Albuquerque Bernalillo County Water Utility Authority

Agenda

Albuquerque/Bernalillo County
Government Center
One Civic Plaza
Albuquerque, NM 87102

Councillor Ken Sanchez, Chair
Commissioner Wayne Johnson, Vice-Chair
Mayor Richard J. Berry
Commissioner Art De La Cruz
Councillor Rey Garduño
Commissioner Maggie Hart Stebbins
Councillor Trudy E. Jones
Trustee Pablo Rael, Ex Officio Member

Wednesday, April 18, 2012 **5:00 PM** **Vincent E. Griego Chambers**

1. CALL TO ORDER

2. INVOCATION/PLEDGE OF ALLEGIANCE

3. APPROVAL OF MINUTES

4. PROCLAMATIONS AND AWARDS

A. Quarterly Employee Awards

5. PUBLIC COMMENT

6. ANNOUNCEMENTS/COMMUNICATIONS

A. Next Scheduled Meeting - May 23, 2012 at 5:00 pm

B. 2011 Water Quality Report

7. INTRODUCTION (FIRST READING) OF LEGISLATION

A.	**WUA R-12-9**	Establishing One-Year Objectives for the Water Utility Authority in Fiscal Year 2013 to Meet Five-Year Goals
B.	**WUA R-12-10**	Appropriating Funds for Operating the Water Authority for Fiscal Year Beginning July 1, 2012 and Ending June 30, 2013
C.	**WUA R-12-11**	Appropriating Funds for the Capital Implementation Program for the Water Authority for the Fiscal Year Beginning July 1, 2012 and Ending June 30, 2013
D.	**WUA R-12-12**	Authorizing an Agreement with Eagle Vista LLC for the 9641 Eagle Ranch Road Apartment Complex for Water and Sewer Service

8. CONSENT AGENDA (Any Board Member may request that a Consent Agenda item be placed under Approvals)

9. APPROVALS

A. **WUA R-12-7** Adopting the Drought Management Strategy as the Water Authority's Drought Management Policy

10. OTHER BUSINESS

A. KAFB Jet Fuel Spill Remediation Status Report

B. New Water Conservation Goal

C. Water Loss - Non Revenue Water Presentation

11. ADJOURNMENT

Visit Our Website at www.abcwua.org

NOTICE TO PERSONS WITH DISABILITIES: If you have a disability and require special assistance to participate in this meeting, please contact the Authority Office as soon as possible before the meeting date at 768-2500 or by the TTY at 1-800-659-8331.

Albuquerque Bernalillo County
Water Utility Authority

Agenda Item No. 4a

Meeting Date: April 18, 2012
Staff Contact: Judy Bentley, Human Resources Manager

TITLE: Quarterly Employee Awards Third Quarter FY 12

SUMMARY:

Magdalena Bojorquez-Ponce $250.00 Magdalena is the top call taker from October 2011 to December 2011. Her attention to detail and willingness to resolve customer questions and inquires efficiently has placed her performance above that of her fellow team members.

Joe Bailey $300.00 +8 Hours Joe has significantly increased the amount of compost sold. He goes out of his way to resolve customer complaints and keep the public perception of the Water Authority beyond reproach. Joe has been instrumental in analyzing the 503 regulations and preparing the EPA annual report.

Robert Marquez $250.00 Robert's dedication and personal excellence helped him become the top call taker for 2011 at Customer Services. His attention to detail and willingness to resolve customer questions and inquires efficiently has placed his performance above his follow team members.

Lorraine Nunez $500.00 + 24 Hours Lorraine has taken an outdated contract system for our on-call construction work and turned it into a system of several contractors bidding on and rotating the work assigned. Lorraine researched and signed a request for qualifications process which allows the Water Authority to competitively qualify multiple firms which then competitively bid each on-call job as it arises. This process is innovative and saves time and money for the Water Authority. This has allowed for much quicker responses to water issues.

Floyd Pena $300.00 + 8 Hours Floyd recently assisted in the recent Customer Services Division Itron upgrade. The project included an upgrade of software, disassembly of old equipment and assembly and setup of all new equipment, testing of upload and download capabilities. One of Floyd's qualities is responsiveness and untiring work ethic. Floyd is dependable, trustworthy and an extremely competent Information Technology resource to Customer Services Division.

Scott Salvas $250.00 Scott started assisting the Water Reclamation Plant in obtaining an emergency air quality permit to operate the new

COGEN engine and the UV emergency generator. These two facilities are vital to the effective operation of the plant. While concurrently performing his assigned duties as Senior Engineer in Water Plant Operations, Scott performed the required technical reviews, management and coordination activities with the environmental consultant as well regulators and Water Authority stakeholders. Scott utilized his diverse experience in environmental permitting to facility approval. The permit was granted in November 2011.

Richard Torres $250.00 Richard has excellent troubleshooting skills and superior job knowledge. Richard caught on very quickly to the advanced treatment processes and volunteered to work numerous hours of overtime to cover vacancies at the Plant. Richard maintains his work standards at a high level. Richard goes out of his way consistently to make sure the treatment plant stays in compliance with its NPDES Permit. Richard took it upon himself to perform preventative maintenance on all Ultra Violet Facility modules. Richard has shown a strong work ethic and a true commitment to the success of the Plant.

FISCAL IMPACT:
None

Albuquerque Bernalillo County
Water Utility Authority

Agenda Item No. 7a

Meeting Date: April 18, 2012
Staff Contact: Frank Roth, Senior Policy Manager

TITLE: R-12-9 - Establishing One-Year Objectives for the Water Utility Authority in Fiscal Year 2013 to Meet Five-Year Goals

ACTION: First Reading – April 18, 2012; Second Reading – May 23, 2012

Overview of Goal Development

The Water Authority established Five-Year Goals and One-Year Objectives in 2005 to help guide the Water Authority's budget process and address priority issues. In addition, the Water Authority's Budget Ordinance specifies that the Water Authority shall annually review and adopt one-year objectives related to the five year goals for the Water Authority. The Ordinance also states that the Water Authority's operating budget shall be formulated by the Water Authority's Executive Director and be consistent with the goals and objectives, and that they be major factors in determining funding for Water Authority programs and improvements in both the operating and capital improvements budgets.

The Five-Year Goals adopted by the Water Authority are based on American Water Works Association's QualServe business model. The QualServe framework is modeled on using fifteen successful quality achievement programs, including the Malcolm Baldridge National Quality Award Program, the Deming Award, and the International Standards Organization series of quality standards. The model characterizes the work of the typical water and wastewater utility around five business systems:

1. Water Supply and Operations
2. Wastewater Collection and Operations
3. Customer Relations
4. Business Planning and Management
5. Organization Development

The Water Authority has also participated in three AWWA QualServe programs which are designed to help the Water Authority improve operations and/or customer service. The Benchmarking program allows the Water Authority to compare its performance against other utilities. The Self-Assessment program gathers employee's opinions about the Water Authority's operations in order to help determine the Water Authority's current performance level. The Peer Review program is an on-site in-depth review of our Water Authority operations by a team of volunteer utility professionals to help us design and implement improvements.

Overview of One-Year Objectives

The AWWA QualServe programs help the Water Authority to identify gaps in service delivery or performance. The Water Authority's performance measures are used to help monitor the Water Authority's performance and to develop performance targets. With the performance measures being used to identify gaps, the One-Year Objectives which are policy directives from the Water Authority Board are used to close performance or service delivery gaps and improve performance levels. It should be noted that not all One-Year Objectives are tied to performance measures or have a measurable component. Some Objectives are related to completing projects or improving programs. Some of the FY13 Objectives are tied to resources contained in the proposed FY13 Budget. A few of the objectives are carried over from FY12 either because they require more time to complete, or are ongoing issues. Some of the Objectives are tied to the Performance Plan in order to improve operations and/or customer service. The One-Year Objectives are categorized by the Water Authority's Five-Year Goal areas. The Water Authority has developed guiding goal statements for each goal area which explains the long-term desired result for that goal. Below are the FY13 Goals and Objectives.

Summary of FY13 Goals and Objectives

Goal 1: Water Supply and Operations

Provide a reliable, safe, affordable, and sustainable water supply by transitioning to renewable supplies and minimizing long term environmental impacts on the community and natural resources while ensuring the ability of the community to grow in a responsible manner.

1. Complete Ground Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 45% of all maintenance labor hours completed by the end of the 4th Quarter of FY13.
2. Complete Surface Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 30% of all maintenance labor hours completed by the end of the 4th Quarter of FY13.
3. Reduce distribution water loss by locating water leaks from surveying 500 miles of small diameter water lines through conventional leak detection methods and 2,000 miles of small diameter water lines through acoustic leak detection by the end of the 4th Quarter of FY13.
4. Conduct a pilot project on large diameter water line leak detection methods and pipe condition assessment by the end of the 4th Quarter of FY13.
5. Maintain water use at 150 gallons per person per day while obtaining community input on setting a new reduction goal through community meetings, stakeholder meetings and surveys; provide report on community input by the end of 3rd Quarter of FY13 to the Board; and update the Water Conservation Plan by the end of the 4th Quarter of FY13.
6. Complete Partnership for Safe Water – Surface Water Treatment Self-Assessment to optimize water system operations and performance by the end of the 2nd Quarter of FY13.
7. Complete Partnership for Safe Water – Drinking Water Distribution System Self-Assessment to optimize water system operations and performance by the end of the 4th Quarter of FY13.

8. Complete a Preliminary Water Pump Station 10-Year Asset Management Plan to determine the condition of the Water Authority's drinking water pump station facilities by the end of the 2nd quarter of FY13.
9. Complete a Preliminary Water Well 10-Year Asset Management Plan to determine the condition of the Water Authority's drinking water well facilities by the end of the 4th quarter of FY13.

Goal 2: Wastewater Collection and Operations

Provide reliable, safe and affordable wastewater collection, treatment and reuse systems to protect the health of the Middle Rio Grande Valley by safeguarding the regional watershed, minimizing environmental impacts, and returning quality water to the Rio Grande for downstream users.

1. Develop a draft sanitary sewer overflow response plan based on Water Environment Federation best practices and coordinate with other entities and jurisdictions by the end of the 4th Quarter of FY13.
2. Improve operation and maintenance of the sanitary sewer system by implementing the EPA's strategy of Capacity Management Operation Maintenance for managing sanitary sewer overflows; automate the sewer pipe segment evaluation process by developing a tool selection software to determine the appropriate mechanism for maintaining sewer pipelines which can be integrated into the Maximo workorder system by the end of the 4th Quarter of FY13.
3. Integrate video inspections performed on small diameter sanitary sewers into the Maximo workorder system and the GIS by the end of the 1st Quarter of FY13.
4. Televise small diameter sanitary sewer lines and assess the condition of approximately five percent of the system by the end of the 4th Quarter of FY13.
5. Install electrical testing equipment at the major sanitary sewer lift stations to allow safe and reliable testing of the emergency generator systems by the end of the 4th Quarter of FY13.
6. Conduct an assessment and develop strategies to continue minimizing odors at the Southside Reclamation Plant utilizing different methodologies and report quarterly on the effectiveness of each technique through the end of the 4th Quarter of FY13.
7. Limit overall permit excursions to no more than 5 operating discharge permit violations through the end of the 4th Quarter of FY13.
8. Beneficially reuse biosolids by diverting 25% of the biosolids to compost through the end of the 4th Quarter of FY13.
9. Implement the Reclamation Rehabilitation Asset Management Plan by planning, designing and constructing reclamation facility improvements through the end of the 4th Quarter of FY13.
10. Complete Waste Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 30% of all maintenance labor hours completed by the end of the 4th Quarter of FY13.
11. Design and construct a 1 megawatt solar array at the Wastewater Treatment Plant to offset on-peak power imports from the electric utility and have it operational and connected to the plant primary power distribution system by the end of the 4th Quarter of FY13.

Goal 3: Customer Services

Provide quality customer services by communicating effectively, billing accurately, and delivering water and wastewater services efficiently based on understanding the needs and perceptions of our customers and the community at large.

1. Maintain call wait time for all call centers to less than 1 minute, 90 percent of the time to provide effective customer service to customers through the 4th Quarter of FY13.
2. Implement Phase 2 of the Automated Meter Infrastructure (AMI) project to modernize the Water Authority's aging meter infrastructure with smart meters to increase revenue, support conservation efforts, and provide better customer service by the end of the 4th Quarter of FY13.
3. Implement new payment methods for customer billing with Western Union to provide more payment options to customers and improved cash flow by the end of the 4th Quarter of FY13.

Goal 4: Business Planning and Management

Maintain a well planned, managed, coordinated, and financially stable utility by continuously evaluating and improving the means, methods, and models used to deliver services.

1. Expend $31 million in water and wastewater capital rehabilitation and replacement programs to replace aging, high risk assets that are past their useful life by the end of the 4th Quarter of FY13. $1 million shall be dedicated and used for identifying steel water pipes in critical or poor condition and rehabilitating or replacing at least 2 miles of small diameter steel water lines by the end of the 4th Quarter of FY13.
2. Implement Phase I of the Enterprise Resource Planning (ERP) project to integrate and optimize major business management functions by the end of the 4th Quarter of FY13; develop a transition plan to move services that are currently being provided by the City of Albuquerque by the end of the 2nd Quarter of FY13.
3. Continue implementation of mobile devices to operations staff and integrate a GIS solution to optimize workorder flow process through the 4th Quarter of FY13.
4. Develop a strategic plan to update the policies and procedures for the Information Technology Division including upgrading and hosting of major utility applications by the end of the 3rd Quarter of FY13; develop a succession and knowledge management plan to prepare for upcoming retirements in the Division in order to retain critical institutional knowledge by the end of the 3rd Quarter of FY13.
5. Implement GFOA best practices recommendations for the Ten-Year Financial Plan, for increasing the financial capacity of the capital program, and for making progress in reaching the reserve fund goal of one-twelfth of operating expenses by the end of the 4th Quarter of FY13.
6. Continue to develop the integrated water/sewer/reuse master plan by incorporating the Northwest Service area by the end of the 3rd Quarter of FY13; begin water and sewer master planning in the College and Atrisco trunk zones by the end of the 4th Quarter of FY13.
7. Develop a comprehensive energy master plan which should include demand and potential energy reduction measures and costs to implement alternative clean energy sources for use by the Water Authority by the end of the 4th Quarter of FY13.
8. Improve compliance with the Water Authority's Sewer Use and Wastewater Control Ordinance by continuing to inspect and monitor industrial waste permit holders, food establishments, dental offices, and septage haulers; report inspection and monitoring activities and results and the respective compliance rates through weekly, monthly, and quarterly reporting and referencing past performance through the end of the 4th Quarter of FY13.

9. Continue development and implementation of a reporting system for performance metrics at the Water Quality Laboratory (WQL); monitor and report productivity (number of results reported per productive hour) and timeliness (number and percentage of results reported late) on weekly and monthly basis, and in relation to past performance; demonstrate improvement in the productivity of laboratory work through the end of the 4th Quarter of FY13.
10. In conjunction with the Information Technology Division, continue development of a Compliance Division water quality monitoring data repository that will allow Water Authority-wide user access to historical and current analytical results through the end of the 4th Quarter of FY13. .
11. In conjunction with the Information Technology Division, continue development and implementation of the Water Quality Laboratory (WQL) Laboratory Information Management System (LIMS) through the end of the 4th Quarter of FY13.
12. Continue to monitor emerging State and Federal Safe Drinking Water Act (SDWA) and Clean Water Act (CWA) regulations to identify and assess potential impacts on the Water Authority through the end of the 4th Quarter of FY13.
13. Continue development for implementation of an Environmental Monitoring Program to improve the reliability of results from on-line and field instrumentation and sample collection techniques through the end of the 4th Quarter of FY13.
14. Continue development of conventions for all regulatory submittals to assure zero procedural violations and accurate and timely submission of regulatory reports through the end of the 4th Quarter of FY13.
15. In conjunction with the Information Technology Division, develop and implement a plan to transition historic compliance records in Sharepoint by the end of the 1st Quarter of FY13; develop, document, and implement business processes to maintain all newly generated Compliance Division records in Sharepoint by the end of the 2nd Quarter of FY13.
16. Complete documentation and implementation of an ISO 17025-compliant, management-approved records management program for archived WQL records by the end of the 4th Quarter FY13 to include: approval of a comprehensive records management program plan for WQL records; completion and maintenance of a detailed inventory of all archived records; and documentation of all records destroyed.
17. Initiate the Compliance Division Operations Improvement Project to define a vision of future operations for the division and develop an Operations Business Process Map inclusive of Organization/Process/Technology (OPT) changes required through the end of the 4th Quarter of FY13.

Goal 5: Organizational Development

Sustain a well informed, trained, motivated, safe, organized, and competitive work force to effectively meet the expectations of the customers, community, and Board in accordance with adopted policies and mandates.

1. Implement ACT developed WorkKeys skill level assessment program to objectively evaluate skill levels of potential water and wastewater system entry-level applicants in order to improve the successful completion rate of State certifications required for promotions by the end of the 4th Quarter of FY13.

2. Develop and implement an incentive program to advance all qualified water and wastewater system employees to journey-level certification (both utility and state) through the end of the 2nd Quarter of FY13.
3. Implement an employee performance evaluation system that aligns to performance objectives and benchmarks by the end of the 1st Quarter of FY13.
4. Maintain an average utility-wide vacancy rate of no greater than 7% through the end of FY13.
5. Reduce the number of employee injury lost days by 10% to improve productivity and reliability of services provided by employees by the end of the 4th Quarter of FY13.
6. Conduct an evaluation of plant facility operations and maintenance staff, standard operating procedures and training curriculums by the end of the 3rd Quarter of FY13; use report to revise training programs, standard operating procedures, and develop new training curriculum for the Water and Waste Water Treatment Plants in by the end of the 4th Quarter of FY13.

ALBUQUERQUE BERNALILLO COUNTY
WATER UTILITY AUTHORITY

BILL NO. R-12-9

RESOLUTION

ESTABLISHING ONE-YEAR OBJECTIVES FOR THE WATER UTILITY AUTHORITY IN FISCAL YEAR 2013 TO MEET FIVE-YEAR GOALS.

WHEREAS, the Water Authority's Budget Policies and Procedures Ordinance specifies that the Water Authority shall annually review and adopt one-year objectives related to the five year goals for the Water Authority; and

WHEREAS, the Water Authority's operating budget shall be formulated by the Water Authority's Executive Director and be consistent with the goals and objectives as established and approved by the Water Authority; and

WHEREAS, the Water Authority's adoption of goals and objectives, which will be valuable in themselves, will be major factors in determining funding for Water Authority programs and improvements in both the operating budget and capital improvements budgets.

BE IT RESOLVED BY THE WATER AUTHORITY:

Section 1. That the Water Authority adopts the following five-year goals and one-year objectives for Fiscal Year 2013.

GOAL 1. WATER SUPPLY AND OPERATIONS: Provide a reliable, safe, affordable, and sustainable water supply by transitioning to renewable supplies and minimizing long term environmental impacts on the community and natural resources while ensuring the ability of the community to grow in a responsible manner.

Objective 1. Complete Ground Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 45% of all maintenance labor hours completed by the end of the 4th Quarter of FY13.

Objective 2. Complete Surface Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 30% of all maintenance labor hours completed by the end of the 4th Quarter of FY13.

Objective 3. Reduce distribution water loss by locating water leaks from surveying 500 miles of small diameter water lines through conventional leak detection methods and 2,000 miles of small diameter water lines through acoustic leak detection by the end of the 4th Quarter of FY13.

Objective 4. Conduct a pilot project on large diameter water line leak detection methods and pipe condition assessment by the end of the 4th Quarter of FY13.

Objective 5. Maintain water use at 150 gallons per person per day while obtaining community input on setting a new reduction goal through community meetings, stakeholder meetings and surveys; provide report on community input by the end of 3rd Quarter of FY13 to the Board; and update the Water Conservation Plan by the end of the 4th Quarter of FY13.

Objective 6. Complete Partnership for Safe Water – Surface Water Treatment Self-Assessment to optimize water system operations and performance by the end of the 2nd Quarter of FY13.

Objective 7. Complete Partnership for Safe Water – Drinking Water Distribution System Self-Assessment to optimize water system operations and performance by the end of the 4th Quarter of FY13.

Objective 8. Complete a Preliminary Water Pump Station 10-Year Asset Management Plan to determine the condition of the Water Authority's drinking water pump station facilities by the end of the 2nd quarter of FY13.

Objective 9. Complete a Preliminary Water Well 10-Year Asset Management Plan to determine the condition of the Water Authority's drinking water well facilities by the end of the 4th quarter of FY13.

GOAL 2. WASTEWATER COLLECTION AND OPERATIONS: Provide reliable, safe and affordable wastewater collection, treatment and reuse systems to protect the health of the Middle Rio Grande Valley by safeguarding the regional watershed, minimizing environmental impacts, and returning quality water to the Rio Grande for downstream users.

Objective 1. Develop a draft sanitary sewer overflow response plan based on Water Environment Federation best practices and coordinate with other entities and jurisdictions by the end of the 4th Quarter of FY13.

Objective 2. Improve operation and maintenance of the sanitary sewer system by implementing the EPA's strategy of Capacity Management Operation Maintenance for managing sanitary sewer overflows; automate the sewer pipe segment evaluation process by developing a tool selection software to determine the appropriate mechanism for maintaining sewer pipelines which can be integrated into the Maximo workorder system by the end of the 4th Quarter of FY13.

Objective 3. Integrate video inspections performed on small diameter sanitary sewers into the Maximo workorder system and the GIS by the end of the 1st Quarter of FY13.

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Objective 5. Install electrical testing equipment at the major sanitary sewer lift stations to allow safe and reliable testing of the emergency generator systems by the end of the 4th Quarter of FY13.

Objective 6. Conduct an assessment and develop strategies to continue minimizing odors at the Southside Reclamation Plant utilizing different methodologies and report quarterly on the effectiveness of each technique through the end of the 4th Quarter of FY13.

Objective 7. Limit overall permit excursions to no more than 5 operating discharge permit violations through the end of the 4th Quarter of FY13.

Objective 8. Beneficially reuse biosolids by diverting 25% of the biosolids to compost through the end of the 4th Quarter of FY13.

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Objective 11. Design and construct a 1 megawatt solar array at the Wastewater Treatment Plant to offset on-peak power imports from the electric utility and have it operational and connected to the plant primary power distribution system by the end of the 4th Quarter of FY13.

GOAL 3. CUSTOMER SERVICES: Provide quality customer services by communicating effectively, billing accurately, and delivering water and wastewater services efficiently based on understanding the needs and perceptions of our customers and the community at large.

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Objective 2. Implement Phase 2 of the Automated Meter Infrastructure (AMI) project to modernize the Water Authority's aging meter infrastructure with smart meters to increase revenue, support conservation efforts, and provide better customer service by the end of the 4th Quarter of FY13.

Objective 3. Implement new payment methods for customer billing with Western Union to provide more payment options to customers and improved cash flow by the end of the 4th Quarter of FY13.

GOAL 4. BUSINESS PLANNING AND MANAGEMENT: Maintain a well planned, managed, coordinated, and financially stable utility by continuously evaluating and improving the means, methods, and models used to deliver services.

Objective 1. Expend $31 million in water and wastewater capital rehabilitation and replacement programs to replace aging, high risk assets that are past their useful life by the end of the 4th Quarter of FY13. $1 million shall be dedicated and used for identifying steel water pipes in critical or poor condition and rehabilitating or replacing at least 2 miles of small diameter steel water lines by the end of the 4th Quarter of FY13.

Objective 2. Implement Phase I of the Enterprise Resource Planning (ERP) project to integrate and optimize major business management functions by the end of the 4th Quarter of FY13; develop a transition plan to move services that are currently being provided by the City of Albuquerque by the end of the 2nd Quarter of FY13.

Objective 3. Continue implementation of mobile devices to operations staff and integrate a GIS solution to optimize workorder flow process through the 4th Quarter of FY13.

Objective 4. Develop a strategic plan to update the policies and procedures for the Information Technology Division including upgrading and hosting of major utility applications by the end of the 3rd Quarter of FY13; develop a succession and

knowledge management plan to prepare for upcoming retirements in the Division in order to retain critical institutional knowledge by the end of the 3rd Quarter of FY13.

Objective 5. Implement GFOA best practices recommendations for the Ten-Year Financial Plan, for increasing the financial capacity of the capital program, and for making progress in reaching the reserve fund goal of one-twelfth of operating expenses by the end of the 4th Quarter of FY13.

Objective 6. Continue to develop the integrated water/sewer/reuse master plan by incorporating the Northwest Service area by the end of the 3rd Quarter of FY13; begin water and sewer master planning in the College and Atrisco trunk zones by the end of the 4th Quarter of FY13.

Objective 7. Develop a comprehensive energy master plan which should include demand and potential energy reduction measures and costs to implement alternative clean energy sources for use by the Water Authority by the end of the 4th Quarter of FY13.

Objective 8. Improve compliance with the Water Authority's Sewer Use and Wastewater Control Ordinance by continuing to inspect and monitor industrial waste permit holders, food establishments, dental offices, and septage haulers; report inspection and monitoring activities and results and the respective compliance rates through weekly, monthly, and quarterly reporting and referencing past performance through the end of the 4th Quarter of FY13.

Objective 9. Continue development and implementation of a reporting system for performance metrics at the Water Quality Laboratory (WQL); monitor and report productivity (number of results reported per productive hour) and timeliness (number and percentage of results reported late) on weekly and monthly basis, and in relation to past performance; demonstrate improvement in the productivity of laboratory work through the end of the 4th Quarter of FY13.

Objective 10. In conjunction with the Information Technology Division, continue development of a Compliance Division water quality monitoring data repository that will allow Water Authority-wide user access to historical and current analytical results through the end of the 4th Quarter of FY13. .

Objective 11. In conjunction with the Information Technology Division, continue development and implementation of the Water Quality Laboratory (WQL)

Laboratory Information Management System (LIMS) through the end of the 4th Quarter of FY13.

Objective 12. Continue to monitor emerging State and Federal Safe Drinking Water Act (SDWA) and Clean Water Act (CWA) regulations to identify and assess potential impacts on the Water Authority through the end of the 4th Quarter of FY13.

Objective 13. Continue development for implementation of an Environmental Monitoring Program to improve the reliability of results from on-line and field instrumentation and sample collection techniques through the end of the 4th Quarter of FY13.

Objective 14. Continue development of conventions for all regulatory submittals to assure zero procedural violations and accurate and timely submission of regulatory reports through the end of the 4th Quarter of FY13.

Objective 15. In conjunction with the Information Technology Division, develop and implement a plan to transition historic compliance records in Sharepoint by the end of the 1st Quarter of FY13; develop, document, and implement business processes to maintain all newly generated Compliance Division records in Sharepoint by the end of the 2nd Quarter of FY13.

Objective 16. Complete documentation and implementation of an ISO 17025-compliant, management-approved records management program for archived WQL records by the end of the 4th Quarter FY13 to include: approval of a comprehensive records management program plan for WQL records; completion and maintenance of a detailed inventory of all archived records; and documentation of all records destroyed.

Objective 17. Initiate the Compliance Division Operations Improvement Project to define a vision of future operations for the division and develop an Operations Business Process Map inclusive of Organization/Process/Technology (OPT) changes required through the end of the 4th Quarter of FY13.

GOAL 5. ORGANIZATION DEVELOPMENT: Sustain a well informed, trained, motivated, safe, organized, and competitive work force to effectively meet the expectations of the customers, community, and Board in accordance with adopted policies and mandates.

Objective 1. Implement ACT developed WorkKeys skill level assessment program to objectively evaluate skill levels of potential water and wastewater system

entry-level applicants in order to improve the successful completion rate of State certifications required for promotions by the end of the 4th Quarter of FY13.

Objective 2. Develop and implement an incentive program to advance all qualified water and wastewater system employees to journey-level certification (both utility and state) through the end of the 2nd Quarter of FY13.

Objective 3. Implement an employee performance evaluation system that aligns to performance objectives and benchmarks by the end of the 1st Quarter of FY13.

Objective 4. Maintain an average utility-wide vacancy rate of no greater than 7% through the end of FY13.

Objective 5. Reduce the number of employee injury lost days by 10% to improve productivity and reliability of services provided by employees by the end of the 4th Quarter of FY13.

Objective 6. Conduct an evaluation of plant facility operations and maintenance staff, standard operating procedures and training curriculums by the end of the 3rd Quarter of FY13; use report to revise training programs, standard operating procedures, and develop new training curriculum for the Water and Waste Water Treatment Plants in by the end of the 4th Quarter of FY13.

Section 2. That the Executive Director of the Water Utility Authority shall ensure that these goals and objectives are carried out and integrated with the performance plan and submit a report by Goal to the Water Authority Board at least semi-annually on the progress made toward implementation of the one-year objectives.

Albuquerque Bernalillo County
Water Utility Authority

FY13 Goals & Objectives

Strategic Planning, Budgeting, & Improvement Process

- Long-Range Goals
- Short-Term Objectives
- Performance Measures
- AWWA QualServe Program
  - Benchmarking Performance Indicators
  - Self-Assessment
  - Peer Review

Strategic Planning, Budgeting & Improvement Process

Five-Year Goal Statements

Customer Services

Provide quality customer services by communicating effectively, billing accurately, and delivering water and wastewater services efficiently based on understanding the needs and perceptions of our customers and the community at large.

Business Planning & Mgmt

Maintain a well planned, managed, coordinated, and financially stable utility by continuously evaluating and improving the means, methods, and models used to deliver services.

Organization Development

Sustain a well informed, trained, motivated, safe, organized, and competitive work force to effectively meet the expectations of the customers, community, and Board in accordance with adopted policies and mandates.

Water Supply & Operations

Provide a reliable, safe, affordable, and sustainable water supply by transitioning to renewable supplies and minimizing long term environmental impacts on the community and natural resources while ensuring the ability of the community to grow in a responsible manner.

Wastewater Collection & Ops

Provide reliable, safe and affordable wastewater collection, treatment and reuse systems to protect the health of the Middle Rio Grande Valley by safeguarding the regional watershed, minimizing environmental impacts, and returning quality water to the Rio Grande for downstream users.

Performance Measures by Goal Area

Customer Services

Customer Service Complaints
Technical Quality Complaints
Customer Service Cost per Account
Billing Accuracy
Disruptions of Water Service
Residential Cost of Water/ Sewer Service

Business Planning & Mgmt

Debt Ratio
Return on Assets
System Renewal/Replacement Rate

Organization Development

Employee Health and Safety Severity Rate
Training Hours per Employee
Customer Accounts per Employee
MGD Water/Wastewater Delivered/Processed per Employee
Organizational Best Practices Index

Water Supply & Operations

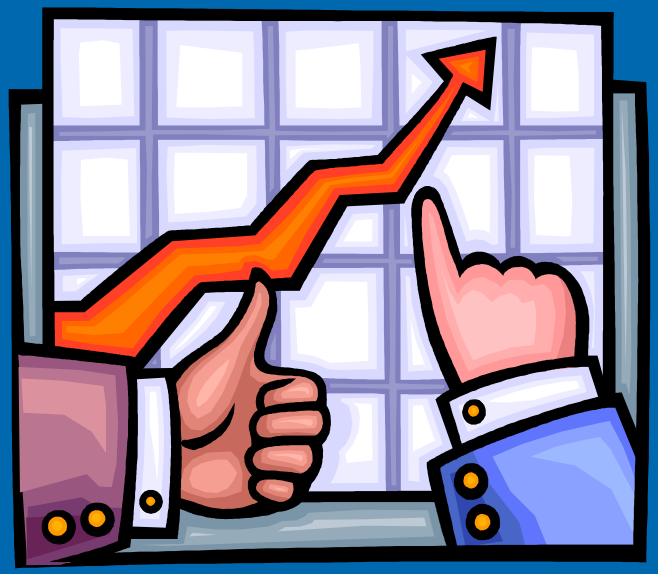
Drinking Water Compliance Rate
Distribution System Water Loss
Water Distribution System Integrity
O&M Cost Ratios
Planned Maintenance Ratio
Water Conservation Savings

Wastewater Collection & Ops

Sewer Overflow Rate
Collection System Integrity
Wastewater Treatment Effectiveness
O&M Cost Ratios
Planned Maintenance Ratio

Performance Objectives & Measures

- Identify performance gaps in operations and service delivery compared to other utilities
- Address performance gaps during the budget process by allocating and prioritizing resources
- Develop improvement processes in order to be more efficient and effective in our operations and service delivery



➔ **One Year Objectives**

FY13 One-Year Objectives

- 46 Objectives by Five Goal Areas
- Implementation of plans or programs
- Incorporate areas of improvement from the QualServe Benchmarking, Self Assessment and Peer Review programs
- Integrated with Performance Plan for operational performance improvement and service delivery
- Carry-over from FY12 either because they require more time to complete, or are ongoing issues
- Objectives may be tied to resources contained in the proposed budget

Water Supply & Operations Goal One Year Objectives

1. Complete Ground Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 45% of all maintenance labor hours completed
   - *Planned Maintenance Ratio Performance Measure*
2. Complete Surface Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 30% of all maintenance labor hours completed
   - *Planned Maintenance Ratio Performance Measure*
3. Maintain water use at 150 gpcd while obtaining community input on setting a new reduction goal
   - *Water Conservation Savings Performance Measure*

Water Supply & Operations Goal One Year Objectives

4. Reduce distribution water loss by locating water leaks from surveying 500 miles of small diameter water lines through conventional leak detection methods and 2,000 miles of small diameter water lines through acoustic leak detection
   - *Water Loss & Water System Integrity Performance Measures*
5. Conduct a pilot project on large diameter water line leak detection methods and pipe condition assessment
   - *Water Loss & Water System Integrity Performance Measures*

Strategic Planning, Budgeting & Improvement Process

Albuquerque Bernalillo County
Water Utility Authority

Agenda Item No. 7b

Meeting Date: April 18, 2012
Staff Contact: Tom Ortiz, Senior Financial Officer

TITLE: R-12-10 - Appropriating Funds for Operating the Albuquerque Bernalillo County Water Utility Authority for Fiscal Year Beginning July 1, 2012 and Ending June 30, 2013

ACTION: Introduction: April 18, 2012 – Final Action May 23, 2012

SUMMARY:
This legislation is the Water Authority's proposed budget appropriation for Fiscal Year 2013 beginning July 1, 2011. The FY/13 budget was developed utilizing the Water Authority's Five-year Goals, One-year Objectives, Performance Plan and the Guiding Principles in determining the costs needed to effectively and efficiently run the utility operation.

FY 2013 HIGHLIGHTS:
For FY/13 the proposed budget does not include a rate adjustment. However, looking forward, the Water Authority must begin to consider the need to spend $250 million to upgrade its sewage treatment plant and adding an additional $36 million per year in Capital Implementation Program (CIP) funding to cover the costs of routine replacement of aging pipes, pumps and other infrastructure as recommended in a recent asset management study commissioned by the Water Authority.

For FY/13 revenues are expected to be $9.76 million over proposed expenditures. The Authority will use the majority of the excess revenue to bring the Working Capital or Fund Balance to $10 million at June 30, 2013. By Ordinance the Water Authority will be required to increase its Fund Balance to 1/12 of the annual budgeted expenditures by FY/15.

In FY/13, the Water Authority will begin the implementation of an Enterprise Resource Planning (ERP) system. This project will implement a full range of financial and human capital resources modules over the next two fiscal years. The Water Authority will be evaluating proposals and make a recommendation to the Board before the end of Fiscal Year 2012 with an anticipated startup for the project beginning in Fiscal Year 2013.

The proposed budget also includes nonrecurring funding for an employee incentive program. This program will reward employees for a decrease in work related losses. Funding for this program is contingent on the Water Authority generating the same or a greater amount in savings. This incentive program has been an effective tool in the

reduction of the Water Authority's Workers Compensation expense in half over the past two fiscal years.

The Bear Canyon Aquifer Storage and Recovery project to infiltrate San Juan-Chama water into the aquifer was successful with approximately 1,100 acre-feet infiltrated into the ground over two years. The design of the full-scale pilot program is continuing in FY/13 with permitting, design and construction to attempt to store more than 50,000 acre-feet into the aquifer at the water treatment plant site. This project will eventually create a future drought supply for the Authority.

The Plant Division continues the major renovation of the Southside Water Reclamation Plant (SWRP) in FY/13. The Reclamation Rehabilitation and Asset Management Plan (RRAMP) is a multi-year program to upgrade and replace the treatment processes that have outlived their useful life. The first two projects that are currently under design are a new Headworks facility and a new Solids Dewatering facility. Construction on these two facilities will begin in the fall of 2012. The funding for the RRAMP improvements will be provided through the Authority's CIP program. The long term financial need for the repair and upgrade of this facility is estimated to be $250 million.

The implementation and upgrade of Maximo (the Utility's Computerized Maintenance Management System) will be completed in FY/13. In addition, the Authority will continue its deployment of Maximo by testing & evaluating mobile devices such as laptops and tablets. This mobile environment will include accessing not just Maximo, but also operating manuals and electronic map books from the field.

The Laboratory Information Management System (LIMS) implementation will be completed in FY/13 and will result in improved water quality business processes, electronic lab notebooks, better access to lab data and improved interfaces between lab equipment and the software application.

Construction of the Southside Municipal Effluent Polishing and Reclamation project will be complete in the fourth quarter of FY/12. Connections to the individual users will commence during the Spring of 2012 and continue for approximately a year. Full operations are expected to begin in irrigation season 2013. The project will provide up to 2,500 acre-feet or non-potable water to more than 40 large turf sites in the southeast heights and south valley of Albuquerque including Isotopes Baseball Park, UNM Championship and Puerto del Sol Golf Course, Bullhead and Vietnam Veterans park and Mesa del Sol.

In FY/13, the Authority will begin the implementation of Phase 2 of its Automated Meter Infrastructure (AMI) project for small residential meters (less than 4"), revamp the Customer Care and Billing (CC&B) billing web interface for customers and increase market penetration of paperless billing. The AMI project will provide access of monthly, daily and hourly water usage to customers.

The CIP Program proposed appropriation for FY/13 is $42.0 million for new projects as well as supplemental appropriations for existing CIP projects to provide additional

funding based on current estimates of ongoing projects. By Ordinance, $30 million of annual CIP funding must be used for system rehabilitation. The appropriation also includes $3 million for system growth, $2 million for Automated Meter Infrastructure/Leak Detection, $1 million for Steel Water Line rehabilitation, $2.3 million for remaining costs for the Drinking Water Project, $1.7 million for San Juan Chama Mitigation efforts and $2 million for the Enterprise Resources Planning System (ERP). There are no appropriations for projects that will be funded with revenues from FY/13 and later.

Also included in the FY/13 proposed budget is the addition of $2 million to the Rate Reserve Fund.

FISCAL IMPACT:
This appropriation consists of the Water Authority Operating Fund which totals $181,645,000 and the Water Authority's Debt Service Fund which totals $75,738,000.

COMMENTS:
The FY/13 budget does not include a rate adjustment.

For FY/13, General Operating Fund revenue is projected to be $191.4 million with proposed expenditures of $181.6 million. The majority of the $9.8 million excess revenue will be used to bring the Working Capital or Fund Balance to $10 million.

Revenues
The following is a revenue comparison of the FY/11 Audited, FY/12 Approved and the FY/13 Proposed budgets:

WATER AUTHORITY OPERATING FUND 621

ACCOUNT NAME	AUDITED FY11	BUDGET FY12	BUDGET FY13	DIFFERENCE FY13-FY12
Interest	61,766	750,000	750,000	0
Miscellaneous	1,446,165	1,274,000	1,874,000	600,000
Water	72,534,668	80,149,000	83,300,000	3,151,000
Water Resources Management	4,671,272	4,468,000	4,500,000	32,000
Sewer	48,381,503	60,919,000	62,000,000	1,081,000
CIP Employees	646,195	650,000	650,000	0
Refuse Transfer	1,032,000	1,047,000	1,142,000	95,000
Franchise Fee	5,850,237	6,915,000	7,192,000	277,000
SJC Strategy Implementation	25,922,012	27,627,000	30,000,000	2,373,000
Rate Reserve	7,000,000	0	0	0
FUND TOTAL	167,545,818	183,799,000	191,408,000	7,609,000

WATER AUTHORITY OPERATING FUND 631

ACCOUNT NAME	AUDITED FY11	BUDGET FY12	BUDGET FY13	DIFFERENCE FY13-FY12
Interest	110,942	500,000	500,000	0
UEC - Water	3,673,458	3,500,000	4,000,000	500,000
UEC - Sewer	2,525,557	3,500,000	4,000,000	500,000
Transfer from Fund 621	65,337,000	66,727,000	66,362,000	(365,000)
Penalties	29,407	0		0
Water Supply Charge	11,651	0		0
FUND TOTAL	71,688,015	74,227,000	74,862,000	635,000

Operating Fund revenue for FY/13 is estimated to be $7.6 million above the FY/12 approved budget. Revenue in the Debt Service Fund has a $.6 million increase due mainly from an increase in UEC estimated revenue, $1 million and a decrease of $.4 million in the transfer from the General Operating Fund.

Expenditures

The following is the appropriation comparison of the FY/11 Actuals, FY/12 Approved and the FY/13 Proposed budgets:

WATER AUTHORITY OPERATING FUND-621	FY 2011	FY 2012	FY 2013	Difference
ACCOUNT DESCRIPTION	**ACTUALS**	**APPROV.**	**PROPOSED**	**FY13-FY12**
500101 REGULAR WAGES	29,152,234	29,848,659	31,041,993	1,193,334
500201 PART TIME	0	464,160	399,360	(64,800)
500301 OVERTIME	2,381,916	1,452,200	1,476,797	24,597
514400 PERA	5,286,154	5,514,832	5,788,214	273,382
514800 FICA	2,347,563	2,352,763	2,463,488	110,725
515600 OTHER EMP BENEFITS	4,502,188	5,346,766	5,744,780	398,014
515700 F/B-RETIREE HEALTH	454,376	536,239	606,693	70,454
516000 EDUCATIONAL INCENT	37,791	0	0	0
516200 EMPLOYEE INCENTIVE	111,487	300,000	0	(300,000)
516400 CLOTHING	0	0	0	0
PERSONNEL EXPENDITURES Total	**44,273,709**	**45,815,619**	**47,521,325**	**1,705,706**
520500 PROFESSIONAL SERV	445,835	1,532,866	1,460,747	(72,119)
521000 OTHER SERVICES	39,089	52,000	52,000	0
521500 UTILITIES	245,932	253,000	253,000	0
521510 ELECTRICITY	9,998,043	9,330,108	9,330,108	0
521520 GAS UTILITY	1,439,333	1,960,500	1,960,500	0
521530 REFUSE REMOVAL	147,776	45,000	128,000	83,000
521540 US WEST LINE COSTS	703,875	402,374	415,842	13,468
521550 WATER AND SEWER	213,481	133,000	133,000	0
522000 SUPPLIES	2,607,896	2,025,532	2,009,565	(15,967)
522012 CHEMICALS	6,450,056	7,231,972	7,225,972	(6,000)
522500 TRAVEL	59,447	92,400	92,400	0
523000 TRAINING	120,206	196,660	196,660	0
523400 DUES/MEMBERSHIPS	199,282	143,492	175,492	32,000
523800 REPAIRS AND MAINT	9,223,130	8,534,916	10,910,216	2,375,300

WATER AUTHORITY OPERATING FUND-621	FY 2011	FY 2012	FY 2013	Difference
ACCOUNT DESCRIPTION	**ACTUALS**	**APPROV.**	**PROPOSED**	**FY13-FY12**
523900 VEHICLE MAINT	1,070,236	1,082,126	1,113,478	31,352
524600 FUELS/LUB	56,453	25,350	25,350	0
525200 TAXES	520,321	686,000	763,000	77,000
525300 INTEREST/DEPOSITS	840	0		0
525400 INTEREST	425,504	424,000	395,000	(29,000)
525800 PRINCIPAL	948,650	978,000	1,007,000	29,000
527500 CONTRACTUAL SERV	9,338,705	6,757,243	7,006,633	249,390
525210 NM WATER CONS FEES	533,704	1,100,000	1,100,000	0
522099 CAPITAL EXP <=$5000	118,271	0	0	0
526200 CLAIMS/JUDGEMENTS	4,007	0	0	0
OPERATING EXPENDITURES Total	**44,910,072**	**42,986,539**	**45,753,963**	**2,767,424**
532000 NON-STRUCT IMPROV	0	0	0	0
532500 AUTOMOBILES	130,650	596,326	618,326	22,000
533000 MACH/EQUIP NONAUTO	19,718	45,693	45,693	0
533500 OFFICE FURNITURE	0	0	0	0
CAPITAL CHARGES Total	**150,368**	**642,019**	**664,019**	**22,000**
594105 WORKERS COMP	1,579,826	831,048	754,159	(76,889)
594107 TORT AND OTHER	3,335,152	2,489,935	2,609,769	119,834
571300 RISK RECOVERY	0	0	0	0
594051 NETWORK	74,650	77,112	77,760	648
594031 VEHICLE-MAINT	212,632	259,834	229,470	(30,364)
594041 VEHICLE-FUEL	1,308,330	1,564,099	1,342,229	(221,870)
594061 RADIO MAINT	40,475	51,795	36,306	(15,489)
591000 TRF OTHER FUNDS	7,382,535	8,255,000	8,200,000	(55,000)
592000 PILOT	5,323,371	6,292,000	6,544,000	252,000
593000 INDIRECT OH	1,550,000	1,550,000	1,550,000	0
595000 INTERFD D/S	65,337,000	66,727,000	66,362,000	(365,000)
INTERNAL SERVICE CHARGES Total	**86,143,971**	**88,097,823**	**87,705,693**	**(392,130)**
581000 BAD DEBT EXP			0	0
585000 AMORTIZATION EXP			0	0
582000 DEPRECIATION			0	0
FINANCIAL AND BUDGETARY Total	**0**	**0**	**0**	**0**
Grand Total	**175,478,120**	**177,542,000**	**181,645,000**	**4,103,000**

The proposed operating expenditures contain a net increase of $4.1 million from FY/12. This includes an increase of $1.7 million in salaries and benefits, an increase in general operating expenses of $2.8 million and a decrease in internal services charges of $.4 million.

