SMITH	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	67 MONTEREY ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
81	SMITH	4/1/2005	INFIL/INFLOW	2	1200	MANHOLE	GOVERNMENT ST AND BREAMWOOD ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
82	SMITH	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	LOURDES CIRCLE AND TONLOURS DR	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
83	SMITH	4/1/2005	INFIL/INFLOW	3	18000	MANHOLE	MILL AND MCKINNEY	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
84	SMITH	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	SIENA VISTA DR (DEAD END)	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
85	SMITH	4/1/2005	INFIL/INFLOW	14	8400	MANHOLE	467 RIDGE DR E	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
86	SMITH	4/1/2005	INFIL/INFLOW	14	8400	MANHOLE	462 RIDGE DR S	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
87	SMITH	4/1/2005	INFIL/INFLOW	14	8400	MANHOLE	466 RIDGE RD W	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
88	SMITH	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	GOODWILL AVENUE	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
89	SMITH	4/1/2005	INFIL/INFLOW	2.5	12000	MANHOLE	2914 BERKLEY AVENUE	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
90	SMITH	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	104 SAGE AVE	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
91	SMITH	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	SAGE AVE AND ORLEANS ST (INTERSECTION)	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
92	ZIEBACH	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	GULFFIELD DR	ROBINSON BAYOU	CONDUCT I/I REHAB IN AREA
93	ZIEBACH	4/1/2005	INFIL/INFLOW	6	3600	MANHOLE	4151 BAYFRONT RD	PERCH CREEK	CONDUCT I/I REHAB IN AREA
94	ZIEBACH	4/1/2005	INFIL/INFLOW	3	18000	MANHOLE	4137 MOREHAVEN	PERCH CREEK	CONDUCT I/I REHAB IN AREA
95	WILLIAMS	4/1/2005	INFIL/INFLOW	1.75	1800	MANHOLE	880 ABILENE DR E	PIERCE CREEK	CONDUCT I/I REHAB IN AREA
96	SMITH	4/2/2005	BLOCKAGE (ROOTS)	2.25	675	MANHOLE	1500 TELEGRAPH RD	HOG BAYOU	INSTALL MAIN LINE LINER
97	WILLIAMS	4/4/2005	BLOCKAGE (GREASE)	3.25	9650	MANHOLE	1601 KNOLLWOOD DR - BLDG #4	SPENCER BRANCH	INSTALL MAIN LINE LINER
98	WILLIAMS	4/5/2005	BREAK	5.5	33000	MAIN LINE	3016 BROOKLINE DR W	SPRING CREEK	POINT REPAIR
102	WILLIAMS	4/6/2005	INFIL/INFLOW	8	14000	MANHOLE	MCVAY DR @ CREEK	BOLTON BRANCH	CONDUCT I/I REHAB IN AREA
103	WILLIAMS	4/6/2005	INFIL/INFLOW	8	24000	MANHOLE	MCVAY DR @ CREEK BEHIND DUGOUT CLUB	BOLTON BRANCH	CONDUCT I/I REHAB IN AREA
104	WILLIAMS	4/6/2005	INFIL/INFLOW	8	9600	MANHOLE	1100 GIMON CIR @ REAR	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA

APPENDIX A-1: SSO AND UNPERMITTED DISCHARGE TABLES

Table 2 Continued: Unpermitted Discharges Reaching Waters of the State or United States (April 1, 2005 through June 30, 2005)

Related to Force Majeure Events
Related to Severe Natural Events (see Section II, 2.2.1)

OCCURANCE ID	COLLECTION SYSTEM	DISCHARGE DATE	CAUSE OF DISCHARGE	DURATION (HOURS)	ESTIMATED VOLUME (GAL.)	DISCHARGE SOURCE	DISCHARGE LOCATION	FLOW DESTINATION (STREAM)	CORRECTIVE ACTION
105	WILLIAMS	4/6/2005	INFIL/INFLOW	10	12000	MANHOLE	1901 OLD SHELL RD	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
107	SMITH	4/6/2005	INFIL/INFLOW	12.75	19125	MANHOLE	CONTI/DEMOUY	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
108	WILLIAMS	4/6/2005	INFIL/INFLOW	10	30000	MANHOLE	ELIZABETH @ MOHAWK ST	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
109	SMITH	4/6/2005	INFIL/INFLOW	10	15000	MANHOLE	RIDGE RD E	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
110	WILLIAMS	4/6/2005	INFIL/INFLOW	11.5	17250	MANHOLE	120 DEMOUY AVE	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
111	WILLIAMS	4/6/2005	INFIL/INFLOW	11.5	6900	MANHOLE	113 DEMOUY AVE	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
112	WILLIAMS	4/6/2005	INFIL/INFLOW	7.75	49000	MANHOLE	1100 GIMON CIR @ CREEK	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
113	WILLIAMS	4/6/2005	INFIL/INFLOW	11.5	6900	MANHOLE	100 DEMOUY AVE	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
106	WILLIAMS	4/7/2005	INFIL/INFLOW	11	13200	MANHOLE	766 JOHNSTON AVE	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
114	SMITH	4/7/2005	INFIL/INFLOW	2	600	MANHOLE	2668 MILL ST	THREE MILE CREEK	CONDUCT I/I REHAB IN AREA
115	WILLIAMS	4/9/2005	BREAK	3	9000	MAIN LINE	3016 BROOKLINE DR W	SPRING CREEK	POINT REPAIR
116	SMITH	4/12/2005	INFIL/INFLOW	4	1200	MANHOLE	CONTI ST @ DEMOUY AVE	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
117	SMITH	4/12/2005	INFIL/INFLOW	3.5	1025	MANHOLE	LAUREL ST @ DAVITT	ESLAVA CREEK	CONDUCT I/I REHAB IN AREA
123	WILLIAMS	4/18/2005	BLOCKAGE (GREASE)	1.75	2500	MANHOLE	4820 GOVERNMENT BLVD (HWY 90)	SPRING CREEK	PLACE ON CLEANING CYCLE
124	WILLIAMS	4/23/2005	BLOCKAGE (GREASE)	1.25	375	MANHOLE	230 REDWOOD ST	MONTLIMAR CREEK	PLACE ON CLEANING CYCLE
125	ZIEBACH	4/28/2005	BREAK	1	300	MAIN LINE	3316 MELODY LN	PAYNE'S CREEK	POINT REPAIR
126	SMITH	4/30/2005	INFIL/INFLOW	13.5	16200	MANHOLE	462 RIDGE RD S	THREE MILE CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
127	SMITH	4/30/2005	INFIL/INFLOW	12.75	3850	MANHOLE	RIDGE RD S/RIDGE W	THREE MILE CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
128	WILLIAMS	4/30/2005	INFIL/INFLOW	2.75	6600	MANHOLE	BROAD ST @ I-10	ESLAVA CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
129	WILLIAMS	4/30/2005	INFIL/INFLOW	5.25	3100	MANHOLE	1710 GULFFIELD DR N	ESLAVA CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
130	WILLIAMS	4/30/2005	INFIL/INFLOW	2.75	2475	MANHOLE	1908 KENTWOOD LN	DOG RIVER	CONDUCT INFLOW/INFIL REHAB IN AREA
131	WILLIAMS	4/30/2005	INFIL/INFLOW	6.25	11250	MANHOLE	1901 OLD SHELL RD	THREE MILE CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
132	WILLIAMS	4/30/2005	INFIL/INFLOW	7.5	16100	MANHOLE	MOHAWK ST AND ELIZABETH ST	ESLAVA CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
133	WILLIAMS	4/30/2005	INFIL/INFLOW	9.5	11500	MANHOLE	MURRAY ST AND DEMOUY AV	ESLAVA CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
134	WILLIAMS	4/30/2005	INFIL/INFLOW	2.25	1400	MANHOLE	CATHERINE ST AND FARMER ST	ESLAVA CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
135	WILLIAMS	4/30/2005	INFIL/INFLOW	8.5	20400	MANHOLE	4200 RIVERIE DU CHIEN RD	MOORE CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
136	WILLIAMS	4/30/2005	INFIL/INFLOW	5.25	12800	MANHOLE	3975 DEMETROPOLIS RD	MOORE CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
137	WILLIAMS	4/30/2005	INFIL/INFLOW	10	15000	MANHOLE	5255 MAUDELAYNE DR N	SPRING CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
138	WILLIAMS	4/30/2005	INFIL/INFLOW	10.75	22575	MANHOLE	1100 GIMON CIR W	ESLAVA CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
139	WILLIAMS	4/30/2005	INFIL/INFLOW	9	16050	MANHOLE	NAVCO RD @ MCVAY	BOLTON BRANCH	CONDUCT INFLOW/INFIL REHAB IN AREA