Personnel expenditures include a 2% step adjustment, $452,500, as per labor agreements. Eleven net new mid-year positions were added in FY/12. The FY/13 annualized cost of the additional positions is $645,400. The positions added include

three Treatment Plant Operators, one Lab Compliance Specialist, two Engineering Associates, an O/M Supervisor, a Mixed Media Technician and three positions to work on the ERP implementation. There are additional personnel expenditures associated with the Classification and Compensation study implemented in FY/11 and a .58% increase in other employee benefits. Total general operating costs increase by $2.8 million. This increase is due mainly to an increase in barricade costs, $1.5 million, paving costs, $631,000 and barricade permit fees to the City of $280,000. Capital costs increase by $22,000. The internal service charges decrease by $392,000 which include an increase of $252,000 for franchise fees, and decreases in fuel, $222,000 and a decrease in the transfer to debt service, $365,000 per the debt schedule. Of note in this expense category is the reduction of $77,000 in the Worker's Comp line item. The Worker's Comp expense has been reduced from $1.58 million in FY/11 to the proposed amount this year of $754,000 or a 53% reduction. This reduction is result of the effectiveness of Board approved employee incentive program and the effort of Authority employees.

Working Capital will add $8 million from the surplus of revenue over expenditures in FY/13. This $8 million will be added to the FY/12 balance of $2 million. The Working Capital balance at June 30, 2013 is estimated to be $10 million. By Ordinance the Water Authority will be required to increase its Fund Balance to 1/12 of the annual budgeted expenditures by FY/15.

An additional $2 million is reserved in the rate reserve fund. The Water Authority will also provide deferred UEC collections on up to 50 affordable housing units developed by non-profit housing developers.

The Water Authority's goals and objectives focus on improving the Utility's operations and improving customer conditions. The Budget Ordinance requires the Water Authority's operating budget be consistent with the goals and objectives, and that they be major factors in determining funding for Water Authority programs and improvements in both the operating and capital Implementation budgets. Many of the objectives also reflect policy direction. With the establishment of goals and objectives that have policy as well as budgetary implications, the Water Authority must actively manage the daily operations of the Utility.

The performance plan which uses the approved goals and objectives as its basis and is required by Ordinance is also scheduled for Board action at the May 16, 2012 meeting.

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. R-12-10

RESOLUTION

APPROPRIATING FUNDS FOR OPERATING THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY FOR THE FISCAL YEAR BEGINNING JULY 1, 2012 AND ENDING JUNE 30, 2013.

WHEREAS, the Albuquerque Bernalillo County Water Utility Authority (Water Authority) as a political subdivision of the State of New Mexico is required to budget and account for all money received or spent in accordance with New Mexico laws; and

WHEREAS, the Board, by Ordinance, has established a budget process for the Water Authority; and

WHEREAS, the Budget Ordinance requires the Executive Director to formulate the operating budget for the Water Authority; and

WHEREAS, the Budget Ordinance requires the Water Authority Board to approve or amend and approve the Executive Director's proposed budget; and

WHEREAS, the Board has received the budget formulated by the Executive Director and has deliberated on it and provided public notice and input; and

WHEREAS, appropriations for the operation of the Water Authority must be approved by the Board.

BE IT RESOLVED BY THE WATER AUTHORITY:

Section 1. That the following amounts are hereby appropriated to the following funds for operating The Albuquerque Bernalillo County Water Utility Authority during Fiscal Year 2013:

JOINT WATER AND SEWER OPERATING FUND – 621	181,645,000
This appropriation is allocated to the following programs:	
Water Authority	21,253,000
Low Income Utility Credit	250,000
Customer Services	5,552,000
Finance	7,022,000
Information Systems	4,152,000

San Juan/Chama	2,247,000
Compliance	4,270,000
Human Resources	1,085,000
Wastewater Collection	6,352,000
Wastewater Treatment	11,792,000
Water Plant Facility Production	6,561,000
Water Plant Facility Distribution	14,706,000
Water Distribution Facilitation	2,050,000
Water Resources, Engineering & Planning	6,515,000
Northwest Service Area	2,394,000
North I-25 Reuse	76,000
Strategy Implementation	2,712,000
Transfers to Other Funds:	
General Fund (110)	8,294,000
Joint Water and Sewer Rehab (628)	8,000,000
Joint Water and Sewer Bond Debt Service (631)	66,362,000

Indirect Costs paid to the City of Albuquerque for services provided to the Water Authority are capped at $1,550,000 for this fund.

JOINT WATER AND SEWER REVENUE BOND DEBT SERVICE FUND – 631	75,738,000

This appropriation is allocated to the following programs:

Debt Service	72,346,000
Transfer to Other Funds:	
Joint Water and Sewer Capital Fund (629)	3,392,000

Section 2. The Executive Director is authorized to develop and establish a nonrecurring safety/performance incentive program. This program will provide employees with an incentive bonus based on cost reductions or performance enhancements resulting in operating efficiencies and/or a reduction in work related losses. Funding for this program is contingent on savings in the same or a greater amount.

Section 3. The Water Authority shall continue its partnership with non-profit affordable housing developers under contract with local government whereby the first time homebuyer will not be required to pay the Utility Expansion Charge until the

property is sold. No more than 50 units per year will be authorized under this program. The Water Authority will secure its position with a second mortgage.

Section 4. The Rate Reserve Fund is augmented by the amount of $2,000,000.

Section 5. The Executive Director is authorized to carry out all appropriations contained in this budget in accordance with established policies and procedures.

PROPOSED FY2013 BUDGET

BOARD MEMBERS

Ken Sanchez
Chair

Wayne A. Johnson
Vice-Chair

Richard J. Berry

Art De La Cruz

Rey Garduno

Trudy E. Jones

Maggie Hart Stebbins

Pablo R. Rael
"Ex-Officio"

ADMINISTRATION

Mark S. Sanchez
Executive Director

Albuquerque Bernalillo County
Water Utility Authority

Albuquerque Bernalillo County
Water Utility Authority

April 18, 2012

To: Ken Sanchez, Chair

From: Mark S. Sanchez, Executive Director

Subject: Resolution Appropriating Funds for the Operation of the Water Authority for the Fiscal Year Beginning July 1, 2012 and Ending June 30, 2013

Presented to the Board for review and consideration is the proposed budget for the Albuquerque Bernalillo County Water Utility Authority (Water Authority) for Fiscal Year 2013. This submittal is the Authority"s financial plan for Fiscal Year 2013. The development of this financial plan has been guided by the Authority"s Five-year Goals, One-year Objectives, Performance Plan and the Guiding Principles. In the development of this proposed budget the Authority has taken a conservative financial approach to provide effective and efficient water and wastewater services balanced against projected resources. This proposed budget is balanced, fiscally conservative and sound.

For Fiscal Year 2013 the proposed budget does not include a rate adjustment. However, looking forward, the Water Authority is facing a critical need to upgrade and repair our aging infrastructure. The Southside reclamation plant is in need of a major renovation with an anticipated cost of $250 million. In addition, due to the backlog of repairs and maintenance, an additional $36 million per year in Capital Implementation Program (CIP) funding is needed to cover the costs of routine replacement of aging pipes, pumps and other infrastructure. The basis for this additional CIP amount is a recent asset management study commissioned by the Water Authority. In order to meet these financial needs the Water Authority, in coordination with the Board, must begin to develop a plan on how the capital needs can be addressed.

In the preparation of this budget, the Authority has developed a maintenance of effort budget within the projected estimated revenues. Staffing levels have an increase of eleven net positions in Fiscal Year 2013. There is a 2% step salary adjustment proposed for Fiscal Year 2013 to comply with current labor agreements as well as a .58% increase in other employee benefits. General operating expenditures increase $2.8 million with the major increase in Repairs and Maintenance of $2.4 million to bring into line budgeted expense with actual spending. The most significant expense of the Authority continues to be debt service payments which will comprise 37% of the total operating expense in Fiscal Year 2013.

The Water Authority will begin the implementation of an Enterprise Resource Planning (ERP) system in Fiscal Year 2013. This project will implement a full range financial and human capital resources system over the next two fiscal years. The Water Authority will be evaluating proposals and make a recommendation to the Board before the end of Fiscal Year 2012 with an anticipated startup for the project in early Fiscal Year 2013.

Construction of the Southside Municipal Effluent Polishing and Reclamation project will be complete in the fourth quarter of Fiscal Year 2012. Connections to the individual users will commence during the Spring of 2012 and continue for approximately a year. Full operations are expected to begin in irrigation season 2013. The project will provide up to 2,500 acre-feet of non-potable water to more than 40 large turf sites in the southeast heights and south valley of Albuquerque including Isotopes Baseball Park, UNM Championship and Puerto del Sol Golf Course, Bullhead and Vietnam Veterans Park and Mesa del Sol.

The San Juan-Chama Drinking Water Project (DWP) is expected to increase surface water treatment to provide 60% of water supplied to the service area. The Authority will continue to operate two water supply systems, the surface water and the ground water systems. This dual system operation will continue into the future even though the primary source of supply will be the surface water from the DWP. It is anticipated that approximately 70% of the area‟s future water supply will be surface water from the DWP.

Major renovation of the Southside Water Reclamation Plant, under a multi-year upgrade and replacement program, will continue in Fiscal Year 2013. The new headworks facility and a new solids dewatering facility are in the final stages of design. Construction on these two facilities is expected to begin in the fall of 2012. The funding for these projects will be provided through the Water Authority‟s CIP Program.

The proposed budget also includes nonrecurring funding for an employee incentive program. This program will reward employees for cost savings as a result of a decrease in work related losses. Funding for this program is contingent on the Water Authority generating the same or a greater amount in savings. This incentive program has been an effective tool in the reduction of the Water Authority‟s Workers Compensation expense.

Revenue for Fiscal Year 2013 is estimated to be $191 million; approximately $7.6 million above the Fiscal Year 2012 approved budget. Proposed operating expenditures of $182 million contain a net increase of $4.1 million for Fiscal Year 2013. This includes an increase of $1.7 million in salaries and fringe benefits, an increase in General Operating Expenses of $2.8 million and a decrease in internal services charges of $.4 million.

Personnel expenditures include a 2% step adjustment, $452,500, as per labor agreements. Eleven net new positions were added in Fiscal Year 2012. These Fiscal Year 2012 positions are fully funded in Fiscal Year 2013, $645,400. There is also a .58% increase for other employee benefits and pay adjustments that resulted from the Classification and Compensation study completed in Fiscal Year 2011. Total general operating costs increase by $2.8 million due mainly to increases in Repairs and Maintenance. Capital costs increase by $22,000. The internal service charges decrease by $.4 million and include an increases of $119,000 for Tort and Other risk charges and $252,000 increase in Franchise Fees. There are reductions in Vehicle Maintenance, $222,000 and the transfer to debt service of $365,000.

For Fiscal Year 2013 revenues are expected to be $9.76 million over proposed expenditures. The Authority will use the majority of this excess revenue to bring the Working Capital or Fund Balance to $10 million at June 30, 2013. By Ordinance, the Water Authority will be required to increase its Fund Balance to 1/12 of the annual budgeted expenditures by Fiscal Year 2015. For Fiscal Year 2013 $2 million is added to the Rate Reserve fund.

Also submitted in a separate resolution is the Capital Implementation Program (CIP) proposed budget for Fiscal Year 2013. The proposed appropriation for Fiscal Year 2013 is $42.0 million

for new projects as well as supplemental appropriations for existing CIP projects to provide additional funding based on current estimates of ongoing projects. By Ordinance, $30 million of annual CIP funding must be used for system rehabilitation. The appropriation also includes $3 million for system growth, $2 million for Automated Meter Infrastructure/Leak Detection, $1 million for Steel Water Line rehabilitation, $2.3 million for remaining costs for the Drinking Water Project, $1.7 million for San Juan Chama Mitigation efforts and $2 million for the Enterprise Resource Planning System (ERP). There are no appropriations for projects that will be funded with revenues from FY/13 and later.

The Authority continues to participate in American Water Works Association‟s (AWWA) QualServe program. The QualServe program provides a framework for water and wastewater utilities to continually improve using a Plan-Do-Check-Act framework. It currently offers a well-developed toolbox of a benchmarking, self-assessment, and peer review for water and wastewater utilities. The QualServe program has assisted the Authority in identifying what it does well and areas where improvement is necessary. The Authority has used the information and recommendations gathered from the QualServe program to provide guidance in the one-year objectives, the performance plan and the financial plan presented here. This information and recommendations have also been the basis for operational improvements already implemented in the Authority.

The Authority has established an asset management program with a steering committee to oversee the program. The program is an extensive, well thought out „Business Model‟ that helps utility managers make better acquisition, operations and maintenance, renewal, and replacement decisions. The principles of asset management were developed to address the critical problem of aging public infrastructure and changing utility business environment. In FY/11, the Authority completed a comprehensive Asset Management Plan (AMP) used to provide a rational framework for understanding and planning of long-range asset renewal (rehabilitation and replacement) requirements. The AMP consolidates the Authority‟s asset information into a structured framework and uses it to provide a justifiable basis to support long-term organization, operations, and asset management decisions. In FY/12, the Authority began work on preparing a set of 10-year asset management plans for various asset classes (i.e., small diameter pipes, large diameter pipes, wastewater treatment plant, groundwater and collection system facilities). The 10-year plans are generated to provide the Authority with a more accurate understanding of the short and intermediate-term renewal requirements. In FY/13, the Authority will continue to improve on its asset management practices and complete the planned 10-year asset management plans.

This budget proposal represents the Authority‟s coordinative effort to bring to the Board a financial plan that will provide the necessary funding to perform all the varied operational and administrative functions, to provide customers with quality water and wastewater service and address the Authority‟s priorities for Fiscal Year 2013 to improvement of services and gain operating efficiencies.

Albuquerque Bernalillo County
Water Utility Authority

BOARD MEMBERS

Ken Sanchez, Chair

Wayne Johnson, Vice-Chair

Richard J. Berry

Art De La Cruz

Rey Garduño

Trudy Jones

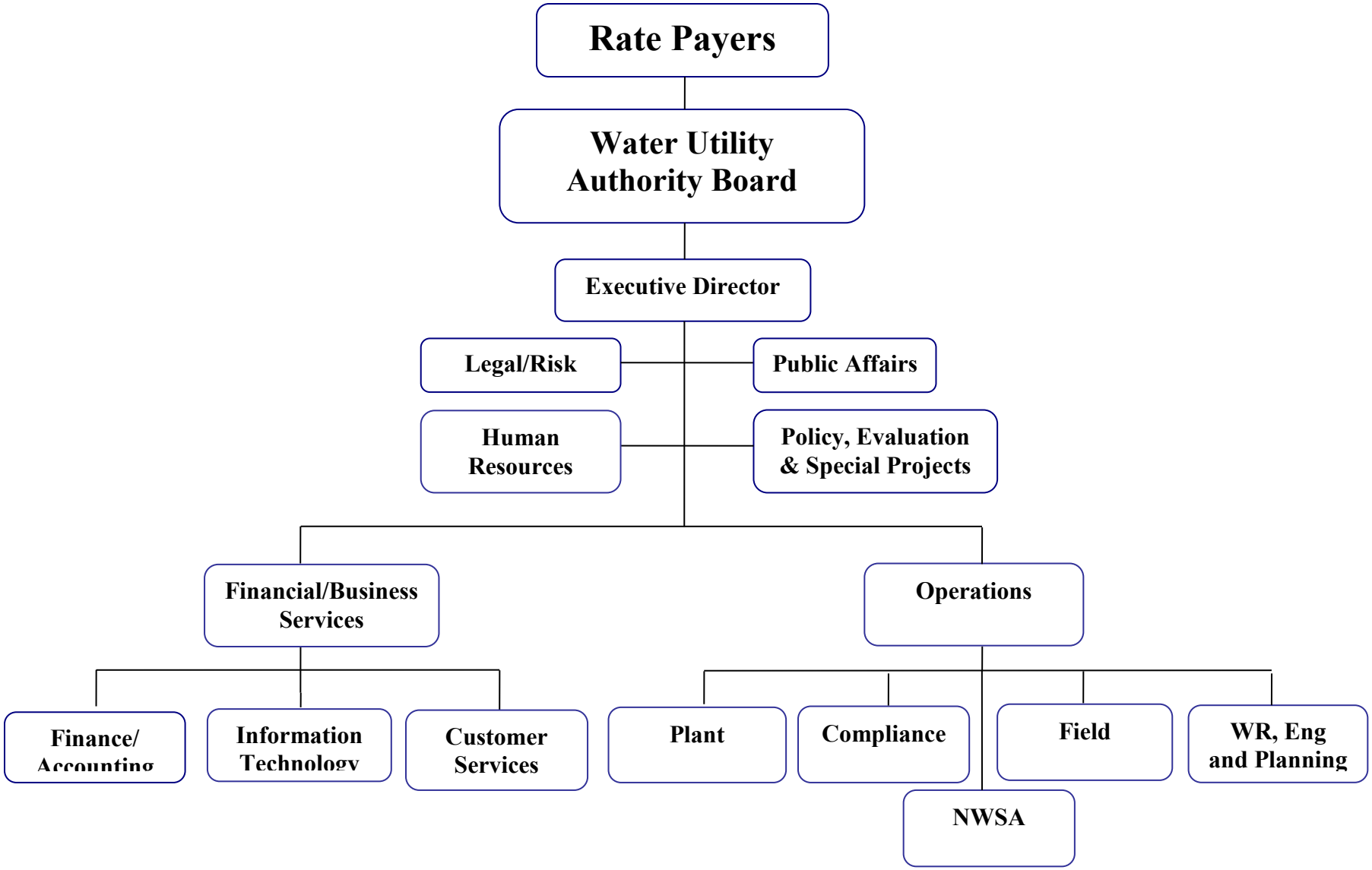
Maggie Hart Stebbins

Pablo Rael, Ex Officio Member

Mark S. Sanchez, Executive Director

THE GOVERNMENT FINANCE OFFICERS ASSOCIATION OF THE UNITED STATES AND CANADA (GFOA) PRESENTED A DISTINGUISHED BUDGET PRESENTATION AWARD TO **ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY, NEW MEXICO** FOR ITS ANNUAL BUDGET FOR THE FISCAL YEAR BEGINNING JULY 1, 2011. IN ORDER TO RECEIVE THIS AWARD, A GOVERNMENTAL UNIT MUST PUBLISH A BUDGET DOCUMENT THAT MEETS PROGRAM CRITERIA AS A POLICY DOCUMENT, AS A FINANCIAL PLAN, AS AN OPERATIONS GUIDE, AND AS A COMMUNICATIONS DEVICE.

Albuquerque Bernalillo County
Water Utility Authority



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ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

PREFACE

NMSA 1978, Section 72-1-20 which created the Albuquerque Bernalillo County Water Utility Authority (Authority), along with Authority Ordinance O-04-6 requires the Executive Director to formulate the operating budget for the Authority. The Executive Director shall propose the budget to the Board at the April regularly scheduled meeting each year. The Authority Board then will approve or amend and approve the Executive Director‟s proposed budget, after the Board has received the budget and has deliberated on it, provided public notice and allowed for public input at or before the May regularly scheduled meeting.

Budget Instructions are issued in January. A salary forecast is completed for review by the Authority. Expense data is accumulated at the current level and totals are reviewed to determine if other actions or changes in budget instructions must be made in order to achieve a balanced budget. Budget meetings are held with the Executive Director and Authority Staff. During this process divisions may request program expansions or offer plans for reducing costs, or revenue enhancements.

Appropriations are at a Fund level, the level at which expenditures may not legally exceed appropriations. Budgetary control is maintained by a formal appropriation and encumbrance system. Appropriations may be made or modified during the year by a legally adopted resolution. Appropriations revert to fund/working capital balance to the extent they have not been expended or encumbered at fiscal year end.

Budget Data is prepared consistent with the Authority‟s basis of Accounting. The Authority‟s Enterprise Funds are on an accrual basis. Revenues are recorded in the accounting period in which earned, and expenses are recorded at the time liabilities are incurred. Transactions are recorded in individual funds. However, depreciation and amortization, although expensed in the accounting system, is not a budget item in the Authority budget.

The Authority‟s Goals and Objectives focus on improving the Authority‟s operations and improving customer conditions. The Goals are based on the American Water Works Association‟s Qualserve program. The FY/13 Goals and Objectives have been approved by the Authority Board.

The Budget Proposal has 8 major sections. The **Budget Proposal & Financial Consolidation** section is designed as an overview. This section contains Fund Balance Tables or Working Fund Tables, where appropriate, by fund group. The funds are presented with estimated ending balances for both the current year and the budget year. This section includes brief highlights and fund financial history.

The section on **Revenue Outlook** contains detailed information on the projected revenue and the **Economic Outlook** to be addressed in the coming year. This section also looks at the **Albuquerque Economy** as it relates to the budget.

The **Capital Budget** section explains the Authority‟s capital process, which is prepared on an annual basis. Anticipated capital projects and the expected operating impacts are discussed as well.

Debt Obligations and the **Appendix** complete the supporting documentation. The **Appendix** contains information that is useful to prepare or understand the budget, including definitions. There is also a brief explanation of the methodology used in budget preparation.

The **Appropriations Legislation** section is a copy of the legislation that is submitted to the Authority Board along with this document. It must be passed as submitted or amended and passed by the Authority Board before the budget becomes law.

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BUDGET PROPOSAL & FINANCIAL CONSOLIDATIONS

Proposed
Operating Budget
FY/13

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

The Albuquerque Bernalillo County Water Utility Authority (Authority) identifies resources to provide quality water in sufficient quantity, collect and treat wastewater to acceptable standards, provide professional utility engineering services, and provide utility customer services. The Authority operates and maintains water pump stations, reservoirs, wells, water lines, the Southside Water Reclamation Plant, the Soil Amendment Facility, sewage lift stations, odor control facilities, and sanitary sewer lines. The Authority also works to secure the region with a safe, adequate, and sustainable water supply.

Mission

The mission of the Albuquerque Bernalillo County Water Utility Authority is to:
Assure responsive Customer Service. **Provide** reliable, high quality, affordable and sustainable water supply, wastewater collection treatment, and reuse systems. **Support** healthy, environmentally-sustainable, and economically-viable community.

Fiscal Year 2013 Highlights

The FY/13 Executive Director"s Proposed Budget establishes the Authority"s financial plan and uses the Goals, Objectives and the Performance Plan as guides for the appropriation of funds. The Authority in conjunction with the Operating Divisions developed the budget by determining those costs necessary to running the utility operation. The proposed budget does not include a rate adjustment. However, looking forward, the Water Authority must begin to consider the need to spend $250 million to upgrade its sewage treatment plant and adding an additional $36 million per year in Capital Implementation Program (CIP) funding to cover the costs of routine replacement of aging pipes, pumps and other infrastructure as recommended in a recent asset management study commissioned by the Water Authority.

The San Juan-Chama Drinking Water Project (DWP) is expected to increase surface water treatment to provide 60% of water supplied to the service area. The Authority will continue to operate two water supply systems, the surface water and the ground water systems. This dual system operation will continue into the future even though the primary source of supply will be the surface water from the DWP. It is anticipated that approximately 70% of the area"s future water supply will be surface water from the DWP. The Authority continues to adjust the funding for operations of the DWP as a history of operating costs is developed.

The Bear Canyon Aquifer Storage and Recovery project to infiltrate San Juan-Chama water into the aquifer was successful with approximately 1,100 acre-feet infiltrated into the ground over two years. The design of the full-scale pilot program is continuing in FY/12 with permitting, design and construction to attempt to store more than 50,000 acre-feet into the aquifer at the water treatment plant site. This project will eventually create a future drought supply for the Authority.

The Northwest Service Area Division (NWSA) has been successfully integrated into some operations of the Authority. The NWSA now provides some selected services not only to customers of the former New Mexico Utilities but also to other Authority Westside ratepayers. In FY/13, the Authority will continue to look at the expansion of the current Northwest Service Area (NWSA) Division from what was the New Mexico Utilities area to an area that will be bounded by Sandoval County on the north, the Rio Grande on the east, I-40 on the south and the Rio Puerco on the west. Any expenses associated with this expansion would have to be budget neutral. Since the Authority has long discussed area operations, the establishment of a northwest service area as described will provide a program that can be used to improve services to customers. The NWSA will continue to pilot mobile Maximo in order to create SOP"s for a paperless, real time, work order system, where field activities are dispatched and closed out on mobile devices. In addition, mobile Maximo will be used to schedule and record the preventative maintenance (PM) activities on the meter box and valve replacement initiative for

NWSA. Also, the NWSA will be developing a reporting matrix where response time, emergency repairs, work order completion percentage, and preventative maintenance can be measured and benchmarked against industry leaders.

Various Field Division efforts include the continuation of Large Interceptor rehabilitation and enhanced cleaning programs; continuation of the Large Meter Testing & Repair program with in-house resources;
On the Collections Section side the Authority will expand closed circuit televising and condition analysis of wastewater collection lines, and integrated the operations and maintenance of the wastewater collections lines & lift stations from the old NM Utilities (Corrales Trunk-NWSA). Continued efforts in odor and corrosion controls are proceeding from the Collections Section, notably at the 98th & Central facility where the bio filter is being abandoned in favor of using carbon treatment. The USEPA has mandated in FY/12 the implementation of a sustained Capacity Maintenance & Operations Management (CMOM) program for the wastewater collection system.

The Plant Division began a major renovation of the Southside Water Reclamation Plant (SWRP) in FY/10 called the Reclamation Rehabilitation and Asset Management Plan (RRAMP). The RRAMP is a multi-year program to renew the treatment processes at the plant. The first two projects that are currently under design are a new headworks facility and a new Solids Dewatering facility. Construction on these two facilities will begin in the winter of 2012/2013. The funding for the RRAMP improvements will be provided through the Authorities Capital Improvement Program (CIP).

Construction of the Southside Municipal Effluent Polishing and Reclamation project will be complete in the fourth quarter of FY/12. Connections to the individual users will commence during the Spring of 2012 and continue for approximately a year. Full operations are expected to begin in irrigation season 2013. The project will provide up to 2,500 acre-feet or non-potable water to more than 40 large turf sites in the southeast heights and south valley of Albuquerque including Isotopes Baseball Park, UNM Championship and Puerto del Sol Golf Course, Bullhead and Vietnam Veterans park and Mesa del Sol.

The SWRP continues to generate Renewable Energy Certificates using digester gas (containing methane) which is used to power a generator. The Southside Water Reclamation Facility generates approximately 30% of its power requirements. Plans are to continue to increase the amount of residual solids that are composted and sold to increase revenue and work cooperatively to increase the amount of compost sold in FY/12. It is the Authority‟s goal to compost 20% of the total wastewater residuals.

Regarding the desktop and mobile computer environment, the Information Technology Division (ITD) will continue its conversion to Microsoft‟s Office365 SharePoint online environment. This service will provide the Authority with online document and records management, improved searching of documents and improved Excel and Visio services. We will complete our implementation of Active Directory, Office 2010 and Windows 7, including the computer replacement of several computers that no longer meet standards. Mobile devices will continue to be deployed in areas that will improve the business processes of field work (evaluation is still pending).

The implementation and upgrade of Maximo (the Utility‟s Computerized Maintenance Management System) will be completed in FY/13. In addition, the Authority will continue its deployment of

Maximo by testing & evaluating mobile devices such as laptops and tablets. This mobile environment will include accessing not just Maximo, but also operating manuals and electronic map books from the field.

In FY/13, the Authority will begin the implementation of Phase 2 of its Automated Meter Infrastructure (AMI) project for small residential meters (≤ 4"), revamp the Customer Care and Billing (CC&B) billing web interface for customers and increase market penetration of paperless billing. The AMI project will provide access to customers of their monthly, daily and hourly water usage.

The Laboratory Information Management System (LIMS) implementation will be completed in FY/13 and will result in improved water quality business processes, electronic lab notebooks, better access to lab data and improved interfaces between lab equipment and the software application.

Water and Wastewater Operations are regulated by a myriad of federal, state, and local environmental permits, regulations, and rules. The Compliance Division continues to develop and maintain a matrix of regulatory requirements and procedural conventions to assure accurate and timely reporting. A Quality Assurance/Quality Control Program will be developed to improve environmental monitoring practices. Monitoring of new regulatory initiatives will be further emphasized to define operational impacts and develop compliance strategies. The Industrial Pretreatment Program will continue to improve compliance with the Water Authority Sewer Use and Wastewater Control Ordinance by continuing validation of compliance of food establishments, extra-strength discharge users, and industrial waste permit holders. Implementation of the Master Plan for the Laboratory Information Management System (LIMS), a laboratory operations management tool that maintains records for millions of analytical results and associated quality assurance/quality control processes, continues. A LIMS reporting system for turnaround-time and hold-time performance will be developed, along with full-scale operational implementation of electronic data acquisition. Process modeling of business practices to improve efficiencies and define key performance metrics will continue.

In FY/13, the Water Authority will begin the implementation of an Enterprise Resource Planning (ERP) system. This project will implement a full range of financial and human capital resources modules over the next two fiscal years. The Water Authority will be evaluating proposals and make a recommendation to the Board before the end of Fiscal Year 2012 with an anticipated startup for the project beginning in Fiscal Year 2013.

The proposed budget also includes nonrecurring funding for an employee incentive program. This program will reward employees for cost savings due to increased efficiencies or a decrease in work related losses. Funding for this program is contingent on the Water Authority generating the same or a greater amount in savings. This incentive program has been an effective tool in the reduction of the Water Authority"s Workers Compensation expense in half over the past two fiscal years.

Debt service payments increased by $5 million over FY/12. The Authority"s service area is still experiencing very slow growth due to the impact of the recession in the service area. The proposed appropriation for Fiscal Year 2013 is $42.0 million for new projects as well as supplemental appropriations for existing CIP projects to provide additional funding based on current estimates of ongoing projects. By Ordinance, $30 million of annual CIP funding must be used for system rehabilitation. The appropriation also includes $3 million for system growth, $2 million for Automated Meter Infrastructure/Leak Detection, $1 million for Steel Water Line rehabilitation, $2.3 million for remaining costs for the Drinking Water Project, $1.7 million for San Juan Chama Mitigation efforts and $2 million for the Enterprise Resource Planning System (ERP). There are no appropriations for projects that will be funded with revenues from FY/13 and later.

Working Capital will add $8 million from the surplus of revenue over expenditures in FY/13. This $8 million will be added to the FY/12 balance of $2 million. The Working Capital balance at June 30, 2013 is estimated to be $10 million.

An additional $2 million is reserved in the rate reserve fund. The Water Authority will also provide deferred UEC collections on up to 50 affordable housing units developed by non-profit housing developers.

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

The Albuquerque Bernalillo County Water Utility Authority can be examined by Division. Comparing the original budget for FY/12 with the proposed FY/13 shows changes in the Plant, Field, and the Water Authority Divisions.

Utility Spending by Division

($000's)	AUDITED FY11	ORIGINAL BUDGET FY12	REVISED BUDGET FY12	ESTIMATED ACTUAL FY12	PROPOSED BUDGET FY13	PROP 13/ EST ACT 12 CHG
Customer Services	5,010	5,262	5,262	5,080	5,552	472
Finance	6,507	6,804	6,804	6,104	7,022	918
Human Resources	1,387	961	961	990	1,085	95
Northwest Service Area	1,437	2,325	2,325	1,265	2,394	1,129
Information Technology	4,194	3,807	3,807	4,501	4,152	(349)
Low Income Utility Credit	244	250	250	250	250	-
San Juan/Chama	910	2,247	2,247	2,247	2,247	-
Water Authority	3,968	3,007	3,007	3,563	21,253	17,690
Plant	34,348	37,450	37,450	37,836	21,141	(16,695)
Compliance	3,508	4,059	4,059	3,571	4,270	699
Field	25,597	22,193	22,193	23,136	23,108	(28)
Water Resources	5,871	6,353	6,353	6,274	6,515	241
Total	92,981	94,718	94,718	94,817	98,989	4,172

Expenditures

Comparing the FY/12 approved budget with the proposed for FY/13 reveals an overall net increase of $4.2 million. The proposed budget for FY/13 has a net increase of $1.7 million for total personnel expenditures. This increase includes a 2% cost of living adjustment of $452,500, and the addition of 11 net new positions added in midyear FY/12 at a cost of $645,400. These positions are three Treatment Plant Operators, one Lab compliance Specialist, two Engineering Associates, one Mixed Media Technician, one O/M Supervisor, one System Analyst 1 for ERP and two Functional Business positions for the ERP implementation. Total general operating costs increase by $2.8 million and Capital Costs increase of $22,000. The primary increase in operating costs is the increase in Paving and Barricade costs of $2.1 million. The City requires the Authority to add an additional 2 inches of asphalt of all repairs done on any city street. Also, of note, all power and chemical costs were moved to one central division in the budget to better manage these costs at an Authority level. The internal service charges decreased by $392,100 which was driven primarily by a reduction in vehicle fuel costs as the Authority hedged their fuel costs in conjunction with the City of Albuquerque. Of note in the expense category is the reduction of $77,000 in Workers Compensation. This reduction is result of the effectiveness of the Board approved employee incentive program and the effort of Authority employees.

The balance for Working Capital, total revenues minus total expenses, is estimated to be minimal at the end of FY/12. Working Capital is augmented by $10 million from the surplus of revenue over expenditures for FY/13. The Working Capital balance at June 30, 2013 is estimated to be $10 million. An additional $2 million is reserved in the rate reserve fund which will be $4 million in FY/13. The Water Authority will also provide deferred UEC collections on up to 50 affordable housing units developed by non-profit housing developers.

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

Proposed Issue Papers and Initiatives – Proposed issue papers and initiatives funded total $3,273,782 for the Joint Water and Sewer Operating Fund. The list below identifies the issues and divisions funded as well as the total amount of the funding provided.

Compensation –The proposed budget includes a step increase for permanent Water Authority employees of 2%.

Total ABCWUA Proposed Issue Papers	
Fund 621 - Joint Water and Sewer Operating	**3,273,782**
Plant	
3 Treatment Plant Operators (FY/12 mid year additions)	225,221
SWRP- Refuse Costs	83,000
ISD	
System Analyst 1 (FY/12 mid year addition) - ERP conversion	90,088
Northwest Service Area	
O/M Supervisor (FY/12 mid year addition) - offset by Contractual Service Cost	0
Human Resources	
Mixed Media Technician (FY/12 mid year addition)	21,526
Unemployment Compensation Fund	76,000
CNM-WTC State Certification Prep Training	18,000
Water Resource, Engineering and Planning	
2 Engineering Associates (FY/12 mid year addition)	114,650
Compliance	
Lab-Regulatory Compliance Specialist	83,241
Finance	
Convert Fiscal Coordinator to Warehouse Supervisor	(8,659)
Forklift for Warehouse at Pino Yards (CIP)	0
2 ERP Functional Users for ERP Implementation (FY/12 mid year additions) 1 position funded out of ERP	110,715
CSD	
Liens - Bernalillio County Increase ($114,650 offset by Revenue)	0
Postage increase	50,000
Increase for annual vehicle replacement	22,000
Field	
Increase in Barricade Costs	1,450,000
Barricade Permit Fees	280,000
Paving & Concrete Replacement Costs	631,000
Admin	
AWWA Subscription-Drinking Water (Increase due to increase in Customers)	27,000

Changes in Employment - The proposed budget for FY/13 shows a net increase of 11 new positions that were FY/12 midyear additions. There were eleven new positions created. The positions are: 3 Treatment Plant Operators, 2 ERP Functional Analysts, System Analyst, Lab Compliance Specialist, 2 Engineering Associates, Mixed Media Technician and a O/M Supervisor.

	ACTUAL FY/11	BUDGET FY/12	BUDGET FY/12	ACTUAL FY/12	BUDGET FY/13
POSITIONS:					
Customer Services	62	61	61	61	61
Finance	23	23	23	25	25
Human Resources	19	12	12	13	13
Information Technology	22	22	22	23	23
Water Authority	12	12	12	12	12
Northwest Service Area	13	12	12	13	13
Wastewater Collection	61	63	63	63	63
Compliance	38	41	41	42	44
Wastewater Treatment	107	108	108	111	109
Water Distribution Facilitation	68	20	20	20	20
Water Plant Facility Production	55	79	79	79	79
Water Plant Facility Distribution	77	103	103	103	103
Water Resources/Engineering/Plan	33	35	35	37	37
Strategy Implementation	9	11	11	11	11
North I-25 Reuse	1	0	0	0	0
TOTAL FULL TIME POSITIONS	**600**	**602**	**602**	**613**	**613**

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

Details for Fund 621(Joint Water Sewer Operating Fund) and Fund 631 (Joint Water and Sewer Revenue Bond Debt Service Fund) can be found in the attached tables below.

($000's)	AUDITED FY11	ORIGINAL BUDGET FY12	REVISED BUDGET FY12	ESTIMATED ACTUAL FY12	PROPOSED BUDGET FY13	PROP 13/ EST ACT 12 CHG
JOINT WATER AND SEWER OPERATING FUND - 621						
Customer Services	5,010	5,262	5,262	5,080	5,552	472
Finance	6,507	6,804	6,804	6,104	7,022	918
Human Resources	1,387	961	961	990	1,085	95
Northwest Service Area	1,437 -	2,325 -	2,325 -	1,265 -	2,394 -	1,129
Information Technology	4,194	3,807	3,807	4,501	4,152	(349)
Low Income Utility Credit	244	250	250	250	250	-
San Juan/Chama	910	2,247	2,247	2,247	2,247	-
Water Authority	3,968	3,007	3,007	3,563	21,253	17,690
Wastewater Collection	8,147	8,055	8,055	8,261	6,352	(1,909)
Compliance	3,508	4,059	4,059	3,571	4,270	699
Wastewater Treatment	13,820	14,511	14,511	15,400	11,792	(3,608)
N-I25 Reuse	317 -	236 -	236 -	201 -	76	(125)
Sustainable Water Supply	9,422 -	11,233 -	11,233 -	8,820 -	2,712	(6,108)
Water Distribution Facilitation	5,139	2,024	2,024	2,241	2,050	(191)
Water Plant Facility Production	10,789	11,470	11,470	13,415	6,561	(6,854)
Water Plant Facility Distribution	12,311	12,114	12,114	12,634	14,706	2,072
Water Resources/Engineering/Plan	5,871	6,353	6,353	6,274	6,515	241
Trfr from Fund 621 to Fund 110	7,256	8,097	8,097	8,097	8,294	197
Trfr from Fund 621 to Fund 628	6,000	8,000	8,000	8,000	8,000	-
Trfr from Fund 621 to Fund 629	1,000	-	-	-	-	-
Trfr from Fund 621 to Fund 631	65,337	66,727	66,727	66,727	66,362	(365)
Subtotal Jt. Water & Sewer Operating Fund - 621	172,577	177,542	177,542	177,641	181,645	4,004
JOINT WATER AND SEWER REVENUE BOND D/S FUND - 631						
Debt Service	65,202	67,727	67,727	67,727	72,738	5,011
Transfer to Capital Fund 627	-	-	-	-	-	-
Transfer to Capital Fund 629	3,000	3,000	3,000	3,000	3,000	-
Total Water/Sewer Debt Svc Fd-631	68,202	70,727	70,727	70,727	75,738	5,011
TOTAL	**240,780**	**248,269**	**248,269**	**248,368**	**257,383**	**9,015**
TOTAL DEPARTMENT APPROPRIATION	240,780	248,269	248,269	248,368	257,383	9,015
Interfund Adjustment	(65,337)	(66,727)	(66,727)	(66,727)	(66,362)	365
NET DEPARTMENT APPROPRIATIONS	175,443	181,542	181,542	181,641	191,021	9,380

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

($000's)	AUDITED FY11	ORIGINAL BUDGET FY12	REVISED BUDGET FY12	ESTIMATED ACTUAL FY12	PROPOSED BUDGET FY13	PROP 13/ EST ACT 12 CHG
T WATER & SEWER OPERATING FUND - 621						
5900009 CUSTOMER SERVICES:						
5928 Customer Services	5,010	5,262	5,262	5,080	5,552	472
PROGRAM APPROPRIATION	**5,010**	**5,262**	**5,262**	**5,080**	**5,552**	**472**
5900005 FINANCE:						
5910 Finance	4,886	5,133	5,133	4,433	5,274	841
5951 Franchise Fee	520	571	571	- 571	648	77
5911 State Water Conservation Fee	1,100	1,100	1,100	1,100	1,100	-
PROGRAM APPROPRIATION	**6,507**	**6,804**	**6,804**	**6,104**	**7,022**	**918**
5900006 HUMAN RESOURCES:						
5929 Payroll/Personnel/Risk	944	811	811	854	931	77
5930 Training	443	150	150	136	154	18
PROGRAM APPROPRIATION	**1,387**	**961**	**961**	**990**	**1,085**	**95**
5900008 INFORMATION TECHNOLOGY:						
5944 Information Systems	4,194	3,807	3,807	4,501	4,152	(349)
PROGRAM APPROPRIATION	**4,194**	**3,807**	**3,807**	**4,501**	**4,152**	**(349)**
5900017 LOW INCOME UTILITY CREDIT:						
5917 Low Income Utility Credit	244	250	250	250	250	-
PROGRAM APPROPRIATION	**244**	**250**	**250**	**250**	**250**	**-**
5900016 SAN JUAN/CHAMA						
5921 San Juan Chama	910	2,247	2,247	2,247	2,247	-
PROGRAM APPROPRIATION	**910**	**2,247**	**2,247**	**2,247**	**2,247**	**-**
5900003 WASTEWATER COLLECTION:						
5915 Wastewater Collection	4,566	4,638	4,638	4,745	4,786	42
5919 Lift Stn Ops	3,581	3,417	3,417	3,517	1,566	(1,951)
PROGRAM APPROPRIATION	**8,147**	**8,055**	**8,055**	**8,261**	**6,352**	**(1,909)**
5900004 WATER AUTHORITY:						
5912 Water Authority	2,584	2,005	2,005	2,050	2,000	(50)
5920 Safety	267	264	264	269	277	7
5943 Strategic Support	1,117	738	738	1,244	459	(784)
	-	-	-	-	18,517	18,517
PROGRAM APPROPRIATION	**3,968**	**3,007**	**3,007**	**3,563**	**21,253**	**17,690**

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

($000's)	AUDITED FY11	ORIGINAL BUDGET FY12	REVISED BUDGET FY12	ESTIMATED ACTUAL FY12	PROPOSED BUDGET FY13	PROP 13/ EST ACT 12 CHG
5900002 COMPLIANCE:						
5914 Laboratory	1,798	2,030	2,030	1,807	2,109	303
5916 Wastewater Pretreatment	805	964	964	852	962	110
5924 Water Quality	905	1,065	1,065	912	1,199	286
PROGRAM APPROPRIATION	**3,508**	**4,059**	**4,059**	**3,571**	**4,270**	**699**
5900001 WASTEWATER TREATMENT:						
5913 Wastewater Treatment	13,820	14,511	14,511	15,400	11,792	(3,608)
PROGRAM APPROPRIATION	**13,820**	**14,511**	**14,511**	**15,400**	**11,792**	**(3,608)**
5900007 Northwest Service Area						
5953 Administration	542	772	772	588	799	211
5954 Plant	480	-	-	-	-	-
5955 Field	416	1,553	1,553	677	1,595	918
PROGRAM APPROPRIATION	**1,437**	**2,325**	**2,325**	**1,265**	**2,394**	**1,129**
5900014 N-I25 Reuse:						
5949 N-I25 Reuse	317	236	236	201	76	(125)
PROGRAM APPROPRIATION	**317**	**236**	**236**	**201**	**76**	**(125)**
5900015 SUSTAINABLE WATER SUPPLY:						
5948 Sustainable Water Supply	9,422	11,233	11,233	8,820	2,712	(6,108)
PROGRAM APPROPRIATION	**9,422**	**11,233**	**11,233**	**8,820**	**2,712**	**(6,108)**
5900013 WATER DISTRIBUTION FACILITATION:						
5925 Tech Services	2,710	1,446	1,446	1,683	1,456	(228)
5926 Administration	2,429	578	578	557	594	37
5927 Workload Management						
PROGRAM APPROPRIATION	5,139	2,024	2,024	2,241	2,050	(191)
5900011 WATER PLANT FACILITY PROI	630	693	693	825	851	27
5931 Well Maintenance	1,736	3,058	3,058	2,966	2,183	(783)
5932 Water Treatment	987	1,346	1,346	1,449	965	(483)
5933 Pump Stations	1,674	1,813	1,813	2,036	1,559	(477)
5934 Plant Operations	5,012	4,049	4,049	5,662	875	(4,787)
5938 Arsenic Treatment	19	442	442	90	70	(20)
5939 MDC Water	731	69	69	389	58	(331)
PROGRAM APPROPRIATION	**10,789**	**11,470**	**11,470**	**13,415**	**6,561**	**(6,854)**

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

($000's)	AUDITED FY11	ORIGINAL BUDGET FY12	REVISED BUDGET FY12	ESTIMATED ACTUAL FY12	PROPOSED BUDGET FY13	PROP 13/ EST ACT 12 CHG
5900012 WATER PLANT FACILITY DISTRIBUTION:						
5923 Customer REQ	2,310	1,707	1,707	1,787	895	(892)
5935 Distribution Lines	8,754	5,968	5,968	8,204	9,780	1,576
5936 Meter Installation	263	166	166	144	243	99
5937 Water Meter Maintenance	1,668	2,186	2,186	2,110	1,196	(914)
PROGRAM APPROPRIATION	**12,994**	**10,027**	**10,027**	**12,245**	**12,114**	**(131)**
5900010 WATER RES/ENG/PLAN						
5922 Utility Development	1,600	1,516	1,516	1,554	1,690	136
5945 Water Resources	4,413	4,265	4,265	4,208	4,614	406
5946 Arsenic Removal	1	49	49	1	49	48
PROGRAM APPROPRIATION	**6,013**	**5,830**	**5,830**	**5,763**	**6,353**	**590**
5900022 TRANSFER TO GENERAL FUND 110						
5990 Utility Transfer to General Fund - 110	7,248	7,257	7,257	7,257	8,097	840
PROGRAM APPROPRIATION	**7,248**	**7,257**	**7,257**	**7,257**	**8,097**	**840**
5900023 TRANSFER TO REHAB FUND 628						
5990 Transfer to Rehab Fund 628	11,500	6,000	6,000	6,000	8,000	2,000
PROGRAM APPROPRIATION	**11,500**	**6,000**	**6,000**	**6,000**	**8,000**	**2,000**
5900024 TRFR TO CAPITAL FUND - 629:						
5990 Trfr to Capital Fd - 629	1,000	1,000	1,000	1,000	-	(1,000)
PROGRAM APPROPRIATION	**1,000**	**1,000**	**1,000**	**1,000**	**-**	**(1,000)**
5900025 TRFR DEBT SVC FUND 631:						
5990 Utility Transfer to 631	67,790	65,337	65,337	65,337	66,727	1,390
PROGRAM APPROPRIATION	**67,790**	**65,337**	**65,337**	**65,337**	**66,727**	**1,390**
JOINT WATER & SEWER REVENUE BOND D/S FUND - 631						
5900019 DEBT SERVICE						
5940 Strategy Implementation D/S	-	23,183	23,183	23,183	23,367	184
5941 NM EID D/S	21,454	24,005	24,005	24,005	28,770	4,765
5942 Utility Revenue Bond	43,748	20,539	20,539	20,539	20,601	62
PROGRAM APPROPRIATION	**65,202**	**67,727**	**67,727**	**67,727**	**72,738**	**5,011**
5900029 TRANSFER TO CAPITAL FUND 627						
5947 Transfer to Capital 627	-	-	-	-	-	-
PROGRAM APPROPRIATION	**-**	**-**	**-**	**-**	**-**	**-**
5900030 TRANSFER TO CAPITAL FUND 629						
5992 Transfer to Capital 629	3,000	3,000	3,000	3,000	3,000	-
PROGRAM APPROPRIATION	**3,000**	**3,000**	**3,000**	**3,000**	**3,000**	**-**

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Financial Plan

The following table is the financial plan for Fund 621 (Operating Fund). The plan looks from FY/11 thru FY/21. This plan takes into account the Authority"s Capital needs, Debt Service needs, revenue sources and expenditures. The Financial Plan helps the Authority plan for future potential expenditure levels in both operating and capital and compare them to the estimated revenue resources for each projected Fiscal Year. The plan shows the effects of the budget on the Authority"s Future Working Capital and provides a tool to project future budget needs for the Utility. Based upon this financial plan, the Authority forecasts the rate increase of 5% that was approved by the Board for FY/14.

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

Operating Fund

Hypothetical DS Comparison

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Capital Funds										
Needs: Basic (Min 50% cash Trans)	33,000	33,000	34,000	34,000	34,000	36,000	36,000	36,000	36,000	36,000
State Grant (Odor Control)										
Water Reclamation	7,000	7,000	20,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
DWL (Santa Barbara)										
Southside Reuse	11,000									
SJC Remediation	5,000									
Steel Line	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
AMR	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Special Projects	-	-	-	-	-	-	-	-	-	-
Valley Utility Projects	1,000	-	-	-	-	-	-	-	-	-
Resources:										
Beginning Bal.	22,988	35,588	4,688	28,788	5,888	35,988	8,088	36,188	8,288	35,388
Trf. from Operating	8,000	8,000	12,000	18,000	15,000	17,000	20,000	23,000	25,000	25,000
Trf. from Debt Service	3,000	3,000	4,000	5,000	5,000	6,000	6,000	6,000	6,000	6,000
Bond Proceeds (Water Reclamation)										
Bond Proceeds	44,500		64,000		56,000		56,000		56,000	
Bond Proceeds Southside/SJC	156,600									
Adjustments										
First Year is 6mos. (y/n)	n	n	n	n	n	n	n	n	n	n
Subtotal	78,488	46,588	84,688	51,788	81,888	58,988	90,088	65,188	95,288	66,388
Interest on Above	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Total	79,588	47,688	85,788	52,888	82,988	60,088	91,188	66,288	96,388	67,488
Balance June 30	35,588	4,688	28,788	5,888	35,988	8,088	36,188	8,288	35,388	6,488
Debt Service Fund										
Future Bond Interest=										
Resources:										
Interest Income	800	800	800	800	800	800	800	800	800	800
UECs	8,000	8,000	8,000	9,000	9,000	11,000	12,000	12,000	12,000	12,000
Transfer from 621	66,727	66,362	69,494	70,108	76,456	81,779	82,813	84,116	81,115	81,114
Transfer from 622										
Adjustments/Misc										
Bg. Fund Balance	(2,823)	2,821	1,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079
Total	72,704	77,983	79,373	81,987	88,335	95,657	97,691	98,995	95,993	95,992
Expenditures:										
Agent Fees	15	15	15	15	15	15	15	15	15	15
Trf to Capital	3,000	4,000	4,000	5,000	5,000	15,000	15,000	15,000	15,000	15,000
Wtr/Swr Loans	3,436	1,818	1,281	985	645	645	645	645	645	645
SJC Series 1999 w/o bas	-	-								
Series 97 P&I	-	-								
99 P&I (excl SJC 622)										
2001 P&I	4,034	4,059								

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

Operating Fund

Hypothetical DS Comparison

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Series 2005 P&I	2,376	2,411	2,316	2,310	2,295	2,447				
04 P&I	-	-								
2005 SJC $116.695M	10,091	10,279	12,498	12,717	10,974	12,332	11,564	11,326	11,060	11,060
NMFA 2004B 82.120M	6,796	6,834	6,869	6,097	6,948	6,995	7,044	7,100	7,149	7,149
2004 NMFA DWRFL	734	734	734	734	734	734	734	734	734	734
NMFA 20M 2005 SJC	1,444	1,374	1,708	1,670	1,880	1,931	1,977	1,909	1,861	1,861
NMFA 36.295M Basic	4,713	4,582	4,445	4,004	5,415					
NMFA Series 2007A Basic	4,130	3,204	3,448	2,087	2,834	2,638	8,909	8,954	2,757	2,757
NMFA Series 2007A Reuse/SJ	2,915	4,864	3,936	5,069	3,804	5,147	2,279	2,507	2,758	2,758
Series 2008 Reuse/SJC $55.6	2,781	2,781	2,781	2,781	2,781	2,781	2,781	2,781	2,781	2,781
Series 2006 P&I	1,321	2,376	2,411	2,316	2,310	2,295	2,447			
Series 2006 P&I (8.680)	1,170	1,167	1,170	1,171	1,169	1,169	570			
Series 2006 SJC 112.765	7,984	7,985	7,986	7,981	7,982	7,986	6,984	7,986	7,984	7,984
Series 2009 (129.26)	12,387	12,393	12,388	12,393	12,389	12,392	12,389	12,385	12,393	12,393
Series 2009 (SJC 6.73)	504	501	503	501	504	499	499	499	503	503
AARA Funding	54	54	54	54	54	54	54	54	54	54
Proposed Issue			3,275	6,550	6,550	6,550	6,550	6,550	6,550	6,550
Proposed Issue							3,200	6,497	6,497	6,497
Proposed Issue					6,497	6,497	6,497	6,497	6,497	6,497
									3,200	3,200
Proposed Issue		5,475	5,477	5,473	5,477	5,472	5,475	5,478	5,476	5,475
Total	69,884	76,904	77,294	79,908	86,256	93,579	95,613	96,916	93,915	93,914
Fund Balance	2,821	1,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079
Operating Fund										
Resources										
Rate Revenue	**174,250**	**175,300**	184,942	187,716	190,531	193,389	196,290	199,235	202,223	205,256
Nonrate Revenue	8,660	8,547	8,547	8,547	8,547	8,547	8,547	8,547	8,547	8,547
Franchise Fee	6,915	6,915	7,053	7,194	7,338	7,485	7,635	7,787	7,943	8,102
Bg. Working Cap.	(10,647)	1,253	10,422	19,370	21,465	19,869	11,073	(950)	(16,468)	(30,174)
Total	179,178	192,015	210,964	222,827	227,881	229,290	223,545	214,619	202,245	191,732
Rate Stabilization Fund										
Expenditures										
Other (incl GF Trn & Tort)	10,587	10,799	11,015	11,235	11,516	11,804	11,922	12,041	12,161	12,283
Salary Savings 4.5		(1,800)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Offset to Issue Papers		3,274								
Incentive	300	300	300	300	300	300	300	300	300	300
Non recuring issues										
Maximo										
Rate Stabilization Fund	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Transf. to DS	66,727	66,362	69,494	70,108	76,456	81,779	82,813	84,116	81,115	81,114
Transf. to Cap.	8,000	8,000	12,000	18,000	15,000	17,000	20,000	23,000	25,000	25,000
Total	177,925	181,593	191,594	201,362	208,012	218,217	224,495	231,087	232,419	234,796
Resources over Comm.	1,253	10,422	19,370	21,465	19,869	11,073	(950)	(16,468)	(30,174)	(43,064)
Rate Increases	5.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Accum. Inc. from 2004	6.0%	6.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**

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REVENUE OUTLOOK

Proposed
Operating Budget
FY/13

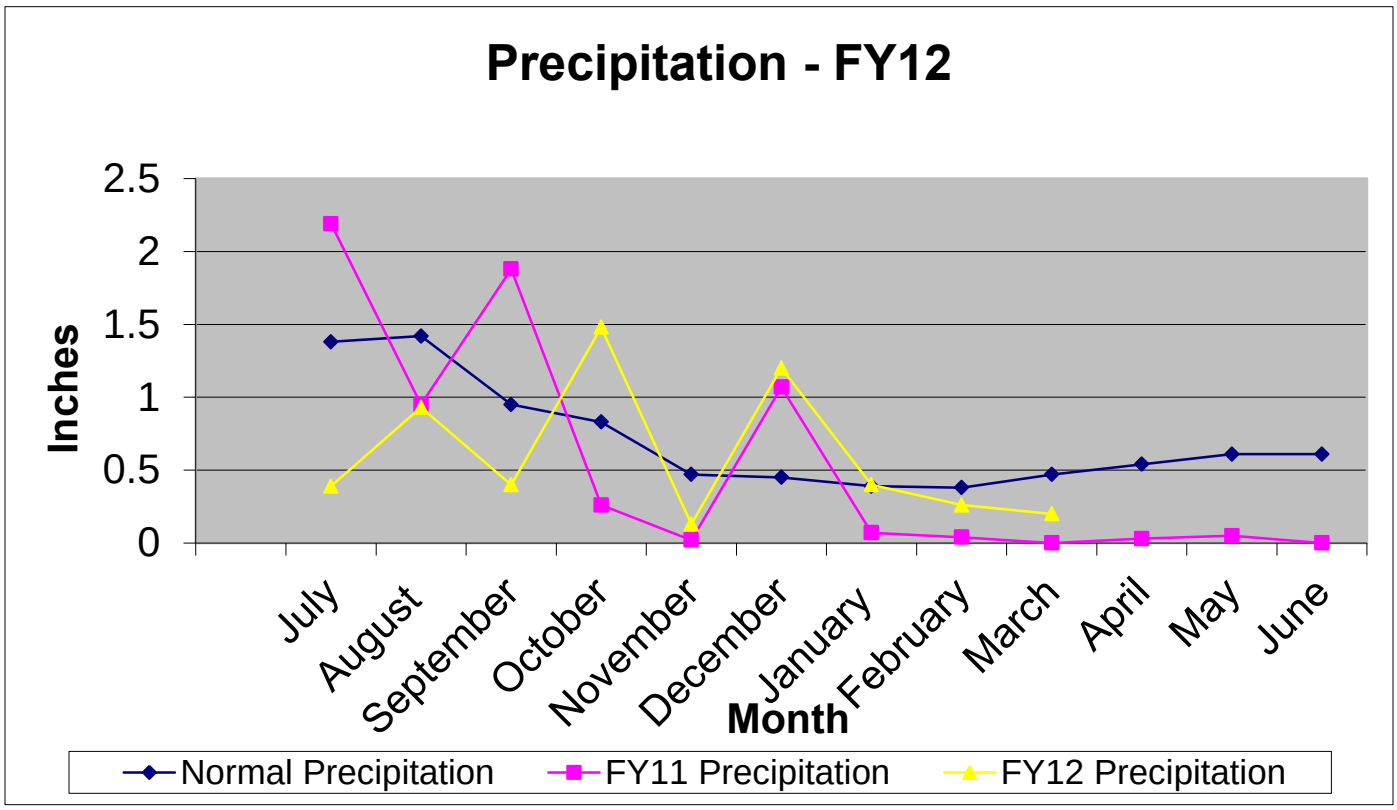
ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

REVISED FY/11 AND PROPOSED FY/12 REVENUE PROJECTIONS

The Authority's revenue projections are summarized in the two tables included in this section. The first table, Joint Water and Sewer Operating Fund 621, presents the operating budgeted revenue for FY/13 as compared to budget FY/12. The second table, Joint Water and Sewer Revenue Bond Debt Service Fund 631, also provides for the same comparison as the other table. For FY/11 the actual results are reported, and for FY/12 budgeted revenues and estimated actual are reported as well.

REVISED FY/10 REVENUE ESTIMATES

Total Authority operating fund revenues for FY/12 are anticipated to be $183.79 million or $23.3 million above FY/11. This is an increase of 14.5% over FY/11 and is projected to be at the approved FY/12 budget level. The increase is primarily the result of a rate increase that went into effect on July 1, 2011. The system has seen some growth in the service area due to development on the Northwest Area of the Authority's service area and in Mesa del Sol. These tempered by continued conservation efforts revenues for FY/12 are estimated to be above FY/12 budgeted levels. This has been compounded by an increase in water usage due to the below average moisture that the service area has received since the beginning of the fiscal year (see chart below).



ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

PROPOSED BUDGET REVENUE ESTIMATES FOR FY/13

Budgeted total Authority Operating Revenues for FY/13 are $191.4 million representing an increase above the budgeted FY/12 amount, due mainly by an increase in the rate of growth of the service area. Revenue in the Debt Service Fund has a $1.0 million increase due mainly from a increase in UEC anticipated revenue.

JOINT WATER AND SEWER OPERATING FUND 621

($000's)	AUDITED FY11	ORIGINAL BUDGET FY12	REVISED BUDGET FY12	ESTIMATED ACTUAL FY12	PROPOSED BUDGET FY13	PROP 13/ EST ACT 12 CHG
RESOURCES:						
Miscellaneous Revenues						
Bond Proceeds	-	-	-	-	-	-
Interest on Investments	62	750	750	750	750	-
Other Miscellaneous Revenue	1,114	1,274	1,274	1,274	1,474	200
Total Miscellaneous Revenues	1,176	2,024	2,024	2,024	2,224	200
Enterprise Revenues						
City System-Water	57,654	68,036	68,036	68,036	70,800	2,764
City System-Sewer	34,911	51,551	51,551	51,551	51,800	249
City System-Contr/Aid	294	240	240	280	350	70
SJC Strategy Implementation	25,922	27,627	27,627	27,627	30,000	2,373
City Metered Water Sales-Reuse	297	350	350	350	400	50
City System-Franchise Fee	5,323	6,292	6,292	6,292	6,544	252
Water Resources Management	4,671	4,468	4,468	4,468	4,500	32
Water Facilities Rehab	9,753	7,100	7,100	9,500	7,100	(2,400)
Wastewater Facilities Rehab	10,485	6,200	6,200	12,500	6,200	(6,300)
Total City System	149,309	171,864	171,864	180,604	177,694	(2,910)
Valley System-Water	4,830	4,373	4,373	4,373	5,000	627
Valley System-Sewer	2,986	3,168	3,168	3,168	4,000	832
Valley System-Contr/Aid	38	50	50	50	50	-
Valley System-Franchise Fee	465	553	553	553	575	22
Rio Rancho-Franchise Fee	1	1	1	1	1	-
Los Ranchos-Franchise Fee	61	69	69	69	72	3
Total Valley System	8,381	8,214	8,214	8,214	9,698	1,484
Total Enterprise Revenues	157,691	180,078	180,078	188,818	187,392	(1,426)
Transfers from Other Funds						
CIP Funded Employees	646	650	650	650	650	-
Refuse Disposal Op. Fund - 651	1,032	1,047	1,047	1,047	1,142	95
Total Transfers	1,678	1,697	1,697	1,697	1,792	95
Total Current Resources	160,546	183,799	183,799	192,539	191,408	(1,131)
Beginning Working Capital Balance	(636)	(10,650)	(10,650)	(10,650)	2,248	12,898
TOTAL RESOURCES	159,910	173,149	173,149	181,889	193,656	11,767

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

JOINT WATER AND SEWER REVENUE BOND DEBT SERVICE FUND 631

($000's)	AUDITED FY11	ORIGINAL BUDGET FY12	REVISED BUDGET FY12	ESTIMATED ACTUAL FY12	PROPOSED BUDGET FY13	PROP 13/ EST ACT 12 CHG
RESOURCES:						
Miscellaneous Revenues						
Interest on Investments	111	500	500	500	500	-
Expansion Charges (UEC)	6,240	7,000	7,000	7,000	8,000	1,000
Proceeds of Refunding Bonds	-	-	-	-	-	-
Release of Reserves	-	-	-	-	-	-
Total Miscellaneous Revenues	6,351	7,500	7,500	7,500	8,500	1,000
Transfers from Other Funds						
General Fund - 110	-	-	-	-	-	-
Joint Water and Sewer Rehab	-	-	-	-	-	-
Water/Sewer Operating Fund - 621	65,337	66,727	66,727	66,727	66,362	(365)
Total Transfers	65,337	66,727	66,727	66,727	66,362	(365)
Total Current Resources	71,688	74,227	74,227	74,227	74,862	635
Beginning Working Capital Balance	(2,689)	(2,971)	(2,971)	(2,971)	529	3,500
TOTAL RESOURCES	68,999	71,256	71,256	71,256	75,391	4,135

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

ECONOMIC OUTLOOK

The following is based on the November 2011 forecast and events may have transpired that may or may not agree with this forecast.

NATIONAL ECONOMY AND KEY POINTS FROM THE GLOBAL INSIGHT OUTLOOK

In the November 2011 forecast, Global Insight (GI) expects moderate growth. The year over year growth in real GDP for FY/12 is expected to be 1.7% which is below the 2.6% growth in FY/11. Employment growth after increasing a meager 0.6% in FY/11 is expected to increase 0.9% in FY/12. Total employment is not expected to reach its previous peak of FY/08 until FY/15. Unemployment reached a peak of 9.9% in the fourth quarter of 2009 and by FY/16 only declines to 7.2%. Inflation is one of the few bright spots in the GI forecast. They expect growth in the Consumer Price Index (CPI) to remain muted, around 2% throughout the forecast. Some of this is due to the expectation of fairly moderate increases in the price of oil. Prices are expected to stay around $89 per barrel through FY/12, gradually increasing to $112 in FY/16. The primary reason for the expectation of low inflation is the weakness in demand due to the weak labor market.

The low inflation expectation also plays into moderate increases in interest rates. GI believes that the Federal Reserve Bank (FRB) will not raise rates until FY/14; reaching 0.4% in FY/13 and continue slowly increasing to reach 3.8% in FY/16.

The alternative forecast gives a 40% probability to a pessimistic scenario and 10% probability to an optimistic scenario. The pessimistic scenario has the economy falling back into recession. This is driven by weakening in credit markets both domestically and worldwide. The unemployment rate peaks at 10.5% in FY/13 and only declines to 9.1% by FY/16. Added to this, increases in the price of commodities push up the CPI to above baseline levels in out years. The optimistic scenario has a quicker recovery. This is driven by the credit markets working better and increases in productivity. The unemployment rate also declines to 5.5% by FY/16

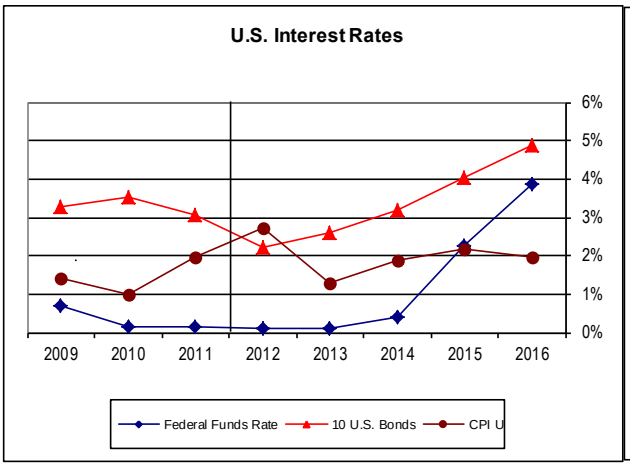
The following charts in Table 1 present a general description of important variables in the GI forecast.

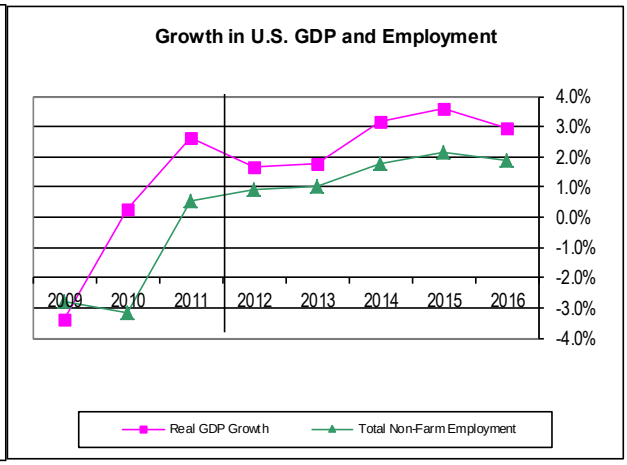
ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

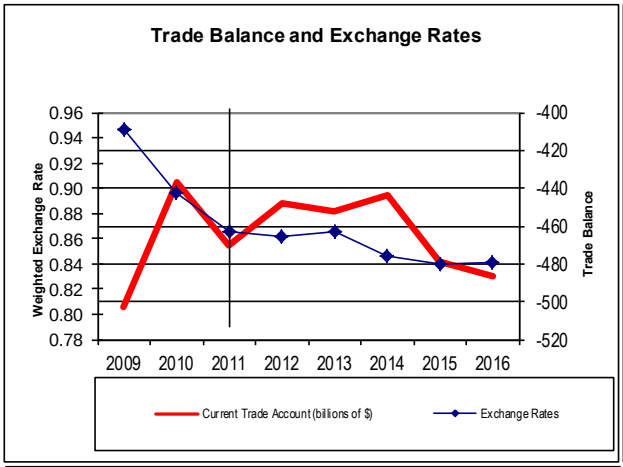
TABLE I

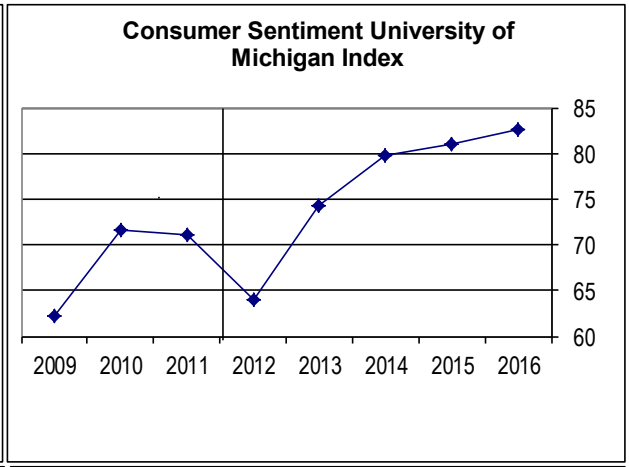
U.S. ECONOMIC VARIABLES AND FORECAST (FISCAL YEAR)

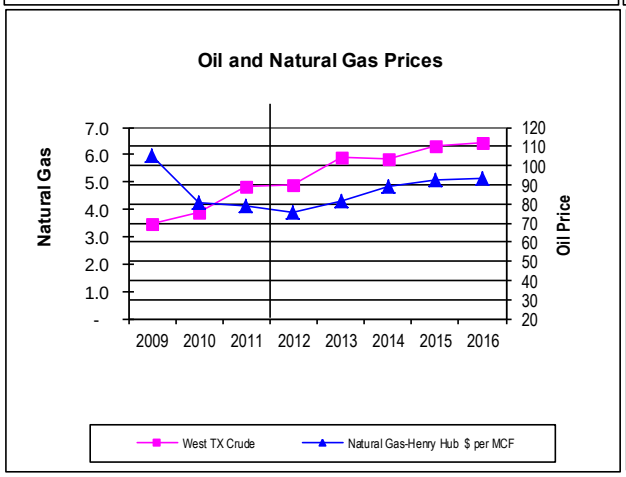
November 2011 Baseline Forecast

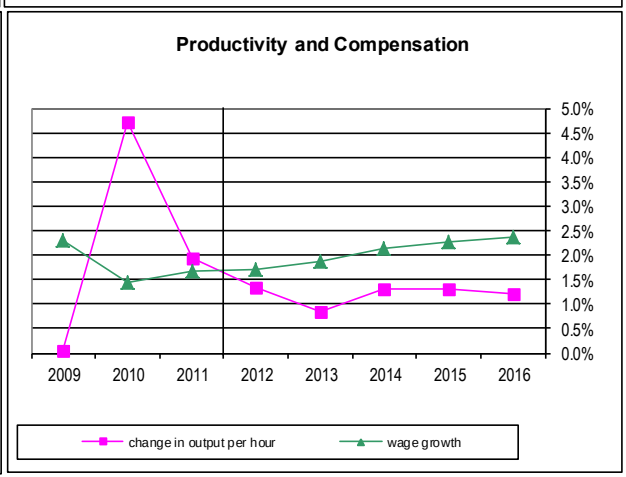












ALBUQUERQUE ECONOMY

The Albuquerque economy is affected by the U.S. and world economies. Housing construction in Albuquerque has slowed dramatically, with single family housing permits falling to a fraction of their peak. Single family housing has increased from its low point in FY/09, but declined in FY/11 as it appears that much of the increase in FY/10 was due to federal stimulus programs for home buyers. With the slowdown, overcapacity exists in many industries, and vacancy rates remain high, making it unnecessary to build many new commercial developments. Commercial projects have been limited and government projects have also slowed.

Employment growth in the Albuquerque economy began slowing in FY/08 and has continued. In FY/09 employment declined 2.2%, FY/10 was down by 3.4%, and in FY/11 the decline was only 0.9%. The 2nd quarter of FY/12 shows growth of 0.5%. This is the first positive number since the 1st quarter of FY/08. The Albuquerque economy lost 22,681 jobs from FY/08 to FY/11 a loss of 6% of total employment. Growth for FY/12 is expected at 0.5% with growth increasing to 1% in FY/13. While the economy is adding jobs, it is at a slow rate and the previous employment peak in FY/08 is not expected to be reached until the end of FY/16. The unemployment rate in FY/11 declined to 7.5% from 8.8% in FY/10. Some of this decrease is due to discouraged workers leaving the labor force. The rate is expected to slowly decline to 5.8% in FY/16.

Tables 2, 3, and 4 at the end of this section provide a summary of the economic variables underlying the forecast and employment numbers for FY/07 to FY/16 by the major NAICS categories.

Wholesale and Retail Trade. These sectors account for about 15% of employment in the Metropolitan Statistical Area (MSA). The sectors posted declines of 4.6%, 4.2%, and 0.6% in FY/09, FY/10, and FY/11 respectively. Retail trade is expected to recover faster than wholesale, but together they increase only 0.5% in FY/12. FY/13 has growth of 1.8% with growth under 1.5% for the remainder of the forecast.

Transportation, Warehousing and Utilities. This sector, while important, only accounts for 2.5% of employment. Employment in this sector was weak before the recession hit and then declined substantially with decreases of 7.2% in FY/09 and 8.0% in FY/10. In FY/11 the sector grew 1.2% with expectation of an increase of 1.6% in FY/12. Employment bounces back with growth of 2.1% and 2.4% in FY/13 and FY/14. Growth remains above 1.5% for the remainder of the forecast. Even with this growth employment in FY/16 is still well below the level in FY/08.

Manufacturing. This sector accounted for about 6% of employment in the MSA in FY/07 but falls to below 5% in FY/10 and the remainder of the forecast. The sector lost approximately 6,600 jobs between FY/07 and FY/10. FY/11 flattened with a very small increase. Employment is expected to increase 1.3% and 1.5% in FY/12 and FY/13. Growth increases to 2.4% in FY/14 and 3.7% FY/15. In FY/16 manufacturing employment is still 4,500 jobs below the FY/07 level.

Educational and Health Services. Albuquerque is a major regional medical center. Presbyterian Healthcare is one of the largest employers in the area. This is also one of the fastest growing categories in the MSA economy. In the period FY/07 to FY/10, the sector increased at an average rate of 4.3%. It was the only sector outside of government to grow in either FY/09 or FY/10. Growth slowed to 2.1% in FY/11 and is expected to grow at 1.4% in FY/12. The sector has average annual growth of around 2% in FY/13 to FY/16.

Leisure and Hospitality. This category includes eating and drinking establishments as well as hotels and other travel related facilities. Growth has been volatile in this sector. In FY/07 growth was 4.7% driven by

expansion in restaurants and hotels. In FY/08 the growth had slowed to 0.6% and then declined 3.5% in FY/09 and 1.7% in FY/10 . In FY/11 growth was 0.3%. This is a major component of GRT and Lodgers" Tax and the growth in tax revenues trends somewhat with employment in the sector. The forecast shows subdued growth in the sector with a maximum of 1.9% in FY/13.

Financial Activities. This sector includes finance, insurance and real estate including credit intermediation. The employment in this sector had a slight decline between FY/05 and FY/08. From FY/09 to FY/11 employment decreased at an average rate of 3.3%. In FY/12 the decline is only expected to be 0.1%. The financial crises, consolidation in the banking industry, and the construction decline have impacted this sector. The sector shows slight growth of under 1% in the remainder of the forecast.

Professional and Business Services. This category includes temporary employment agencies and some of Albuquerque"s back-office operations. It also includes Sandia National Labs (SNL). Growth from FY/05 to FY/08 averaged 2.4%. Employment declined in FY/09 and FY/10 by 2% and 7.2% respectively. In FY/11, there was an additional loss of 2.6%. Much of this loss was construction related; engineers and architects are also included in the sector. FY/12 is expected to post an increase of 1.7%. Growth in the remainder of the forecast averages 1.9%.

Information. This sector includes businesses in publishing, broadcasting, telecommunications, and internet service establishments. In FY/10 the sector declined 2% followed by a decline of 5.3% in FY/11. In FY/12 the sector is expected to rebound with growth of 3%. While the sector is flat for FY/13, growth rebounds substantially with 4.8% growth in FY/14. FY/15 is expected to increase 4.2% and FY/16 by 2.9%.

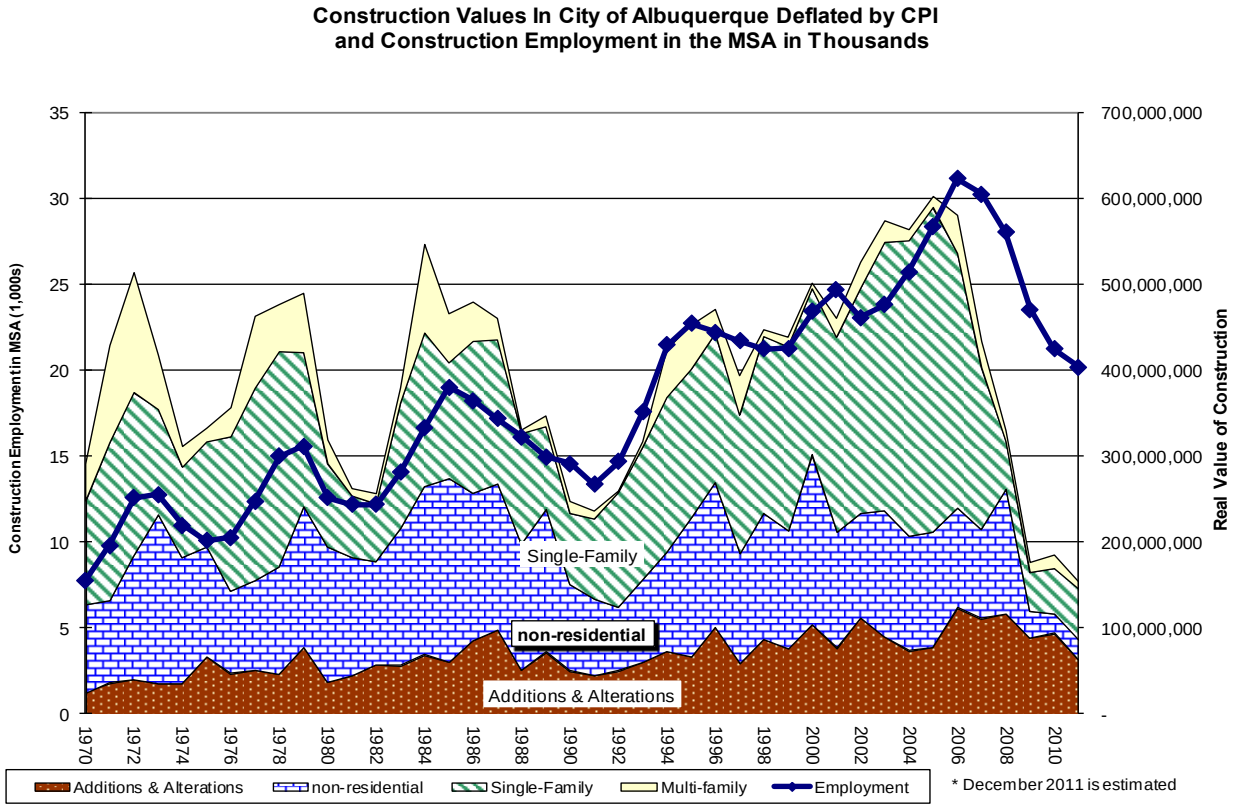
Construction. Construction is typically cyclical, with significant swings in building and employment. The following chart shows the real value of new residential (single-family, multi-family), non-residential (public and private), and additions, alterations, and repairs from 1970 to 2011 (December of 2011 was estimated) and deflated by the CPI; 100=1982-84. Five distinct peaks occur in 1973, 1979, 1985, 1995 and 2005. The fall in single family housing from 2005 to 2009 is the largest in this time period. The bottom was reached in the period of August 2008 to February 2009. While single family permitting has increased, it remains subdued. Construction employment has declined and is expected to continue downward through FY/13. From FY/07 to FY/11 approximately 10,000 jobs or 31% of construction employment was lost. Additional losses of 1,000 jobs are expected in FY/12 and FY/13. The value of new non-residential permits issued in real terms fell dramatically following 2008 and is yet to show any strength.

Single family construction fell dramatically in 2008. The City issued an average of 27 permits a month in the period August 2008 through February 2009. In FY/10 there were 875 single family permits issued. In FY/09 only 435 single family permits were issued. This compares to 1,214 in FY/08 and 2,490 in FY/07. The peak occurred in FY/04 and FY/05 with approximately 5,000 permits issued each year.

While there was some strengthening of non-residential permitted value in FY/08 and early FY/09 much of this was due to the Albuquerque Public Schools construction program. Following this, new non-residential permits have continued to fall. In the first 11 months of 2010 compared to the same period in 2009, the decline in total value was about 1%. Most of this decline occurred because of the slowdown in new public construction. Additions, alterations and repairs have held up relatively well and the modest increases in single family permitting has the total value of building permits 44% below the same period in 2008. Commercial construction was the largest source of this decline with value declining 77%. This was somewhat offset by single family and additions and alterations.

FIGURE 1

City of Albuquerque Value of Permits Deflated by CPI

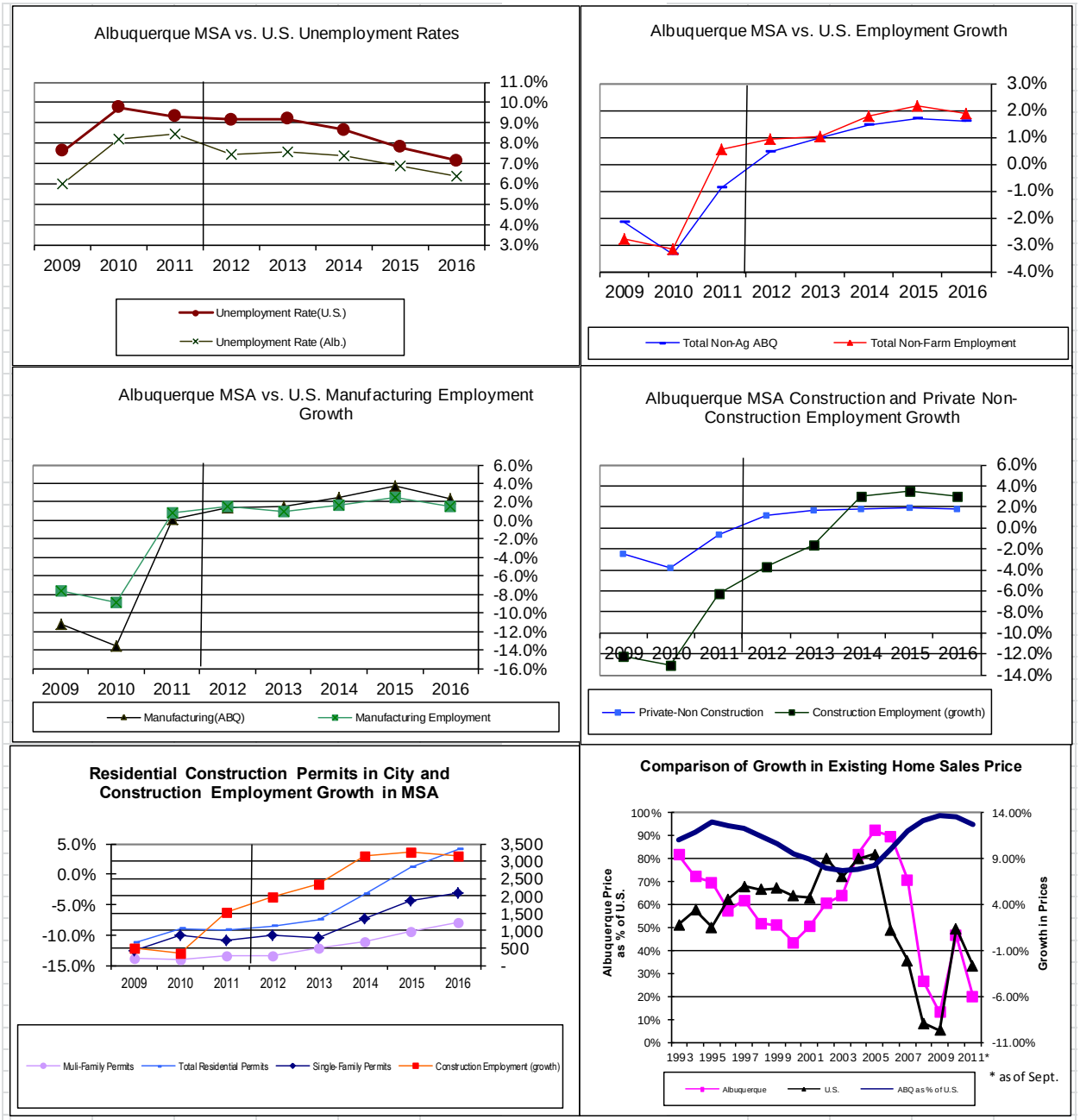


Building permits only tell part of the construction story. Non-building construction such as roads and storm drainage are not captured in the permit numbers. Large construction projects for the State, such as University Hospital, are permitted by the State rather than the City. Employment in the construction sector gives a picture of growth in the entire MSA. As shown in the chart above, construction employment moves similarly to permit values, but differences occur. Growth in employment was very strong in 2000-2002, driven in large part by the Intel project and the Big-I reconstruction project. Employment growth remained strong through FY/07 when it began to slow. In FY/08 employment slowed 5% followed by declines of 12.2% and 13.1% and 6.3% in FY/09, FY/10, and FY/11 respectively. The forecast has a decline of 3.7% in FY/12 and 1.6% in FY/13. Employment finally begins growing in FY/14 and averages 3% through FY/16. At this rate of growth, the expected employment in FY/16 is over 9,000 below the peak in FY/07.