APPENDIX A-1: SSO AND UNPERMITTED DISCHARGE TABLES

Table 2 Continued: Unpermitted Discharges Reaching Waters of the State or United States (April 1, 2005 through June 30, 2005)

Related to Force Majeure Events
Related to Severe Natural Events (see Section II, 2.2.1)

OCCURANCE ID	COLLECTION SYSTEM	DISCHARGE DATE	CAUSE OF DISCHARGE	DURATION (HOURS)	ESTIMATED VOLUME (GAL.)	DISCHARGE SOURCE	DISCHARGE LOCATION	FLOW DESTINATION (STREAM)	CORRECTIVE ACTION
140	SMITH	4/30/2005	INFIL/INFLOW	1.75	550	MANHOLE	202 MONTEREY ST	ESLAVA CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
141	SMITH	4/30/2005	INFIL/INFLOW	9	2625	MANHOLE	LAUREL ST AND DAVITT AV	ESLAVA CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
142	SMITH	4/30/2005	INFIL/INFLOW	9	10500	MANHOLE	LAUREL ST AND DAVITT AV	ESLAVA CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
143	SMITH	4/30/2005	INFIL/INFLOW	9	19600	MANHOLE	CONTI ST AND DEMOUY AV	ESLAVA CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
144	SMITH	4/30/2005	INFIL/INFLOW	2.5	3000	MANHOLE	316 SIENA VISTA DR (DEAD END)	THREE MILE CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
145	ZIEBACH	4/30/2005	INFIL/INFLOW	1.25	400	MANHOLE	4137 MORHAVEN DR	PERCH CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
146	ZIEBACH	4/30/2005	INFIL/INFLOW	2	550	MANHOLE	4150 BAYFRONT RD	PERCH CREEK	CONDUCT INFLOW/INFIL REHAB IN AREA
147	WILLIAMS	5/1/2005	BLOCKAGE (GREASE)	7	8400	MANHOLE	7561 QUENCY DR	SECOND CREEK	PLACE ON CLEANING CYCLE
148	WILLIAMS	5/1/2005	BLOCKAGE (GREASE)	3	900	MANHOLE	5928 THELES DR	MILKHOUSE CREEK	POINT REPAIR
151	WILLIAMS	5/4/2005	3RD PARTY-BREAK	1.5	425	MANHOLE	1201 MONTLIMAR DR	MONTLIMAR CREEK	POINT REPAIR
152	WILLIAMS	5/5/2005	BLOCKAGE (GREASE)	0.25	300	MAIN LINE	1475 GOLDFINCH DR	ESLAVA CREEK	PLACE ON CLEANING CYCLE
155	SMITH	5/12/2005	BLOCKAGE (GREASE)	3.5	4620	MAIN LINE	764 STANTON RD	THREE MILE CREEK	PLACE ON CLEANING CYCLE
156	WILLIAMS	5/12/2005	BLOCKAGE (GREASE)	2	240	MANHOLE	3018 AIRPORT BLVD	ESLAVA CREEK	PLACE ON CLEANING CYCLE
158	SMITH	5/20/2005	BLOCKAGE (GREASE)	1	400	MAIN LINE	1956 ST. STEPHENS RD	THREE MILE CREEK	POINT REPAIR
166	SMITH	6/3/2005	BLOCKAGE (GREASE)	1.25	4800	MANHOLE	1900 SCHILLINGER RD N	CLEAR CREEK	PLACE ON CLEANING CYCLE
168	SMITH	6/6/2005	BLOCKAGE (GREASE)	3	2700	MANHOLE	6029 SCOTTSDALE DR	EIGHTMILE CREEK	PLACE ON CLEANING CYCLE
170	WILLIAMS	6/8/2005	BREAK	0.75	225	MAIN LINE	PANORAMA DR (DITCH)	SPENCER CREEK	POINT REPAIR
172	WILLIAMS	6/9/2005	BLOCKAGE (GREASE)	3	3600	MAIN LINE	6816 GARDEN RIDGE CT	MILKHOUSE CREEK	POINT REPAIR
173	ZIEBACH	6/10/2005	3RD PARTY-BYPASS PUMP FAILURE	0.5	15000	MANHOLE	DAUPHIN ISLAND PKWY - PERCH CREEK LS	PERCH CREEK	ADDRESSED BYPASS PUMP REQUIREMENTS WITH CONTRACTOR
176	DECENTRALIZED	6/13/2005	BREAK	1	1560	FORCE MAIN	4971 MYRICK @ COPELAND ISLAND	ISLAND BRANCH CREEK	POINT REPAIR
178	ZIEBACH	6/15/2005	3RD PARTY-BYPASS PUMP FAILURE	4.75	560	MANHOLE	4137 MORHAVEN DR	PERCH CREEK	ADDRESSED BYPASS PUMP REQUIREMENTS WITH CONTRACTOR
180	WILLIAMS	6/26/2005	BLOCKAGE (SAND)	2	360	MANHOLE	6551 MARY KNOLL DR	MILKHOUSE CREEK	PLACE ON CLEANING CYCLE
181	WILLIAMS	6/27/2005	BLOCKAGE (GREASE)	1	120	MANHOLE	PROVIDENCE ST & SPRINGHILL AVE	THREE MILE CREEK	POINT REPAIR

APPENDIX A-2: ANALYSIS OF WASTEWATER COLLECTION AND TRANSMISSION SYSTEMS AND WWTFS

APPENDIX A-2: ANALYSIS OF WASTEWATER COLLECTION AND TRANSMISSION SYSTEMS AND WWTFS

1. Introduction

The following semi-annual analysis of wastewater collection and transmission systems and wastewater treatment facilities meets the requirements set forth in Paragraph 23 of the CD. Overflow, rehabilitation, operations, and maintenance information from July 1, 2004 through June 30, 2005 was included in the analysis.

2. Trends in Rehabilitation, Operation, and Maintenance

2.1 Gravity Line Maintenance

2.1.1 Hydraulic Cleaning

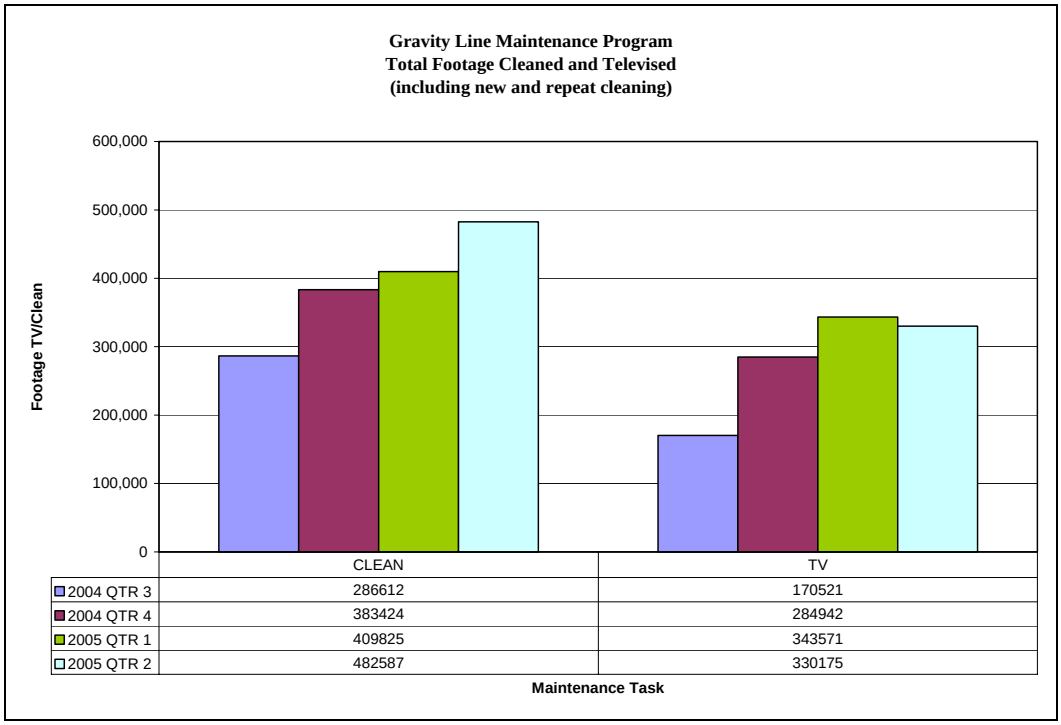
Approximately 1,562,400 linear feet (LF) of gravity sewer was cleaned since July 1, 2004. Of this total, approximately 909,700 LF of gravity sewer was cleaned for the first time. Excluding repeat cleaning of lines, 51 percent of the entire collection system has been cleaned since implementation of the program in 2000. Figure 2.1.1-1 shows the amount of cleaning and video inspection completed during the past four quarters.