TABLE 2

LOCAL ECONOMIC VARIABLES HISTORY AND FORECAST

By Fiscal Year BBER FOR-UNM Baseline November 2011



ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

TABLE 3

Economic Variables Underlying the Forecast

	Historical			Forecast				
	2009	2010	2011	2012	2013	2014	2015	2016
National Variables								
Real GDP Growth	-3.4%	0.3%	2.6%	1.7%	1.8%	3.2%	3.6%	3.0%
Federal Funds Rate	0.7%	0.2%	0.2%	0.1%	0.1%	0.4%	2.3%	3.9%
10 U.S. Bonds	3.3%	3.5%	3.1%	2.2%	2.6%	3.2%	4.1%	4.9%
CPI U	1.4%	1.0%	2.0%	2.7%	1.3%	1.9%	2.2%	2.0%
Unemployment Rate(U.S.)	7.6%	9.7%	9.3%	9.2%	9.2%	8.7%	7.8%	7.2%
Total Non-Farm Employment	-2.8%	-3.1%	0.6%	0.9%	1.0%	1.8%	2.1%	1.9%
Manufacturing Employment	-7.7%	-8.9%	0.8%	1.5%	1.0%	1.6%	2.5%	1.6%
Consumer sentiment index--University of Michigan	62.2	71.6	71.1	64.1	74.4	79.7	81.0	82.6
Exchange Rates	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8
Current Trade Account (billions of $)	(502.7)	(437.1)	(469.9)	(448.2)	(452.6)	(443.9)	(479.1)	(486.2)
Change in output per hour	0.0%	4.7%	1.9%	1.3%	0.9%	1.3%	1.3%	1.2%
Natural Gas-Henry Hub $ per MCF	5.9	4.2	4.1	3.9	4.3	4.9	5.1	5.1
West TX Intermediate (dollars per bbl)	69.8	75.2	89.4	89.6	104.0	103.7	110.2	112.1
Wage Growth	2.3%	1.4%	1.7%	1.7%	1.9%	2.1%	2.3%	2.4%
Albuquerque Variables								
Employment Growth and Unemployment in Albuquerque MSA								
Total Non-Ag ABQ	-2.2%	-3.4%	-0.9%	0.5%	1.0%	1.4%	1.7%	1.6%
Private-Non Construction	-2.4%	-3.8%	-0.6%	1.2%	1.6%	1.7%	1.9%	1.8%
Construction Employment (growth)	-12.2%	-13.1%	-6.3%	-3.7%	-1.6%	3.0%	3.5%	3.0%
Manufacturing(ABQ)	-11.3%	-13.5%	0.1%	1.3%	1.5%	2.4%	3.7%	2.3%
Unemployment Rate (Alb.)	6.0%	8.2%	8.5%	7.4%	7.5%	7.4%	6.9%	6.3%
Construction Units Permitted in City of Albuquerque								
Single-Family Permits	435	875	723	856	806	1,346	1,862	2,093
Muli-Family Permits	204	172	274	278	514	699	962	1,239
Total Residential Permits	639	1,047	997	1,134	1,320	2,045	2,824	3,333
Source Global Insight and FOR-UNM November 2011 Baseline Forecasts								

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

TABLE 4

Albuquerque MSA Employment in Thousands										
	FY2007	**FY2008**	**FY2009**	**FY2010**	**FY2011**	**FY2012**	**FY2013**	**FY2014**	**FY2015**	**FY2016**
TOTAL NONAGRICULTURAL	380.567	382.270	374.017	361.440	358.184	359.796	363.308	368.545	374.741	380.740
CONSTRUCTION	31.595	30.099	26.419	22.971	21.532	20.743	20.418	21.029	21.771	22.416
MANUFACTURING	24.092	22.837	20.259	17.521	17.538	17.772	18.046	18.485	19.165	19.611
WHOLESALE TRADE	13.433	13.351	12.506	12.130	11.932	11.672	11.983	12.279	12.481	12.662
RETAIL TRADE	44.207	44.939	43.088	41.133	40.997	41.527	42.148	42.603	43.158	43.721
TRANSPORTATION, WAREHOUSING, AND UTILITIES	10.059	10.335	9.593	8.829	8.935	9.077	9.269	9.495	9.667	9.824
INFORMATION	9.385	9.182	9.176	8.994	8.517	8.775	8.810	9.228	9.613	9.895
FINANCIAL ACTIVITIES	18.054	17.873	17.276	16.755	16.135	16.111	16.194	16.307	16.408	16.478
PROFESSIONAL AND BUSINESS SERVICES	63.609	64.191	62.913	58.367	56.822	57.803	58.719	59.773	61.129	62.279
EDUCATIONAL AND HEALTH SERVICES	43.557	45.068	47.667	49.479	50.503	51.195	52.291	53.336	54.379	55.715
LEISURE AND HOSPITALITY	39.114	39.260	37.887	37.228	37.350	37.725	38.446	38.932	39.600	40.202
OTHER SERVICES	10.271	10.433	10.341	9.982	10.045	10.115	10.165	10.250	10.329	10.403
GOVERNMENT	73.190	74.701	76.892	78.052	77.877	77.287	76.825	76.827	77.032	77.523
LOCAL GOVERNMENT	38.781	39.953	41.291	41.303	41.071	40.782	40.709	41.022	41.386	41.904
STATE GOVERNMENT	19.861	20.279	20.672	21.088	21.065	20.967	20.894	20.912	21.002	21.128
FEDERAL GOVERNMENT	14.548	14.470	14.929	15.661	15.741	15.538	15.221	14.893	14.644	14.491
Private Non-Construction	275.782	277.469	270.706	260.418	258.774	261.766	266.065	270.690	275.938	280.801
MILITARY EMPLOYMENT, THOUSANDS	6.157	5.735	5.702	6.159	6.255	6.228	6.070	5.931	5.833	5.771
Growth Rates										
TOTAL NONAGRICULTURAL	-1.2%	0.4%	-2.2%	-3.4%	-0.9%	0.5%	1.0%	1.4%	1.7%	1.6%
CONSTRUCTION	3.9%	-4.7%	-12.2%	-13.1%	-6.3%	-3.7%	-1.6%	3.0%	3.5%	3.0%
MANUFACTURING	2.8%	-5.2%	-11.3%	-13.5%	0.1%	1.3%	1.5%	2.4%	3.7%	2.3%
WHOLESALE TRADE	2.7%	-0.6%	-6.3%	-3.0%	-1.6%	-2.2%	2.7%	2.5%	1.6%	1.4%
RETAIL TRADE	1.2%	1.7%	-4.1%	-4.5%	-0.3%	1.3%	1.5%	1.1%	1.3%	1.3%
TRANSPORTATION, WAREHOUSING, AND UTILITIES	-3.4%	2.7%	-7.2%	-8.0%	1.2%	1.6%	2.1%	2.4%	1.8%	1.6%
INFORMATION	4.2%	-2.2%	-0.1%	-2.0%	-5.3%	3.0%	0.4%	4.8%	4.2%	2.9%
FINANCIAL ACTIVITIES	-6.8%	-1.0%	-3.3%	-3.0%	-3.7%	-0.1%	0.5%	0.7%	0.6%	0.4%
PROFESSIONAL AND BUSINESS SERVICES	2.6%	0.9%	-2.0%	-7.2%	-2.6%	1.7%	1.6%	1.8%	2.3%	1.9%
EDUCATIONAL AND HEALTH SERVICES	-7.5%	3.5%	5.8%	3.8%	2.1%	1.4%	2.1%	2.0%	2.0%	2.5%
LEISURE AND HOSPITALITY	4.6%	0.4%	-3.5%	-1.7%	0.3%	1.0%	1.9%	1.3%	1.7%	1.5%
OTHER SERVICES	-14.3%	1.6%	-0.9%	-3.5%	0.6%	0.7%	0.5%	0.8%	0.8%	0.7%
GOVERNMENT	-5.3%	2.1%	2.9%	1.5%	-0.2%	-0.8%	-0.6%	0.0%	0.3%	0.6%
LOCAL GOVERNMENT	1.9%	3.0%	3.4%	0.0%	-0.6%	-0.7%	-0.2%	0.8%	0.9%	1.3%
STATE GOVERNMENT	-19.9%	2.1%	1.9%	2.0%	-0.1%	-0.5%	-0.3%	0.1%	0.4%	0.6%
FEDERAL GOVERNMENT	1.0%	-0.5%	3.2%	4.9%	0.5%	-1.3%	-2.0%	-2.2%	-1.7%	-1.0%
Private Non-Construction	-0.6%	0.6%	-2.4%	-3.8%	-0.6%	1.2%	1.6%	1.7%	1.9%	1.8%
MILITARY EMPLOYMENT, THOUSANDS	0.0%	-6.9%	-0.6%	8.0%	1.6%	-0.4%	-2.5%	-2.3%	-1.7%	-1.1%

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CAPITAL BUDGET

Proposed
Operating Budget
FY/13

Capital Program Overview

The Authority‟s Capital program is comprised of different categories of projects, each with its own funding rules. The „Basic Program‟ is funded by recurring revenues generated from the water/sewer rate structure. Special Projects are done outside of the Basic program but are funded from the same revenue stream that funds the Basic Program. Since the Basic Program is the first in line to get this revenue, the size and scope of these Special projects depend upon the availability of resources. "Dedicated Revenue" projects have a revenue element in the rate structure dedicated for that specific purpose and accordingly, their size and scope are dependent upon the revenue stream generated. The Authority has increased in recent years its utilization of state and federal grants to fund some capital projects in whole or in part.

The blueprint for the Authority‟s Basic Program is its Decade Plan, a ten-year capital plan required to be updated biennially in even numbered fiscal years with two, four, six, eight and ten year planning elements. The Decade Plan includes detailed requirements for program development and project scope, schedule, budget, justification and alternatives. The Decade Plan requires approval by the Authority Board with at least one public hearing and due deliberation. In those fiscal years where the Decade Plan must be updated, the new Decade Plan must be approved by the Authority‟s Board before that year‟s Capital program budget can be approved. This policy ensures there is always an approved two-year planning element in place for every approved annual Basic Program budget. FY/13 is the second year of the two year planning element included in the FY/12 – FY/21 Decade Plan approved by the Board in April, 2011.

Basic Program capital needs are incorporated into the water/sewer rate structure. The Rate Ordinance requires that Basic Program needs are funded at least 50% from cash, with the balance of capital funding obtained through revenue bond or loan financing. The rate structure is designed to provide sufficient revenue to meet the 50% cash requirement and to meet the debt service obligations incurred to finance the remainder of the Basic Program. System growth projects are funded through Utility Expansion Charge (UEC) revenues, either by reimbursing capital investments made under the terms of a Developer Agreement, or by direct appropriation to Authority capital projects. UEC revenue is considered cash for purposes of meeting the 50% test. The current Rate Ordinance requires a $30 million Basic rehabilitation program. The Rate Ordinance does not specify the size of the Basic growth program.

The FY/12 – FY/21 Decade Plan was significant for the use of risk analysis techniques combined with an asset management strategy to determine where the Authority‟s capital resources should be expended in order to maximize the benefit to rate payers. The Authority‟s asset management plan is intended to provide a business model for managing infrastructure assets to minimize the total costs of owning and operating them at an acceptable level of risk. Rate payers‟ investment in the infrastructure is maximized as a result. The adopted decade plan represents the funding decisions made by a broad array of staff and managers throughout the Authority. Project prioritization resulted from unprecedented levels of discussions within the Authority and with outside consultants engaged to assist the Authority in charting a path for its capital program.

While maintaining a similar presentation format as the prior decade plan, the FY/12 – FY/21 Decade Plan for rehabilitation was constructed from pipeline / plant perspective rather than the water / water reclamation perspective used in prior decade plans. A pipeline / plant perspective provides a basic delineation of the infrastructure as either being in the ground or on the surface of the ground. In order to enhance distinctions within the plant category, odor control, lift station and compliance rehabilitation were shown separately from water reclamation plant

A continued decline in Utility Expansion Charge (UEC) revenue has led to a reduction in the Basic growth program to $3 million in FY/12 and $3 million in FY/13. The Basic growth program has shifted in focus from placing from new pipe in the ground to meeting the demands of a business intent on achieving performance improvement goals and meeting mandated standards. The discretionary spending in the FY/13

Growth program budget will continue initiatives in Information Technology (IT) support for the operating divisions. The remainder of the FY/13 Growth program is primarily non-discretionary and includes funding for the low income connection program managed by Bernalillo County and repayment to developers as connections are made to the System.

The most significant project in the IT area is a special project for the acquisition and implementation of the Authority"s own financial and human resource systems. The Authority is currently utilizing the City of Albuquerque"s PeopleSoft systems which went live on January 1, 2009. The continuing difficulties with the PeopleSoft systems have been a primary contributor to the inability of the City and the Authority to get their annual external financial audit done on a timely basis and to timely monitor actual results against budgeted amounts. The Authority intends to choose a financial system appropriate to its size and needs with the goal of minimal customization while changing business processes as needed to accommodate the delivered software.

The Authority has engaged the services of the Governmental Finance Officers Association to assist with system criteria, vendor selection and implementation services. The target start-up dates are July 1, 2013 for the financial system and January 1, 2014 for the human resources system. The FY/13 capital program appropriation includes $2.0 million for this project.

There are no appropriations in the approved FY/13 CIP budget for projects that will be funded with revenues from FY/14 and later.

FY/13 Capital Program Appropriations and Spending by Categories

Summary Perspective

The Authority"s Capital program budget for FY/13 is $33 million for the Basic capital program, $5.0 million for special projects and $4.0 million for Water Resource Management Strategy projects.

The Basic program is comprised of $30 million for rehabilitation infrastructure needs as required by the Rate Ordinance and $3 million for growth infrastructure needs.

Spending in the FY/13 Basic program may differ for some projects from the levels appropriated in the budget resolution because of expected positive and deficit carryovers from the FY/12 Basic program. The deficit carryovers will be absorbed by utilizing FY/13 revenues and correspondingly reducing FY/13 spending.

In order to meet reporting requirements, the Capital program is presented from the perspective of categories of spending. Category definitions are:

Rehabilitation = Costs required to extend the service life of an existing facility or to restore original performance or capacity by rehabilitating or replacing system components

Growth = Costs for either new facilities, component additions or system upgrades that provide service or capacity for new or future customers, or restores needed reserves previously used to support new customers. Included in growth are costs for improvements not tied to specific infrastructure assets. Improvements include management information systems development, geographic information systems development, vehicles and asset management.

Valley = Costs for water and sewer expansion projects in the North and South Valley service areas in partnership with Bernalillo County.

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Water Resources Management Strategy (WRMS) = Costs for projects identified in the Water Resources Management Strategy as adopted by the City of Albuquerque in 1997 and as adopted by the Authority as successor. There is a revenue element in the rate structure dedicated for WRMS.

		Appropriation		Planned Spending
Basic Pipeline Renewal	$	9,900,000	$	9,900,000
Basic Plant Renewal	$	20,100,000	$	20,100,000
Basic System Growth	$	3,000,000	$	3,000,000
Total Basic	$	33,000,000	$	33,000,000
Special Projects:				
Rehab				
Automated Meter Infrastructure	$	2,000,000	$	2,000,000
Steel Water Line Replacement	$	1,000,000	$	1,000,000
Growth				
Financial System Implementation	$	2,000,000	$	2,000,000
Total Special Projects	$	5,000,000	$	5,000,000
Water Resources Management Strategy				
San Juan Chama	$	2,300,000	$	-
San Juan Chama Mitigation	$	1,700,000	$	1,700,000
Total WRMS Projects	$	4,000,000	$	1,700,000
Total	$	42,000,000	$	39,700,000

		Appropriation		Planned Spending
Rehab				
Basic Program	$	30,000,000	$	30,000,000
Special Projects	$	3,000,000	$	3,000,000
Growth				
Basic Program	$	3,000,000	$	3,000,000
Special Projects	$	2,000,000	$	2,000,000
Water Resources Management Strategy	$	4,000,000	$	1,700,000
Total	$	42,000,000	$	39,700,000

Category	Percentage		Amount
Rehab	78.6	$	33,000,000
Growth	11.9	$	5,000,000
Water Resources Management Strategy	9.5	$	4,000,000
Total	100.0	$	42,000,000

The revenue sources for the appropriations are comprised of:

		Debt		Cash
Rehab				
Basic Program	$	22,000,000	$	8,000,000
Special Project	$	3,000,000	$	-
Growth				
Basic Program	$	-	$	3,000,000
Special Project	$	2,000,000	$	-

Water Resources Management Strategy	$	4,000,000	$	-
Total	$	31,000,000	$	11,000,000

Basic Program appropriations by decade plan category

Rehab		
Water Reclamation Line Renewal	$	5,000,000
Water Line Renewal	$	3,700,000
Water Reclamation Plant Renewal	$	15,000,000
Lift Station and Vacuum Station Renewal	$	590,000
Water Plant Renewal	$	3,710,000
Water Reclamation Compliance	$	600,000
Franchise Fee Compliance	$	1,000,000
CIP Funded Position Transfer	$	400,000
	$	30,000,000
Growth		
Water Lines	$	500,000
Developer Agreements	$	295,000
MIS / GIS	$	1,200,000
Vehicle Replacement	$	300,000
Utility Risk Reduction	$	5,000
Master Plan and Asset Management	$	300,000
Low Income Water/Sewer Connections	$	400,000
	$	3,000,000

The $5.0 million appropriation for special projects is comprised of three projects:

- $2 million for Automated Meter Infrastructure (AMI) representing the evolution of Automatic Meter Reading (AMR) technology
- $1 million for steel water line replacement
- $2 million for the acquisition and implementation of a new financial and human resource system which will allow the Authority to move off of similar systems currently shared with the City of Albuquerque

Reconciliation between Appropriations and Planned Spending

Appropriations per this resolution	$	43,000,000
Currently appropriated loan proceeds that have been spent for the Surface Water Drinking Project	$	(2,300,000)
Planned spending	$	40,700,000

By fund, the $42.0 million is allocated: $.5 million in the Valley Projects fund 627 (the $.5 million for the low income connection program is in fund 627), $33.0 million in the Joint Water & Sewer Rehabilitation Fund 628 and $8.5 million in the Joint Water & Sewer Fund 629.

FY/13 Capital Program Highlights

There was a significant change in the planned spending in FY/12 per the FY/12 – FY/21 Decade Plan. The signature rehabilitation project in the decade plan was the Preliminary Treatment Facilities (PTF) / Dewatering Facilities project which was bid as one project. Project bids from various construction companies were opened in January 2012 and all of the bids came in higher than available revenues and accordingly all

bids were rejected. This project is currently on hold pending ongoing consultant services for a value engineering analysis with the goal of reducing project scope to within available revenues.

Despite the setback with the PTF / Dewatering project, the rehabilitation focus remains on the Southside Water Reclamation Plant (the Plant) in FY/13. While a final resolution of resource allocation will not occur until sometime in FY/13, initial efforts are underway on the two projects which were to receive substantial funding in FY/14 – the Digester Rehabilitation project and the Primary Clarifier project.

The FY/12 – FY/21 decade plan contains narrative descriptions of the individual projects within each category and should be read in accompaniment with this document.

While Southside Water Reclamation Plant projects dominate rehabilitation spending, there are planned rehabilitation projects in other areas. The FY/13 portion of the FY/12/13 small diameter water and sewer line project is proceeding as is the FY/12 portion of the FY/11/12 large diameter sewer line project. The largest water plant rehabilitation project is an upgrade of the SCADA (Supervisory Control and Data Acquisition) system at the Surface Water Treatment Plant. The SCADA system network of computer servers and workstations which control the surface and groundwater pumping and treatment systems is facing obsolescence.

The San Juan Chama Mitigation project is intended to create riparian habitat along the Rio Grande River below the surface water diversion dam to compensate for the reduced river flow due to the dam. Three sites north and south of Paseo Del Norte and on both the east and west sides of the river have been selected for habitat restoration.

The project will involve dirt work including shelves, terraces and channels in the river and tree plantings as well as enhanced natural revegetation processes arising from the expected increased river flows.

Anticipated project benefits include 1) increased silvery minnow habitat 2) increased diversity of the riparian ecosystem 3) creating willow dominated flycatcher breeding and migratory habitat along the channel margin and 4) enhancing the hydrologic connectivity between the floodplain and the river channel.

Each of the three site footprints would be at least five acres with two of the sites possibly extending to eight acres.

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

Purpose	Source	Increase
Basic Program		
Valley Projects Fund 627		
Valley Low Income W/S Connections	Transfer from Fund 631	400,000
Water Utility / Joint Water & Sewer Rehab Fund 628		
Sanitary Sewer Pipeline Renewal		
Interceptor Sewer Rehabilitation	Bond Proceeds	3,000,000
Small Diameter Sewer Line Rehabilitation	Bond Proceeds	1,500,000
Sewer Line CCTV Inspections	Bond Proceeds	500,000
Drinking Water Pipeline Renewal		
Small Diameter Water Line Rehabilitation	Bond Proceeds	2,500,000
Large Diameter Water Line Rehabilitation	Bond Proceeds	500,000
Water Service Line Replacement	Bond Proceeds	5,000
Water Meter Box Replacement	Bond Proceeds	5,000
Water Meter Replacement	Bond Proceeds	240,000
Large Water Valve Replacement	Bond Proceeds	250,000
Pressure Reducing Valve Replacement	Bond Proceeds	200,000
Southside Water Reclamation Plant Renewal		
Preliminary Treatment Facility Replacement	Bond Proceeds	2,400,000
	Transfer from Fund 621	4,000,000
Dewatering Facility Replacement	Bond Proceeds	2,400,000
	Transfer from Fund 621	4,000,000
Digester Rehabilitation, Capacity And Gas Improvements	Bond Proceeds	250,000
Primary Clarifier Improvements	Bond Proceeds	450,000
DAF Rehabilitation	Bond Proceeds	660,000
In-House Plant Projects	Bond Proceeds	500,000
ABB Service Contract	Bond Proceeds	140,000
ABB SCADA Upgrade	Bond Proceeds	200,000

Lift Station and Vacuum Station Renewal		
Lift Station Rehabilitation	Bond Proceeds	330,000
Lift Station Radio Replacement	Bond Proceeds	140,000
Lift Station Programmable Logic Controller Replacement	Bond Proceeds	120,000
Drinking Water Plant Renewal		
Annual Sodium Hypochlorite Generator System Rehabilitation / Replacement	Bond Proceeds	130,000
Annual Well and Booster Pump Station Rehabilitation and Maintenance	Bond Proceeds	1,450,000
Water Treatment Plant Rehab	Bond Proceeds	50,000
Solids Drying Beds Improvements	Bond Proceeds	50,000
Grit Removal Basin Improvements	Bond Proceeds	50,000
Dissolved Ozone Monitoring Improvements	Bond Proceeds	250,000
Diversion Bar Screen Improvements	Bond Proceeds	500,000
Settling Basin Edge Protection	Bond Proceeds	50,000
Lomas Reservoir No. 2 Rehabilitation	Bond Proceeds	310,000
Water Treatment Plant SCADA Control Upgrade	Bond Proceeds	100,000
College Reservoir Rehab	Bond Proceeds	220,000
College Arsenic Removal Demonstration Facility Rehab	Bond Proceeds	50,000
Corrales Trunk System Reliability Improvements	Bond Proceeds	200,000
Corrales Trunk Gas Engine Overhauls	Bond Proceeds	50,000
Asset Management Plan for Wells	Bond Proceeds	250,000
Compliance		
Water Quality Laboratory	Bond Proceeds	295,000
NPDES Program	Bond Proceeds	155,000
Water Quality Program	Bond Proceeds	150,000
Shared Renewal		
Franchise Fee Compliance	Bond Proceeds	1,000,000
CIP Funded Position Transfer	Bond Proceeds	400,000

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

Water Utility / Joint Water & Sewer Fund 629		
Warehouse Meters	Transfer from Fund 631	500,000
Development Agreements	Transfer from Fund 631	295,000
MIS / GIS	Transfer from Fund 631	1,200,000
Vehicle Replacements	Transfer from Fund 631	300,000
Utility Risk Reduction / GPS	Transfer from Fund 631	5,000
Integrated Master Plan	Transfer from Fund 631	300,000
Special Projects		
Water Utility / Joint Water & Sewer Rehab Fund 628		
Automatic Meter Reading	Bond Proceeds	2,000,000
Steel Water Line Replacement	Bond Proceeds	1,000,000
Water Utility / Joint Water & Sewer Fund 629		
ERP Financial Systems Project	Bond Proceeds	2,000,000
Water Resource Management Strategy Projects		
Water Utility / Joint Water & Sewer Fund 629		
San Juan Chama Drinking Water	Bond Proceeds	2,300,000
San Juan Chama Mitigation	Bond Proceeds	1,700,000

DEBT OBLIGATIONS

Proposed
Operating Budget
FY/13

DEBT OBLIGATIONS

The joint water and sewer system (the "Water/Sewer System") was owned by the City of Albuquerque, New Mexico (the "City") and operated by its Public Works Department until December 17, 2003. Revenue bond debt relating to the Water/Sewer System continues to be outstanding. In 2003, the New Mexico Legislature adopted Laws 2003, Chapter 437 (Section 72-1-10, NMSA 1978) which created the Albuquerque Bernalillo County Water Utility Authority (the "Authority") and provided that all functions, appropriations, money, records, equipment and other real and personal property pertaining to the Water/Sewer System would be transferred to the Authority. The legislation also provides that the debts of the City payable from net revenues of the Water/Sewer System shall be debts of the Authority and that the Authority shall not impair the rights of holders of outstanding debts of the Water/Sewer System. The legislation also required that the New Mexico Public Regulation Commission audit the Water/Sewer System prior to the transfer of money, assets and debts of the Water/Sewer System; the audit was completed December 2003. The policy-making functions of the Water/Sewer System have been transferred to the Authority. The Authority and the City entered into a Memorandum of Understanding dated January 21, 2004, as amended April 7, 2004, under which the City continues to operate the Water/Sewer System until June 30, 2007. In 2005, the New Mexico Legislature amended Section 7-1-10, NMSA 1978, to provide the Authority the statutory powers provided to all public water and wastewater utilities in the state and to recognize the Authority as a political subdivision of the state. On March 21, 2007 the Authority and City entered into a new MOU effective July 1, 2007. At that time the Utility employees transitioned from the city and became employees of the Authority.

The outstanding Water/Sewer System parity obligations are currently rated "Aa1" by Moody"s, "AA+" by S&P and "AA" by Fitch. In addition, the outstanding System bonds are credit enhanced and therefore have a higher rating which is based upon the rating of the credit enhancer rather than the rating of the Authority for such bonds.

The total outstanding obligation indebtedness of the Authority as of April 1, 2012 is $690.864 million shown in the table on the next page.

ABCWUA
SCHEDULE OF BONDS & OTHER DEBT OBLIGATIONS
April 1, 2012

	RATINGS
SENIOR DEBT OBLIGATIONS	
JOINT WATER AND SEWER - SENIOR LIEN	Aa1/AA+/AA
MAY 2002 - NMFA DWRLF LOAN	
APRIL 2003 - NMFA DWRLF LOAN	
SEPT 2004 - NMFA PPRF LOAN	
OCT 2005 - IMPROVEMENT	
OCT 2005 - NMFA PPRF LOAN	
Series 2006A Bonds	
Series 2007A NMFA Loan	
Series 2008A Bonds	
Series 2009A-1	
Series 2009A-2	
2009 NMFA DWRFL	
NOV 2011 - NMFA LOAN	
SUBTOTAL - CITY/COUNTY WATER AUTHORITY OBLIGATIONS	
SUBORDINATE & SUPER-SUBORDINATE DEBT OBLIGATIONS	
1989 Loan	
1995 Loan	
2001 Loan	
2004 NMFA DWRLF Loan	
2009 WTB Loan	
2009 NMFA DWRLF Loan	
2010 NMFA DWRLF Loan - 2379-PP	
2010 NMFA DWRLF Loan - 2380-PP	
2010 NMFA DWRLF Loan - 2381-PP	
2010 DWRFL - 2382-ADW	
2011 DWRFL - 205-ADW	
2011 DWRFL - 206-ADW	
2011 DWRFL - 207-ADW	
SUBTOTAL - SUBORDINATE & SUPER-SUBORDINATE LIEN LOANS	

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

FINAL MATURITY	ORIGINAL AMT ISSUED	AMOUNT RETIRED	AMOUNT OUTSTANDING	INTEREST RATES
07/01/12	2,450,000	2,327,719	122,281	1.75%
07/01/15	3,600,000	2,303,552	1,296,448	4.25% - 5.00%
05/01/24	118,415,000	31,960,000	86,455,000	4.25% - 5.25%
05/01/25	20,000,000	1,250,000	18,750,000	5.00%
07/01/25	132,985,000	8,940,000	124,045,000	3.00% - 5.50%
07/01/26	133,390,000	11,955,000	121,435,000	4.25% - 5.00%
06/01/25	77,005,000	12,035,000	64,970,000	4.25% - 5.25%
07/01/23	55,630,000	0	55,630,000	5.00%
07/01/13	14,375,000	6,765,000	7,610,000	3.00% - 5.00%
07/01/34	135,990,000	1,695,000	134,295,000	3.25% - 5.25%
11/01/30	1,010,000	0	1,010,000	1.00%
07/01/36	53,400,000	0	53,400,000	3.00% - 5.00%
	$748,250,000	**$79,231,271**	**$669,018,729**	
10/01/13	7,907,285	6,820,576	1,086,709	3.00%
07/01/12	15,000,000	13,473,435	1,526,565	4.00%
07/01/25	15,000,000	7,689,808	7,310,192	3.00%
05/01/31	12,000,000	1,792,719	10,207,281	2.00%
11/13/29	50,000	3,943	46,057	1.00%
11/13/29	100,000	7,749	92,251	0.25%
01/23/31	47,518	0	47,518	1.00%
01/23/31	60,600	2,952	57,648	1.00%
01/23/31	125,453	0	125,453	1.00%
06/01/30	200,000	9,765	190,235	0.25%
01/23/31	452,000	0	452,000	0.25%
01/23/31	640,000	0	640,000	0.25%
11/23/31	63,354	0	63,354	0.25%
	$51,646,210	**$29,800,947**	**$21,845,263**	
	$799,896,210	**$109,032,218**	**$690,863,992**	

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APPENDIX

Proposed
Operating Budget
FY/13

ANALYSIS METHODOLOGY FOR COMPUTING LINE ITEM ADJUSTMENTS

Numerical Rounding

Budgets were developed using whole numbers. When program strategies were summarized, each was rounded to the nearest one thousand. Rounding makes for ease of reading when reviewing the document.

Salaries

- The wage and salary base was established for each filled or authorized-to-be-filled position.

- This base is increased or decreased for all wage adjustments for FY/13 so as to incorporate current contractual increases.

- Employee benefits are calculated on wage and salary costs at the following rates: FICA - 7.65% regular, RHCA-2.0%, PERA – 19.01% for blue and white collar and management/professional, and 7.00% for temporary employees and some seasonal employees. Other employee benefits (group life, and health insurance including retiree health insurance) – 18.96%.

- A vacancy savings rate of 0.5% for the Water Authority is calculated into employee salaries.

Operating Expenses

Division managers were required to provide detailed information supporting FY/13 budget requests for professional services, contract services, supplies and repairs and maintenance. Other FY/13 operating expenses were equal to FY/12 appropriated amounts. One-time appropriations for FY/12 were deleted.

- Inflationary adjustments were not granted as automatic across-the-board adjustments.

- For FY/13, utilities (gas, electricity, and water) are budgeted based on historical expenditures and anticipated needs.

- Power, chemicals and fuel will not exceed the CPI index and the cost of operating two water distribution systems will not exceed the consultant estimate.

- Beyond those stated above, line item increases needing special justifications include extraordinary price increases, increased workload, or a special need not previously funded.

Capital Expenditures

New and replacement property items are included in the appropriate program appropriations within each of the funds.

Transfers

- Workers' Compensation and insurance transfers are treated as direct transfers to the Risk Management Fund in each program for FY/13. These transfers are identified by the Finance and Administrative Services Department, Risk Management Division based on the historical experience and exposure factors relative to each specific program.

- Vehicle maintenance charges are estimated for FY/13 according to the class of vehicle and historical cost of maintaining that class. These charges are designed to recover the costs of normal maintenance including a preventive maintenance program which schedules vehicles for periodic checks and needed repairs as determined by those checks.

- Authority debt interest costs for future borrowings will be approximately 25 basis points under market rate based on the Authority‟s AA+ bond rating.

- Radio maintenance costs are based on historical average prices during an 18-month period ending December 2011.

- Fuel costs have been hedged for FY13 at approx. $2.78 a gallon.

ACRONYMS

ABCWUA – Albuquerque Bernalillo County Water Utility Authority

AFL-CIO – American Federation of Labor and Congress of Industrial Organizations

AFH – Affordable Housing

AFSCME - American Federation of State, County and Municipal Employees

AMI – Automated Meter Infrastructure

AMR – Automated Meter Reader

APS – Albuquerque Public Schools

ASOMS – Albuquerque Sewer Operations Management Strategy

ASR – Aquifer Storage and Recovery

AWWA – American Water Works Association

BBER – University of New Mexico, Bureau of Business and Economic Research

CAC – Customer Advisory Committee

CC&B – Customer Care and Billing

CCTV – Closed Circuit Television

CIS – Customer Information System

CIP - Capital Improvements or Implementation Program

CMDWWCA – Carnuel Mutual Domestic Water and Waste Water Consumer Association

CMMS – Computerized Maintenance Management System

COLA - Cost-of-Living Adjustment

CPI-U - Consumer Price Index for all Urban Consumers

CWA – Clean Water Act

D & C – Design and Construct

DAF – Dissolved Air Floatation

DOE - Dept of Energy

DOL - Dept of Labor

D/S - Debt Service

DWL – Drinking Water Loan

DWP – San Juan – Chama Drinking Water Project

EID – Environmental Improvement Division

EPA – Environmental Protection Agency

FD - Fund
FTE - Full-time Equivalent Position

FY - Fiscal Year

GI – Global Insight economic forecasting, formerly Data Resources Wharton Econometric Forecasting Associates International

GASB - General Accounting Standards Board

GDP-Gross Domestic Product

GFOA - Government Finance Officers Association

GI – Global Insight

GIS – Geographic Information System

GPCD – Gallons per capita per day

GPPAP - Groundwater Protection Policy and Action Plan

GRT – Gross Receipts Tax

HMO – Health Maintenance Organization

HR – Human Resources

IDOH - Indirect Overhead

IPC – Indicators Progress Commission

ITD – Information Technology Division

IVR – Interactive Voice Response

IWA – International Water Audit

KAFB – Kirtland Air Force Base

ACRONYMS

LIMS – Laboratory Information System

MSA - Metropolitan Statistical Area

MDC – Metropolitan Detention Center

MGD – Million Gallons per Day

MIS – Management Information System

MOU – Memorandum of Understanding

MSA – Metropolitan Statistical Area

MRGCOG – Middle Rio Grande Council of Governments

NBER – National Bureau of Economic Research

NM – New Mexico

NMDOT – New Mexico Department of Transportation

NMFA – New Mexico Finance Authority

NMED – New Mexico Environment Department

NMUI – New Mexico Utilities Group Inc.

NPDES – National Pollution Discharge Elimination System

NWSA – Northwest Service Area

O/M – Operations and Maintenance

OSHA – Occupational Safety and Health Administration

P&I – Principal and Interest

PERA - Public Employees Retirement Association

PNM – Public Service Company of New Mexico

PTF – Preliminary Treatment Facility

REC – Renewable Energy Credit

RFP - Request for Proposal(s)

RRAMP – Reclamation Rehabilitation and Asset Management Plan

SAD - Special Assessment District

SAF – Soil Amendment Facility

SCADA – Supervisory Control And Data Acquisition

SDWA – State Drinking Water Act

SJC – San Juan Chama

SJCWTP - San Juan – Chama Drinking Water Project

SNL – Sandia National Laboratory

SOP – Standard Operating Procedures

SRF – State Revolving Loan Fund

SWR - Sewer

SWRP - Southside Water Reclamation Plant

TRFR - Transfer

UEC – Utility Expansion Charge

UNM – University of New Mexico

UV – Ultra-Violet

WQL – Water Quality Laboratory

WRAC – Water Resources Advisory Committee

WTP – Water Treatment Plant

YR - Year

SELECTED GLOSSARY OF TERMS

ACCRUED EXPENSES: Expenses incurred but not due until a later date

ADJUSTMENTS FOR POLICY DIRECTION CHANGES: Approved adjustment to the maintenance-of-effort budget both positive and negative which are considered major policy issues

AMERICAN WATER WORKS ASSOCIATION: An international nonprofit scientific and educational society dedicated to the improvement of water quality and supply and is the authoritative resource for knowledge, information, and advocacy to improve the quality and supply of water in North America

ANNUALIZED COSTS: Costs to provide full year funding for services initiated and partially funded in the prior year

APPROPRIATION: Legal authorization granted by the Authority Board to make expenditures and to incur obligations for specific purposes within specified time and amount limits

APPROPRIATIONS RESOLUTION: Legal means to enact an appropriation request, e.g., annual operating budget

AUDIT: Official examination of financial transactions and records to determine results of operations and establish the Authority's financial condition

BASE BUDGET: Portion of an annual budget providing for financing of existing personnel, replacement of existing equipment, and other continuing expenses without regard for price changes

BONDED INDEBTEDNESS/BONDED DEBT: That portion of indebtedness represented by outstanding general obligation or revenue bonds

CAPITAL BUDGET: Plan of approved capital outlays and the means of financing them

CAPITAL EXPENDITURES: Expenditures to acquire or construct capital assets

DEBT SERVICE FUND: Fund for the accumulation of resources to pay principal, interest, and fiscal agent fees on long-term debt

ENCUMBRANCES: Commitments of appropriated monies for goods and services to be delivered in the future

ENTERPRISE FUND: Fund established to account for services financed and operated similar to private businesses and with costs recovered entirely through user charges

FINANCIAL PLAN: See Operating Budget

FISCAL YEAR: For the Authority, a period from July 1 to June 30 where the financial plan (budget) begins the period and an audit ends the period

FRANCHISE FEE: A fee based upon gross revenue that results from an authorization granted to rent and use the rights-of-way and public places to construct, operate and maintain Authority facilities in the City of Albuquerque, Bernalillo County, Rio Rancho and the Village of Los Ranchos

FUND: Fiscal and accounting entity with self-balancing set of books to accommodate all assets and liabilities while conforming to designated parameters

FUND BALANCE: Fund equity of governmental funds

SELECTED GLOSSARY OF TERMS

GOALS: General ends toward which the Authority directs its efforts in terms of meeting desired community conditions. The Executive Director and Authority Board with input from the community, establish Goals for the Authority

INDIRECT OVERHEAD: Cost of central services allocated back to a department through a cost allocation plan

INTERFUND TRANSFER: Legally authorized transfers from one fund to another fund

INTERGOVERNMENTAL REVENUES: Revenues from other governments in the form of grants, entitlements, shared revenues, etc.

ISSUE PAPERS: Forms used in the budget process to track and request budget changes

MAINTENANCE OF EFFORT: Base budget plus allowances for cost-of-living wage adjustments and inflationary price increases, or within a limited time frame

MAXIMO: Maximo Enterprise's asset and service management software capabilities maximize the lifetime value of complex assets and closely align them with your overall business strategy

NORTHWEST SERVICE AREA: Water and waste water service to approximately 17,000 accounts on Albuquerque"s West Side. The 34-square-mile service area includes Paradise Hills and the Ventana Ranch subdivision

NON-RECURRING EXPENDITURES: Expenditure occurring only once, or within a limited time frame, usually associated with capital purchases and pilot projects

NON-RECURRING REVENUES: Revenues generated only once

OPERATING: Term that applies to all outlays other than capital outlays

OPERATING BUDGET: Financial plan for future operations based on estimated revenues and expenditures for a specific period

OPERATING REVENUES: Proprietary (enterprise service) fund revenues directly related to the fund's primary service activities and derived from user charges for services

PROGRAM STRATEGY: The unit of appropriations and expenditure that ties related service activities together to address a desired community condition(s) that pertains to one of the Authority"s Goals

QUALSERVE: A voluntary, continuous improvement program offered jointly by the American Water Works Association and the Water Environment Federation to help water/wastewater utilities improve their performance and increase customer satisfaction on a continuing basis. The program evaluates all facets of the utility business including organization development, business operations, customer relations, and core water/wastewater operations. QualServe comprises of three components: Benchmarking, Self-Assessment, and Peer Review

RECURRING EXPENDITURES: Expenditures generally arising from the continued operations of the Authority in a manner and at a level of service that prevailed in the last budget, or new and/or increased services expected to be provided throughout the foreseeable future

RECURRING REVENUES: Revenues generated each and every year

RESERVE: Portion of fund balance earmarked to indicate its unavailability or to indicate portion of fund equity as legally segregated for a specific future use

SELECTED GLOSSARY OF TERMS

RESERVE: Portion of fund balance earmarked to indicate its unavailability or to indicate portion of fund equity as legally segregated for a specific future use

REVENUES: Amounts received from taxes and other sources during the fiscal year

REVENUE BONDS: Bonds whose principal and interest are payable exclusively from earnings of the Utility, and are thereby not backed by the full faith and credit of the issuer

SERVICE ACTIVITY: A set of related functions that are managed below the Program Strategy level, and are the smallest unit of budgetary accountability and control

STATE ENGINEER PERMIT 4830: The permit allows the Authority to divert 97,000 acre-feet annually from the Rio Grande consisting of an equal amount of Authority San Juan-Chama water and native Rio Grande water. The native Rio Grande water is required to be simultaneously released from the Southside Water Reclamation Plant. The State Engineer's permit is the foundation of the Drinking Water Project from a water rights perspective

UNACCOUNTATED FOR WATER: The difference between the quantity of water supplied to the Authority‟s network and the metered quantity of water used by the customers. UFW has two components: (a) physical losses due to leakage from pipes, and (b) administrative losses due to illegal connections and under registration of water meters

UTILITY EXPANSION CHARGES: assessed by the Authority to compensate for additional costs associated with the type and location of new development

WORKING CAPITAL BALANCE: Remaining current assets in a fund if all current liabilities are paid with current assets

NUMERIC LIST OF FUND NAMES BY CATEGORY

ENTERPRISE FUNDS:

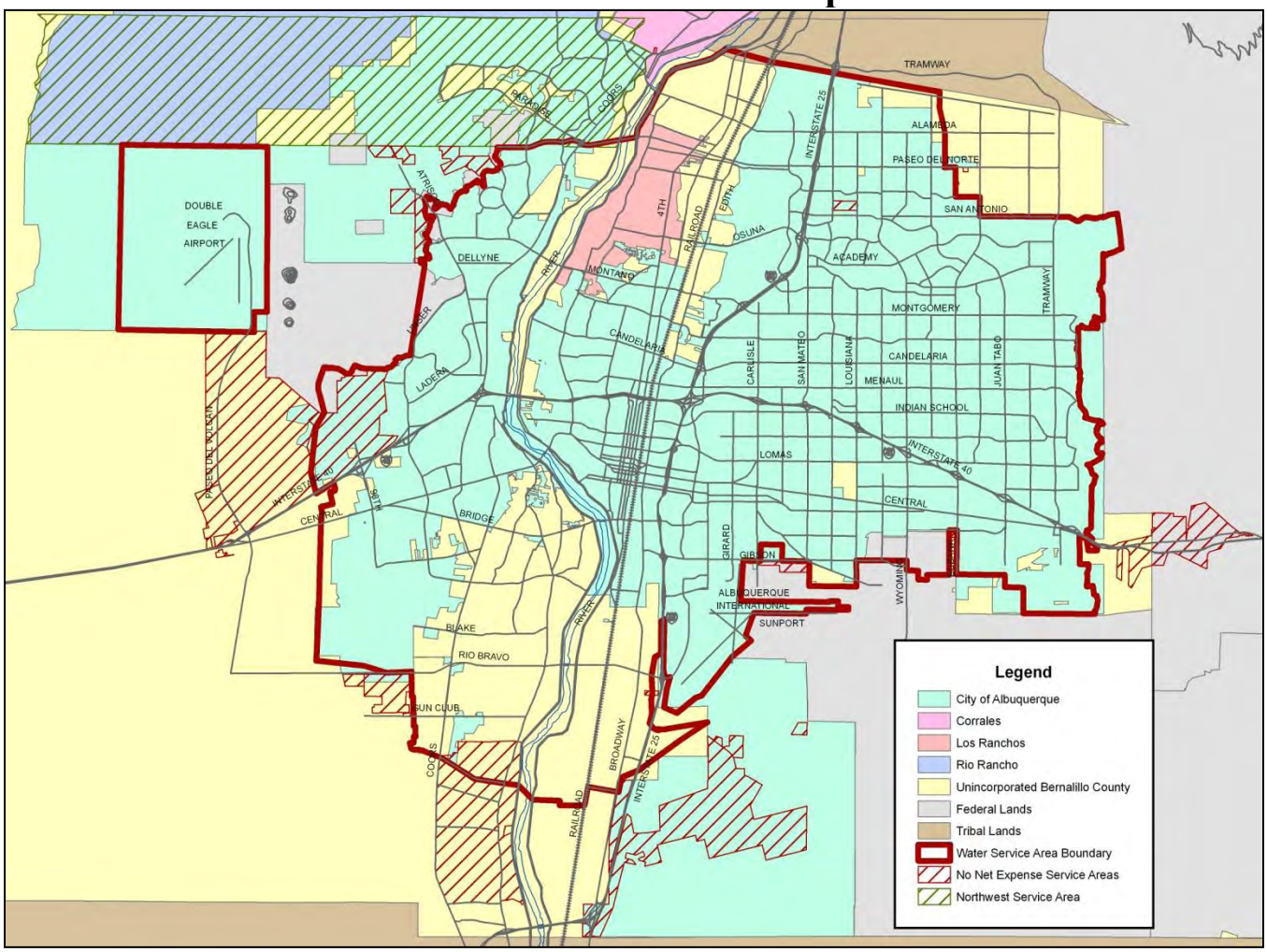
621 Joint Water and Sewer Operating
631 Joint Water and Sewer Revenue Bond Debt Service

FUNDS REFERENCED:

627 Joint Water & Sewer Valley Utility Projects
628 Joint Water & Sewer Rehab
629 Joint Water & Sewer Capital

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

Water Service Area Map



Major Assets:

- San Juan-Chama Surface Water Treatment Plant
- Adjustable diversion dam, intake structure and raw water pump station on the Rio Grande
- 93 ground water supply wells
- 46 water supply reservoirs providing both mixed surface and ground water
- 3,039 miles of water supply pipeline
- 5 MGD arsenic removal treatment plant

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

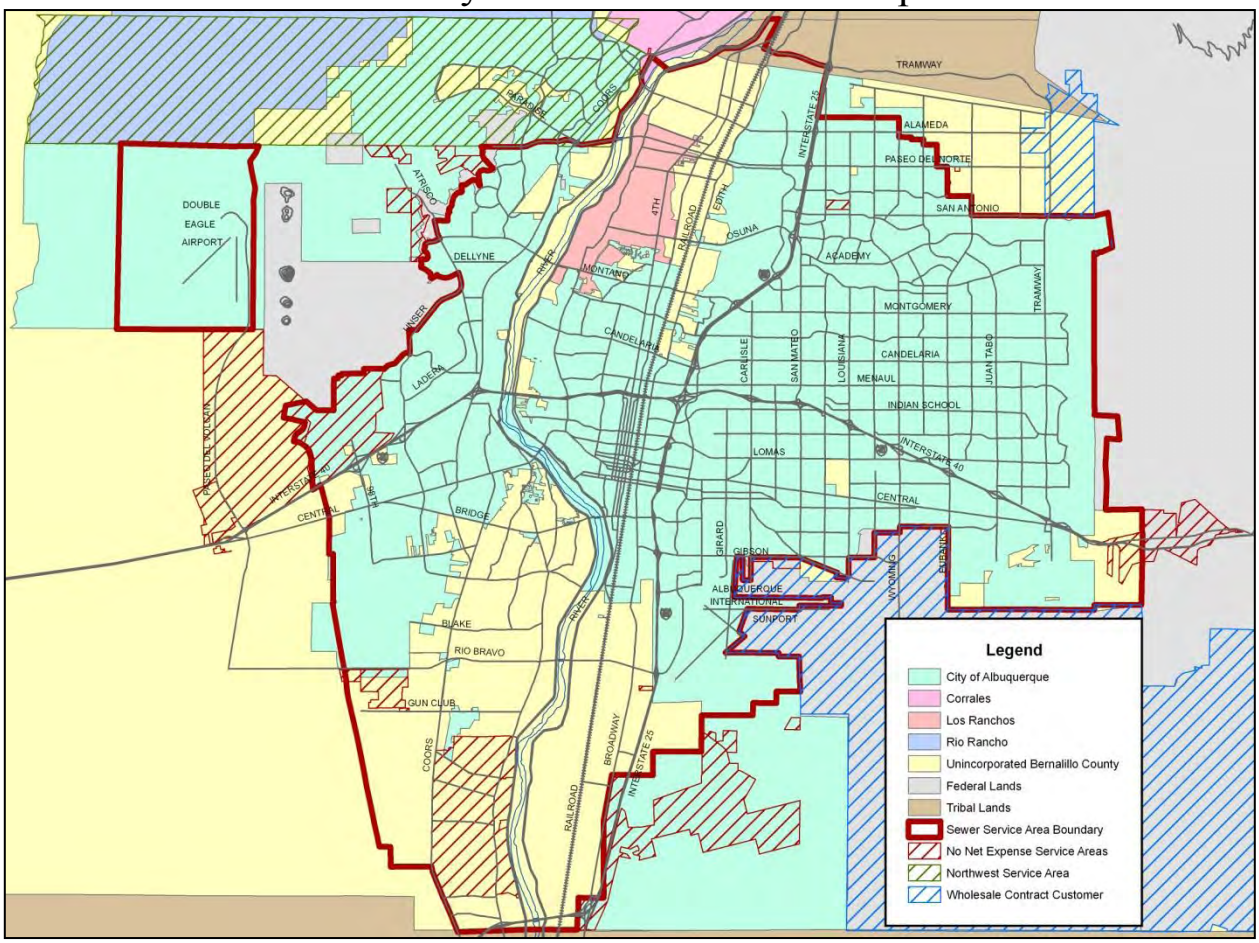
The Water System provides water services to approximately 550,000 residents comprising approximately 88% of the residents of Bernalillo County, New Mexico. About one-third of unincorporated County residents are customers of the Water System. Service is provided to approximately 200,000 accounts. Approximately 58% of the water sales are for residential uses. Up until December 2008, ground water from the middle Rio Grande basin aquifer was the Water Authority‟s primary source of supply used for the Water System. Now, the Water Authority is using about 50% ground water and 50% surface water from its newly completed Surface Water Drinking Water Treatment Plant which treats imported Colorado river water (San Juan-Chama water) from the Rio Grande River for potable water use. The new treatment plant has the capacity to produce 92 MGD and can be expanded to 120 MGD. The San Juan-Chama Drinking Water Project is part of the Authority‟s strategic plan to provide for a safe and sustainable water supply through conservation and the conjunctive use of surface water, reclaimed water, and shallow and deep groundwater. The ground water supply is produced from 93 wells located throughout the metropolitan area. Total well production capacity is approximately 294 MGD. Maximum historical peak day demand is 214 MGD. Ground storage reservoirs that hold both surface and ground water provide for fire, peak hour and uphill transfer storage. Water is distributed from higher to lower elevations through a 115-foot vertical height pressure zone to provide minimum static pressures of 50 psi for consumers. There are 46 reservoirs located throughout the service area, with a total reservoir storage capacity of 211 million gallons. These reservoirs are interconnected by over 3,000 miles of pipelines and are situated at various locations east and west of the service area to provide multiple sources of supply to customers and for operating economies. The Water System takes advantage of the unique topography of the Water Authority's service area which allows ground level storage while simultaneously providing system pressure by gravity. Control of the Water System is provided by remote telemetry units distributed throughout the System for control from a central control facility. The Water System Service Area is approximately 167 square miles.

Any extension of service outside the Service Area would incur “no net expense” to the Water Authority‟s customers in that that revenue generated from any expansion or improvement of the System shall be sufficient to support the costs of the water and/or wastewater facilities being expanded or improved. In addition, the new developments outside the water service area are required to pay a water supply charge for acquisition of future water supplies. In 2007, the Water Authority adopted a set of guiding principles for utility development and planning. Some of the major policies include: balancing water use with renewable supply, not subsidizing development outside the service by current Water Authority customers, linking land use with infrastructure, ensuring that system expansion is concurrent with infrastructure service levels, protecting valued environmental and cultural resources of the region, and utilizing asset management principles for evaluating and considering rehabilitating, replacing or acquiring new assets.

In May 2009, the Water Authority acquired a private utility in the northwest section of Bernalillo County. Starting in FY11, these customers will be incorporated into the Water System and pay the same rates as current customers. The new rates reflect the cost of providing a sustainable long-term supply via the San Juan-Chama Drinking Water Project, and the cost of conservation programs designed to ensure our water future in Albuquerque and Bernalillo County.

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

Sanitary Sewer Service Area Map



Major Assets:

- Southside Water Reclamation Plant
- 43 Lift Stations
- 2,535 miles of collection pipeline

The Sewer System consists of small diameter collector sewers, sewage lift stations, and large diameter interceptor sewers conveying wastewater flows to the Southside Water Reclamation Plant. The treatment plant provides preliminary screening, grit removal, primary clarification and sludge removal, advanced secondary treatment including ammonia and nitrogen removal, final clarification, and effluent chlorination and dechlorination prior to discharge to the Rio Grande River. Treatment plant capacity is based upon overall 76 MGD hydraulic capacity. However, capacity deficiency at the chlorination/dechlorination, anaerobic digestion and dewatered sludge handling facilities needs to be addressed to bring these facilities to the 76 MGD plant hydraulic capacity. The existing chlorination/dechlorination system is being replaced by ultraviolet light disinfection in Spring 2011. Existing flows at the plant are about 54 MGD. The Sewer System Service Area is approximately 303 square miles. The secondary service area designates Wholesale-Special Contracts. These contract customers are responsible for a collection system beyond the point where their respective wastewater discharges into the Water Authority"s interceptors.

Any extension of service outside the Service Area would incur "no net expense" to the Water Authority"s customers in that that revenue generated from any expansion or improvement of the System shall be sufficient to support the costs of the water and/or wastewater facilities being expanded or improved. In 2007, the Water Authority adopted a set of guiding principles for utility development and planning. Some of the major policies include: promote reuse, reduce odor, improve treatment capacity, improve capacity in the collection system, not subsidizing development outside the service by current Water Authority customers, linking land use with infrastructure, ensuring that system expansion is concurrent with infrastructure service levels, protecting valued environmental and cultural resources of the region, and utilizing asset management principles for evaluating and considering rehabilitating, replacing or acquiring new assets.

In May 2009, the Water Authority acquired a private utility in the northwest section of Bernalillo County. Starting in FY11, these customers will be incorporated into the Sewer System and pay the same rates as current customers. The new rates reflect the cost of providing a sustainable long-term supply via the San Juan-Chama Drinking Water Project, and the cost of conservation programs designed to ensure our water future in Albuquerque and Bernalillo County.

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FY13 Budget Presentation

Albuquerque Bernalillo County
Water Utility Authority

Strategic Planning, Budgeting & Improvement Process

FY13 Operating & CIP Budget Highlights

- No rate increase is proposed
- Includes a 2% step adjustment based on Collective Bargaining Agreements
- $2 million is added to the Rate Reserve Fund
- $30 million CIP for Basic Rehab Program
- $3 million for Non Basic Capital projects

FY13 Operating & CIP Budget Highlights

- Continue conservation surcharge for high residential water users (Top 7%)
- Continue to offer the 30% discount to residential users consuming 150% or less of their conservation average

FY13 Budget Assumptions

- Nominal growth in service area
- 2% decrease in consumption based on conservation
- Growth in operating expenses include only essential items.
- Increased capital spending for rehabilitation work at the Southside Reclamation Plant

FY12 & FY13 Budget Comparison

	FY12	FY13	Change	%
Revenue	192.5	191.4	(1.1)	(0.6%)
Expenditures	179.6	183.6	4.0	2.2%
Difference	12.9	7.8		
Beginning Fund Balance	-10.7	2.2		
Ending Fund Balance	2.2	10.0		

FY13 Budget - Expenditures

Personnel Expenditures

- 2% step adjustment - $452,500
- Annualize 11 FY12 mid-year positions – $645,400

Operating Expenditures

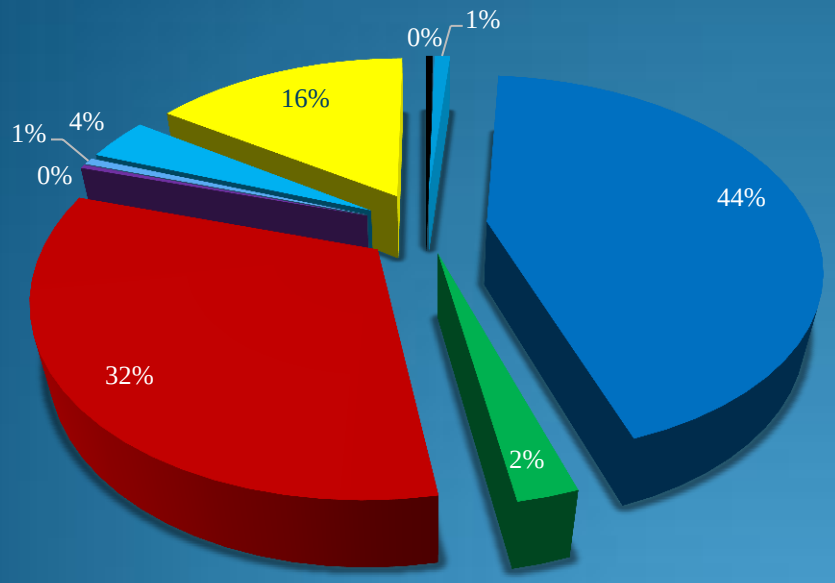
- Increase in barricade and paving costs of $2.1 million
- $700,000 for postage, liens, training and unemployment compensation

FY13 Budget - Expenditures

Internal Services and Transfers

- Debt service cost increases by $5 million
- UEC transfer to CIP of $3 million for growth CIP Projects

FY 13 Revenues

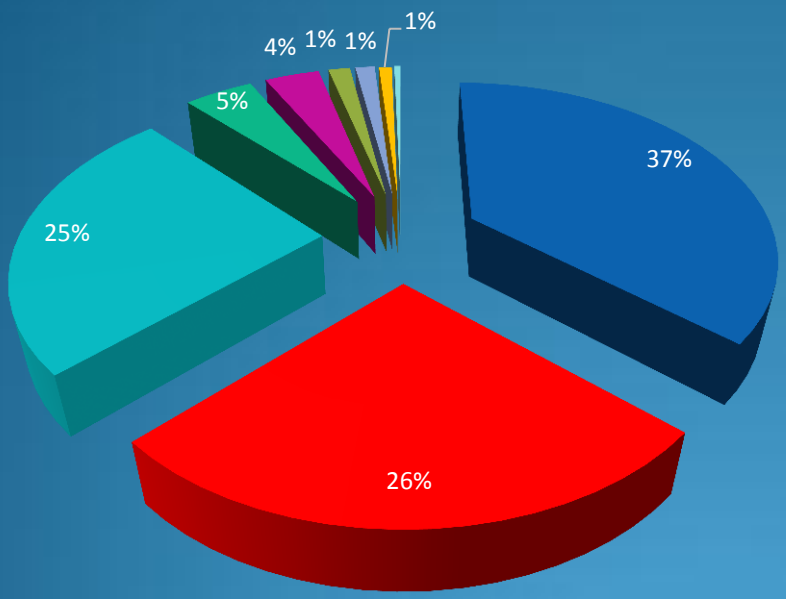


- INTEREST ($750,000)
- MISCELLANEOUS ($1,874,000)
- WATER ($83,300,000)
- WATER RESOURCES MANAGEMENT ($4,500,0000)
- SEWER ($62,000,000)
- CIP EMPLOYEES ($650,000)
- SOLID WASTE TRANSFER ($1,142,000)
- FRANCHISE FEE ($7,192,000)
- SJC STRATEGY IMPLEMENTATION ($30,000,000)

TOTAL ($191,408,000)

TOTAL $191,408,000

FY 13 Expenditures



- DEBT SERVICE ($66,362,000)
- WAGES & BENEFITS ($47,521,000)
- OPERATING EXPENSE ($45,754,000)
- TRF TO OTHER FUNDS ($8,200,000)
- FRANCHISE FEE ($6,544,000)
- RISK ($3,364,000)
- OTHER - Vehicle Fuels, Radio and other Capital ($2,350,000)
- INDIRECT OH ($1,550,000)
- WORKERS COMP ($754,000)

TOTAL ($181,645,000)

TOTAL $181,645,000

Finance Plan FY13

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Resources	179,178	**192,015**	210,964	222,827	227,881	229,290	223,545	214,619	202,245	191,732
Expenditures	177,925	**181,593**	191,594	201,362	208,012	218,217	224,495	231,087	232,419	234,796
Resources over Expenditures	1,253	**10,422**	19,370	21,465	19,869	11,073	(950)	(16,468)	(30,174)	(43,064)
Rate Increases	5%	**0**	5%	0	0%	0	0	0	0	0

CIP Appropriations

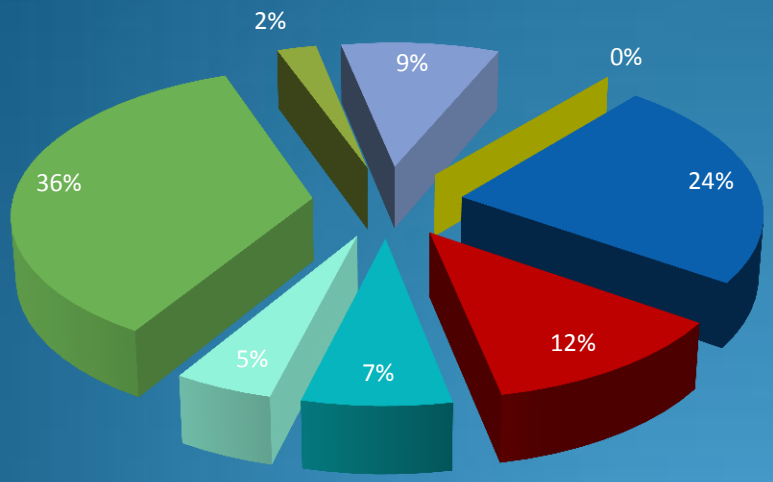
Appropriates $42 million

- $33 million for FY11 basic water and sewer program of which $30 million is for rehab and replacement
- $2 million for the implementation of the Enterprise Resource and Planning system (ERP)
- $3 million for special projects
  - $2 million for Automated Meter Infrastructure
  - $1 million steel water line replacement

CIP Appropriations

- $4 million for Water Resource Management Strategy (WRMS) projects
  - $2.3 million for remaining costs at the Surface Water Treatment Plant
  - $1.7 million for mitigation efforts rebuilding habitat on the Bosque

FY13 CIP Planned Spending



- Basic Pipeline Renewal ($9,900,000)
- Basic Plant Renewal ($5,100,000)
- Basic Growth Projects ($3,000,000)
- Enterprise Resources Planning (ERP) ($2,000,000)
- Southside Water Reclam. Plant ($15,000,000)
- Steel Water Line Replacement ($1,000,000)
- Special Projects ($4,000,000)
- Automated Meter Reading ($2,000,000)
- Total ($42,000,000)

TOTAL $42,000,000

Future Financial Challenges

- Substantial improvements to reclamation facility
- Increase reserve to 1/12th to maintain Rating
- Increasing cost of power, fuel and chemicals
- Finance Asset Management Plan by increasing CIP spending

Status Report on Water Authority's

Asset Management Program FY12 Infrastructure Renewal

Drinking Water Assets

- San Juan Chama WTP
- Wells, Booster Pumping Stations
- Reservoirs
- Water Pipelines

Wastewater Assets

- Sewage Collection Pipelines
- Sewage Lift and Vacuum Stations
- Southside Water Reclamation Plant
- Soil Amendment Facility




Reclaimed Water Assets

- Northside Non-Potable Water System
- Southside Non-Potable Water System

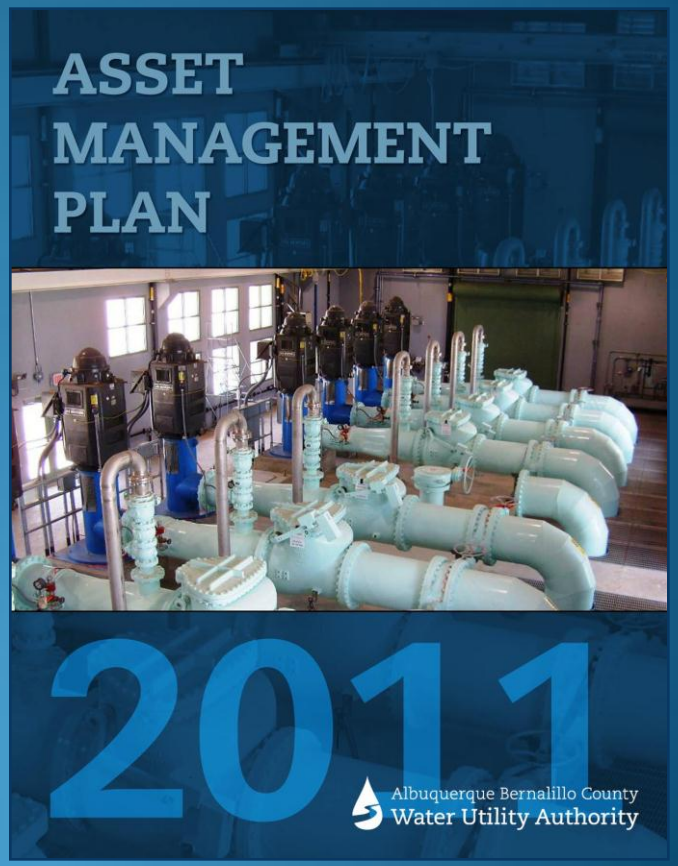
Compliance Division Assets

- Analytical Laboratory at the SWRP
- Process Laboratory at the SJCWTP

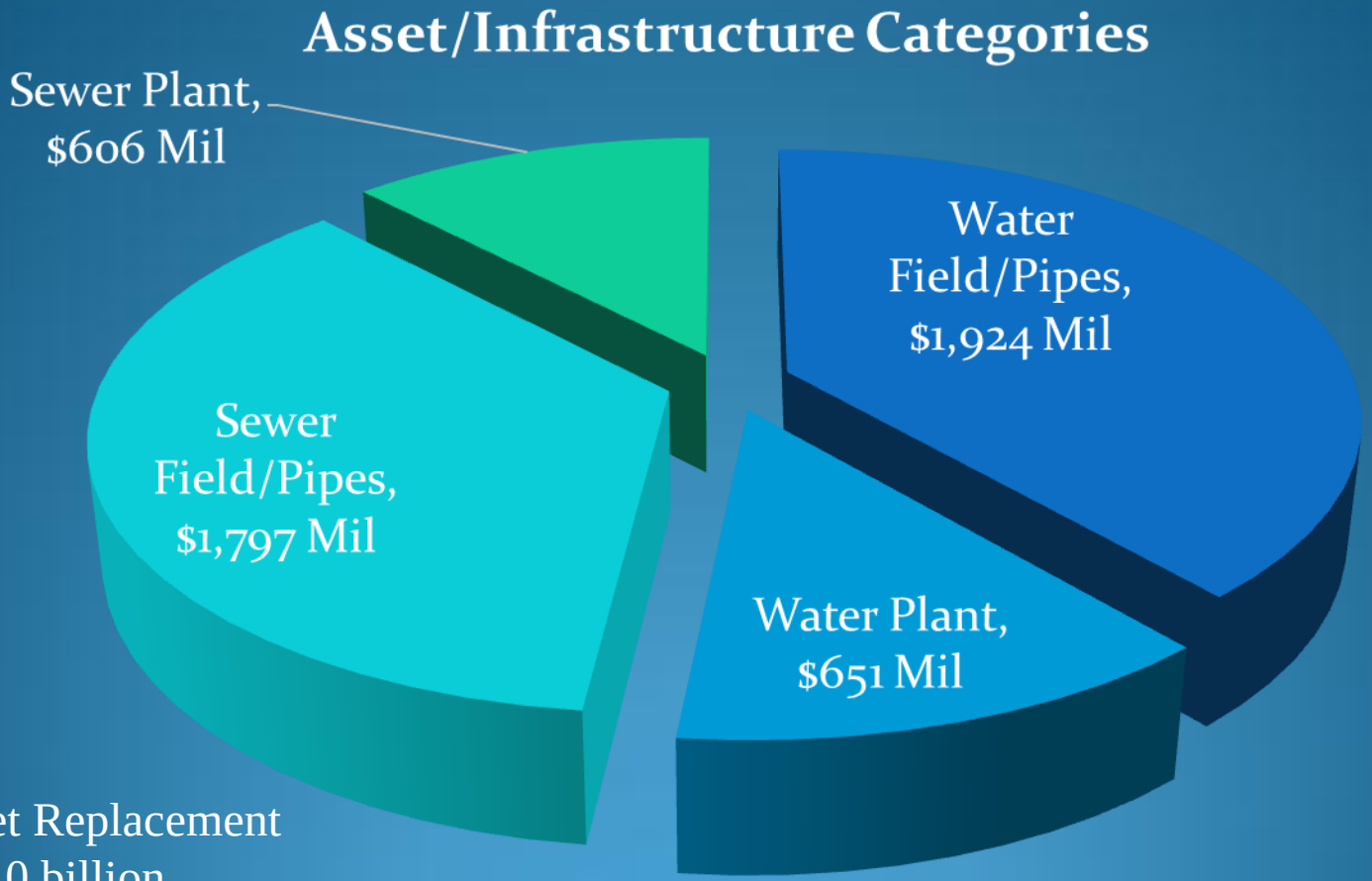
Asset Management Program

2011 Asset Management Plan

- Evaluated over 200,000 assets
- Scheduled the asset renewal requirements largely based on their age and anticipated useful life plus through individual asset condition assessments
- Highest “risk” assets given priority for renewal
- Risk = Probability of Failure X Consequence of Failure

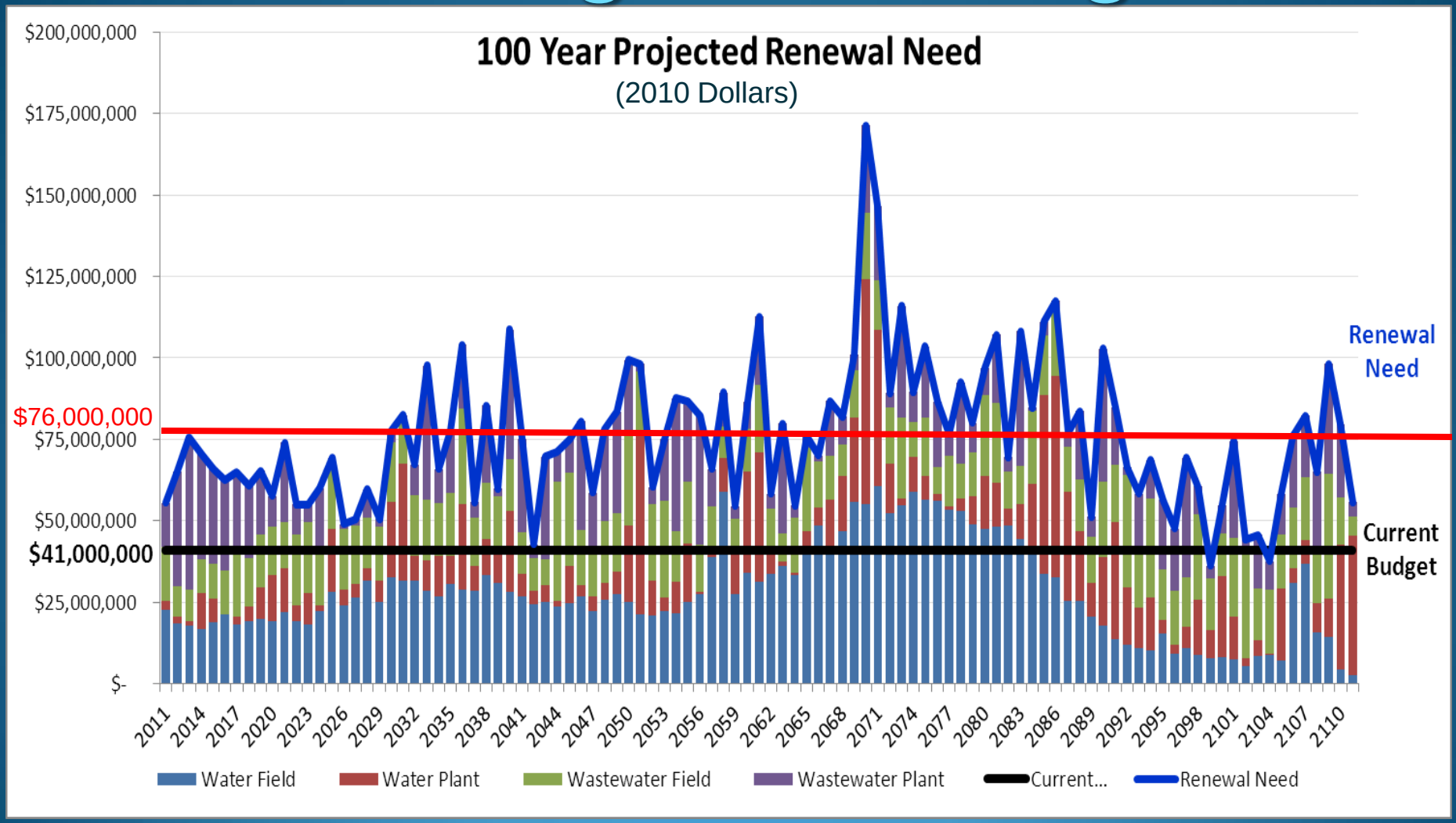


Asset Management Program



Total Asset Replacement Cost ≈ $5.0 billion (2010 dollars)

Asset Management Program

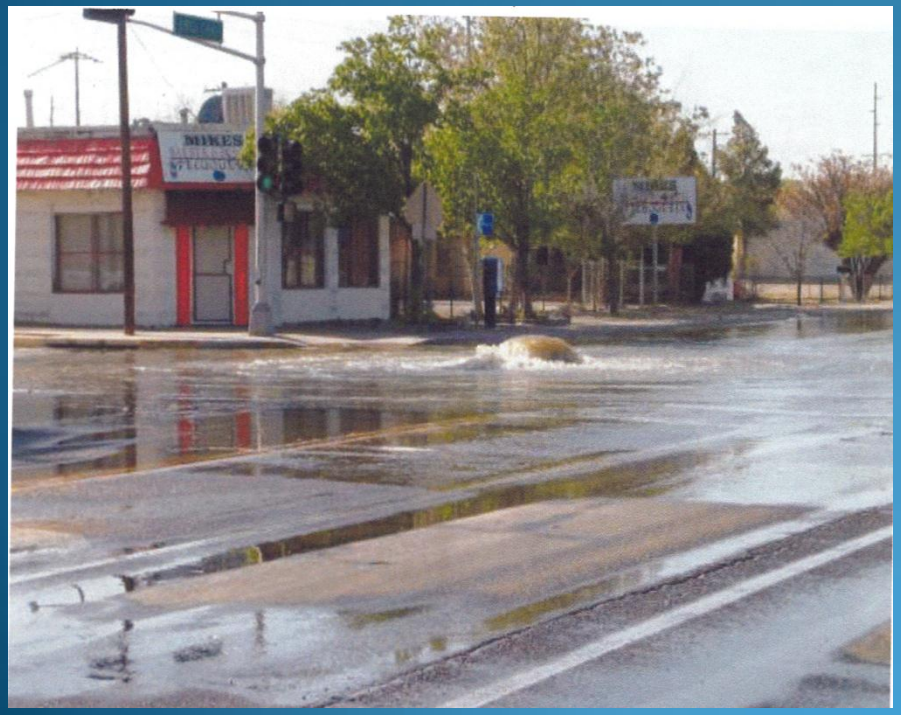


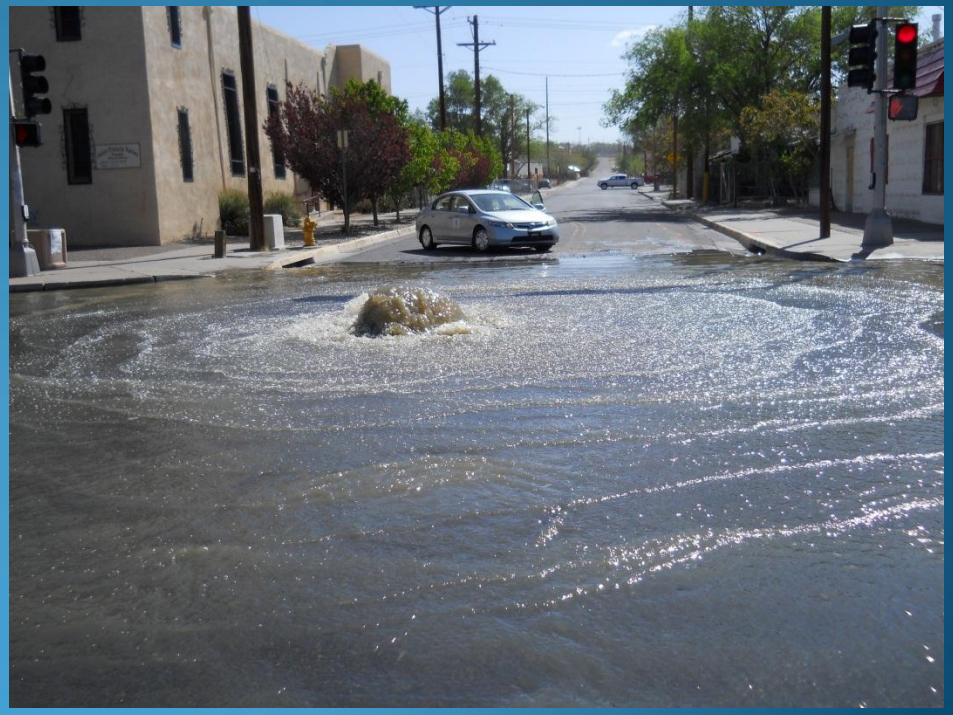
Asset Management Program

Falling behind in asset renewal results in failures such as sewer collapses and water line breaks

Asset Management Program

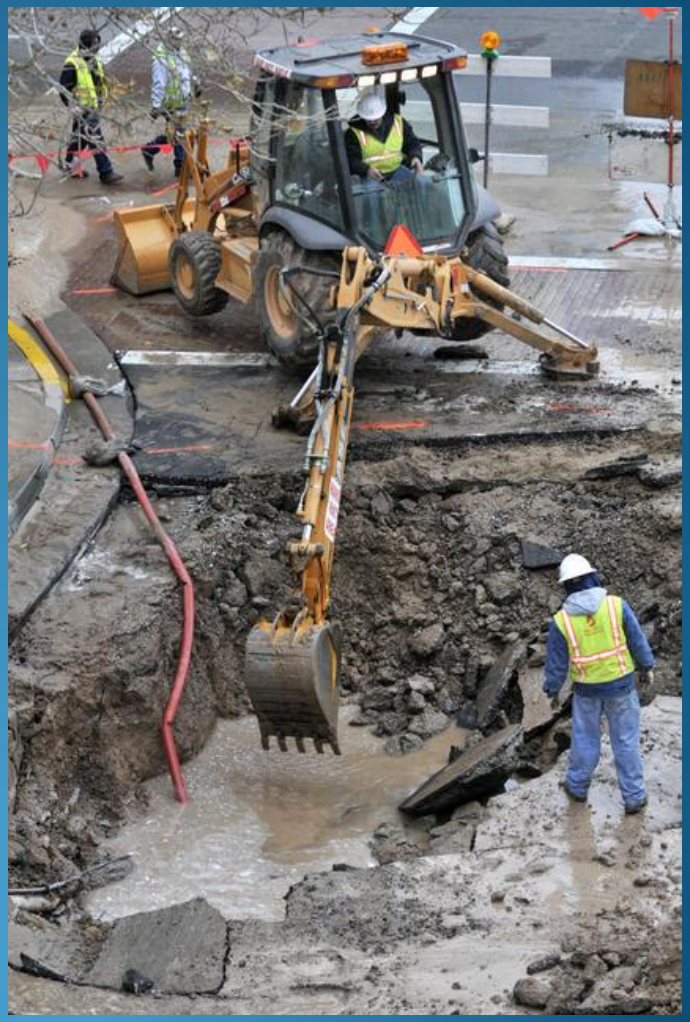
April 2011 Sewer Interceptor Collapse Resulted in Untreated Sewage Overflow





Asset Management Program

The "Level of Service" that the Water Authority provides to its rate payers is dependent on maintaining our water and wastewater assets



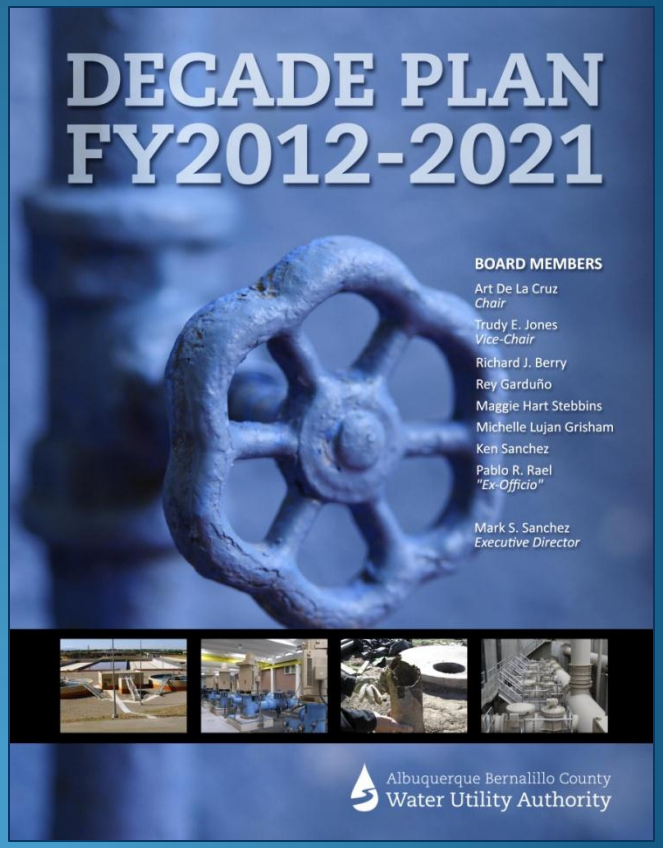
Asset Management Program

Tactical, 10-Year Asset Management Plans (AMPs):

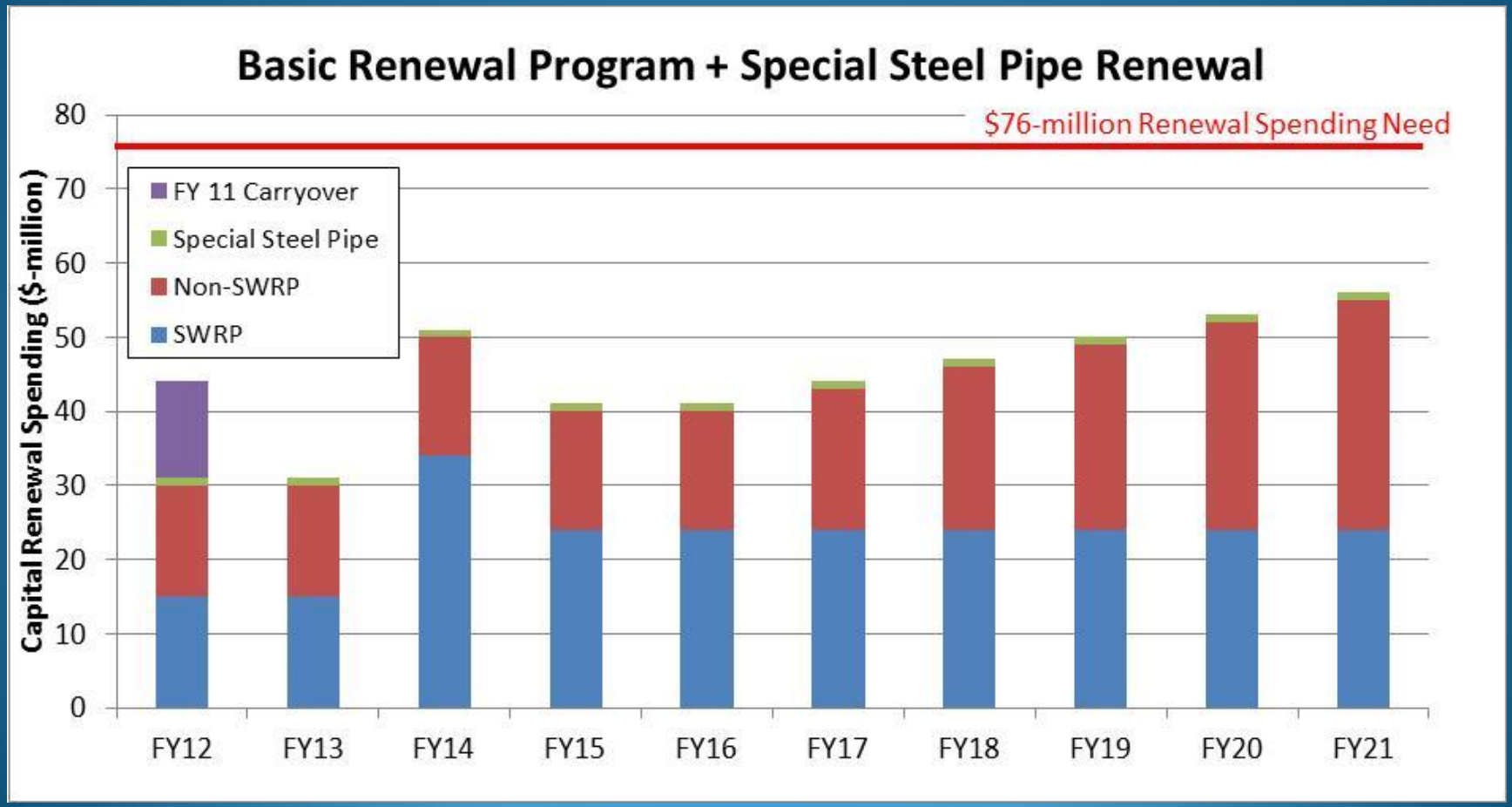
- Sewer Interceptors
- Small Diameter Water & Wastewater Pipelines
- Sanitary Sewer Lift/Vacuum Stations
- Water Storage Reservoirs
- Water Booster Pumping Stations Wells
- Large Diameter Water Pipelines

FY2010-2021 Decade Plan

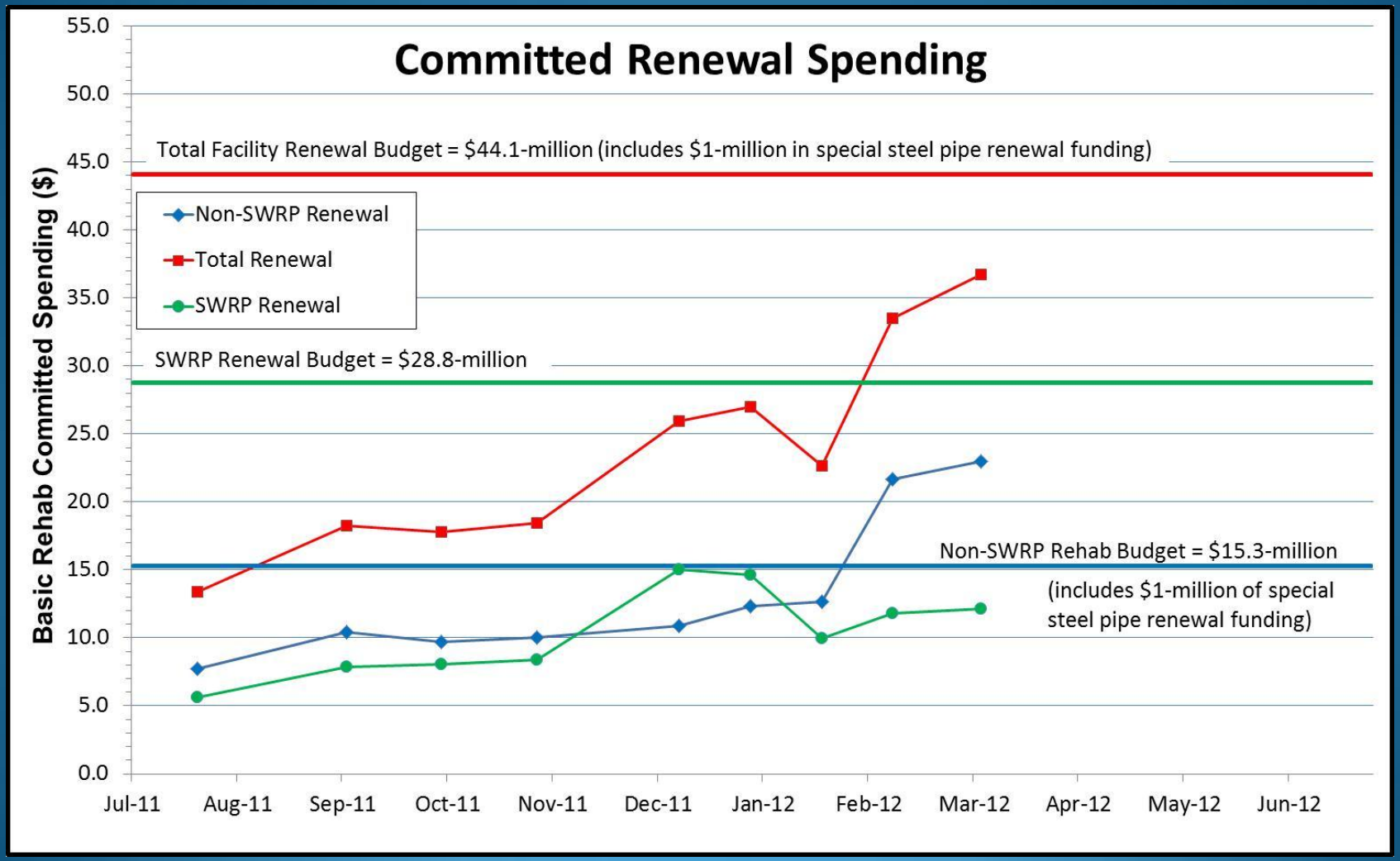
- Identifies capital projects for next 10 Years
- Developed every 2 Years
- Incorporates data and analysis from Asset Management Plan
- Direct Link to Water Authority's Financial Plan to proposed capital needs