MAWSS continues to place a high priority on the cleaning and television inspection of lines not previously cleaned or televised. Over 58 percent of the sewer lines cleaned during the past year had not previously been cleaned. While the focus was shifted towards sewer lines not previously cleaned or televised, MAWSS crews continued to maintain areas of the collection systems that require high frequency cleaning schedules such as inverted siphons, sand traps, and overflow locations.

The Board continues to use contractors to clean and inspect large diameter sewer lines. During the past quarter, MAWSS contracted the hydraulic cleaning of 19 large diameter inverted siphons. This work removed over 350 tons of debris. Additionally, the Board completed hydraulic cleaning and television inspection of 4,500 LF of the upper portion of the Three Mile Interceptor sewer. In the Ziebach basin, contractors completed cleaning of 5,640 LF of the 30-inch and 36-inch Perch Creek Interceptor sewer, removing approximately 300 tons of debris.

APPENDIX A-2: ANALYSIS OF WASTEWATER COLLECTION AND TRANSMISSION SYSTEMS AND WWTFS

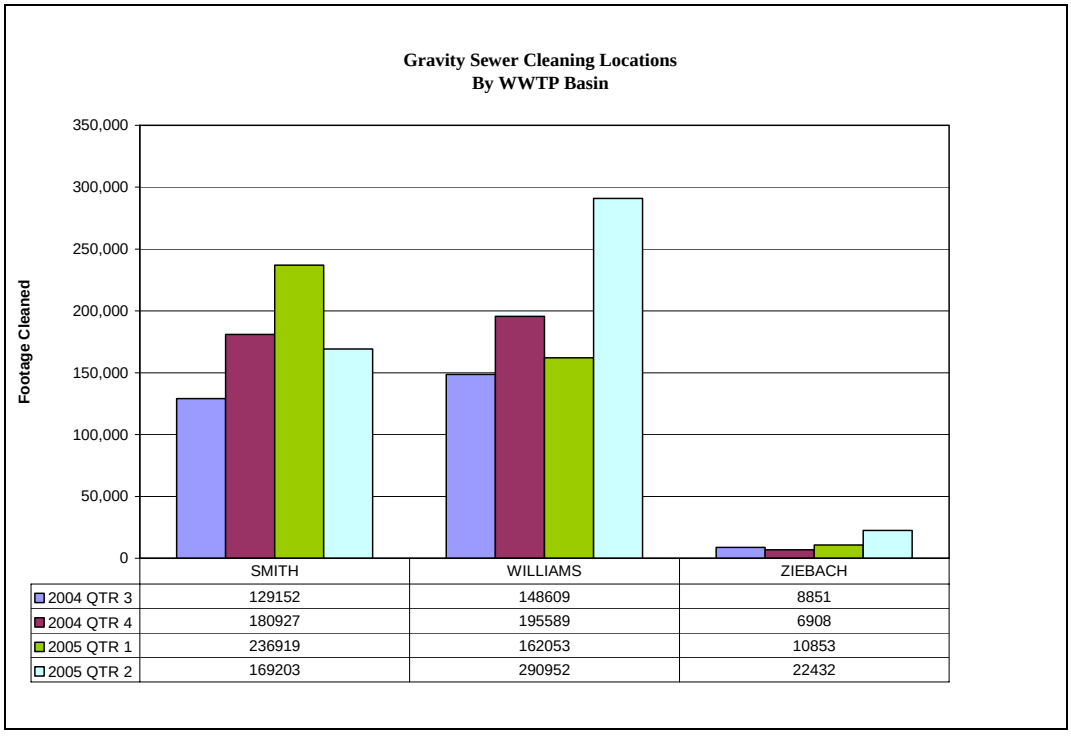
Figure 2.1.1-1: Footage of Gravity Sewer Cleaned and Televised



	CLEAN	TV
2004 QTR 3	286612	170521
2004 QTR 4	383424	284942
2005 QTR 1	409825	343571
2005 QTR 2	482587	330175

Figure 2.1.1-2 shows the distribution of cleaning efforts in each WWTP basin.

Figure 2.1.1-2: Location of Gravity Line Cleaning



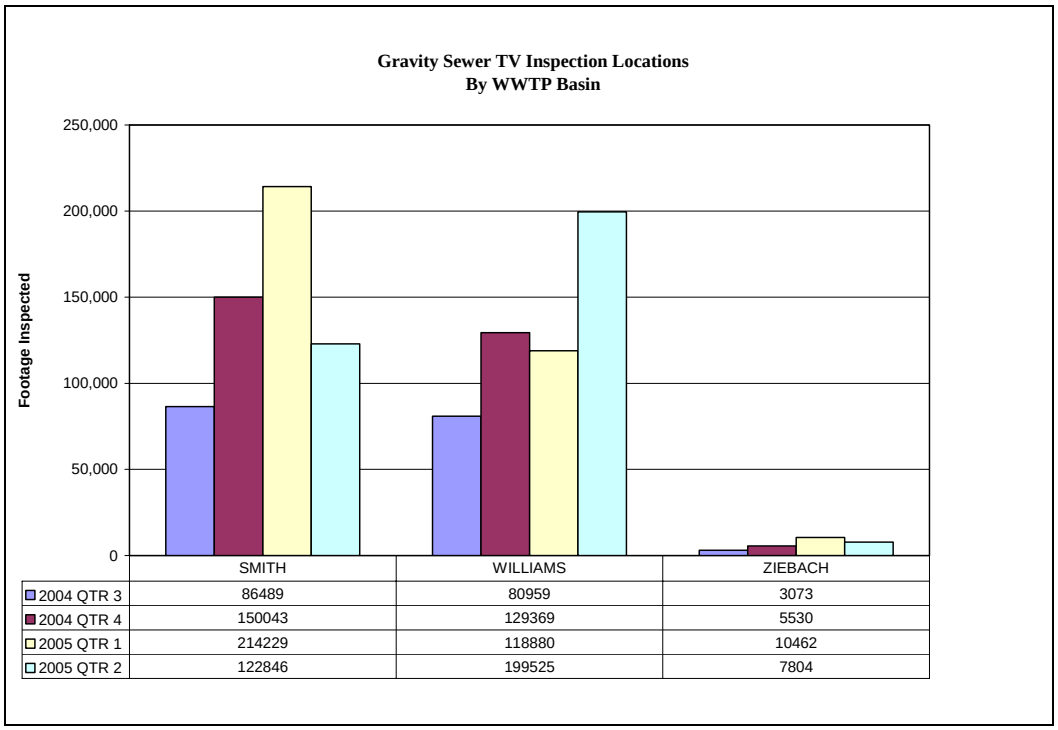
	SMITH	WILLIAMS	ZIEBACH
2004 QTR 3	129152	148609	8851
2004 QTR 4	180927	195589	6908
2005 QTR 1	236919	162053	10853
2005 QTR 2	169203	290952	22432

2.1.2 Closed Circuit Television Inspections

In addition to hydraulic cleaning, over 1,129,200 LF of gravity sewer was inspected by closed circuit TV since July 1, 2004. TV inspection activities followed the increasing quarterly trend of hydraulic cleaning (see Figure 2.1.1-1). Since implementation of the program, approximately 43 percent of the collection systems have been inspected by TV.

Figure 2.1.2-1 shows distribution of TV inspection activities in each WWTP basin.

Figure 2.1.2-1: Location of Gravity Line TV Inspection



	SMITH	WILLIAMS	ZIEBACH
2004 QTR 3	86489	80959	3073
2004 QTR 4	150043	129369	5530
2005 QTR 1	214229	118880	10462
2005 QTR 2	122846	199525	7804

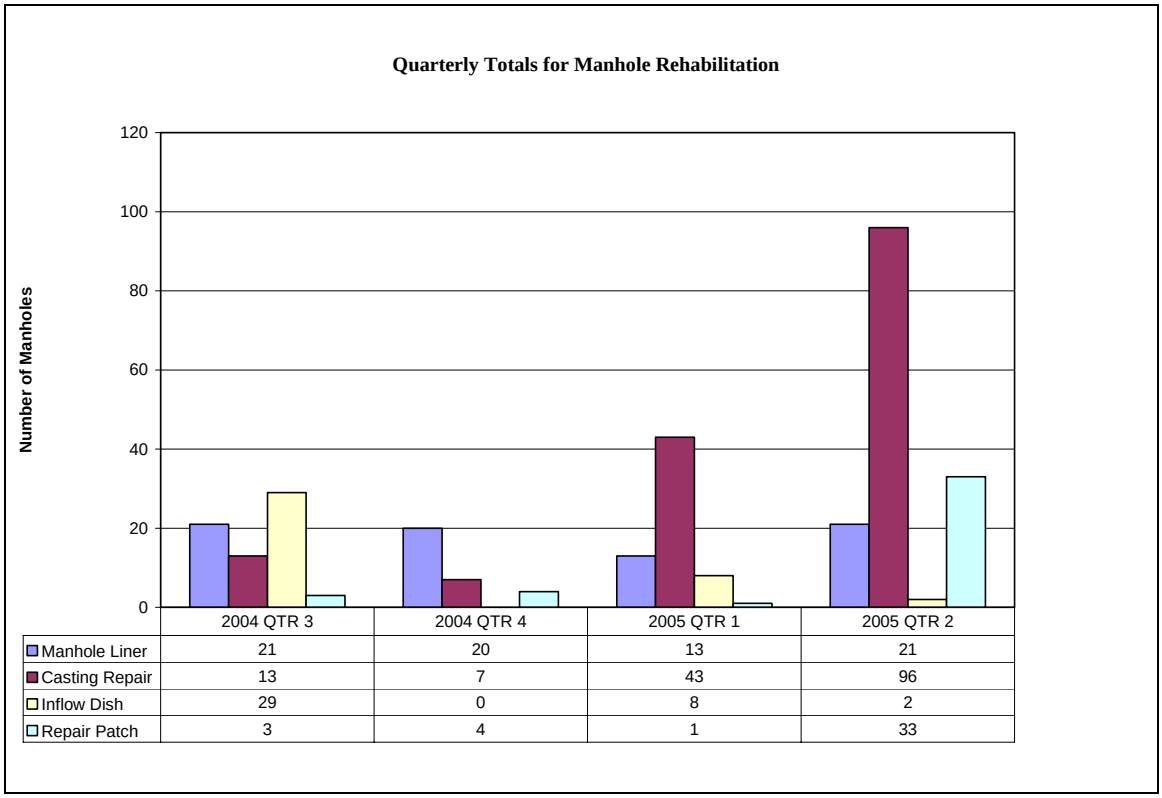
2.2 Collection System Rehabilitation

2.2.1 Manhole Rehabilitation

Manhole rehabilitation activities such as installation of inflow dishes, applying repair patches, and sealing or replacement of manhole castings are being completed by in-house personnel in order to address I/I sources. The Board has an annual contract for manhole repair and rehabilitation. Manhole rehabilitation is being performed by the contractor as needed. Figure 2.2.1-1 shows quarterly totals for manhole rehabilitation.

APPENDIX A-2: ANALYSIS OF WASTEWATER COLLECTION AND TRANSMISSION SYSTEMS AND WWTFS

Figure 2.2.1-1: Totals for Manhole Rehabilitation



	2004 QTR 3	2004 QTR 4	2005 QTR 1	2005 QTR 2
Manhole Liner	21	20	13	21
Casting Repair	13	7	43	96
Inflow Dish	29	0	8	2
Repair Patch	3	4	1	33

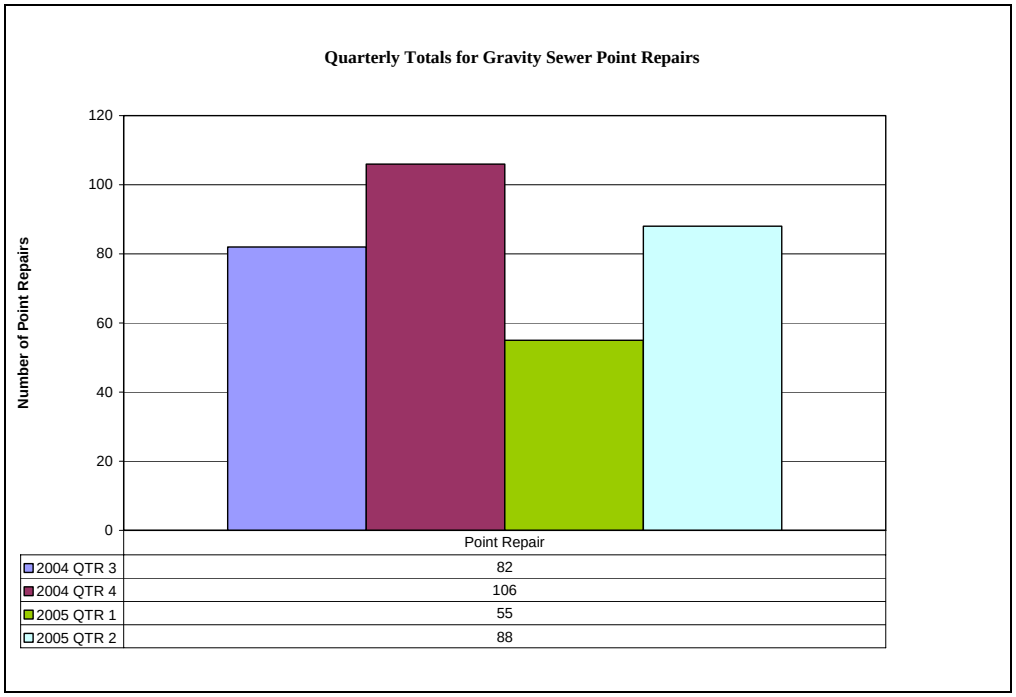
2.2.2 Gravity Sewer Rehabilitation

In January 2005, Insituform, Inc. began an annual contract to install cured-in-place liners in gravity sewer lines. Over 36,000 LF of sewer was lined during the first half of the year. This total represents a substantial increase in lining efforts from 2004.

In addition to this work, contractor and in-house crews have completed 331 point repairs since July 1, 2004. Figure 2.2.2-1 shows quarter totals for point repairs completed by the annual contractor and in-house forces.

APPENDIX A-2: ANALYSIS OF WASTEWATER COLLECTION AND TRANSMISSION SYSTEMS AND WWTFS

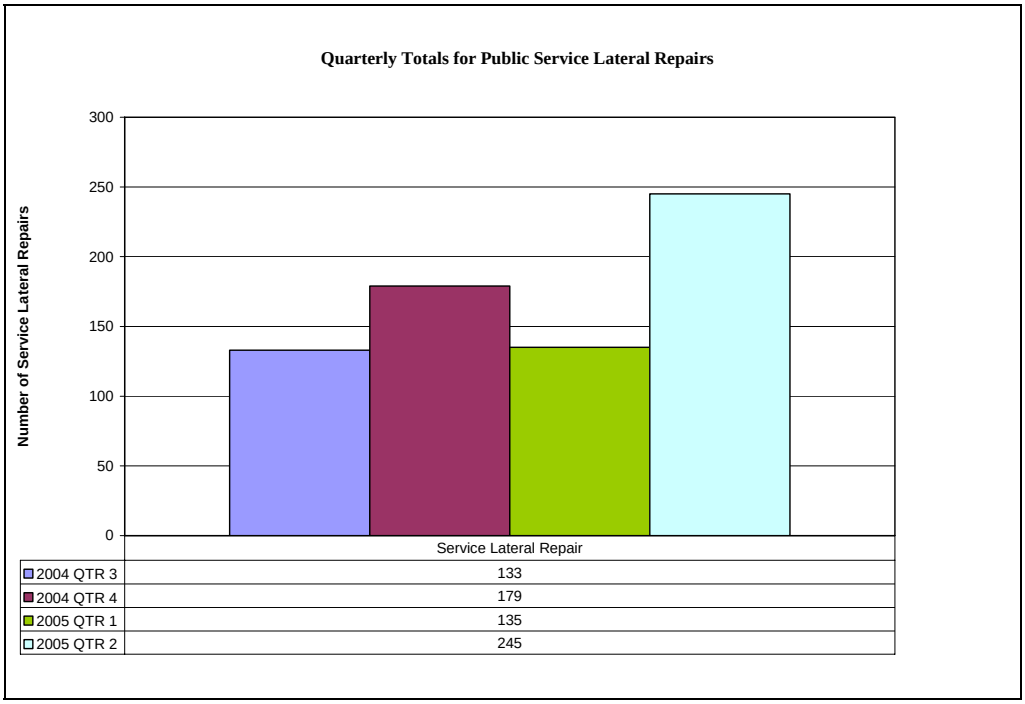
Figure 2.2.2-1: Totals Gravity Sewer Point Repairs



2.2.3 Service Lateral Rehabilitation

A total of 692 public service laterals were repaired or replaced by contractors and in-house forces. Figure 2.2.3-1 shows quarterly totals for public service lateral repairs.