FY2010-2021 Decade Plan



Committed Renewal Spending



Committed Renewal Spending

Some Examples:

- Groundwater and Surface Water Production, Treatment, Pumping, and Storage = $4.5-million
- Drinking Water Pipelines = $9-million
- Sanitary Sewers = $5-million
- Lift and Vacuum Stations = $1.1-million
- Odor Control Stations = $1.5-million
- Southside Water Reclamation Plant = $12-million
- Franchise Fee Compliance = $3-million

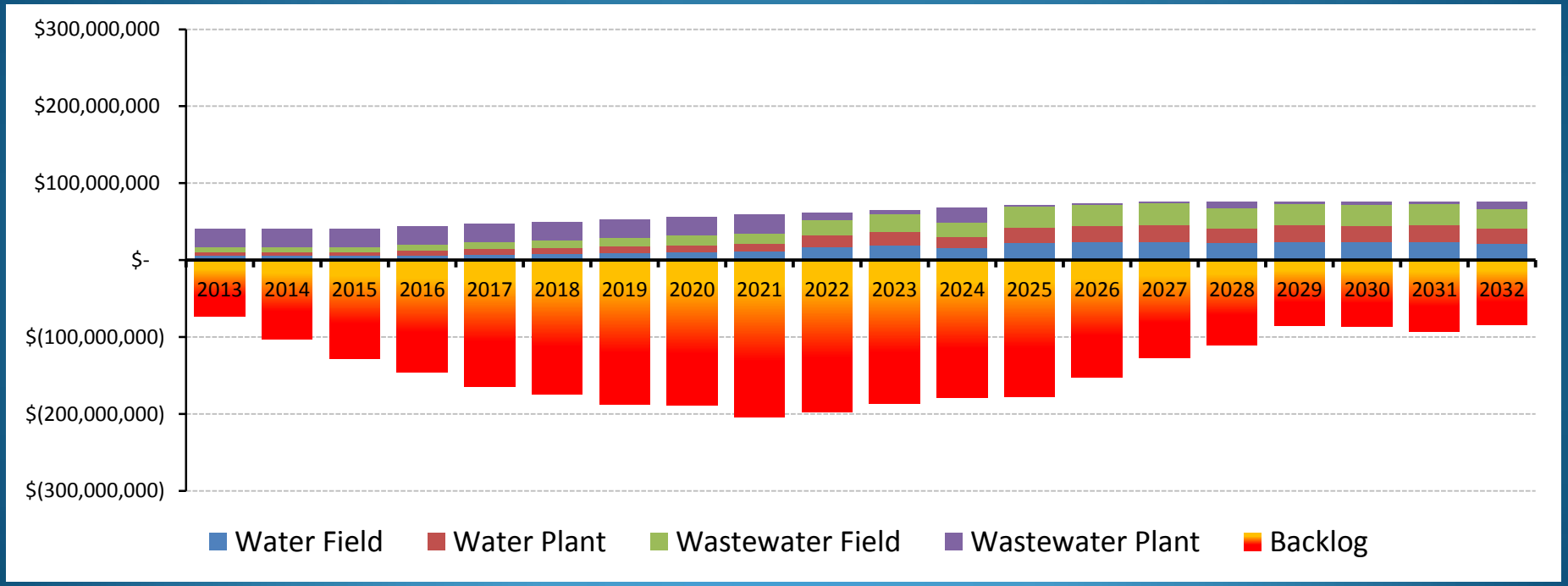
Asset/Infrastructure Renewal Backlog

The 2012 – 2021 Decade Plan identified a backlog of over $355-million in unfunded renewal projects. For Example…

- Unfunded Sewer Pipelines = $70-million
- Unfunded Drinking Water Pipelines = $141-million
- Unfunded Drinking Water Plant = $119-million
- Unfunded Lift/Vacuum/Odor Stations = $7-million
- Unfunded Soil Amendment Facility = $6-million

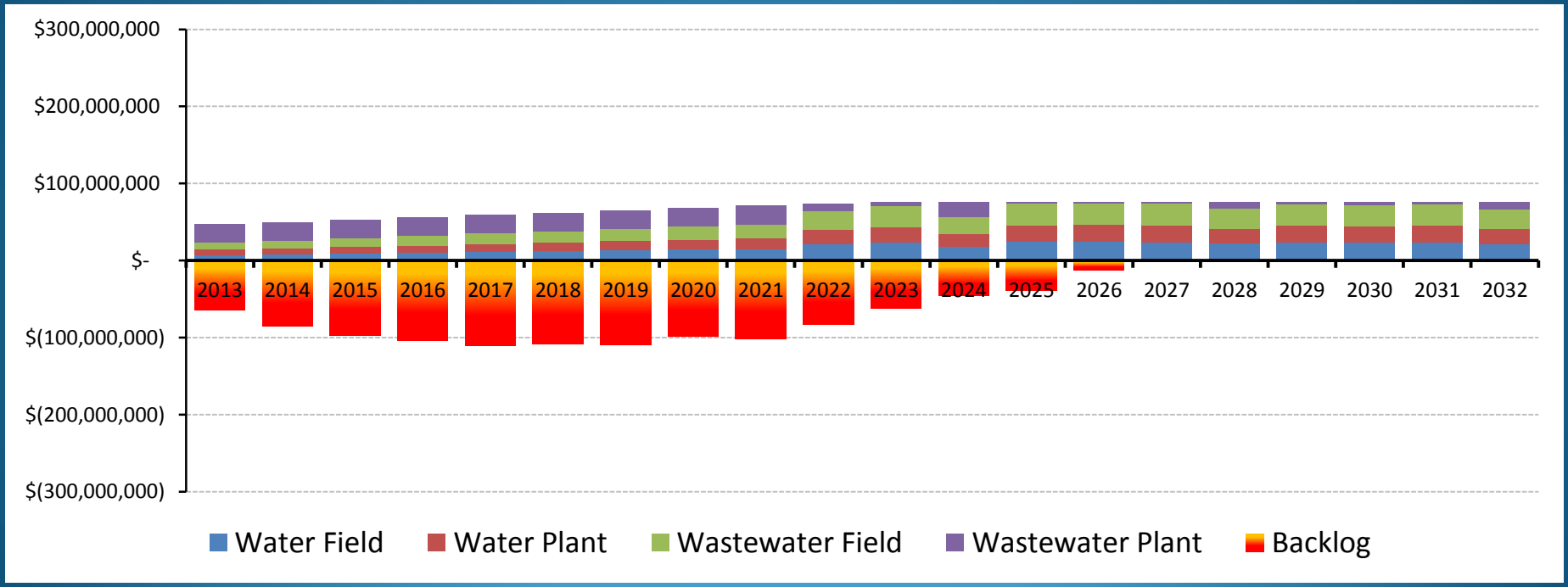
Renewal Backlog

Current Decade Plan Spending with Increase of $3-million per year starting in FY2017



Renewal Backlog

Current Decade Plan Spending with Increase of $3-million per year starting in FY2015



Overview of Water Authority Debt and Bond Ratings

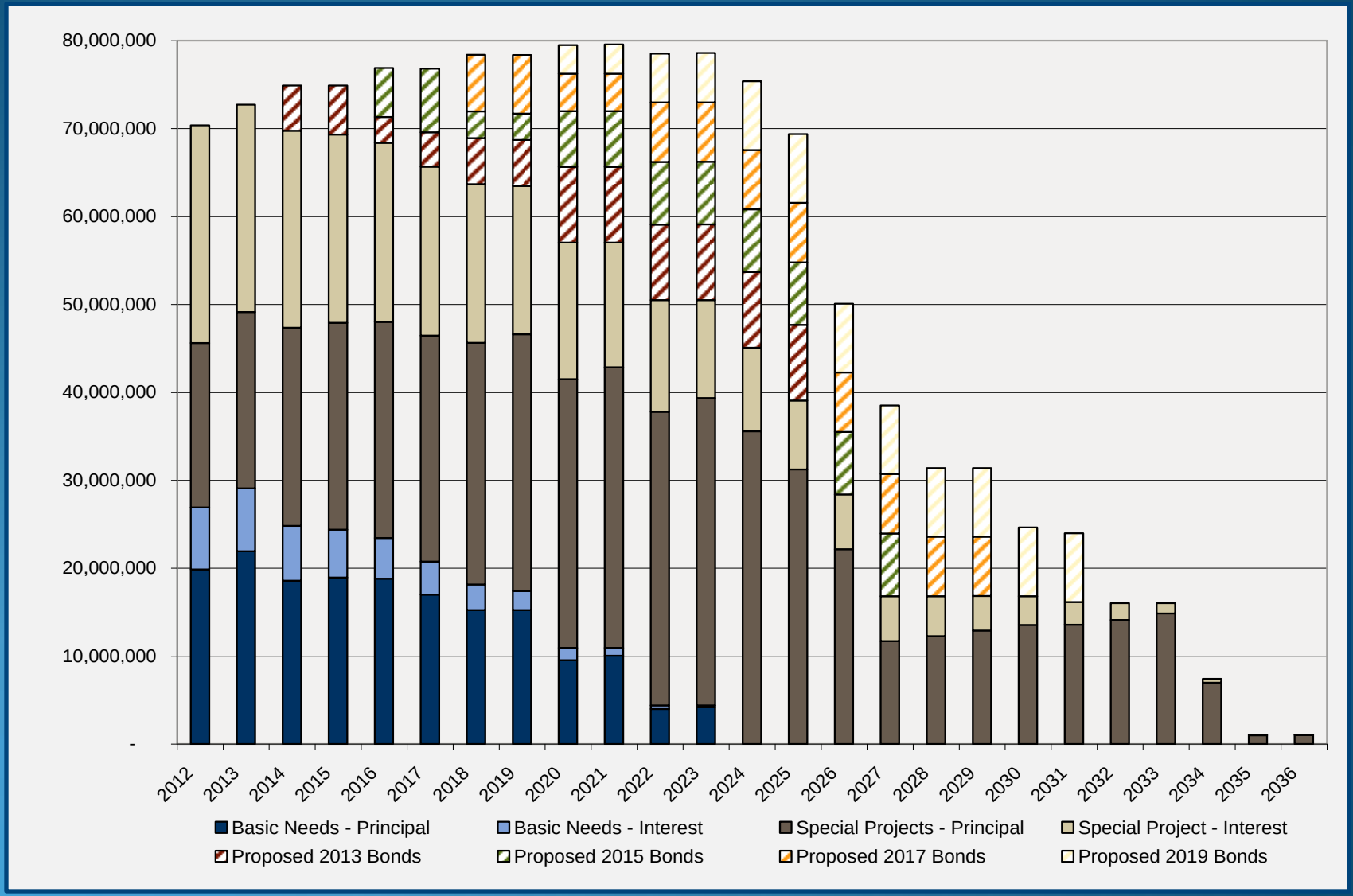
Overview of Authority Debt

- $690.9 million of outstanding debt with an average rate of 4.39%
  - 100% fixed rate – no variable rate debt or interest rate swaps
  - $669.0 million of senior lien debt
  - $ 20.4 million of subordinate lien debt
  - $ 1.5 million of super-subordinate lien debt
- Senior lien is broken down as follows:
  - $173.3 million of **basic needs**
    - 12 year final maturity at time of issuance
    - Final maturity all basic needs debt of 2023
    - Average annual rate of 3.74%
    - Average life of debt is 4.36 years
  - $495.7 million of **special needs projects** including San Juan Chama
    - 25 year final maturity at time of issuance
    - Final maturity of all special needs projects of 2037
    - Average annual rate of 4.63%
    - Average life of debt is 9.98 years

Overview of Authority Debt

- Subordinate / super-sub. lien for special projects is broken down as follows:
  - $ 9.9 million of NMED Loans which have an average rate of 3.15% and a final maturity in 2025 (Valley Utilities)
  - $10.5 million of NMFA Drinking Water Loans which have an average rate of 1.98% and a final maturity of 2031 (Santa Barbara project)
  - $ 1.5 million of Water Trust Board Loans which have an average rate of 0.25% and a final maturity of 2031 (Carnuel)
    - Received $3.9 million of grants in connection with the Water Trust Board Loans

Combined Debt Service – All Debt



Overview of Bond Ratings

- Standard and Poor's: AA+ (stable outlook) downgrade from AAA in March 2012
  - Similar rated credits include
    - City of El Paso, TX Water and Sewer
    - City of San Antonio, TX Water and Sewer
    - Los Angeles Dept. of Water and Power

- Fitch Ratings: AA (negative outlook) downgrade from AA+ in July 2011
  - Similar rated credits include
    - District of Columbia Water and Sewer Authority
    - City of Houston, TX Joint Water and Sewer
    - City of Fresno, CA Joint Water and Sewer
    - Pima County, AZ (Phoenix) Water and Sewer
    - City of San Diego, CA

- Moody's Rating: Aa1 (stable outlook) rating under review (April 2012)
  - City of El Paso, TX Water and Sewer
  - City of Phoenix, AZ Water and Sewer
  - City of Tucson, AZ Water Enterprise
  - City & County of Denver, CO
  - City of Dallas, TX Waterworks & Sewer Enterprise

S&P AND FITCH INVESTMENT GRADE

AAA

Highest possible rating – Obligators capacity to meet its financial commitments are extremely strong.

AA-/AA/AA+

High quality - differs from highest rating only in the degree of protection provided bondholders.

A-/A/A+

Good ability to pay principal and interest although more susceptible to adverse effects due to changing conditions.

BBB-/BBB/BBB+

Adequate ability to make principal and interest payments -- adverse changes are more likely to affect the ability to service debt.

MOODY'S INVESTMENT GRADE

Aaa

Highest possible rating – Obligators capacity to meet its financial commitments are extremely strong.

Aa3/Aa2/Aa1

High quality - differs from highest rating only in the degree of protection provided bondholders.

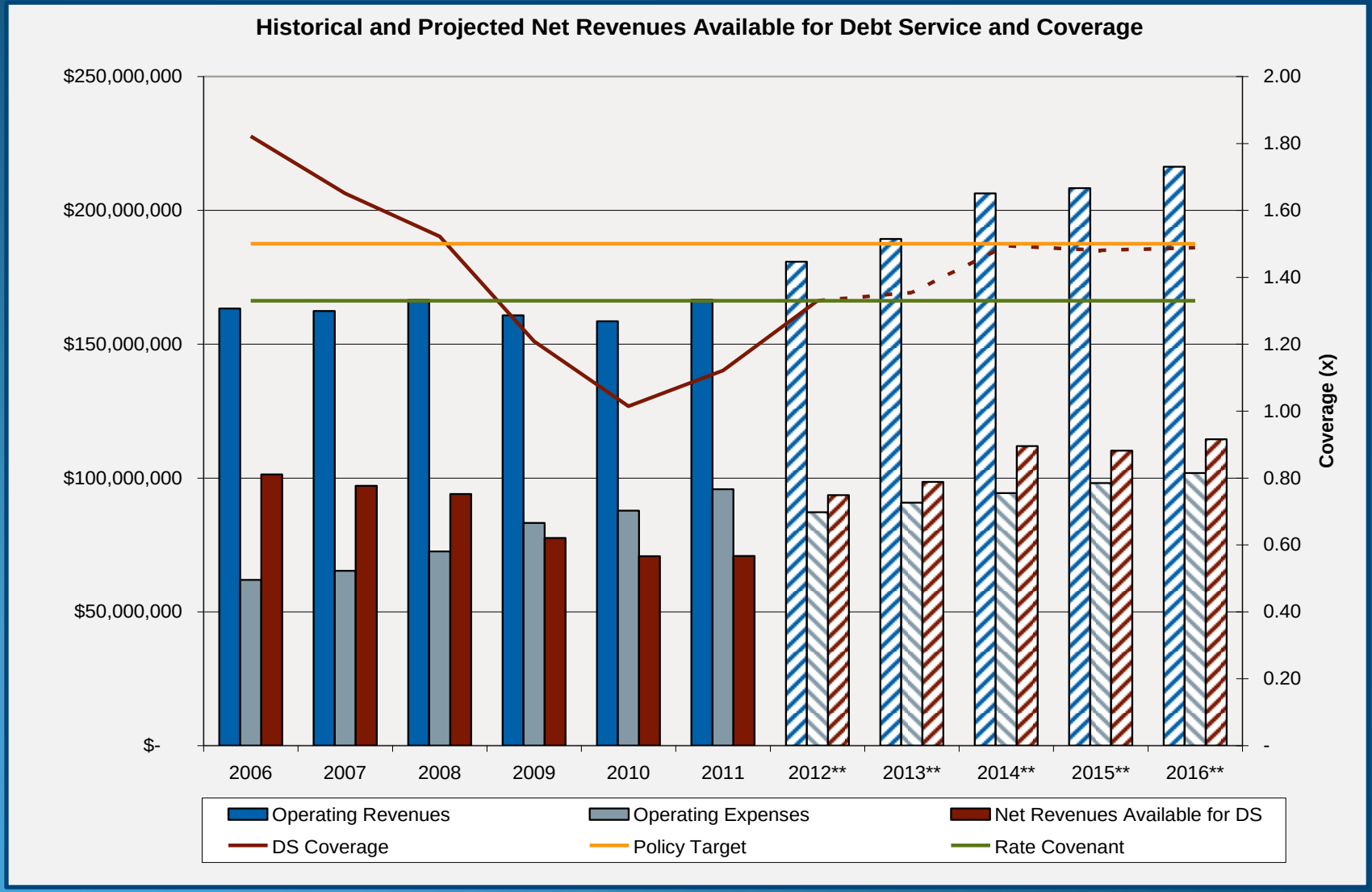
A3/A2/A1

Good ability to pay principal and interest although more susceptible to adverse effects due to changing conditions.

Baa3/Baa2/Baa1

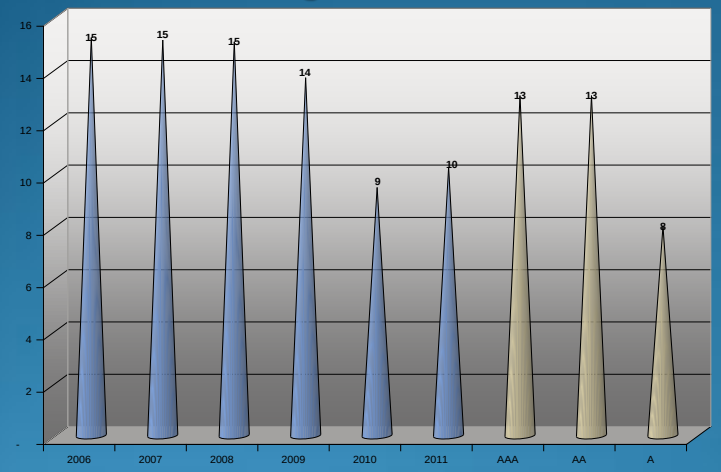
Adequate ability to make principal and interest payments -- adverse changes are more likely to affect the ability to service debt.

Historical and Projected Net Revenues and Debt Service Coverage

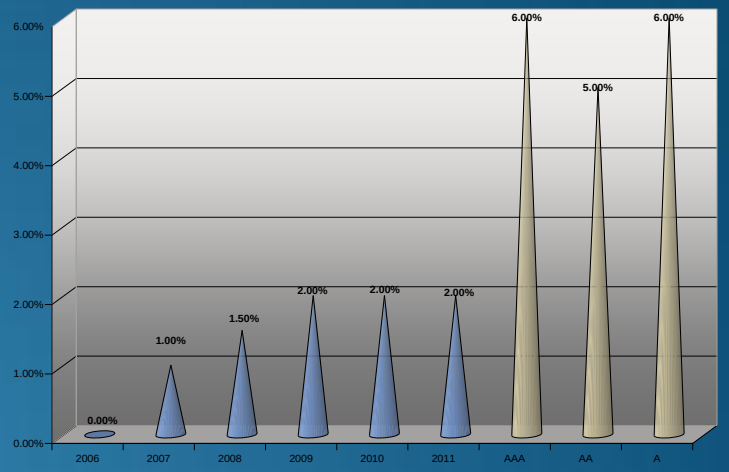


Key Ratios

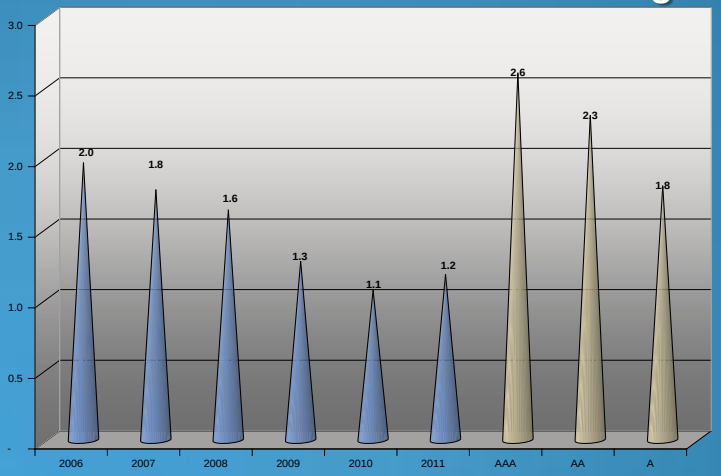
Age of Plant



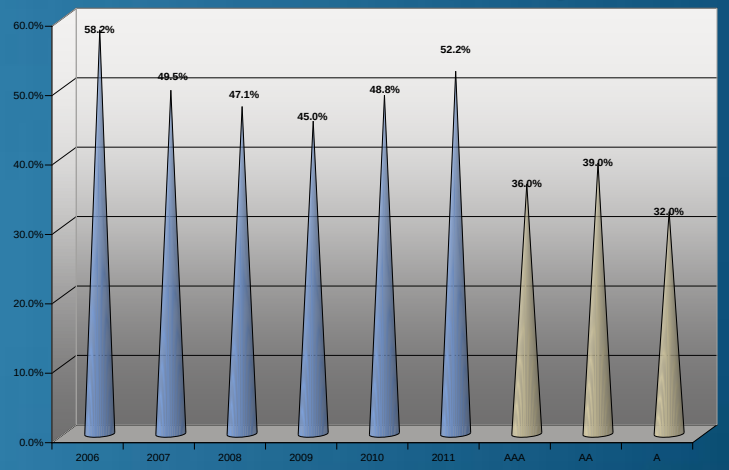
Average Annual Projected Water Rate Increase



Senior Lien Debt Service Coverage



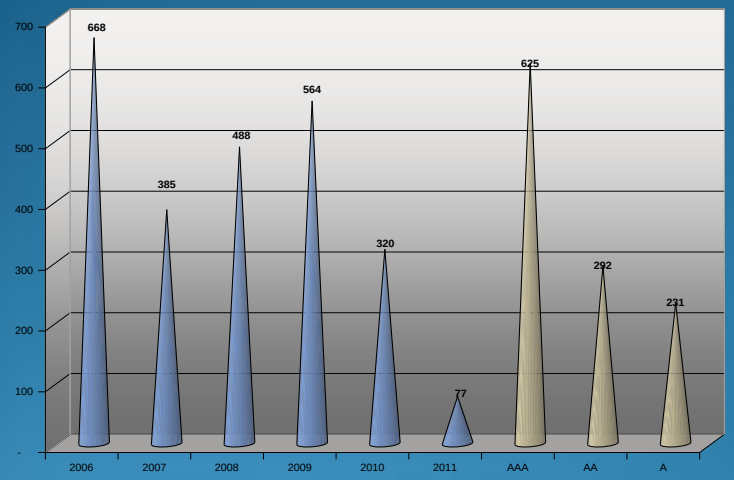
10 Year Bond Principal Payout



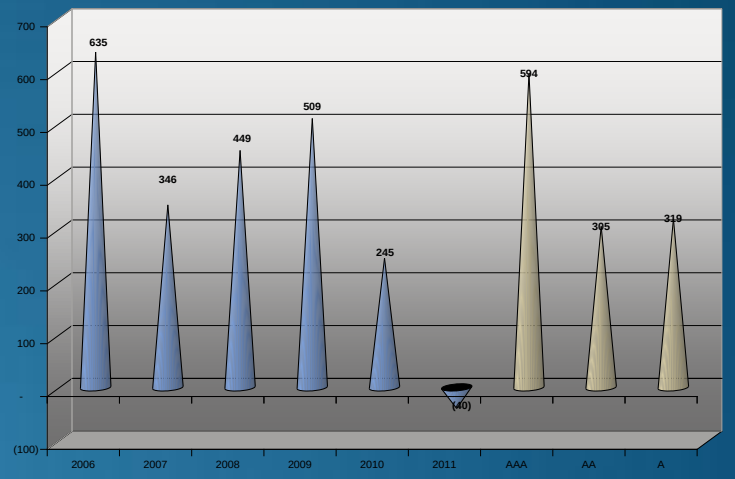
RBC Capital Markets®

Key Ratios

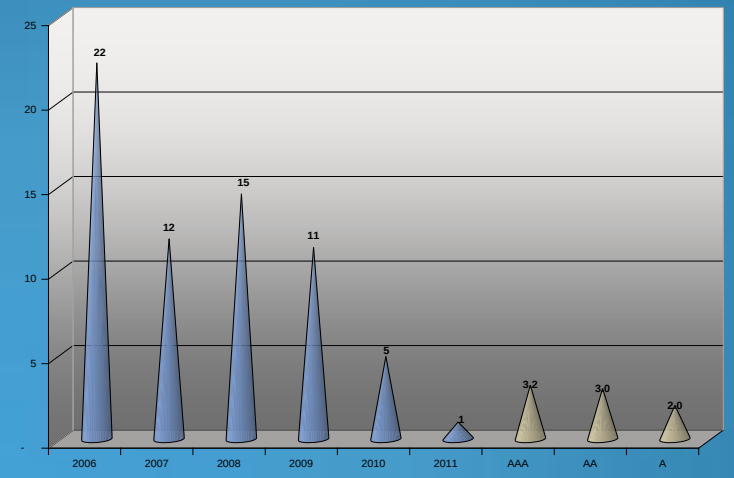
Days Cash on Hand



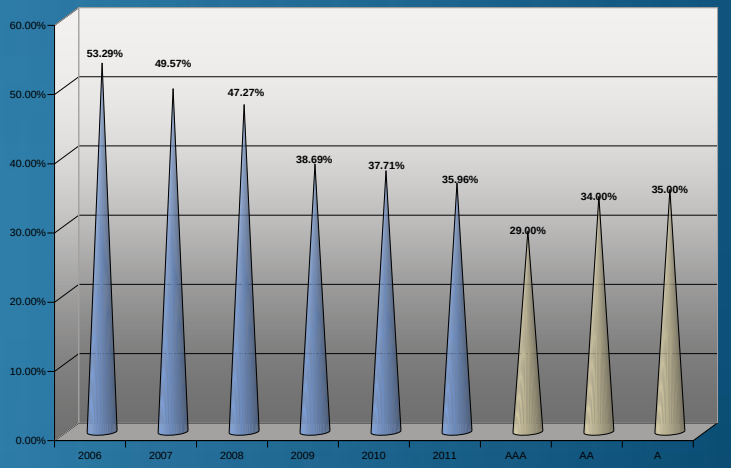
Days Working Capital



Quick Ratio



Operating Margin



RBC Capital Markets®

Finance Plan – Increase CIP Spending/Reserves

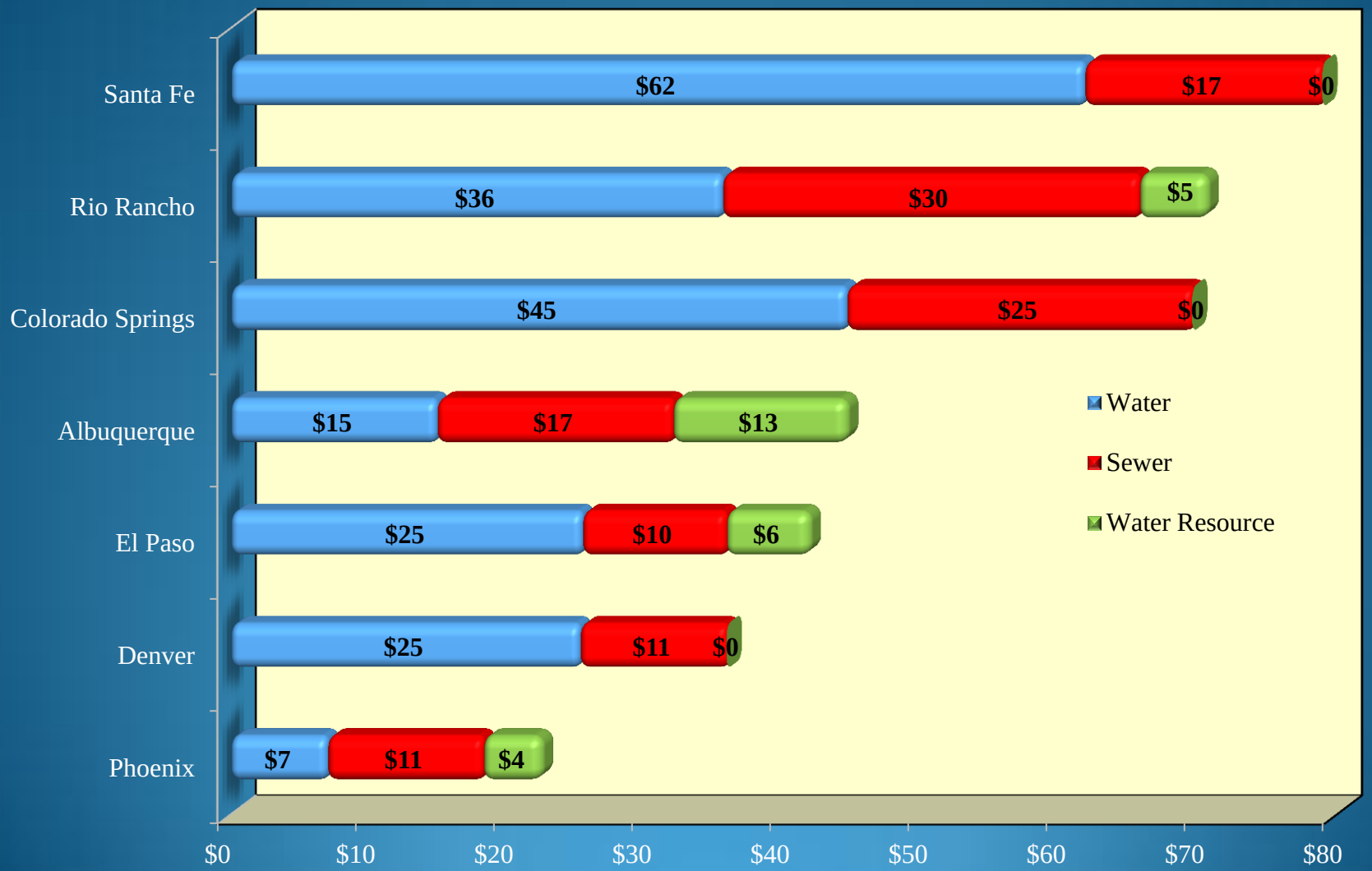
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Resources	179,178	**192,015**	210,963	222,826	236,244	242,184	251,310	258,151	262,461	267,570
Expenditures	177,925	**181,593**	191,594	202,384	213,008	223,162	229,921	237,016	240,874	245,802
Resources over Expenditures	1,253	**10,422**	19,369	20,442	23,236	19,022	21,389	21,135	21,588	21,768
Rate Increases	5.00%	**0.00%**	5.00%	0.00%	5.00%	0.00%	5.00%	0.00%	0.00%	0.00%

Employee Efficiency Metrics

- Water O&M Cost per Account
  - Comparable to peers
- Wastewater O&M Cost per Account
  - Less than peers
- Customer Water Accounts per Employee
  - Higher than peers
- Customer Wastewater Accounts per Employee
  - Higher than peers

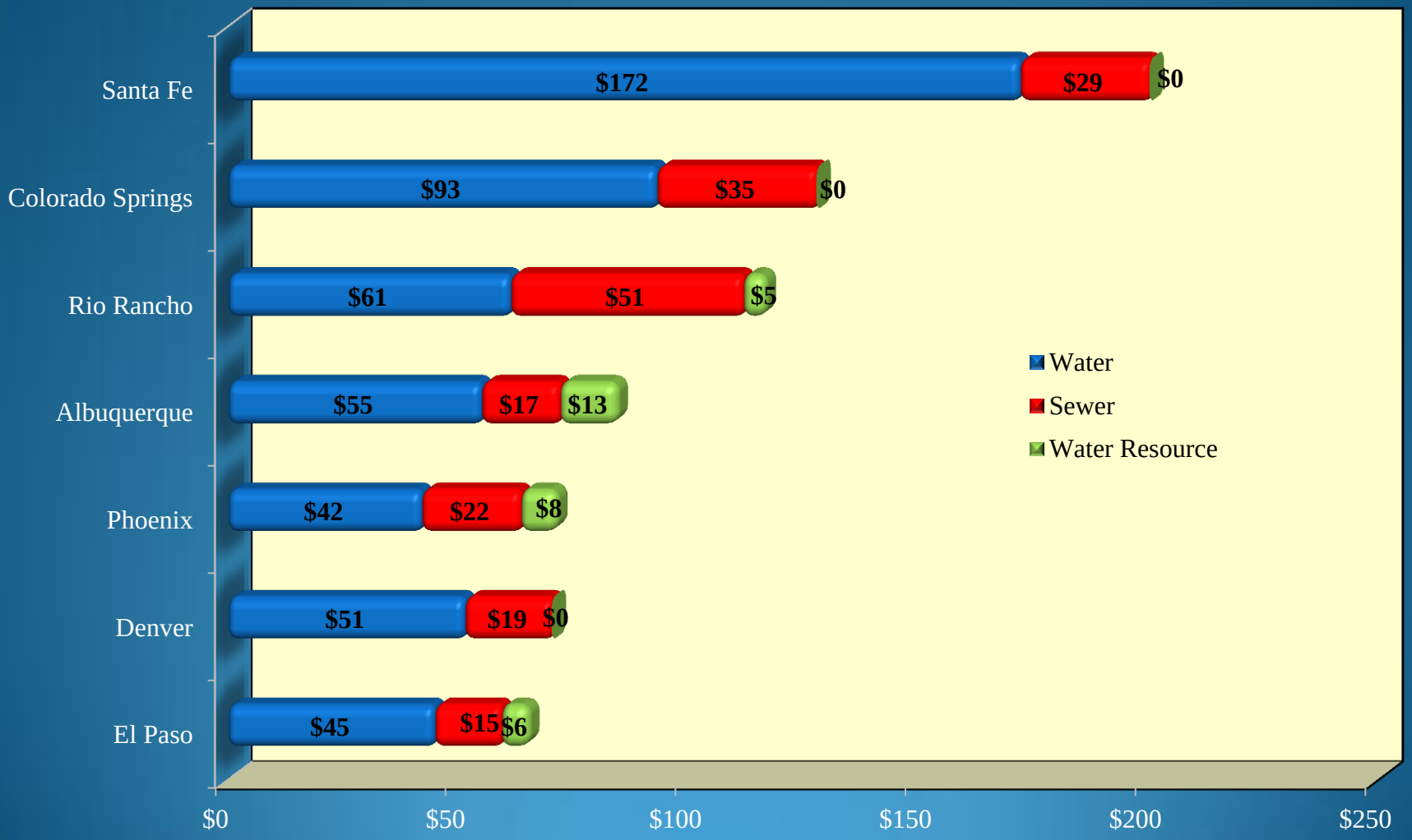
Bill Comparison – Low Use

Total Single Family Residential Bill, 8 CCF (6CCF AWC)



Bill Comparison – High Use

Total Single Family Residential Bill, 20 CCF (8 CCF AWC)



Albuquerque Bernalillo County
Water Utility Authority

Agenda Item No. 7c

Meeting Date: April 18, 2012
Staff Contact: Tom Ortiz, Senior Financial Officer

TITLE: **R-12-11 - Appropriating Funds for the Capital Implementation Program for the Albuquerque Bernalillo County Water Utility Authority for Fiscal Year Beginning July 1, 2012 and Ending June 30, 2012**

ACTION: **Introduction: April 18, 2012 – Final Action May 23, 2012**

SUMMARY:
This legislation appropriates funding for the FY 2013 Capital Implementation Program (CIP). This appropriation provides funding for new projects as well as supplements current appropriations for projects that are ongoing.

FISCAL IMPACT:
The appropriation totals $42.0 million. $33 million is appropriated for the Basic Capital program, $5.0 million is appropriated for Special Projects and $4.0 million is appropriated for Water Resource Management Strategy (WRMS) projects.

The $33 million for the Basic Capital program is comprised of $30 million for rehabilitation infrastructure needs as required by the Rate Ordinance and $3 million for growth infrastructure needs. The $30 million Basic Rehabilitation program allocates $9.9 million for Pipeline Renewal and $20.10 million for Plant Renewal. The $9.9 million for Pipeline Renewal includes $5.0 million for water reclamation lines, $3.7 million for water lines, $1.0 million for franchise fee compliance costs and $.2 million for CIP funded employees. The $20.1 million for plant renewal includes $15.0 million for the water reclamation plant, $.59 million for lift stations, $.6 million for water quality compliance at the Water Reclamation Plant, $3.71 million for water plant and $.2 million for CIP funded employees.

The appropriation includes $2 million for the acquisition and implementation of the Water Authority's own ERP (Enterprise Resource Planning) financial system which will allow the Water Authority to move off of similar systems run by the City of Albuquerque.

Besides the ERP project, the other special projects are:

- $2 million for Automated Meter Infrastructure (AMI) the successor technology to the Automatic Meter Reading concept
- $1 million for steel water line replacement

The WRMS appropriation includes $2.3 million for remaining costs at the Surface Water Treatment Plant and $1.7 million for mitigation efforts rebuilding habitat and required as a result of the diversion of river water for the Surface Water Treatment Plant.

There are no appropriations included in this legislation for projects that will be funded with resources from FY 2014 and beyond.

COMMENTS:
The revenue sources for the appropriations in this legislation are comprised of:

		Debt		Cash
Rehab				
Basic Program	$	22,000,000	$	8,000,000
Special Project	$	3,000,000	$	-
Growth				
Basic Program	$	-	$	3,000,000
Special Project	$	2,000,000	$	-
WRMS	$	4,000,000	$	-
Total	$	31,000,000	$	11,000,000

The blueprint for the Basic Capital program is the Decade Plan, a ten year plan required to be updated biennially with two, four, six, eight and ten year planning elements. This appropriation matches the FY 2013 year shown in the FY 2012 – FY 2021 Decade Plan with the exception of a reduction in the Basic Growth program from $4 million to $3 million necessary to improve working capital balance in the debt service fund.

Spending in the FY 2013 Basic Program will differ for some projects from the levels appropriated in the budget resolution because of expected positive and deficit carryovers from the FY 2012 Basic Program. The deficit carryovers will be absorbed by utilizing FY 2013 revenues and correspondingly reducing FY 2013 spending.

Basic Program appropriations by decade plan category

Rehab		
Water Reclamation Line Renewal	$	5,000,000
Water Line Renewal	$	3,700,000
Water Reclamation Plant Renewal	$	15,000,000
Lift Station and Vacuum Station Renewal	$	590,000
Water Plant Renewal	$	3,710,000
Water Reclamation Compliance	$	600,000
Franchise Fee Compliance	$	1,000,000
CIP Funded Position Transfer	$	400,000
	$	30,000,000
Growth		
Water Lines	$	500,000

Developer Agreements	$	295,000
MIS / GIS	$	1,200,000
Vehicle Replacement	$	300,000
Utility Risk Reduction	$	5,000
Master Plan and Asset Management	$	300,000
Low Income Water/Sewer Connections	$	400,000
	$	3,000,000

FY 2013 CAPITAL PROGRAM HIGHLIGHTS:

The major initiative in the Basic Rehabilitation Program for water plant in FY 2013 is the Supervisory Control and Data Acquisition (SCADA) Upgrade project for the drinking water system. The SCADA computer servers and workstations control the surface and groundwater pumping and treatment systems and are facing obsolescence. Dell will not warranty the equipment nor can Dell resellers provide replacement parts. The existing SCADA security is a decade behind national standards for SCADA security. A contract has been signed with Telvent for $1.6 million to provide the upgrade with an additional $240 thousand in optional items. The project schedule calls for project completion prior to the end of FY 2013.

The FY 2013 Basic Growth program is $3 million which is the same amount as in the FY 2012 Basic Growth program. With such limited resources, the discretionary spending in the Growth program budget will continue initiatives in Information Technology (IT) support for the operating divisions. The remaining growth program will fund non-discretionary spending for developer repayments and the low income connection program managed by Bernalillo County as well as vehicle replacements and the continuation of the integrated master plan project.

The San Juan Chama Mitigation project will create riparian habitat along the Rio Grande River below the surface water diversion dam to compensate for the reduced river flow due to the dam. Three sites north and south of Paseo del Norte and on both the east and west sides of the river have been selected for habitat restoration.

The project will involve dirt work including shelves, terraces and channels in the river and tree plantings. The dirt work will increase river flows and provide habitat as well as enhancing natural revegetation processes.

Anticipated project benefits include 1) increased silvery minnow habitat 2) increased diversity of the riparian ecosystem 3) creating willow dominated flycatcher breeding and migratory habitat along the channel margin and 4) enhancing the hydrologic connectivity between the floodplain and the river channel.

Each of the three site footprints would be at least five acres with two of the sites possibly extending to eight acres.

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. **R-12-11**

RESOLUTION

APPROPRIATING FUNDS FOR THE CAPITAL IMPLEMENTATION PROGRAM FOR THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY FOR THE FISCAL YEAR BEGINNING JULY 1, 2012 AND ENDING JUNE 30, 2013

WHEREAS, the Albuquerque Bernalillo County Water Utility Authority (Authority) as a political subdivision of the State is required to budget and account for all money received or spent in accordance with New Mexico laws; and

WHEREAS, the Board, by Ordinance, has established a budget process for the Authority; and

WHEREAS, the Budget Ordinance, requires the Executive Director to formulate an annual Capital Implementation Program budget for the Authority; and

WHEREAS, the Budget Ordinance requires the Authority Board to approve or amend and approve the Executive Director's proposed budget; and

WHEREAS, the Board has received the Capital Implementation Program Budget formulated by the Executive Director and has deliberated on it and provided public notice and input; and

WHEREAS, appropriations for the Capital Implementation Program of the Albuquerque Bernalillo County Water Utility Authority must be approved by the Board; and

WHEREAS, the appropriation of these Capital Implementation Program funds to projects with their respective purposes are timely and necessary for the Albuquerque Bernalillo County Water Utility Authority to serve its customers.

BE IT RESOLVED BY THE AUTHORITY:

Section 1. That the appropriations for the projects as stated below are hereby made.