Figure 2.2.3-1: Totals Service Lateral Repairs



APPENDIX A-2: ANALYSIS OF WASTEWATER COLLECTION AND TRANSMISSION SYSTEMS AND WWTFS

3. Analysis of Unpermitted Discharges and SSOs

3.1 Trend in Number of and Volume of Unpermitted Discharges and SSOs

A total of 266 sanitary sewer overflows (SSOs) were reported since July 1, 2004. Of this amount, 155 (37%) were identified as having reached waters of the State or United States, and as a result, were classified as Unpermitted Discharges. Of the 155 SSOs reaching waters, 89 are considered the result of Force Majeure Events - leaving 67 SSOs reaching waters in non-Force Majeure circumstances.

In the preceding annual reporting period of January 1 through December 31, 2004, 87 SSOs reached waters in non-Force Majeure circumstances. In the reporting period of July 1 through June 30, 2004, 128 SSOs reached waters in non-Force Majeure circumstances.

2005 has been an unusually active year in Mobile for very heavy rain events and named storms. These storms have had a major impact on the number of wet weather related SSOs occurring in the MAWSS service area. MAWSS has requested Force Majeure status for five events since the start of the Consent Decree, three of which are in 2005. The date of the Force Majeure letters sent to EPA and a brief summary of each event is shown below.

<u>July 23, 2003</u>

Between May 18 and July 1, 29.63 inches of rainfall were recorded at Mobile's Regional Airport. According to Dr. Bill Williams, Director of the Coastal Weather Research Center of the University of South Alabama, this rainfall was a once in 100 year event, the second largest rainfall recorded in a forty-four day period since records were first kept in 1871. Force Majeure was requested for May 18, June 6, and June 30 which had rainfall of 6.67, 7.93, and 7.55 inches in a 24 hour period, respectively.

<u>October 27, 2004</u>

Hurricane Ivan came ashore near Pensacola Florida causing rain, damaging winds, widespread power outages and downed trees throughout Mobile.

<u>April 6, 2005</u>

Widespread flooding on the dates of March 31 and April 1, 2005 resulted from nearly 11 inches of rain falling in areas of Mobile within a 24 hour period. This rainfall was a once in 50 year event.

APPENDIX A-2: ANALYSIS OF WASTEWATER COLLECTION AND TRANSMISSION SYSTEMS AND WWTFS

April 7, 2005

On April 7, 3.68 inches of rain fell on Mobile when creeks and ground water levels were still elevated from the April 1 rain. The additional flooding caused by this rain was attributed to the April 1 rain event.

May 2, 2005

On April 29 and 30, 6.19 inches of rain fell in Mobile with intensities of 3.57 inches in one hour and 5.0 inches in two hours. The rain intensities were consistent with 25 year and 50 year events.

Figure 3.1-1 and 3.1-3 illustrates the cumulative totals of rainfall along with total overflows and total Unpermitted Discharges by week for each years since 2002. Figures3.1-2 and 3.1-4 show the same information with the exclusion of Force Majeure events. The SSO charts without Force Majeure related SSOs are considered to be more indicative of the collection system's performance during dry weather and most rain events.

Excluding the Unpermitted Discharges from the Force Majeure events, the yearly trend in total overflows for 2005 is on track to be the lowest in the last three years. Annual trends in overflow totals continue to follow trends in yearly rainfall totals. Increased flow rates due to I/I may be a secondary cause of overflows by compounding the impact of other problems such blockages and structural failures. Excluding the Force Majeure events, the relatively unchanging slope of the 2005 charted data suggests that the collection system is less responsive to rain events. This indicates that rehabilitation efforts have helped to reduce infiltration and inflow entering the collection system.

APPENDIX A-2: ANALYSIS OF WASTEWATER COLLECTION AND TRANSMISSION SYSTEMS AND WWTFS

Figure 3.1-1: Cumulative Overflow Totals by Week of the Year Including Force Majeure Events

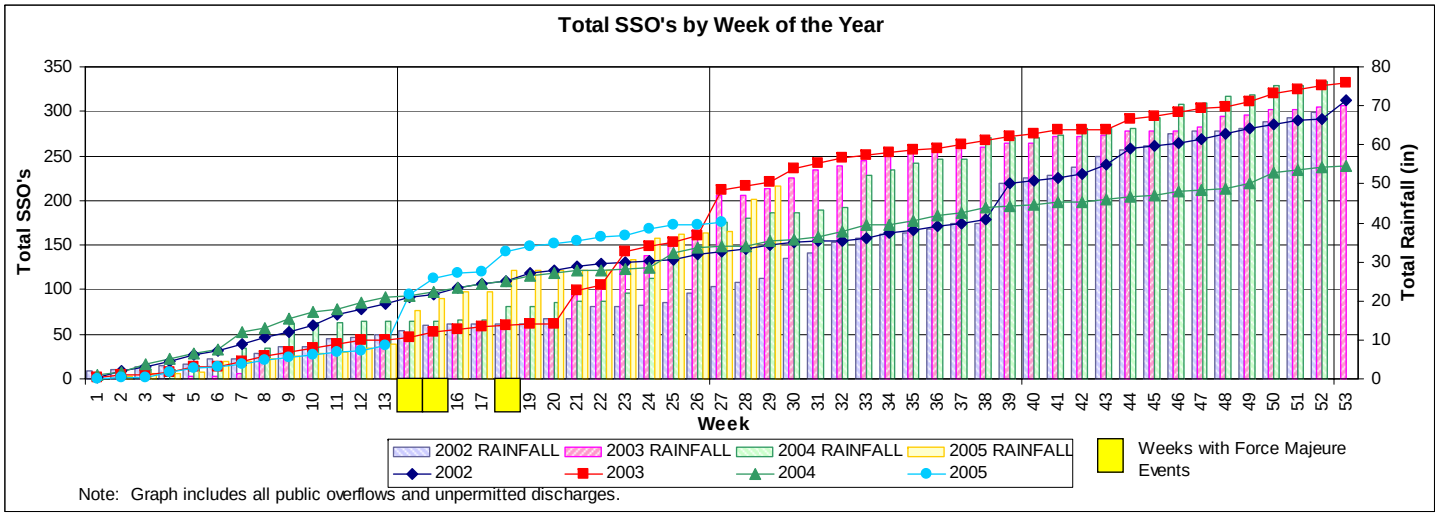


Figure 3.1-2: Cumulative Overflow Totals by Week of the Year Excluding Force Majeure Events

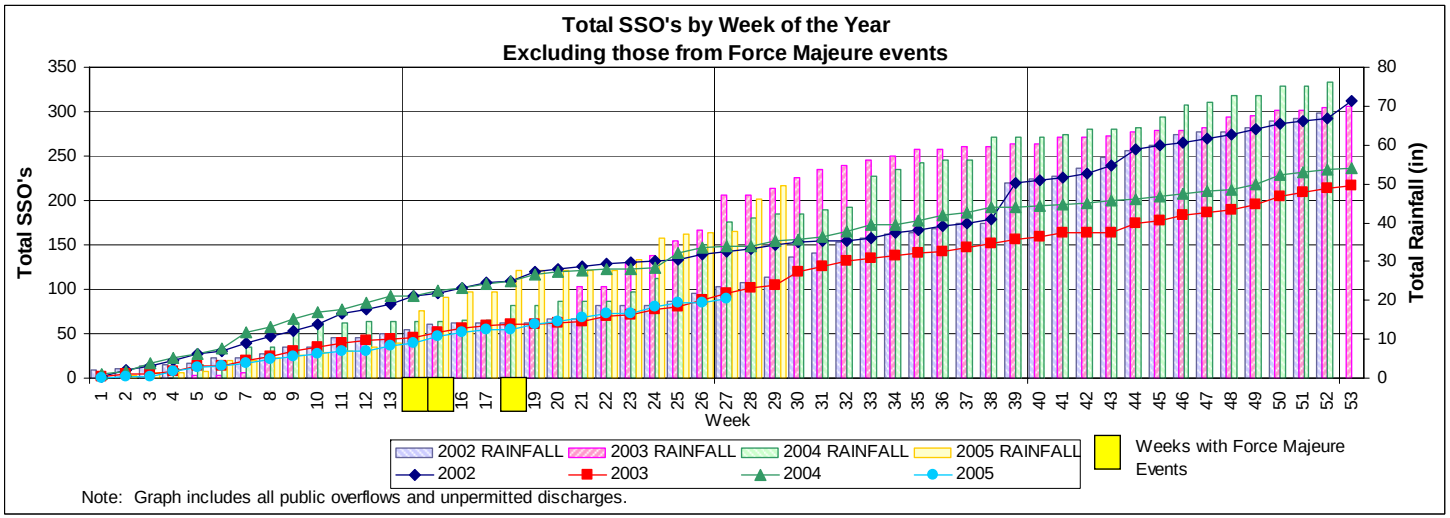


Figure 3.1-3: Cumulative Unpermitted Discharge Totals by Week of the Year Including Force Majeure Events

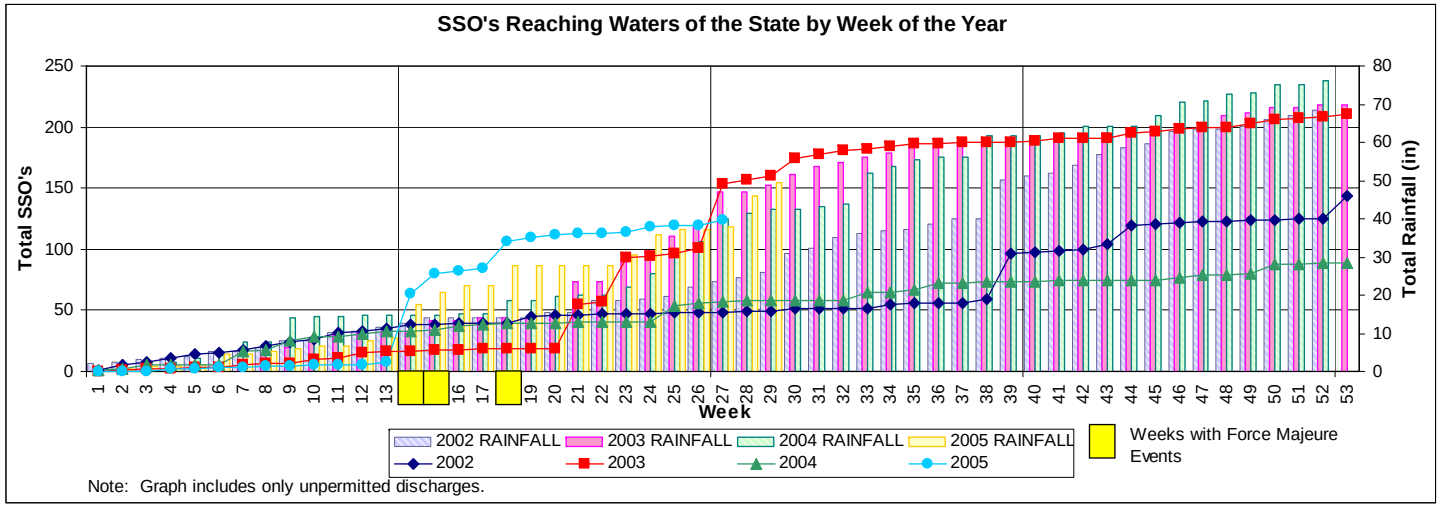


Figure 3.1-4: Cumulative Unpermitted Discharge Totals by Week of the Year Excluding Force Majeure Events

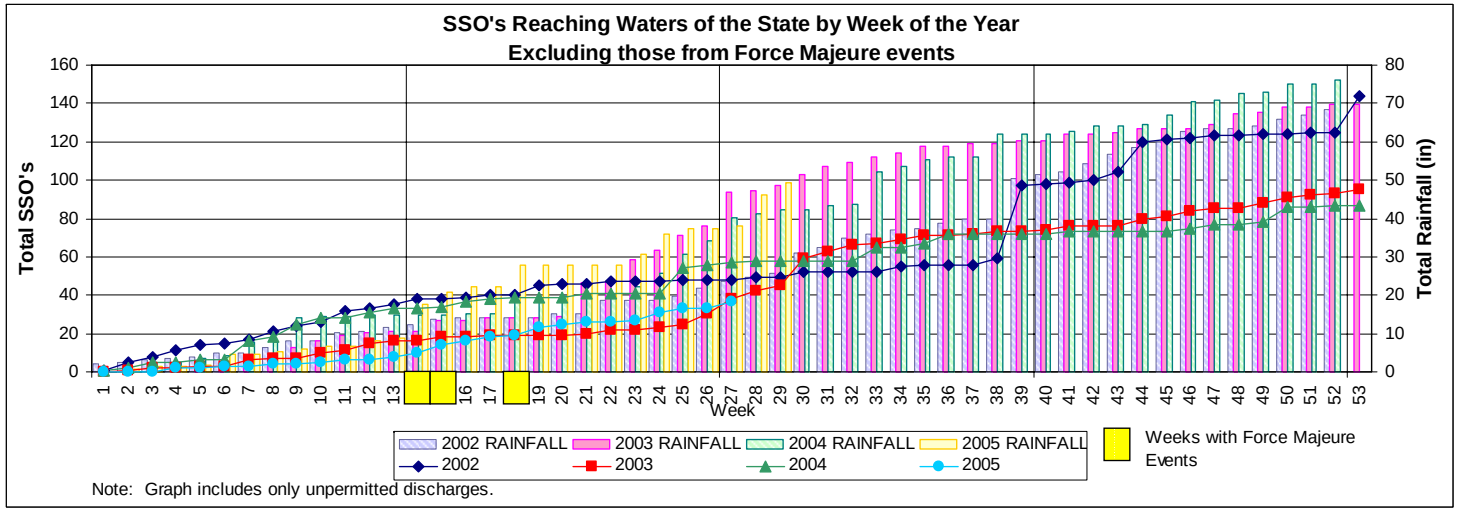


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Figure 3.1-5 shows the quarterly overflow totals for 2004.

Figure 3.1-5: Trend in Number of Unpermitted Discharges and SSOs

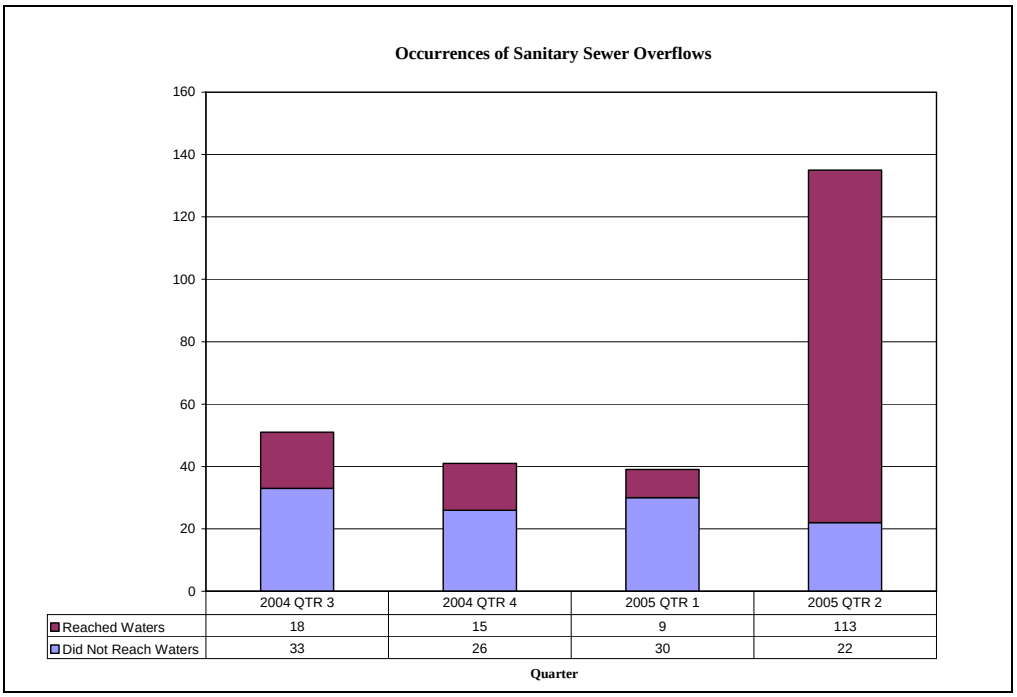
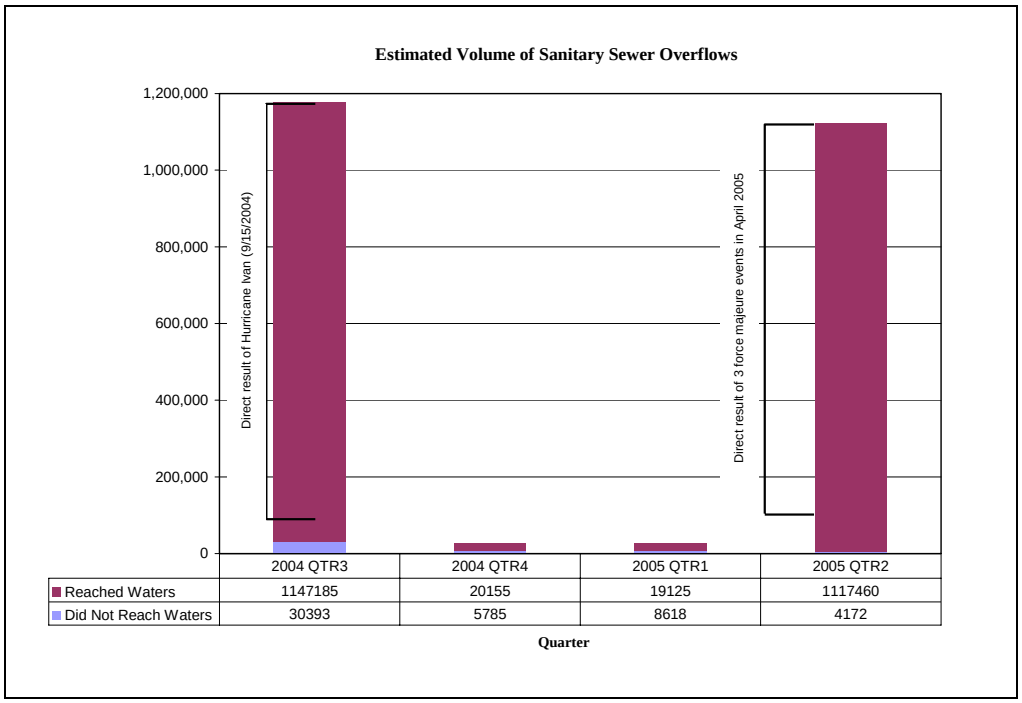