Purpose	Source	Increase
Basic Program		

[+Bracketed Material+] - New
[-Bracketed Material-] - Deletion

1	Valley Projects Fund 627		
2	Valley Low Income W/S Connections	Transfer from Fund 631	400,000
3	Water Utility / Joint Water & Sewer Rehab Fund 628		
4	Sanitary Sewer Pipeline Renewal		
5	Interceptor Sewer Rehabilitation	Bond Proceeds	3,000,000
6	Small Diameter Sewer Line		
7	Rehabilitation	Bond Proceeds	1,500,000
8	Sewer Line CCTV Inspections	Bond Proceeds	500,000
9	Drinking Water Pipeline Renewal		
10	Small Diameter Water Line		
11	Rehabilitation	Bond Proceeds	2,500,000
12	Large Diameter Water Line		
13	Rehabilitation	Bond Proceeds	500,000
14	Water Service Line Replacement	Bond Proceeds	5,000
15	Water Meter Box Replacement	Bond Proceeds	5,000
16	Water Meter Replacement	Bond Proceeds	240,000
17	Large Water Valve Replacement	Bond Proceeds	250,000
18	Pressure Reducing Valve		
19	Replacement	Bond Proceeds	200,000
20	Southside Water Reclamation Plant Renewal		
21	Preliminary Treatment Facility		
22	Replacement	Bond Proceeds	2,400,000
23		Transfer from Fund 621	4,000,000
24	Dewatering Facility Replacement	Bond Proceeds	2,400,000
25		Transfer from Fund 621	4,000,000
26	Digester Rehabilitation, Capacity		
27	And Gas Improvements	Bond Proceeds	250,000
28	Primary Clarifier Improvements	Bond Proceeds	450,000
29	DAF Rehabilitation	Bond Proceeds	660,000
30	In-House Plant Projects	Bond Proceeds	500,000
31	ABB Service Contract	Bond Proceeds	140,000
32	ABB SCADA Upgrade	Bond Proceeds	200,000
33	Lift Station and Vacuum Station Renewal		

[+Bracketed Material+] - New
[-Bracketed Material-] - Deletion

1	Lift Station Rehabilitation	Bond Proceeds	330,000
2	Lift Station Radio Replacement	Bond Proceeds	140,000
3	Lift Station Programmable Logic		
4	Controller Replacement	Bond Proceeds	120,000
5	Drinking Water Plant Renewal		
6	Annual Sodium Hypochlorite Generator		
7	System Rehabilitation / Replacement	Bond Proceeds	130,000
8	Annual Well and Booster Pump Station		
9	Rehabilitation and Maintenance	Bond Proceeds	1,450,000
10	Water Treatment Plant Rehab	Bond Proceeds	50,000
11	Solids Drying Beds Improvements	Bond Proceeds	50,000
12	Grit Removal Basin Improvements	Bond Proceeds	50,000
13	Dissolved Ozone Monitoring		
14	Improvements	Bond Proceeds	250,000
15	Diversion Bar Screen Improvements	Bond Proceeds	500,000
16	Settling Basin Edge Protection	Bond Proceeds	50,000
17	Lomas Reservoir No. 2 Rehabilitation	Bond Proceeds	310,000
18	Water Treatment Plant SCADA Control		
19	Upgrade	Bond Proceeds	100,000
20	College Reservoir Rehab	Bond Proceeds	220,000
21	College Arsenic Removal Demonstration		
22	Facility Rehab	Bond Proceeds	50,000
23	Corrales Trunk System Reliability		
24	Improvements	Bond Proceeds	200,000
25	Corrales Trunk Gas Engine Overhauls	Bond Proceeds	50,000
26	Asset Management Plan for Wells	Bond Proceeds	250,000
27	Compliance		
28	Water Quality Laboratory	Bond Proceeds	295,000
29	NPDES Program	Bond Proceeds	155,000
30	Water Quality Program	Bond Proceeds	150,000
31	Shared Renewal		
32	Franchise Fee Compliance	Bond Proceeds	1,000,000
33	CIP Funded Position Transfer	Bond Proceeds	400,000

[+Bracketed Material+] - New
[-Bracketed Material-] - Deletion

1	Water Utility / Joint Water & Sewer Fund 629		
2	Warehouse Meters	Transfer from Fund 631	500,000
3	Development Agreements	Transfer from Fund 631	295,000
4	MIS / GIS	Transfer from Fund 631	1,200,000
5	Vehicle Replacements	Transfer from Fund 631	300,000
6	Utility Risk Reduction / GPS	Transfer from Fund 631	5,000
7	Integrated Master Plan	Transfer from Fund 631	300,000
8	Special Projects		
9	Water Utility / Joint Water & Sewer Rehab Fund 628		
10	Automatic Meter Reading	Bond Proceeds	2,000,000
11	Steel Water Line Replacement	Bond Proceeds	1,000,000
12	Water Utility / Joint Water & Sewer Fund 629		
13	ERP Financial Systems Project	Bond Proceeds	2,000,000
14	Water Resource Management Strategy Projects		
15	Water Utility / Joint Water & Sewer Fund 629		
16	San Juan Chama Drinking Water	Bond Proceeds	2,300,000
17	San Juan Chama Mitigation	Bond Proceeds	1,700,000
18			
19			

[+Bracketed Material+] - New
[-Bracketed Material-] - Deletion

Albuquerque Bernalillo County
Water Utility Authority

Agenda Item No. 7d

Meeting Date: April 18, 2012
Staff Contact: Allan Porter, Principal Engineer, Utility Development

TITLE: **R-12-12 - Authorizing an Agreement with Eagle Vista LLC for the 9641 Eagle Ranch Road Apartment Complex for Water and Sewer Service**

ACTION: **First Reading – April 18, 2012; Second Reading – May 23, 2012**

SUMMARY:
Eagle Vista LLC desires to develop a 200 unit apartment complex on a site just north of the Eagle Ranch Rd. and Irving Blvd. intersection. The site is located outside the Water Authority service area. Eagle Vista has requested water and sewer service from the Water Authority. Water service to the development will require the construction of on-site public water lines within a dedicated public water line easement. Sewer service to the site will be via a private collection line that discharges to the public system. A Development Agreement is required to allow the proposed work to proceed. All costs of required infrastructure will be borne by the Eagle Ranch LLC, and there will be no reimbursement by the Water Authority for the water and sewer infrastructure constructed.

This proposed development agreement outlines the terms and conditions to enable this project to proceed, and is recommended for Board approval.

FISCAL IMPACT:
None

ALBUQUERQUE BERNALILLO COUNTY
WATER UTILITY AUTHORITY

BILL NO. R-12-12

RESOLUTION

AUTHORIZING AN AGREEMENT WITH EAGLE VISTA LLC FOR THE 9641 EAGLE RANCH ROAD APARTMENT COMPLEX FOR WATER AND SEWER SERVICE.

WHEREAS, Eagle Vista LLC is proposing to construct a 200 unit apartment complex located at 9641 Eagle Ranch Road NW; and

WHEREAS, the property which is located outside the service area of the Water Authority will require a service agreement for the extension and/or connection of water and sewer lines to the Water Authority's water and sewer system; and

WHEREAS, the Water Authority's Water and Wastewater System Expansion Ordinance requires that new service developed outside the Water Authority's service area will incur no net expense to the Water Authority and be subject to provisions of relevant updated planning documents as approved by the City and/or County; and

BE IT RESOLVED BY THE WATER AUTHORITY:

Section 1. Eagle Vista LLC will obtain all permits, assurances, and approvals from the Water Authority and the City of Albuquerque development/design review process. Construction of water and sewer lines shall be in conformance with the plans approved by the Water Authority and all applicable plans, specifications, requirements, and standards of the Water Authority.

Section 2. The expansion of the System shall incur no net expense to the Water Authority. Eagle Vista LLC will convey at no expense to the Water Authority, all necessary real property and grant all easements to the Water Authority free and clear of all liens, claims, and encumbrances for the construction, operation, and maintenance of the system. Eagle Vista LLC will be responsible for paying a Water Supply Charge in accordance with the System Expansion Ordinance.

Section 3. Eagle Vista LLC will be responsible for close coordination of the project with the Water Authority during the design and construction phases, including the review of the design details during the design process, and the approval of specifications and contract documents.

Section 4. The Executive Director is authorized to enter into the agreement with Eagle Vista LCC attached as “Exhibit 1” for the provision of water and sewer service.

AGREEMENT
Eagle Vista Apartments

Albuquerque Bernalillo County Water Utility Authority, a New Mexico political subdivision ("Water Authority") and Eagle Vista, LLC, a New Mexico limited liability company ("The Owner"), agree as follows:

1. Recitals

A. The Owner is the developer of certain real property located at 9641 Eagle Ranch Road N.W. (the "Property"), more particularly described and as shown on **Exhibit A** attached hereto and incorporated herein by reference**.** The Property is located outside the Water Authority's current Service Area.

B. The Owner desires to construct two hundred (200) apartment units consisting of seven 3-story structures as well as a community building with a swimming pool on the Property.

C. In order to provide water and waste water service to the Property, the Owner desires to construct, or cause to be constructed extensions of public water lines ("Improvements") under all relevant plans, specifications, requirements, and standards of the Water Authority. The Serviceability Statement (#120203),for the Property reflecting the line extension and other matters referred to in this Agreement is attached hereto as **Exhibit B** and incorporated herein by reference.

D. The water line extension referenced in this Agreement is not considered a Master Plan waterline by the Water Authority. As such, reimbursement of construction costs associated with this waterline extension will not be eligible for UEC reimbursement

2. Design and Construction of the Waterline Improvements

A. The Owner will cause definitive designs and plans for the Improvements to be produced which will include estimates of all costs and expenses. The necessary Improvements will be determined by the Water Authority prior to the approval for the Owner to connect to the existing waterline and sanitary sewer line. The Owner will convey, at no expense to the Water Authority, all necessary easements to the Water Authority at locations reasonably acceptable to The Owner, free and clear of all liens, claims, and encumbrances for the construction, operation, and maintenance of the Improvements. The Owner will obtain all necessary permits, assurances, and approvals from the Water Authority and Bernalillo County, and The Owner will deliver a copy of such conveyances, permits, assurances, and approvals to the Water Authority prior to the start of construction

B. The Owner will complete, or cause to be completed, construction of the Improvements, approved by Bernalillo County Public Works and the Water

Authority, and in conformance with all applicable plans, specifications, and standards of the County and the Water Authority.

C. The Owner will be responsible for close coordination of the project with the Water Authority during the design and construction phases, including review of the design details during the design process, and the approval of specifications and contract documents. The Water Authority will review and approve in a timely manner the design plans for construction and estimated cost, to ensure the designs meet Water Authority standards and follow the guidance provided in the City's Development Process Manual and/or applicable Water Authority Design Manuals.

D. To the extent relevant and applicable and to the extent there is no conflict with the terms of this Agreement, the usual procedures and documentation, including the Procedure "A", as defined in the Subdivision Ordinance and the Development Process Manual ("DPM") of the City, will be followed and used for the Improvements.

3. Service

A. The Owner shall comply with the Water Authority's Water and Sewer System Expansion Ordinance, as amended from time to time. Connection for water service shall require concurrent sewer service connection to the Water Authority's wastewater system.

B. The Owner will extend public water lines and all required appurtenances onsite from Irving Blvd to Eagle Ranch Road NW. The Owner will also build a private sewer collection system which will discharge to the sanitary sewer line in Eagle Ranch Road NW near the intersection with Westside Drive NW.

C. The Owner shall pay Utility Expansion Charges ("UECs") and the Water Supply Charges ("WSCs") at the rates that are imposed at the time of a service connection, as provided in the Water Authority's Water and Sewer Rate Ordinance, as amended from time to time.

D. Pursuant to Water Authority Resolution No. R-05-13, The Owner agrees that it shall incorporate Water Authority conservation guidelines and will participate in Water Authority conservation programs.

4. Termination. If construction of the waterline and sanitary sewer modifications by The Owner has not been completed and accepted by the Water Authority within seven (7) years of the effective date of this Agreement, this Agreement shall automatically terminate, and the Water Authority and The Owner shall have no further rights, obligations, or liabilities with respect to this Agreement, unless otherwise agreed in writing.

5. **Water for Construction.** During the construction of the Connection to the waterline and sanitary sewer line, water for construction may be obtained from a hydrant designated by the Water Authority as set forth on **Exhibit C** attached hereto and incorporated herein by reference. If economically feasible, the Contractor is encouraged to utilize alternative methods for dust abatement and control including compost from the Water Authority.

6. **Indemnification.** The Owner will indemnify and hold harmless the Water Authority and its officials, agents, and employees on demand from any claims, actions, suits, or other proceedings arising from the acts or omissions of the Owner, its agents, representatives, contractors, or subcontractors, or arising from the failure of the Owner, its agents, representatives, contractors, or subcontractors to perform any act or duty required of the Owner in this Agreement. The indemnification by the Owner will not extend to the negligent acts of the Water Authority.

7. **Representations and Warranties of the Owner.** The Owner represents and warrants that:

   A. The Owner is a validly existing limited liability company under the laws of the State of New Mexico.
   B. The Owner has all the requisite power and authority to enter into this Agreement and bind the Owner under the terms of the Agreement; and
   C. The undersigned officer of the Owner is fully authorized to execute this Agreement on behalf of the Owner.

8. **Notices.** Any notice to be given under this Agreement will be in writing and will be deemed to have been given when deposited with the United States Postal Service, postage prepaid and addressed as follows:

   If to the Water Authority:

   Mark S. Sanchez
   Executive Director
   Albuquerque Bernalillo County
   Water Utility Authority
   One Civic Plaza, Room 5012
   Albuquerque, New Mexico 87102

   If to the Owner:

   Eagle Vista, LLC
   Attn: Brad B. Allen
   2440 Louisiana Blvd NE, Suite 280
   Albuquerque, NM 87110

9. **Assignment.** This Agreement will not be assigned without the prior written consent of the Water Authority and the Owner.

10. **Miscellaneous.** This Agreement will be governed by and interpreted in accordance with the laws of the State of New Mexico. The headings used in this Agreement are for convenience only and shall be disregarded in interpreting the substantive provisions of the Agreement. This Agreement binds and benefits the Water Authority and their successors, assigns, and transferees and the Owner and their successors, assigns and transferees. Time is of the essence of each term of this Agreement. If any provision of this Agreement is determined by a court of competent jurisdiction to be void, invalid, illegal, or unenforceable, that portion will be severed from this Agreement and the remaining parts will remain in full force as though the invalid, illegal, or unenforceable portion had never been a part of this Agreement.

11. **Integration; Interpretation.** This Agreement contains or expressly incorporates by reference the entire agreement of the parties with respect to the matters contemplated by this Agreement and supersedes all prior negotiations. This Agreement may only be modified in writing executed by both parties.

12. **Approval.** This Agreement is subject to the approval of the Board of Directors of the Water Authority and will not become effective until approved by the Water Authority.

13. **Effective Date.** The effective date of this Agreement is the date last entered below.

In Witness Whereof, the parties hereto have executed this Agreement on the dates entered below.

Albuquerque Bernalillo County Water Utility Authority	**Eagle Vista, LLC**
By: _____	By: _____
Mark S. Sanchez Executive Director	Brad B. Allen Managing Member
Date: _____	Date: _____

\ACKNOWLEDGEMENTS

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on _____, 2012 by Brad B. Allen, managing member of Eagle Vista, LLC, a New Mexico limited liability company, on behalf of said Corporation.

_____
Notary Public

My Commission Expires:
_____

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on _____, 2012 by Mark S. Sanchez, Executive Director of the Albuquerque Bernalillo County Water Utility Authority, a New Mexico political subdivision.

_____
Notary Public

My Commission Expires:
_____

Eagle Vista LLC Development Agreement
Exhibit A – Site Map

Exhibit B

Albuquerque Bernalillo County
Water Utility Authority

PO Box 1293
Albuquerque, NM 87103
505-768-2500
www.abcwua.org

March 5, 2012

Scott M. McGee, P.E.
Scott M. McGee, P.E. LLC
9700 Tanoan Dr. NE
Albuquerque, NM 87111

RE: Water and Sanitary Sewer Availability Statement #120203
Cottonwood Pointe-Lot C - Zone Atlas Map: B-13

Dear Mr. McGee:

Project Information: The subject site is ±6.7 acres of an undeveloped parcel located between Irving Blvd. and Eagle Ranch Road, just north of the Irving and Eagle Ranch intersection. The site is currently zoned SU-1 and lies in the 1W pressure zone within the Corrales trunk, within the City of Albuquerque limits. The request proposes the construction of approximately 200 apartment units.

Existing Conditions: Water infrastructure in the area includes an eight inch line on site, an eight inch line in Eagle Ranch and a 16 inch line in Irving.
Sanitary sewer infrastructure in the area includes an eight inch line on-site, an eight inch line in Eagle Ranch and an eight inch line in Irving.

Development Agreement: Pursuant to the System Expansion Ordinance, this property is outside of the Water Authority service area and the Water Authority Board must approve a Development Agreement to serve this property and establish requirements as a condition of service. Contact the Utility Development Office for draft Development Agreements.

Service: New metered water and sewer service is available to the site via one of two options. Service is available to the site contingent upon construction of new public water and sewer lines within the complex or via a single master meter and fallout for sanitary sewer, with private internal water and sewer lines. Service is also contingent upon compliance with the Fire Marshal's fire flow requirements. Service will not be sold without adequate fire protection. Water service will only be sold in conjunction with sewer service.

Easements: Water Authority public water and sanitary sewer easements are also required for all lines that are to be constructed outside of any dedicated rights-of-way. The minimum easement width for public water and sanitary sewer lines shall be 25 feet in width and 20 feet for a single line. Acceptable easements must be documented on the final site plan and/or plat prior to approval.

Fire Protection: A review of the final site plan will be necessary to ensure compliance with the Fire Marshal's distance requirements. All required hydrants as well as their

exact locations must be determined through the Fire Marshal's Office and verified through the Utility Development Office prior to sale of service.

Design and Construction of all required improvements will be at the developer/property owner's expense and must be coordinated through the City Of Albuquerque and Water Authority Design Review Process. Designs must be done by a New Mexico Registered Professional Engineer. Construction of all public improvements must be by a licensed, bonded, public utility contractor.

Costs and Fees: Water and sanitary sewer service accounts must be established with New Services at 924-3920. In addition to installation and construction costs, each metered water service will be subject to water and sanitary sewer Utility Expansion Charges (UEC) payable at the time of service application. All charges and rates collected will be based on the ordinances and policies in effect at the time service is actually requested and authorized.

Water Supply Charge: All developments located outside of the Water Authority's service area will be assessed a Water Supply Charge (WSC) as provided in the Water Authority's Water and Sewer Rate Ordinance for the development of new water resources, rights and supplies necessary to serve the development. The WSC shall not be used for reimbursement of master planned facilities.

Water Use: All new development shall be required to meet the standard water usage of 180 gallons per household per day which is equivalent to 75 gallons per capita day. Indoor water use shall consist of 70% of total use with outdoor limited to 30%. Where available, outdoor water usage shall utilize reclaimed water.

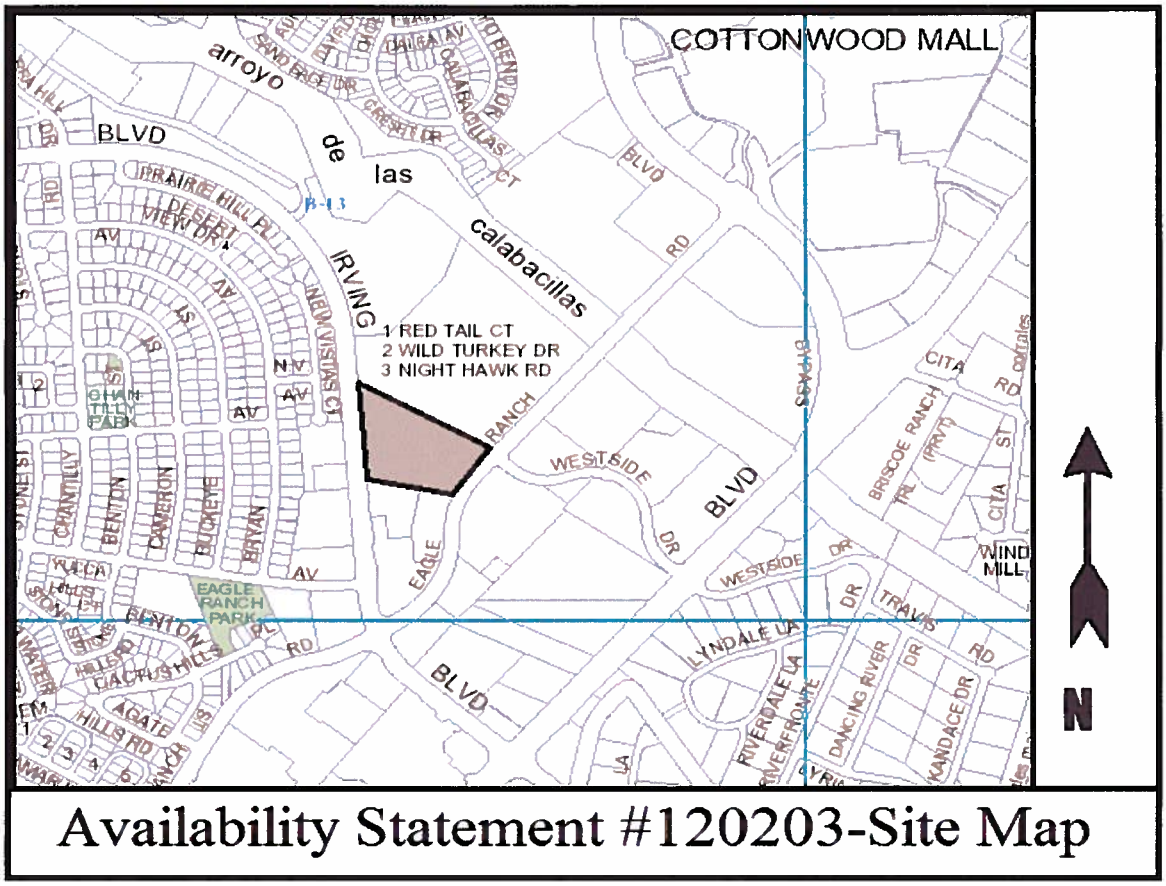
Closure: This statement of availability will remain in effect for a period of one year from the date of issue and applies only to the development identified herein. Its validity is, in part, contingent upon the continuing accuracy of the information supplied by the developer. Changes in the proposed development may require reevaluation of availability and should be brought to the attention of the Utility Development Section of the Water Authority as soon as possible.
Please feel free to contact the Utility Development Office at (505) 924-3987 or by fax at (505) 924-3864 if you have questions regarding the information presented herein or need additional information.

Sincerely,

Mark S. Sanchez
Executive Director

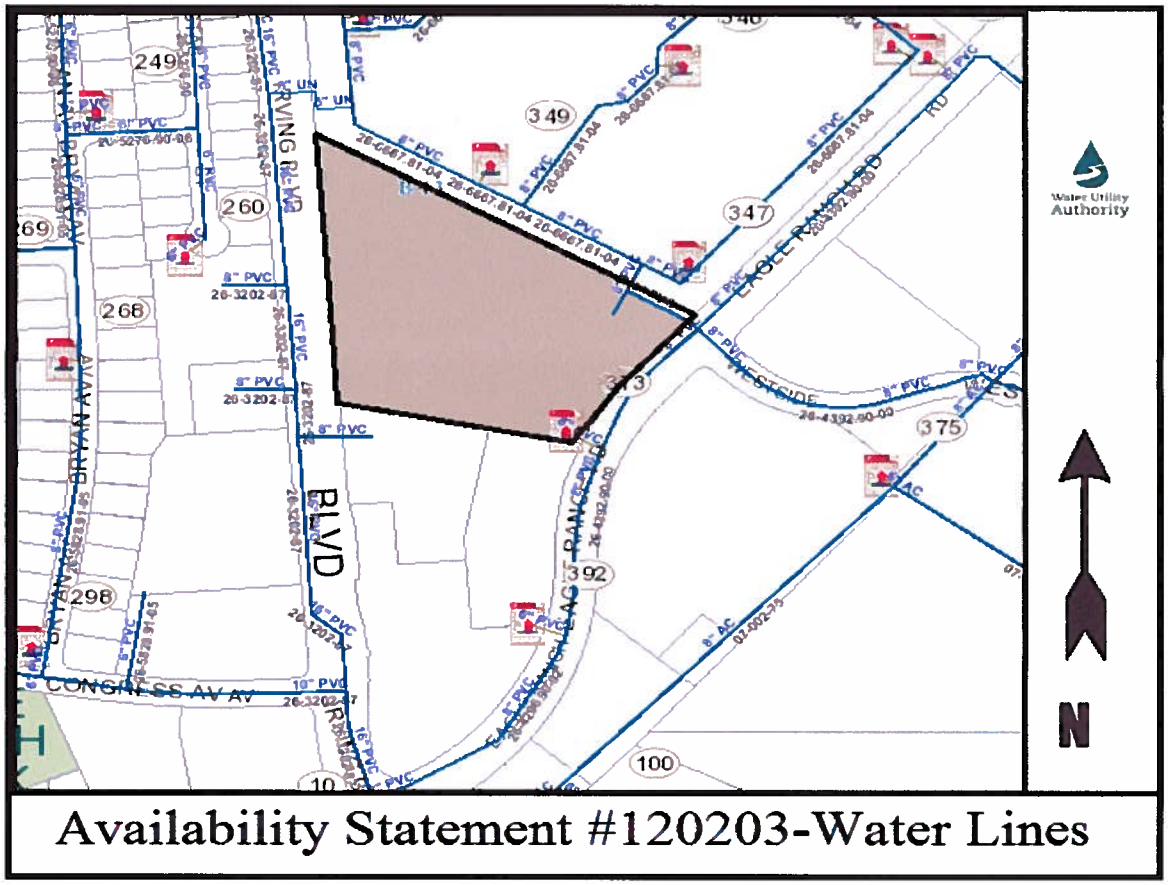
Encl: Site and Infrastructure Maps (3)
f/ Availability B-13

Exhibit B



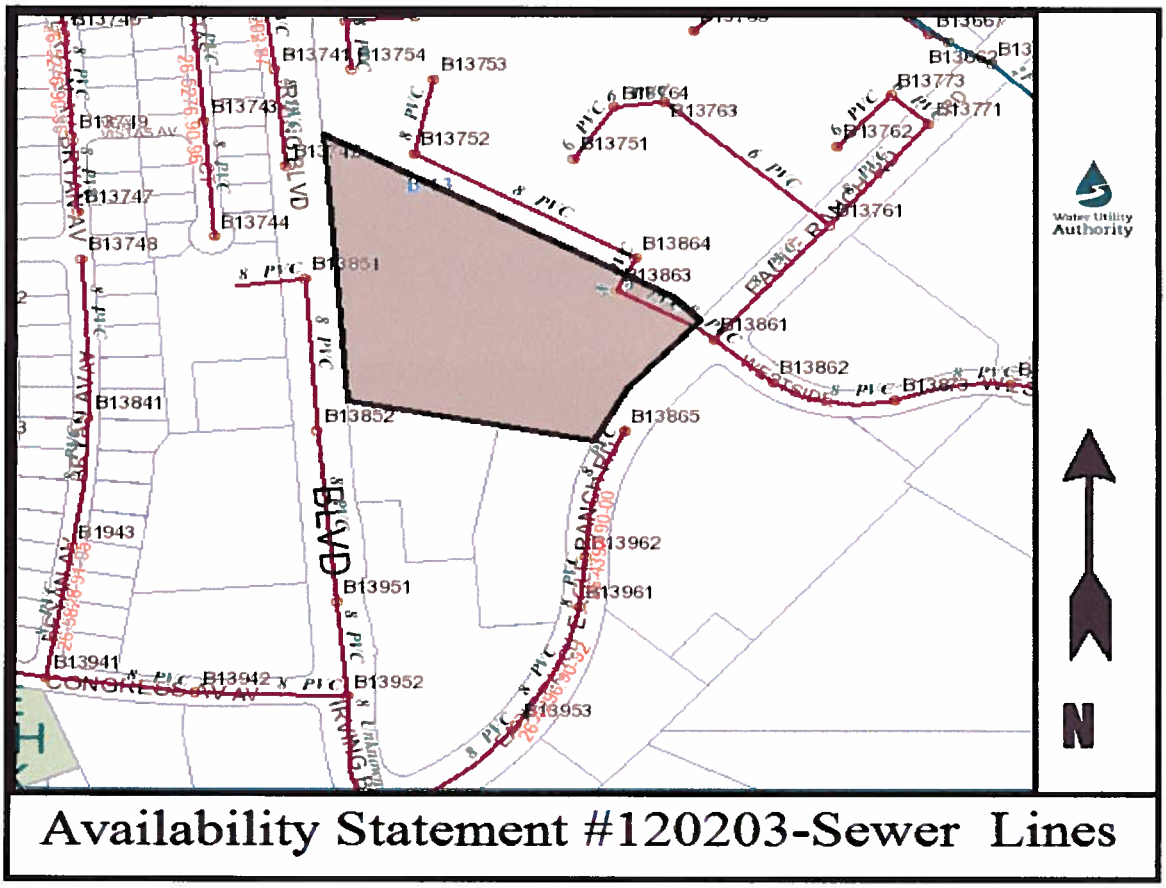
Availability Statement #120203-Site Map

Exhibit B

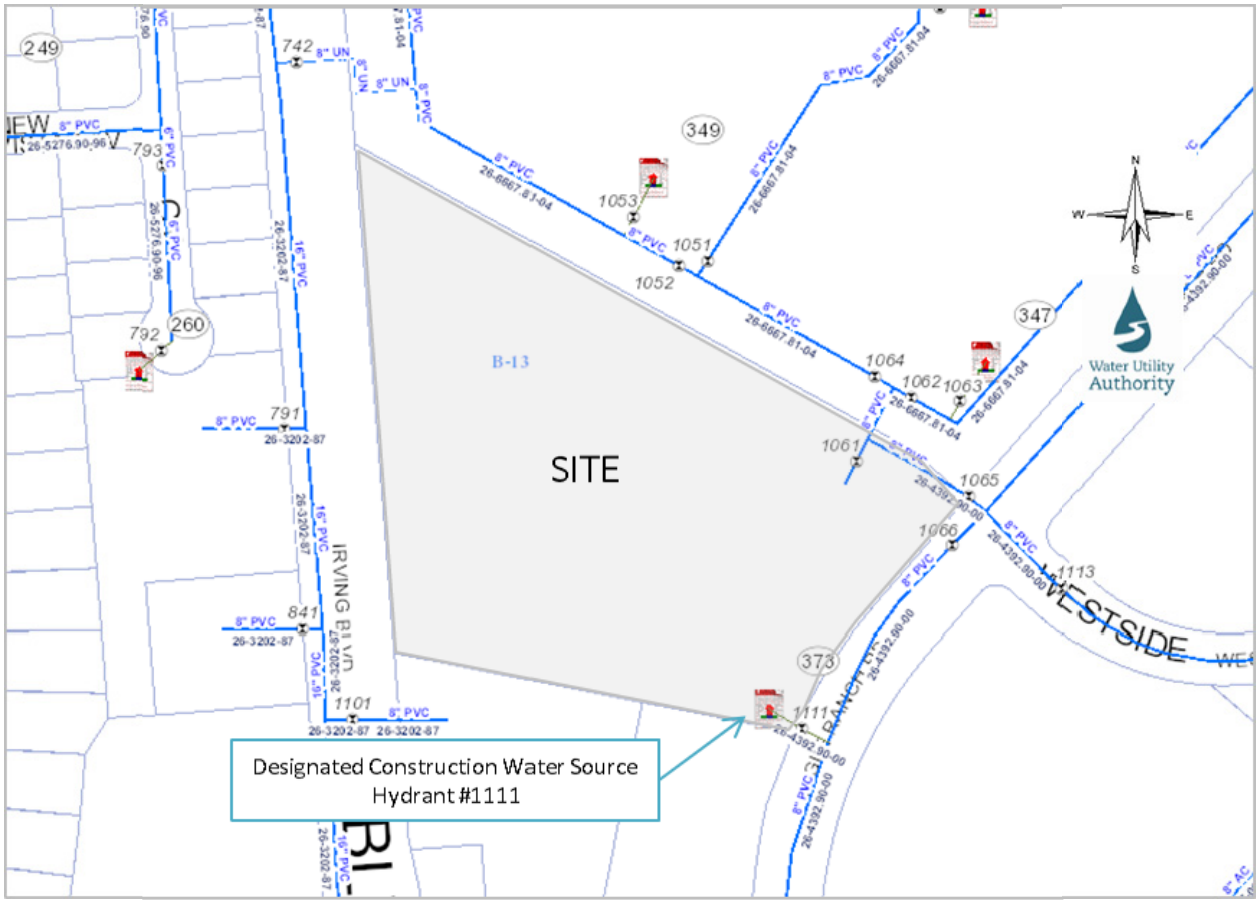


Availability Statement #120203-Water Lines

Exhibit B



Availability Statement #120203-Sewer Lines



Eagle Vista LLC Development Agreement
Exhibit C – Water for Construction
Designated Hydrant

Albuquerque Bernalillo County
Water Utility Authority

Agenda Item No. 9a

Meeting Date: April 18, 2012
Staff Contact: Katherine Yuhas, Water Conservation Officer

TITLE: R-12-7 - Adopting the Drought Management Strategy as the Water Authority's Drought Management Policy

ACTION: Recommend Approval

SUMMARY:
This update of the Albuquerque Bernalillo County Water Authority (Water Authority) Drought Management Strategy (Strategy) was developed by the City. In addition, the Strategy was updated to conform to the Water Resources Management Strategy (WRMS) adopted by the Water Authority in 2007 consisting of thirteen policies and more than sixty recommendations for providing a safe, sustainable water supply. Lessons learned during the droughts of 2006 and 2011 were used to refine the drought stage criteria and the drought response measures.

The drought stages and their corresponding water use reduction methods are subject to approval by the Water Authority Board. In adopting drought stages, the Board will consider the severity of the drought, the amount by which annual groundwater pumping goals are projected to be exceeded and the amount by which the annual gallons per capita per day water usage goal are projected to be exceeded.

Water use reduction methods include: public education, increasing water waste fines, rebates for attending a class on drought, mandatory day-of-the-week watering schedules, changing the time of day watering restrictions, distributing low-flow showerheads and offering a rebate to customers who reduce their water use by at least 20%. Implementation of the Strategy should be considered separately from the Water Authority's conservation program. The water conservation program is intended to provide for long-term water savings as opposed to a single year or irrigation season.

Whenever the majority of Bernalillo County is in severe drought according to the National Weather Service, the Water Authority will issue a Drought Advisory to educate the public about drought conditions and encourage voluntary conservation. Whenever a Drought Advisory is in effect, the Water Authority Board will be advised on water use and drought conditions during monthly Board meetings.

FISCAL IMPACT:
None

ALBUQUERQUE BERNALILLO COUNTY
WATER UTILITY AUTHORITY

BILL NO. __R-12-7_____

RESOLUTION

ADOPTING THE DROUGHT MANAGEMENT STRATEGY AS THE WATER AUTHORITY'S DROUGHT MANAGEMENT POLICY.

WHEREAS, the Albuquerque metropolitan area experiences periodic drought; and

WHEREAS, a Drought Management Strategy was developed by a Task Force under City Council Resolution R-137 Enactment No. 4-2001 that consisted of a diverse group of interests; and

WHEREAS, the Albuquerque Bernalillo County Water Utility Authority (Water Authority) adopted the Drought Management Strategy on January 1, 2004 under the Memorandum of Understanding with the City of Albuquerque; and

WHEREAS, the Drought Management Strategy calls for updates to the Strategy every five years; and

WHEREAS, the Water Resources Management Strategy adopted in 2007 calls for the Water Authority to adopt and implement drought management measures as necessary to reduce demand in times of drought; and

WHEREAS, enactment of the Drought Management Strategy in 2006 and 2011 allowed the Water Authority to redesign the Strategy with the most effective drought stages and drought response measures; and

WHEREAS, the Drought Management Strategy is intended to preserve water resources and assist in meeting water conservation goals during a drought; and

WHEREAS, under Permit No. 4830 from the Office of the State Engineer requires that the Water Authority reduce overall usage to 175 gallons per capita for native water diversions and 155 gallons per capita per day within twenty years (by 2024); and;

WHEREAS, the Customer Advisory Committee reviewed and recommended approval of the updated Drought Management Strategy.

BE IT RESOLVED BY THE WATER AUTHORITY:

Section 1. The Drought Management Strategy, attached as “Exhibit A”, is hereby adopted as the Water Utility Authority’s drought management policy.

Albuquerque Bernalillo County
Water Utility Authority

Water Resources Management Strategy Implementation

Drought Management Strategy

March 2012

Albuquerque Bernalillo County Water Utility Authority Board
Councilor Ken Sanchez, Chair
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EXECUTIVE SUMMARY

This update of the Albuquerque Bernalillo County Water Authority (Water Authority) Drought Management Strategy (Strategy) was developed because the former strategy, which was adopted by the Albuquerque City Council when the water utility was managed by the City's Public Works Department. In addition, the Strategy was updated to conform to the Water Resources Management Strategy (WRMS) adopted by the Water Authority in 2007 consisting of thirteen policies and more than sixty recommendations for providing a safe, sustainable water supply.

The drought stages and their corresponding water use reduction methods are subject to approval by the Water Authority Board. In adopting drought stages, the Board will consider the severity of the drought, the amount by which annual groundwater pumping goals are projected to be exceeded and the amount by which the annual gallons per capita per day water usage goal are projected to be exceeded.

Water use reduction methods include: public education, increasing water waste fines, rebates for attending a class on drought, mandatory day-of-the-week watering schedules, changing the time of day watering restrictions, distributing low-flow showerheads and offering a rebate to customers who reduce their water use by at least 20%.

Whenever the majority of Bernalillo County is in severe drought according to the National Weather Service, the Water Authority will issue a Drought Advisory to educate the public about drought conditions and encourage voluntary conservation. Whenever a Drought Advisory is in effect, the Water Authority Board will be briefed on water use and drought conditions at the monthly Board meetings.

INTRODUCTION

The Drought Management Strategy (Strategy) provides for a continuation of the drought management measures from the original Strategy adopted by the Albuquerque City Council in April 2003. When the Strategy was adopted, the utility was a part of the City of Albuquerque. The City established a task force to develop and finalize a drought management plan. This plan established four stages of drought and voluntary and mandatory drought response measures to protect and preserve the aquifer. The Water Authority utilized the recommended drought stages and corresponding drought response measures in 2006 and 2011 through resolution as a result of below average precipitation and/or above average temperatures from *La Niña* conditions. In 2008, the Water Authority began utilizing surface water in addition to ground water to provide its customers a safe and sustainable water supply. As a result, the Strategy needed to be updated as the original Strategy's drought stages were structured exclusively on groundwater use. In addition, lessons learned from the 2006 and 2011 droughts were used to design more appropriate drought stages and drought response measures. Similar to the original Strategy, this updated Strategy was reviewed by the Water Authority's Customer Advisory Committee before being adopted by the Water Authority Board and will be reviewed/updated every five years.

BACKGROUND

The Water Authority now supplies about 102,000 acre-feet/year of water to more than 600,000 customers in the metropolitan area. Water is supplied from both the aquifer and from surface water.

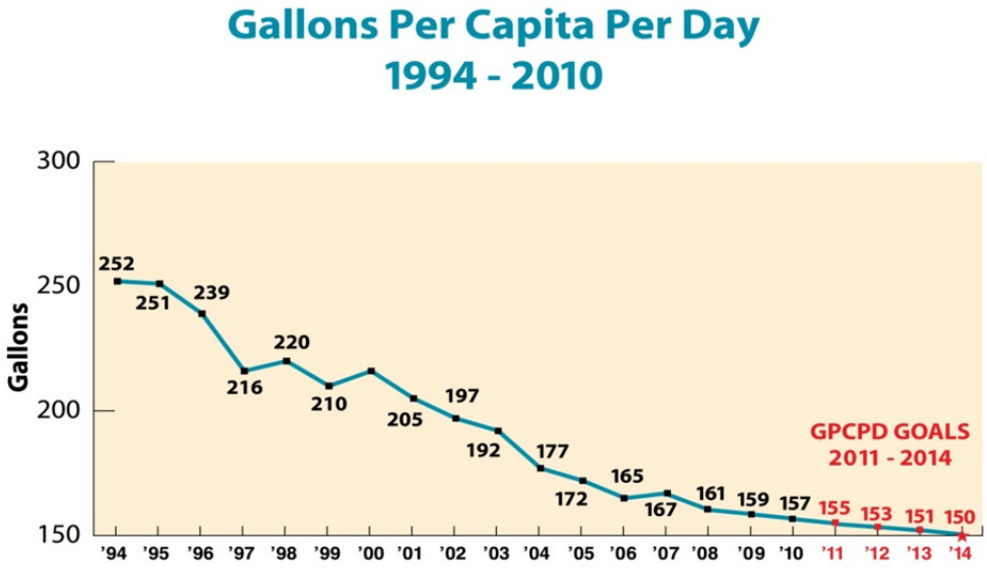
In 2007, the Water Authority adopted a comprehensive Water Resources Management Strategy (WRMS) to update the 1997 strategy adopted by the City and to assure a safe and sustainable water supply for its customers to the year 2060. A town hall meeting was held in September 2007 to solicit public input on future water policy.

The 2007 WRMS consists of thirteen policies and more than sixty recommendations for providing a safe and sustainable water supply. This Strategy addresses Policy C of the WRMS which states that the Water Authority shall establish a ground-water drought reserve that maintains sufficient water in storage in the aquifer to provide water supply during a prolonged drought. In addition, this Strategy addresses Policy D, Recommendation 4 of the WRMS which states that the Water Authority should adopt and implement drought management measures as necessary to reduce demand during droughts.

Implementation of the WRMS, particularly the San Juan-Chama Drinking Water Project, is diversifying the water sources used and allowing recharge of the aquifer so that it can be maintained as a drought reserve. In the United States Geological Survey report, "Water-Level Data for the Albuquerque Basin and Adjacent Areas, Central New Mexico, Period of Record Through September 30, 2010" numerous graphs show water levels increasing or stabilizing in area wells.

Meanwhile, water use has been reduced. The City adopted an ambitious water conservation program in 1995 with the goal of reducing per capita water use by 30 percent to 175

gallons/person/day by 2004. This goal was achieved and the Water Authority established a further goal of reducing water use to 150 gallons/person/day (GPCPD) by 2014. By the end of 2010, usage stood at 157 GPCPD, so the conservation program is on track to meet its 2014 goal.



PURPOSE OF THE DROUGHT MANAGEMENT STRATEGY

The purpose of the Strategy is to reduce water use during a drought consistent with the goals and objectives of the WRMS. The water savings that are targeted during declaration of various stages of drought are intended to be short-term measures capable of producing water savings over time periods ranging from one month to one year, but no longer.

Implementation of the Strategy should be considered separately from the Water Authority's conservation program. The water conservation program is intended to provide for long-term water savings as opposed to a single year or irrigation season. The public messages for the Strategy will certainly promote education about the long-term need to conserve. However, the Water Authority will strive to achieve higher than average savings during a short period of time during a drought.

ESTABLISHING ANNUAL WATER USAGE GOALS

Each year, staff will establish an annual demand goal pursuant to achievement of long-term conservation objectives. This goal along with the projected annual operations plan for groundwater and surface water usage will be presented to the Water Authority governing board.

The Strategy is intended to address increased water use solely resulting from drought and is not intended to be used to penalize its customers for slight periodic monthly or annual increases in per capita use or for increased groundwater use due to water quality or other unforeseen conditions that prevent diversion and direct use of the San Juan-Chama water as part of the Drinking Water Project.

For example, in 2011 the use of San Juan-Chama water was curtailed due to changes in water quality in the Rio Grande due to upstream fires. These types of issues will occur from time to time, but would not trigger the declaration of a drought.

DECLARING A DROUGHT

Drought in the Water Authority's service area relates to the supply of surface water and the amount of ground water pumped during dry, high-demand periods. Because drought has its greatest impact in the summer and early fall (the highest water demand times of the year) drought mitigation focuses on these time periods and reducing outdoor water use.

When drought conditions exist or are anticipated to develop in our region, the Water Authority Board will be briefed on water usage and predicted drought conditions and will utilize this information to decide when to declare the drought stages. The approval of a drought stage by the Water Authority Board, will authorize the Water Authority's Executive Director to initiate all the measures associated with that drought stage. There are four levels of drought that can be declared and all but the Drought Advisory (a first stage early warning system that calls for increased education on drought and voluntary conservation) must be approved by the Water Authority Board based on water usage information, local and statewide drought conditions as defined by the National Weather Service, groundwater pumping and other information that may be requested or provided by staff or the public.

During drier than normal conditions per capita water demand may increase, and in addition, surface water may not be available. These two conditions combined would result in increased ground-water pumping when compared to normal or expected conditions. All of the drought mitigation measures are aimed at reducing demand, so it is appropriate to invoke these measures when demand has increased as a result of drought.

DROUGHT DECLARATION CRITERIA

Each year the Water Authority sets an operational plan for use of ground water, surface water and reuse. The plan is established to preserve the aquifer for the long-term. The drought stages are tied to the operational plan and increases in customer water use.

There are three drought stages that can be declared along with an early alert system, the Drought Advisory. The Drought Advisory does not require mandatory conservation, but rather calls for increased public education. Each of the drought stages contains mandatory measures that are anticipated to reduce demand back to operational goals. The majority of water usage reduction methods are aimed at reducing outdoor water usage, because this is the use most likely to increase during a drought and because outdoor use is a consumptive use.

Not all of the methods to reduce water use are restrictive. For each drought stage there is a rebate or incentive also being offered to customers to increase their motivation to reduce their water use. This is a unique approach to drought management intended to maintain the positive relationship that has been developed over time with customers regarding water usage reduction.

A Drought Advisory is declared whenever the majority of Bernalillo County reaches Stage 3 – Severe Drought as defined by the National Weather Service, regardless of water usage patterns. Upon declaration of a Drought Advisory, the staff is directed to immediately increase public education on drought. The drought advisory is intended to be an early warning system for customers to alert them to the need for increased awareness of water use because the service area is experiencing a drought before an increase in water usage has occurred.

Use of the Drought Advisory was highly effective at keeping water demand under control during the Extreme Drought experienced by the service area in 2011. For this reason, this stage of drought awareness does not require Water Authority Board approval, so that staff may increase drought awareness quickly and thereby, hopefully, alleviate the need for additional measures.