Figure 3.1-6 shows the quarterly total estimated volumes of reported overflows during 2004.

Figure 3.1-6: Trend in Volume of Unpermitted Discharges and SSOs



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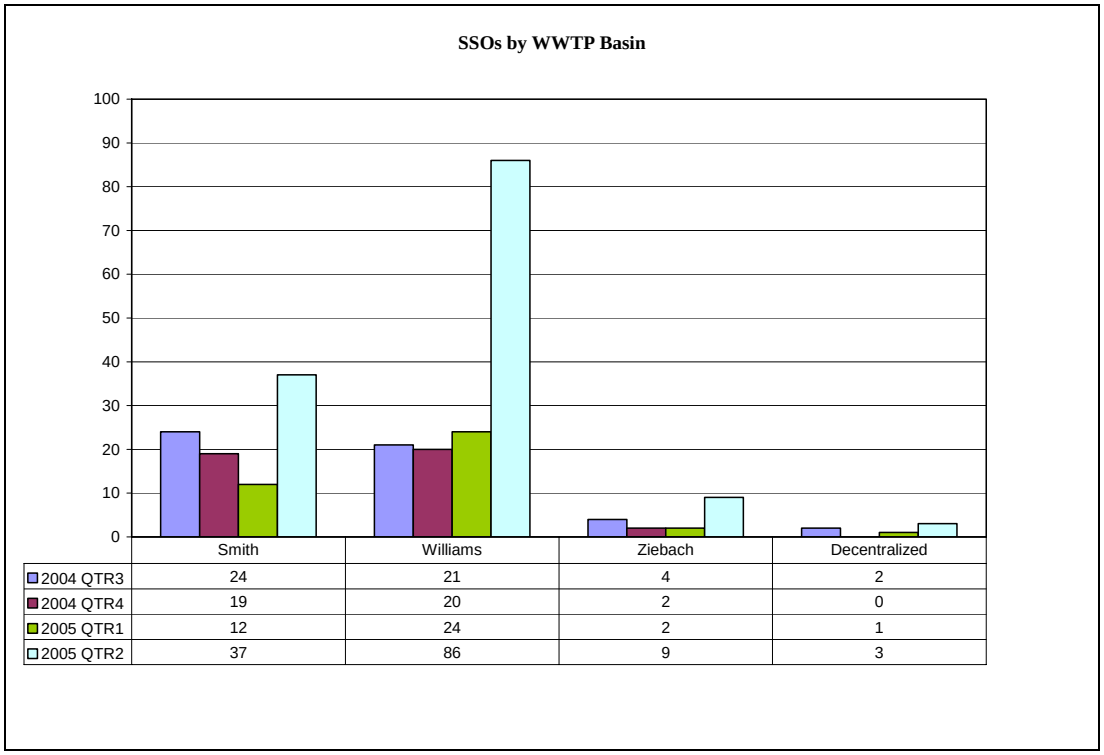
3.2 Trend in the Location of Unpermitted Discharges and Overflows

A quarterly total of SSOs per WWTP basin is provided below. The second quarter of 2005 shows a dramatic increase in overflows in each basin as a result of the three April Force Majeure events. During these events, 24 Unpermitted Discharges were reported in the Smith WWTP basin, 59 Unpermitted Discharges were reported in the Williams WWTP basin, and 5 Unpermitted Discharges were reported in the Ziebach WWTP basin.

Figure 3.2-1: Trend in Location of Unpermitted Discharges and SSOs



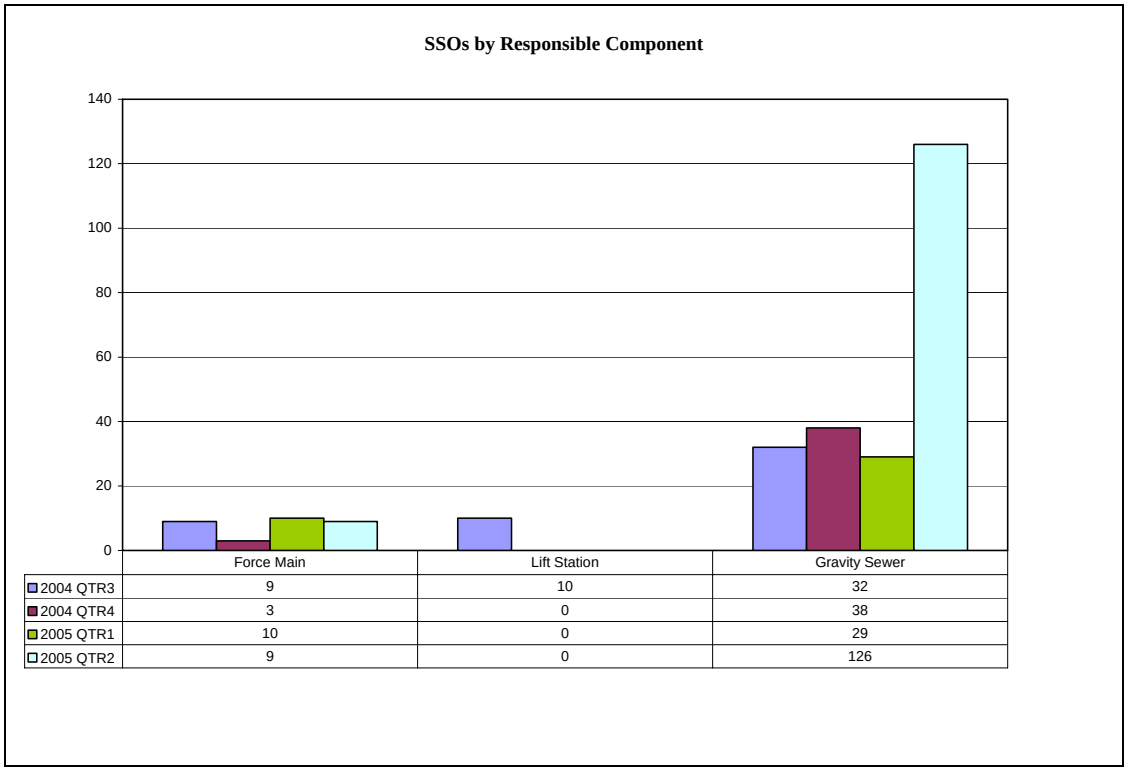
	Smith	Williams	Ziebach	Decentralized
2004 QTR3	24	21	4	2
2004 QTR4	19	20	2	0
2005 QTR1	12	24	2	1
2005 QTR2	37	86	9	3

3.3 Trend in the System Component Responsible for Unpermitted Discharges and SSOs

Figure 3.3-1 identifies the distribution of SSOs between force mains, lift stations, and gravity sewers per quarter. Except for lift station failures due to power outages from Hurricane Ivan during the third quarter of 2004, no further overflows have been reported due to lift station failures. Overflows within the gravity collection system increased significantly as a result of the April 2005 Force Majeure events.

APPENDIX A-2: ANALYSIS OF WASTEWATER COLLECTION AND TRANSMISSION SYSTEMS AND WWTFS

Figure 3.3-1: Trend in System Components Responsible for Unpermitted Discharges and SSOs



	Force Main	Lift Station	Gravity Sewer
2004 QTR3	9	10	32
2004 QTR4	3	0	38
2005 QTR1	10	0	29
2005 QTR2	9	0	126

3.4 Trend in the Suspected Cause of Unpermitted Discharges and Overflows

Figure 3.4-1 identifies the trend in causes of Unpermitted Discharges and SSOs for 2004. Only the overflow totals resulting from infiltration and inflow show a sharp increase. Again, this can be attributed to the three Force Majeure events. For the other causes, the quarterly totals tend to be lower than those recorded for previous years.

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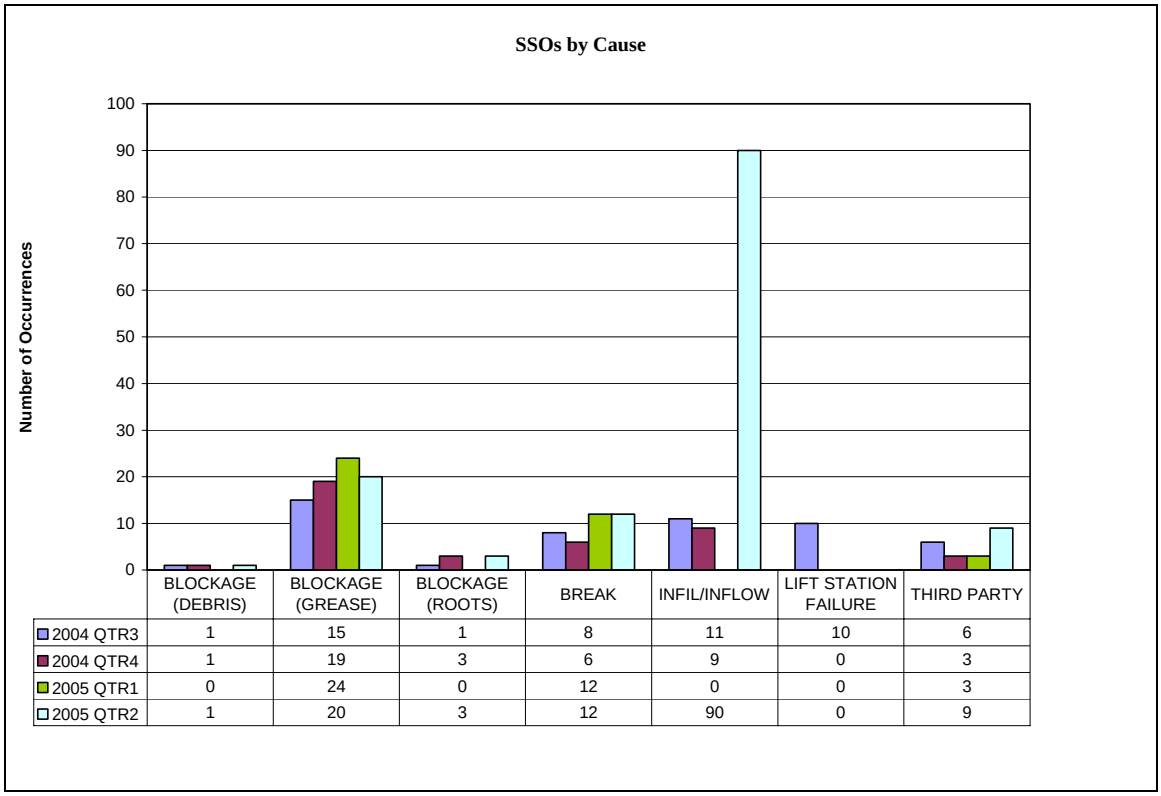
Figure 3.5-1*: Trend in Causes of Unpermitted Discharges and SSOs*



	BLOCKAGE (DEBRIS)	BLOCKAGE (GREASE)	BLOCKAGE (ROOTS)	BREAK	INFIL/INFLOW	LIFT STATION FAILURE	THIRD PARTY
2004 QTR3	1	15	1	8	11	10	6
2004 QTR4	1	19	3	6	9	0	3
2005 QTR1	0	24	0	12	0	0	3
2005 QTR2	1	20	3	12	90	0	9

4. Conclusions

The Board has continued with improvements in its operations and maintenance programs that began in 2004.

Cleaning and television inspection efforts are targeted in areas where no prior cleaning or television inspection had been conducted. The Board has expanded its hydraulic cleaning forces to 10 combination cleaning trucks and one jet truck. Further, four new video units, including one with the ability to televise service laterals from within the main sewer line, are also now in use. A contractor is currently using an in-line camera to inspect all gravity sewer lines greater than or equal to 12-inches in diameter that have not previously been televised. The Board has also contracted the cleaning of several large diameter interceptor sewers including the upper portion of the Three Mile Creek Interceptor sewer and the Perch Creek Interceptor sewer. Additionally, the Board contracted the cleaning of several large diameter inverted siphons. This work has removed large amounts of debris, significantly improving capacity.

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During the first half of 2005, increased funding has allowed the Board to expand rehabilitation efforts for manholes, main lines, and service lines. Already, twice as much gravity sewer has been lined during the first half of 2005 as was completed in 2004.

The Grease Control Program which began in October 2002 has had a significant impact on the reduction in grease related overflows. In the past year, 78 grease related overflows were recorded. This is the lowest annual total of grease related overflows since the start of the Grease Control Program in 2002. During the past year, the Board has continued with the extensive monitoring and compliance efforts developed under the Grease Control Program. Additionally, improvements have been made in regard to public awareness of the adverse effects of grease on collection system performance. The Grease Control Program Manual supplied to Food Service Facilities has been revised and educational door hangers are being distributed in areas where significant amounts of grease have been identified during video inspection.

The Board is also continuing to address secondary causes of grease related overflows. Video information from grease related overflows is reviewed to determine if pipe defects are allowing grease to accumulate. Defects such as roots and dropped joints are being corrected through point repairs or cured-in-place-pipe (CIPP). Sewer lines with shallow grades or sags that are accumulating grease remain on a frequent cleaning schedule until the lines can be re-laid at a steeper grade, if possible.

The Board has also made significant improvements to lift station capacity, operations and maintenance. Backup systems such as diesel pumps and backup generators have been installed at several lift stations. Thirteen backup systems were installed in 2004 and another thirteen are scheduled for installation this year. Additional efforts and resources will be pursued to further address widespread power outages that can result from hurricanes.

Several lift stations have received major upgrades. The Virginia Street Lift Station Upgrade Project and the Florida Street Lift Station Relocation Project were completed at the end of 2003. Construction of upgrades to the Halls Mill Lift was completed during the third quarter of 2004. Upgrades to the Eslava Creek Lift Station were completed in July 2005. The Faye Lane Lift Station has been upgraded and its force main has been rerouted downstream of the Eslava Creek Lift Station, removing up to 4 MGD from the Eslava Creek Lift Station during heavy rain events. Construction of the new Ridge Road Lift Station to address overflows in that area is expected to be completed by the end 2005.

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Operations and maintenance of lift stations have also improved. A combination cleaning truck has been permanently assigned to the cleaning of lift station wet wells.

All of these efforts have reduced overflows. Excluding Force Majeure events, yearly totals of reported Unpermited Discharges have been trending downward for the last four years. The Board is also identifying future improvements needed to further reduce overflows.

Currently, the Board has construction projects underway that will complete all projects identified in the Consent Decree programs submitted by the Board. By the end of the year, completion of upgrades to the Perch Creek Lift Station will allow flows in the Ziebach Basin to be transmitted to the Williams WWTP. Once the upgrades are complete, the Ziebach WWTP will be removed from service.

The Board has authorized borrowing $25 million a year for the next 4 years through the State Revolving Fund (SRF) to be used for system improvements. These funds will be borrowed as needed. A recent 10% increase in the water and wastewater rate that took place January 1, 2005 is expected to support repayment of SRF loans.

I/I reduction efforts will focus on the Eslava Creek Basin, the Conti and Demouy area of the Three Mile Basin, and the Ziebach Basin.

Although the Board has experienced significant reductions in overflows unrelated to Force Majeure Events, it is not known if overflows will be reduced to a satisfactory level by the termination date of the Consent Decree, September 30, 2007. Consequently, the Board continues to evaluate the possibility of requesting an extension of the Consent Decree deadline after evaluating SSO reductions in 2005.