If declaration of the Drought Advisory is ineffective at keeping water use consistent with the established goals, then further stages of drought may be adopted by the Board. Drought stages are linked to the annual groundwater pumping goal and the gallons per capita per day water usage goal as shown in the chart below.

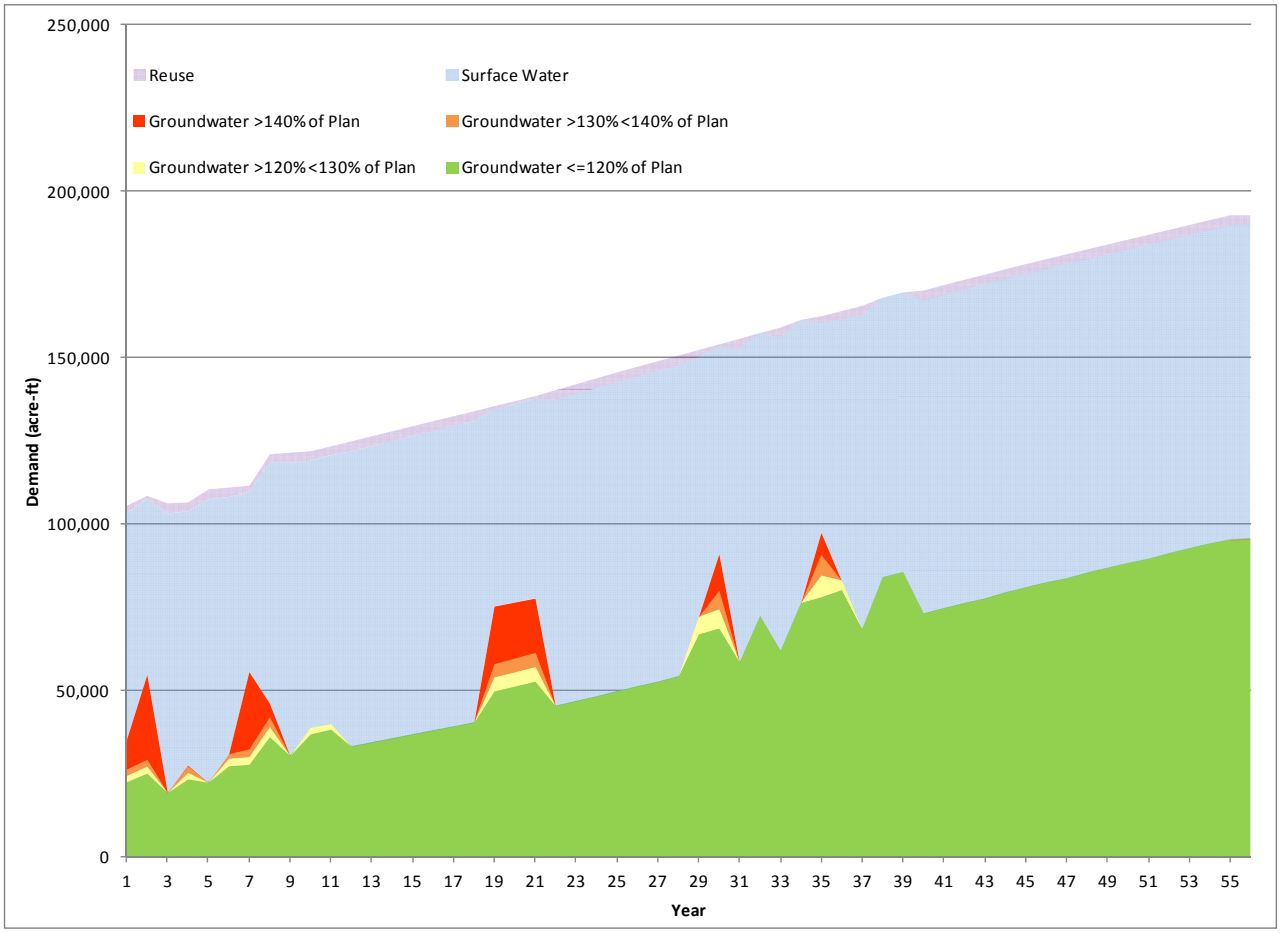
Both of these criteria are important. The first establishes that groundwater supplies are being depleted and the second that the cause for the depletion is customer behavior. Based on an extended analysis of 1971-1998 hydrology data (as used in the State Engineer permitting process for the Drinking Water Project), a threshold of 20% of the operational goal for groundwater pumping would cause the Water Authority service area to enter Stage 1 drought conditions. Analysis of the 1971-1998 hydrology dataset extrapolated out to 2026, demonstrates that a drought would occur for 92 out of 673 months (13% of the months), which occur in 15 out of 56 years as shown in figure one. The response of customers to the Drought Advisory would determine whether it would be necessary to enter into any of the restrictive levels of the Strategy.

Drought Stage Criteria Chart

Groundwater Pumping /GPCD	Less than 120% of the GW pumping goal	Between 120% and 130% of GW pumping goal	Between 130% and 140% of GW pumping goal	More than 140% of the GW pumping goal
< 2 GPCD over the goal	None	None	None	Stage 1
2-4 GPCD over the goal	None	Stage 1	Stage 1	Stage 2
4-6 GPCD over the goal	None	Stage 1	Stage 2	Stage 3
> 6 GPCD over the goal	Stage 1	Stage 2	Stage 3	Stage 3

Figure 1 shows the anticipated demand for water over the next sixty years. Projected onto this demand are potential drought years. The potential severity of the drought is indicated with colors that match those in the Drought Stage Criteria Chart. Whether any of those drought stages are entered into will depend upon customer response to each drought stage.

Figure 1.



Figures 2 and 3 show estimations of excess production in acre-feet that could activate the drought stages as outlined in the chart above. The pumping volumes shown in the graphs below are examples based on current estimates. Each year the actual criteria will be based on the annual operational plan and the GPCD goal. Figures two and three are included as examples of how the two criteria will work together in determining the drought stages.

Figure 2.

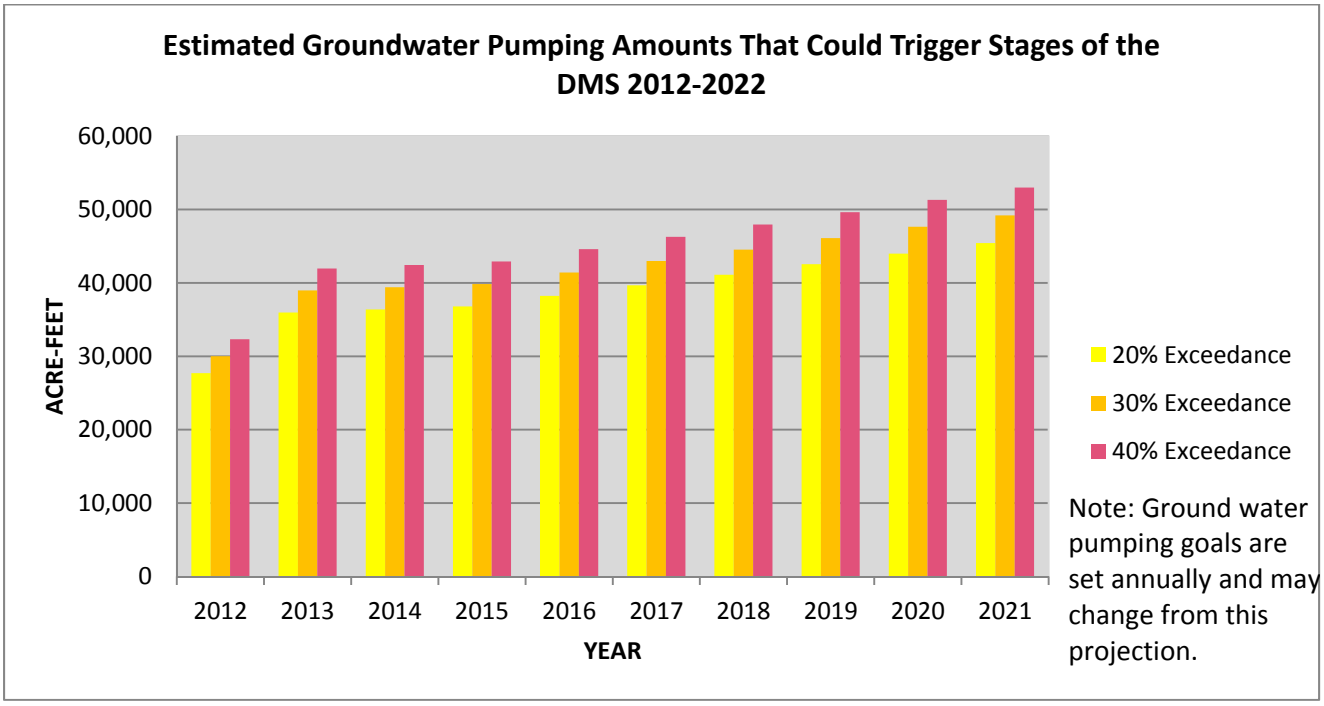
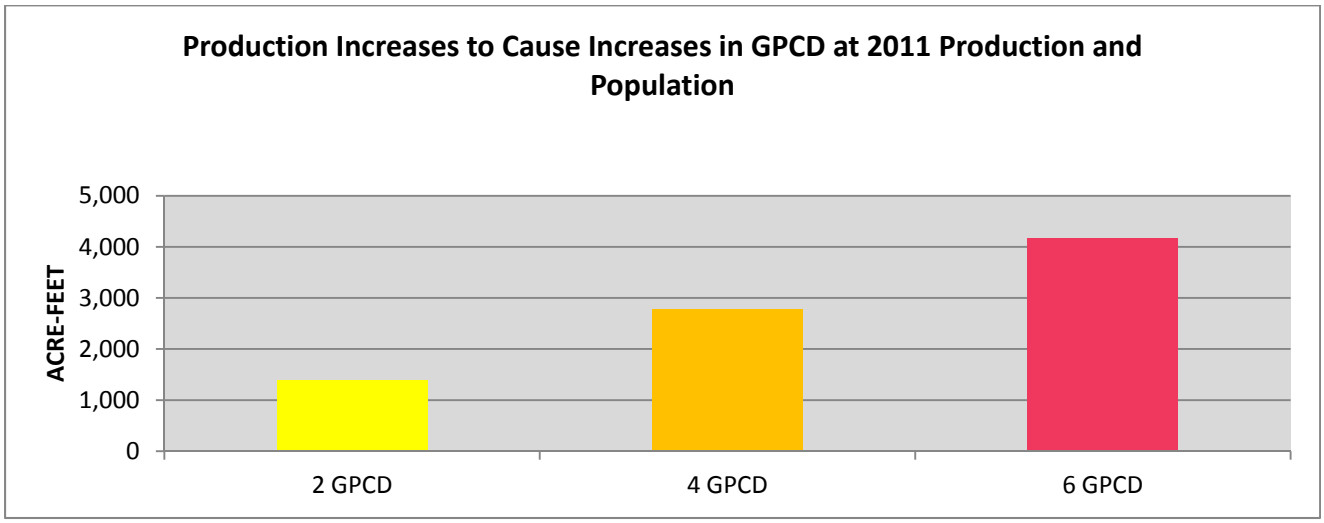


Figure 3.



DROUGHT STAGES AND CORRESPONDING DROUGHT RESPONSE MEASURES

Anticipated savings for the water reduction methods were calculated based on the 1997 Drought Management Strategy, water usage reductions seen in the droughts of 2006 and 2011, water usage reductions achieved by the Water Authority Conservation Program and the anticipated water use level at each drought stage based on the operational plan for 2012-2022. As the Drought Level increases, the anticipated savings from water usage reduction methods that have already been implemented at a lower level decreases.

Finally, the savings shown in the charts below are not cumulative. They are based solely upon the savings anticipated at that particular drought stage and the water use anticipated at that level of drought. Savings were calculated this way, because if the drought stage worsens then the methods being used in the previous drought stage were likely not sufficient to control water usage. Thus, they are anticipated to be not as effective at higher stages. For example: Public education is anticipated to be able to reduce annual groundwater production by 12% when used at the Drought Watch level, but is only anticipated to reduce water use by 2% at the Drought Warning stage. At the Drought Warning stage, customers will have been exposed to two increases in public education, one at the Drought Advisory level and another at the Drought Watch level, if these two educational efforts prove ineffective, it is unlikely that further increases in public education will achieve the necessary reductions in water use.

If the savings anticipated from adoption of the methods at a particular drought stage are not achieving the desired results but water use is still below the next drought stage threshold, the Water Authority Board may adopt an additional water usage reduction method from a higher drought stage or from recommendations from staff without moving to a higher drought stage. The Board may approve maintaining drought restrictions even as a drought decreases in severity in order to achieve the desired savings.

If an increase in funding is needed to accomplish any of the water use reduction methods, it will be presented to the Board for their approval at the time that the Drought Stage is approved.

DROUGHT STAGE 1: DROUGHT WATCH		
Water Use Reduction Method	Savings Goals as a percentage of total annual ground water production	Average Savings Goals in acre-feet (based on 2012-2022 goals)
Increase public education	12%	4,653
Double Fees for Wasting Water	5%	1,938
Offer Drought Smart $20 rebate classes	3%	1,163
TOTAL	20%	7,754

DROUGHT STAGE 2: DROUGHT WARNING		
Water Use Reduction Method	Savings Goals as a percentage of total annual groundwater production	Average Savings Goals in acre-feet (based on 2012-2022 goals)
Increase public education	2%	840
Double Fees for Wasting Water	4%	1,680
Offer Drought Smart $20 rebate	2%	840
Double Surcharges	10%	4,201
Water by the Numbers becomes mandatory	8%	3,360
Change Time of Day Watering Restrictions (no watering 9AM to 9PM)	2%	840
No variances granted to Time of Day Watering Restrictions	2%	840
Distribute low-flow showerheads and/or timers and educate on 5-minute showers	1%	421
TOTAL	31%	13,021

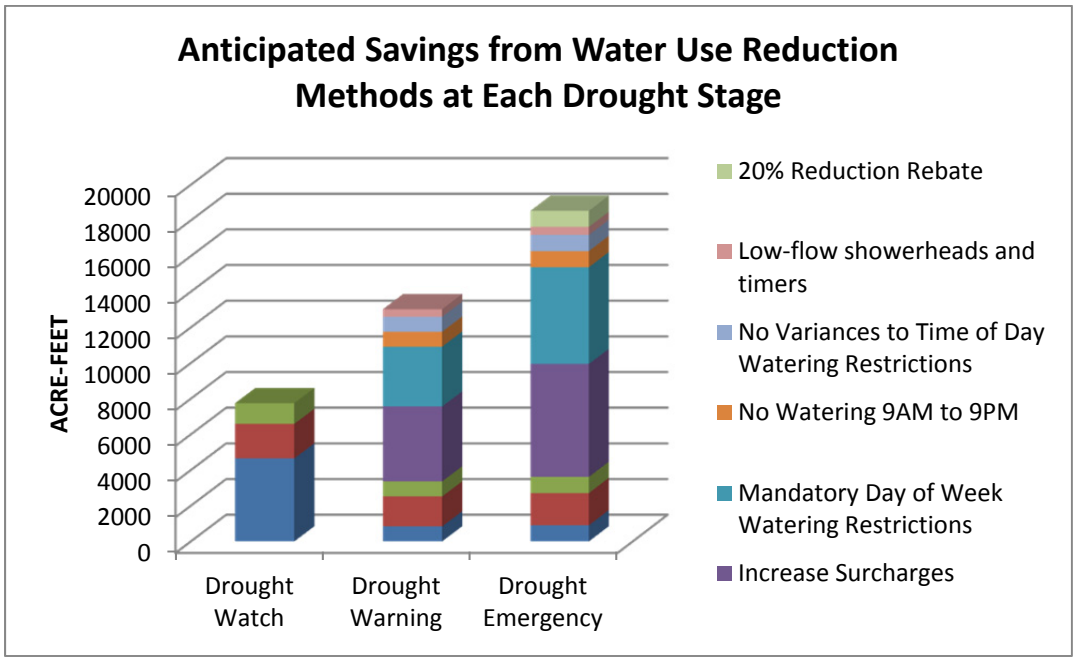
DROUGHT STAGE 3: DROUGHT EMERGENCY		
Water Use Reduction Method	Savings Goals as a percentage of total annual groundwater production	Average Savings Goals in acre-feet (based on 2012-2022 goals)
Increase public education	2%	904
Double Fees for Wasting Water	4%	1,809
Offer Drought Smart $20 rebate	2%	904
Change Time of Day Watering Restrictions (no watering 9AM to 9PM)	2%	904
No variances granted to Time of Day Watering Restrictions	2%	904
Distribute low-flow showerheads and/or timers and educate on 5-minute showers	1%	452
Triple Surcharges	14%	6,333
Reduce mandatory Water by the Numbers by one day/week	12%	5,428
20% Reduction Rebate	2%	904
TOTAL	41%	18,542

If water use cannot be reduced sufficiently with the methods above and additional savings are needed methods may be adopted from the "Table of Options When More Savings Are Needed" found on page 11.

DESCRIPTION OF THE WATER USE REDUCTION METHODS

The graph in Figure 4 shows the anticipated savings from each of the water usage reduction methods at each of the three mandatory drought stages. Details on implementation of each of the water use reduction methods follow below the graph.

Figure 4.



Increase public education: change water conservation communications to customers from the regular yearly message to one that educates on the current drought. A key component of the drought message will be the total number of gallons per day by which each customer needs to reduce his/her use. As drought stages increase, communicate the severity of the drought and the water use reduction methods being enacted. Education about each of the water use reduction methods adopted is critical to their success.

Double fees for wasting water: the Water Authority's Water Waste Ordinance authorizes the imposition of fees for customers who put water into the public right of way, onto other private property or water during the Time of Day Watering Restriction period. Fees start at $20 for the first violation of the ordinance and escalate to $2,000. Under this method, the fee for the first violation would be $40 and would continue to be double for each subsequent level. Eliminating water waste is the first step in reducing water use during drought.

Offer Drought Smart $20 Rebate: the Water Authority currently offers a $20 rebate to customers who attend a one-hour irrigation class called "WaterSmart." During drought, this class would be changed to be "DroughtSmart" and would inform customers how to manage

their landscapes during drought. In addition, a video of the "DroughtSmart" class would be posted on our website to get the information to customers who are unable to attend the class.

Distribute low-flow showerheads and/or timers and education on 5-minute showers: Showerheads and/or timers would be distributed at selected locations and mailed to customers who could not come get them. The Water Authority would also produce information to accompany the showerheads on the savings generated from taking 5-minute showers.

Water by the Numbers Schedules: the water conservation program educates customers year-round on appropriate watering schedules with the Water by the Numbers program, so many customers are already following a seasonal watering schedule. During drought, the Water Authority would establish watering days for even addresses and for odd addresses. Depending on the drought level, customers would be allowed to water on one, two or three of their allowed days. Any customer watering on the wrong day of the week would be issued a water waste fee by the Authority's Water Use Compliance inspectors. Variances by be granted to this policy for large properties to allow them to water the entire landscape provided that no area of the landscape is watered more times per week than allowed by the policy.

Change Time of Day Watering Restrictions (No Watering 9AM to 9PM): regular time of day watering restrictions begin April 1 and end October 31 and prohibit watering from 11AM to 7PM. By adding another three hours to the prohibited period, additional water savings could be achieved because less water would be evaporating.

No Variances Granted to Time of Day Watering Restrictions: from April 1 through October 31 spray irrigation is not allowed from 11AM to 7PM, but customers may request a 30-day variance from this ordinance for re-seeding and planting sod. During a drought warning or emergency these variances would not be granted, except for safety considerations on public or educational playing fields. Variances may be granted for public and educational playing fields to ensure a safe playing surface.

20% Reduction Rebate: this rebate would be offered to customers who sign up for a program pledging to reduce their water use by 20% over last year's use for a given period. The period of the rebate would vary depending on when the drought emergency was adopted. At the end of the set time period, customers who had reduced their use by 20% would receive a credit on their water bill. There may be a cap placed on the number of participants.

Double or Triple Surcharges: customers are assessed surcharges on their water bill for use in excess of two, three and four times their average winter water consumption during the irrigation season as set forth in the Water Authority Rate Ordinance. During a drought warning or emergency, the surcharges at each level would be doubled to encourage customers not to use more than two times their average winter water use during the drought.

TABLE OF OPTIONS WHEN MORE SAVINGS ARE NEEDED

Water Use Reduction Method	**Savings Goals as a percentage of total annual groundwater production**	**Average Savings Goals in Acre-feet (based on 2012 -2022 goals)**
Reduce Surcharge Threshold by 25%	2%	904
Reduce Surcharge Threshold by 50%	3%	1,356
Quadruple Surcharge	18%	8,136
Triple Water Waste Fees	3%	1,356
Reduce Mandatory Water by the Numbers by two days/week	18%	8,136
Increase leak detection services	2%	904
Work with customers to reduce water intensive processes (e.g. fleet washing, nursery plant watering, power washing, construction)	1-4%	452 -1,808
Target large water users in all sectors (initiate/ follow up on audits, call customers to report on progress)	2%	904
Provide water conservation seminars to landscape firms	2%	904
Expand school programs on drought	3%	1,356
Increase an existing rebate to encourage higher levels of participation	2%	904

APPENDIX A
SUMMARY OF CASE STUDIES DEMONSTRATING WATER SAVING METHODS AND RESULTS

The case studies presented below support the water savings goals described in this report. A summary of these findings and comparisons to the Water Authority's Drought Management Strategy (Strategy) are presented in Table 1.

PUBLIC EDUCATION CAMPAIGNS

The city of Cary, North Carolina, put together a water conservation program that looked at the cost-effectiveness of various conservation methods (EPA, 2002). In doing so they evaluated the effectiveness of public education on water conservation and estimated that their planned public education campaign would result in 26 percent of total water savings by the year 2009 and 21 percent of total water savings by 2019. They estimated that the conservation program would reduce retail water production by 16 percent by 2028. Assuming the 2019 estimate of 21 percent water savings from public education would still apply in 2028, they would have achieved 3 percent of this total water savings as a result of the public education campaign alone. This estimate does not directly correlate with the Water Authority's Strategy goals for water savings due to public education during a drought, but it does quantify another water provider's estimate of the effectiveness of public education alone. All other water conservation and drought management plans reviewed in preparation of this section looked at the effectiveness of public education combined with other water saving strategies.

INITIATION OF VOLUNTARY AND MANDATORY IRRIGATION WATERING RESTRICTIONS

Kenney, Klein, and Clark (2004) conducted a study of water conservation measures implemented by several cities in Colorado's Front Range during drought conditions in the summer of 2002. During periods of mandatory restrictions, savings of 18 to 56 percent were seen, while voluntary restrictions saw only 4 to 12 percent savings. Many of the water providers also specified the time of day watering was to occur, special rules for irrigating trees, and allowances for hand watering. Restrictions, both voluntary and mandatory, were combined with public education campaigns and sometimes included other measures (e.g., price increases). Water providers in Thornton, Aurora, Denver Water, and Westminster limited lawn watering to once every three (3) days and saw an average reduction of 22 percent. Water providers in Fort Collins, Boulder, and Louisville limited lawn watering to twice a week and saw an average reduction of 33 percent. Water providers in Lafayette limited lawn watering to once a week and saw a reduction of 56 percent. For these studies, water use was calculated as "expected use per capita", which is a comparison of actual per capita use (deliveries) in 2002 with the level of use anticipated in 2002 had watering restrictions not been in effect and given the adverse climatic conditions associated with drought. They also saw similar results looking at "net use", which is a calculation that compares daily system-wide water deliveries in 2002 to the 2000 to 2001 average for the same dates.

Table 1: Summary of case studies and comparison to the Strategy

Category	Utility	Case Study Summaries		Corresponding Water Authority Goal
Public Education Campaigns	Cary, North Carolina	Estimated 3 percent water savings resulting from public education campaign.		In Stage 1, a 12 percent savings goal from public education. If drought escalates, assume 2 percent savings goal for Stages 2 and 3.
Initiation of Voluntary & Mandatory Irrigation Watering Restrictions	Survey of seven Denver-area water providers	Voluntary watering restrictions	4 to 12 percent water savings	Not Applicable
		Mandatory watering restrictions of once per 3 days	22 percent water savings (average of four water providers)	Not Applicable
		Mandatory watering restrictions of twice per week	33 percent water savings (average of three utilities)	"Water by the Numbers" becomes mandatory (31% percent water savings goal)
		Mandatory watering restrictions of once per week	56 percent water savings	Reduce mandatory "Water by the Numbers" by one day/week (41% percent water savings goal)
Surcharges	Denver Water	Surcharges are more effective when combined with a variety of other drought management options.		The Strategy combines surcharges with a variety of other conservation methods.
		Surcharges should match the severity of the drought.		Surcharges increase with each drought stage.
		Surcharges should be tailored to specific customer groups.		Surcharge volume is based on the amount of water the customer has used over their winter water use, so it is different for each customer.
		Surcharges should be implemented as temporary measures.		Surcharges are implemented with the drought stage and lifted when the stage is over.
Santa Cruz Demand Reduction Program	Santa Cruz, CA	Five stage reduction plan involving a variety of water conservation measures to realize demand reduction up to 50 percent. Plan was developed using estimated water savings achieved in previous drought situations by comparable water shortage management plans.		The Strategy implements similar water conservation methods and sets water savings goals of up to 41 percent.

The Water Authority's Strategy implements similar methods to those described in Kenney, Klein, and Clark (2004) to achieve water savings and presents more conservative water savings goals than those presented above (e.g., The Water Authority lists a water savings goal of 31 percent for making "Watering by the Numbers" mandatory, while the Denver area water providers realized 33 percent average water savings for limiting lawn watering to twice per week.). Table 2 presents a comparison of Water Authority water savings goals to those realized by the municipalities described above.

Table 2: Comparison of Water Savings Realized by Denver Area Water Providers and Water Authority's Strategy Water Savings Goals (NOTE: Each of these providers also implemented a variety of water conservation methods, including public education, rate increases, and water waste fees.)

	Mandatory Irrigation Limit		
	Once Every 3 Days	**Two Days per Week**	**One Day per Week**
Denver Area Water Providers*	22% average reduction realized	33% average reduction realized	56% average reduction realized
Water Authority's Strategy Water Savings Goal	20% (Stage 1 water savings goal)	31% (Stage 2 water savings goal)	41% (Stage 3 water savings goal)

*Kenney, Klein, and Clark (2004)

SURCHARGES

The *American Water Works Association (AWWA) Drought Preparedness and Response Manual* (AWWA, 2011) reported that Denver Water found surcharges are more effective when combined with a variety of other drought management options. By incorporating surcharges into an overall program to increase awareness of drought severity they found customers responded better and believed that this was because they had created an atmosphere where customers recognized the importance of water savings. They recommended that surcharges should match the severity of the drought. They recommended tailoring surcharges to different customer groups, because a one-size surcharge will not work with the variety of customers served. They recommended implementing surcharges as temporary measures and reinforced that the criteria determining when the surcharge is lifted should be specified before the surcharges are imposed to reinforce its temporary nature. These recommendations directly correspond to the methods implemented in the Water Authority's Strategy.

SANTA CRUZ DEMAND REDUCTION PROGRAM

The *American Water Works Association (AWWA) Drought Preparedness and Response Manual* (AWWA, 2011) reported that Santa Cruz, California, updated their drought management plan (DMP) in 2009. They developed a five stage plan using estimated water savings achieved in previous drought situations by comparable water shortage management plans. The water

savings methods implemented at each stage and corresponding water savings goals presented in Table 3.

The water savings goals and methods described in the Santa Cruz DMP are comparable to those presented in the Water Authority's Strategy. The Santa Cruz DMP lists several activities not mentioned in the Water Authority's Strategy, such as coordinating conservation actions with other city departments and encouraging regular household meter reading and leak detection; however, these are actions that the Water Authority completes on a regular basis, regardless of whether they are in a drought situation.

Table 3: Santa Cruz, California, Example Demand Reduction by Stage and Corresponding Water Savings Measured Initiated (AWWA, 2011)

	Stage 1 (0-5% Deficiency)	Stage 2 (5-15% Deficiency)	Stage 3 (15-25% Deficiency)	Stage 4 (25-35% Deficiency)	Stage 5 (35-50% Deficiency)
	Water Shortage Alert	Water Shortage Warning	Emergency Water Shortage	Severe Water Shortage Emergency	Critical Water Shortage Emergency
Demand Reduction	0%	15%	25%	35%	50%
Measures Taken by Stage	• Initiate public information and advertising campaign • Publicize suggestions and requirements to reduce water use • Adopt water shortage ordinance prohibiting nonessential uses • Step up enforcement of water waste • Coordinate conservation actions with other city departments, green industry • Voluntary water conservation requested of all customers • Adhere to water waste ordinance • Landscape irrigation restricted to early morning and evening • Nonessential water uses banned • Shutoff nozzles on all hoses used for any purpose • Encourage conversion to drip, low volume irrigation	• Intensify public information campaign • Send direct notices to all customers • Establish conservation hotline • Conduct workshops on large landscape requirements • Optimize existing water sources; intensify system leak detection and repair; suspend flushing • Increase water waste patrol • Convene and staff appeals board • Continue all Stage 1 measures • Landscape irrigation restricted to designated watering days and times • Require large landscapes to adhere to water budgets • Prohibit exterior washing of structures • Require large users to audit premises and repair leaks • Encourage regular household meter reading and leak detection	• Expand, intensify public information campaign • Provide regular media briefings; publish weekly consumption reports • Modify utility billing system and bill format to accommodate residential rationing, add penalty rates • Convert outside-city customers to monthly billing • Hire additional temporary staff in customer service, conservation, and water distribution • Give advance notice of possible moratorium on new connections if shortage continues • Institute water rationing for residential customers • Reduce water budgets for large landscapes • Require all commercial customers to prominently display “save water” signage and develop conservation plans • Maintain restrictions on exterior washing • Continue to promote regular household meter reading and leak detection	• Contract with advertising agency to carry out major publicity campaign • Continue to provide regular media briefings • Open centralized drought information center • Promote gray water use to save landscaping • Scale up appeals staff and frequency of hearings • Expand water waste enforcement to 24/7 • Develop strategy to mitigate revenue losses and plan for continuing/escalating shortage • Reduce residential water allocations • Institute water rationing for commercial customers • Minimal water budgets for large landscape customers • Prohibit turf irrigation, installation in new development • Prohibition on on-site vehicle washing • Rescind hydrant and bulk water permits	• Continue all previous actions • Develop crisis communications plan and campaign • Establish emergency notification lists • Coordinate with CA Department of Public Health regarding water quality, public health issues and with law enforcement and other emergency response agencies to address enforcement challenges • Continue water waste enforcement 24/7 • Further reduce residential water allocations • Reduce commercial water allocations • Prohibit outdoor irrigation • No water for recreational purposes, close pools • Continue all measures initiated in prior stages as appropriate

REFERENCES

American Water Works Association (AWWA), 2011. *Manual of Water Supply Practices – M60, First Edition, Drought Preparedness and Response*.

Kenney, Douglas S., Roberta A. Klein, and Martyn P. Clark, 2004. *Use and Effectiveness of Municipal Water Restrictions during Drought in Colorado*. Journal of the American Water Resources Association. February.

Environmental Protection Agency (EPA), 2002. *Cases in Water: Conservation, How Efficiency Programs Help Water Utilities Save Water and Avoid Costs*. July.

Albuquerque Bernalillo County
Water Utility Authority

Agenda Item No. 10a

Meeting Date: April 18, 2012
Staff Contact: Rick Shean, Water Quality Hydrologist

TITLE: Kirtland Air Force Base Water Authority Board Briefing

SUMMARY:
The Kirtland Air Force Base (KAFB) has submitted to the New Mexico Environment Department (NMED) the Quarterly Monitoring and Investigation Report for the months of October – December, 2011 (Qtr. 4, 2011). KAFB will be presenting the most recent data from their report, which shows the current known extent of the plume emanating from a former Bulk Fuel Facility on base, which leaked for approximately 50 years into the soil and reaching the City of Albuquerque's aquifer.

The plume is approximately two miles long, and half a mile wide, based on current maps prepared by KAFB's environmental contractor. KAFB will also provide a summary of proposed activities in the near future, including the drilling of additional downgradient wells to better determine the extent of the jet fuel and aviation gas plume, as well as describe the plans of interim containment and remediation of the fuel product that remains floating on the aquifer under the source area and with the Albuquerque city limits.

FISCAL IMPACT:
None

EXECUTIVE SUMMARY

This report has been prepared in response to correspondence dated June 4, 2010, from the New Mexico Environment Department (NMED) Hazardous Waste Bureau (HWB) (NMED, 2010a) to Kirtland Air Force Base (AFB) outlining the reporting, sampling, and analysis requirements related to the characterization and remediation of contaminated groundwater at Solid Waste Management Units ST-106 and SS-111, Bulk Fuels Facility (BFF) Spill, Kirtland AFB, New Mexico. Quarterly reporting incorporates information and data collected in support of ongoing remediation and site characterization activities related to the Stage 2 abatement action for the Former Fuel Offloading Rack (FFOR), designated as ST-106, and the phase-separated, hydrocarbon-impacted groundwater, designated as SS-111. As specified by the NMED-HWB, quarterly reporting for the ST-106 and SS-111 sites has been integrated due to the interrelated nature of the sites and the applicability of different data sets to characterization and remediation activities at the BFF Spill site.

Quarterly remediation and site investigation reporting presents field and analytical data and information associated with the operation, maintenance, and performance of the interim remedial measures soil-vapor extraction (SVE) and treatment systems; characterization and remediation activities associated with the groundwater and vadose zone and FFOR investigations; and pre-remedy quarterly monitoring for groundwater and soil vapor at the BFF Spill site.

The major site characterization findings from the quarterly reports are cumulative and summarized as follows:

Vadose Zone

- Based on the three-dimensional (3D) distribution of vadose zone soil and vapor concentrations from wells installed and sampled to date, it appears that the majority of the vadose zone contaminant mass is located within 100 feet (ft) above the water table at depths of approximately 400 to 500 ft below ground surface (bgs).

- Based on the data collected to date, the soil concentrations indicate that the non-aqueous phase liquid (NAPL) migrated in a predominantly vertical direction along relatively narrow pathways until it reached the capillary fringe above the water table where it spread out in horizontal directions. The planned Pneulog testing for the First Quarter 2012 will further delineate these pathways.

- Soil concentrations define the soil residual NAPL saturations, which overall are less than 0.01 cubic centimeters (cm^3)-NAPL/cm^3-soil. This is a low value but is consistent with the medium- to coarse-grained nature of the sandy soil at the site.

- 3D volumetric analysis shows that the current extent of soil contamination, as defined by soil concentrations of total petroleum hydrocarbons (TPH) greater than 10 milligrams per kilogram (mg/kg), is approximately 29 million cubic yards with 12.4 million cubic yards (43%) at or below an elevation of 5,000 ft above mean sea level (approximately 350 ft bgs).

- Based on a screening process that accounts for frequency of detection, the following compounds are determined to be vapor constituents of concern (COCs): 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; 2-butanone; acetone; benzene; C5-C8 aliphatic hydrocarbons; C9-C10 aromatic hydrocarbons; C9-C12 aliphatic hydrocarbons; cyclohexane; ethylbenzene; heptane; isopropanol; m,p,o-xylenes; methylene chloride; n-hexane; propene; propylene; toluene; and total xylenes (in lieu of quantifying individual m,p,o-xylene isomers).

- The time-series analysis of the vapor concentration data since 2007 shows only marginal vapor concentration declines over time, even in the SVE wells. It is concluded that while substantial contaminant mass has been removed from the vadose zone (approximately 400,000 gallons of NAPL-equivalent mass vapor), the overall effect of the current SVE efforts is difficult to determine from the vapor concentration data.

Groundwater and NAPL

- Historical water level data from well KAFB-3 show that the groundwater table has declined 140 ft since 1949 with the majority (about 100 ft) of this decline occurring since the mid-1970s.

- As the water table declined as a result of regional groundwater extraction, the NAPL from the initial and subsequent releases followed the falling water table downward. Over time, this has had the effect of creating a residual NAPL "smear zone" from nominal depths of 400 to 500 ft bgs.

- Rising groundwater levels continue to result in decreases in NAPL thickness and observations in monitoring wells. During the Third and Fourth Quarters 2011, NAPL was consistently observed only in a few monitoring wells. The majority of the NAPL mass observed in 2009, the year of lowest water levels, is now trapped below the water table.

- NAPL chemical analytical results show that the NAPL will be an ongoing source of dissolved groundwater contamination indefinitely.

- Current groundwater flow directions are toward the KAFB-3 and Ridgecrest water supply wells with average groundwater velocity of 95 ft/year (yr) and a range of 18 to over 300 ft/yr to the northeast at a direction of North 25° to 35° East. Overall, vertical groundwater flow direction is down—a downward flow velocity has not been determined at this time.

- A number of hydraulic properties were measured at the site using field slug tests and laboratory tests. The results are incorporated into the following groundwater migration analysis:

Parameter	Units	Average Value[a]	Standard Deviation	Minimum Value[b]	Maximum Value[b]
Hydraulic conductivity	ft/day	70	NM	40	129
Effective Porosity	Fraction	0.274	±0.049	0.22	0.32
Gradient	Fraction	0.001	±0.0006	0.0004	0.0016
Fraction Organic Carbon	mg/kg	230	±78	<100	380
Groundwater Velocity	ft/day	0.26	NM	0.05	0.94
Groundwater Velocity	ft/yr	95	NM	18	340
50-Year Downgradient Migration Distance	ft	4,750	NM	900	17,000

[a]Geometric mean used for hydraulic conductivity.

[b]Mean ±1 standard deviation used for minimum and maximum for gradient and porosity values.

NM - not meaningful.

Minimum porosity value used to calculate maximum velocity and maximum porosity used to calculate minimum velocity.

- Groundwater analytical data for new monitoring wells indicate that organic compounds are present in some Intermediate and Deep Zone wells.

- Based on the analysis of the degradation indicator compounds and the spatial extent of the organic compounds, it appears that microbial degradation is limiting the extent of a majority of the organic compounds including benzene; ethylbenzene; toluene; xylene; 1,2,4-trimethylbenzene; and naphthalene. Additional evaluations are required to quantify the degradation rates and impact on future plume migration.

- EDB has migrated the full length of the monitoring network and was detected above the U.S. Environmental Protection Agency (EPA) maximum contaminant level (0.05 micrograms per liter) in samples from 28 of 51 shallow wells, 11 of 27 of intermediate wells, and 2 of 28 deep wells during the Fourth Quarter 2011 event. EDB is the one compound that was detected in the shallow, intermediate, and deep zones in the farthest downgradient well cluster (GWM 10; KAFB-106055, KAFB-106057, and KAFB-106058) during Third and Fourth Quarters 2011.

- The concentration patterns of both EDB and TPH-GRO indicate two release periods of NAPL containing EDB.

- The extent of EDB groundwater contamination at the northeastern extent of the plume is not defined at this time. Assuming no degradation and adsorption factors, a simple migration calculation shows that EDB has a low retardation factor of R = 1.03. Therefore, it is possible that EDB will migrate at an estimated velocity of 0.97 times the groundwater flow velocity if there is limited EDB degradation. Assuming a 50-year NAPL on water table and an average groundwater velocity of 95 ft/yr, the calculated EDB plume downgradient of the NAPL area is approximately 4,500 ft long if no EDB degradation is assumed. The observed EDB plume length downgradient of the NAPL area is 2,500 ft, which is substantially less than the calculated estimate; however, the northeastern extent of the plume is still undefined at this time and will require additional monitoring wells to delineate the downgradient extent of the EDB plume.

- The effect of microbial degradation on EDB migration rates and extent is less clear and the current extent of EDB is a strong indication that any EDB degradation rates are quite slow. Additional compound-specific microbial and isotope data are required to determine whether microbial degradation is having any effect on EDB migration.

- Based on a screening process that accounts for frequency of detection and comparison between maximum detected concentrations and NMED and EPA regulatory screening levels, the following analytes are determined to be groundwater COCs: EDB; 1,2-dichloroethane (EDC); benzene; toluene; ethylbenzene; arsenic; manganese; mercury; nitrogen (nitrate plus nitrite); and selenium.

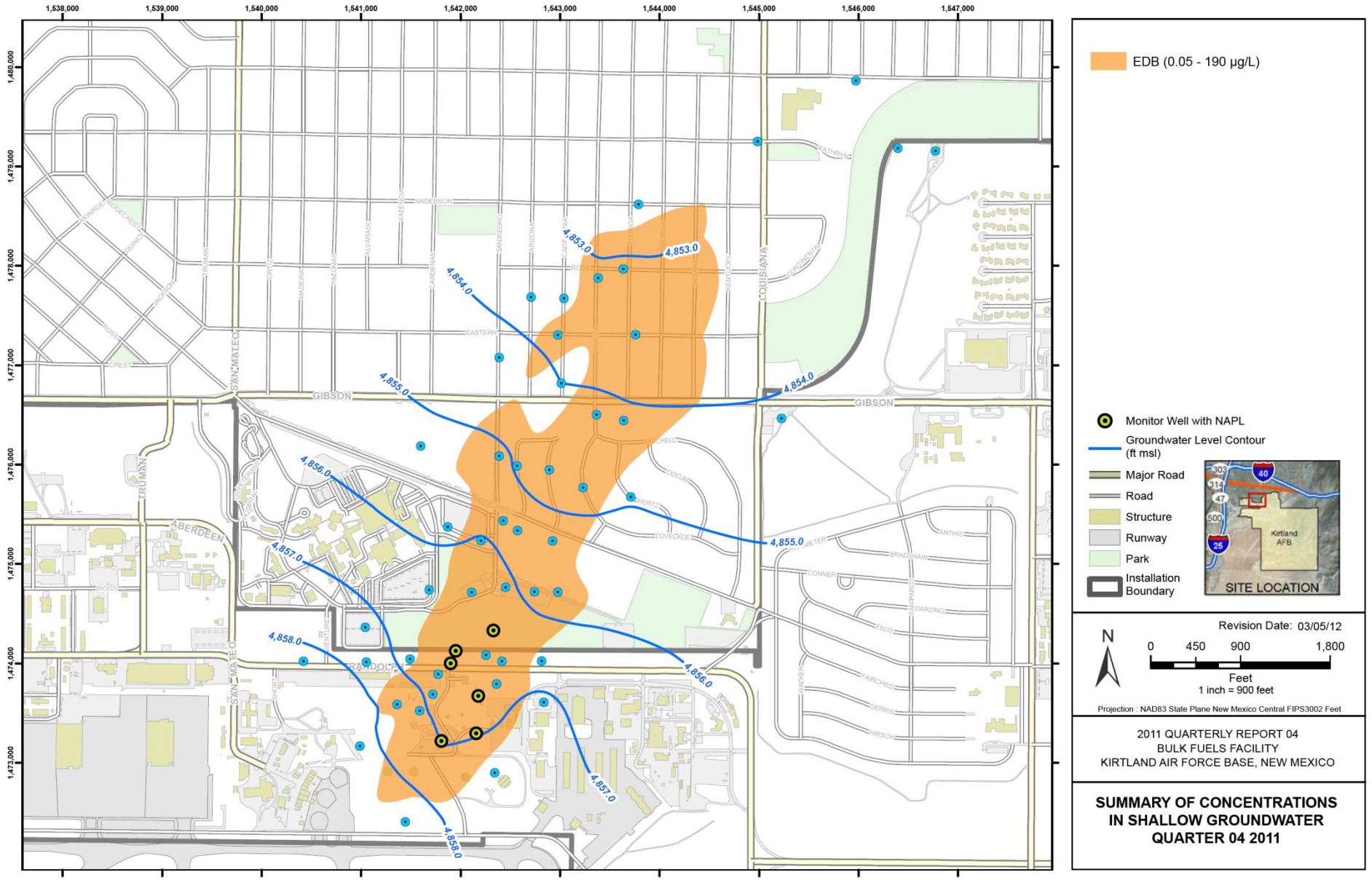
- Additional screening will be conducted over the next year to determine, which, if any, of the inorganic analytes in this COC list are related to background concentrations. Those constituents determined to be related to background will be deleted from the COC list. It is also noted that, EDC has been observed above EPA MCL of 5.0 µg/L in samples from a few wells. As such, EDC may not remain on the groundwater COC list in future quarters.

Kirtland Air Force Base
Albuquerque Bernalillo County
Water Utility Briefing

Colonel Donald Conley
377 MSG Commander

April 18, 2012

Shallow Wells
October – December 2011



2011 QUARTERLY REPORT 04
BULK FUELS FACILITY
KIRTLAND AIR FORCE BASE, NEW MEXICO

SUMMARY OF CONCENTRATIONS IN SHALLOW GROUNDWATER QUARTER 04 2011

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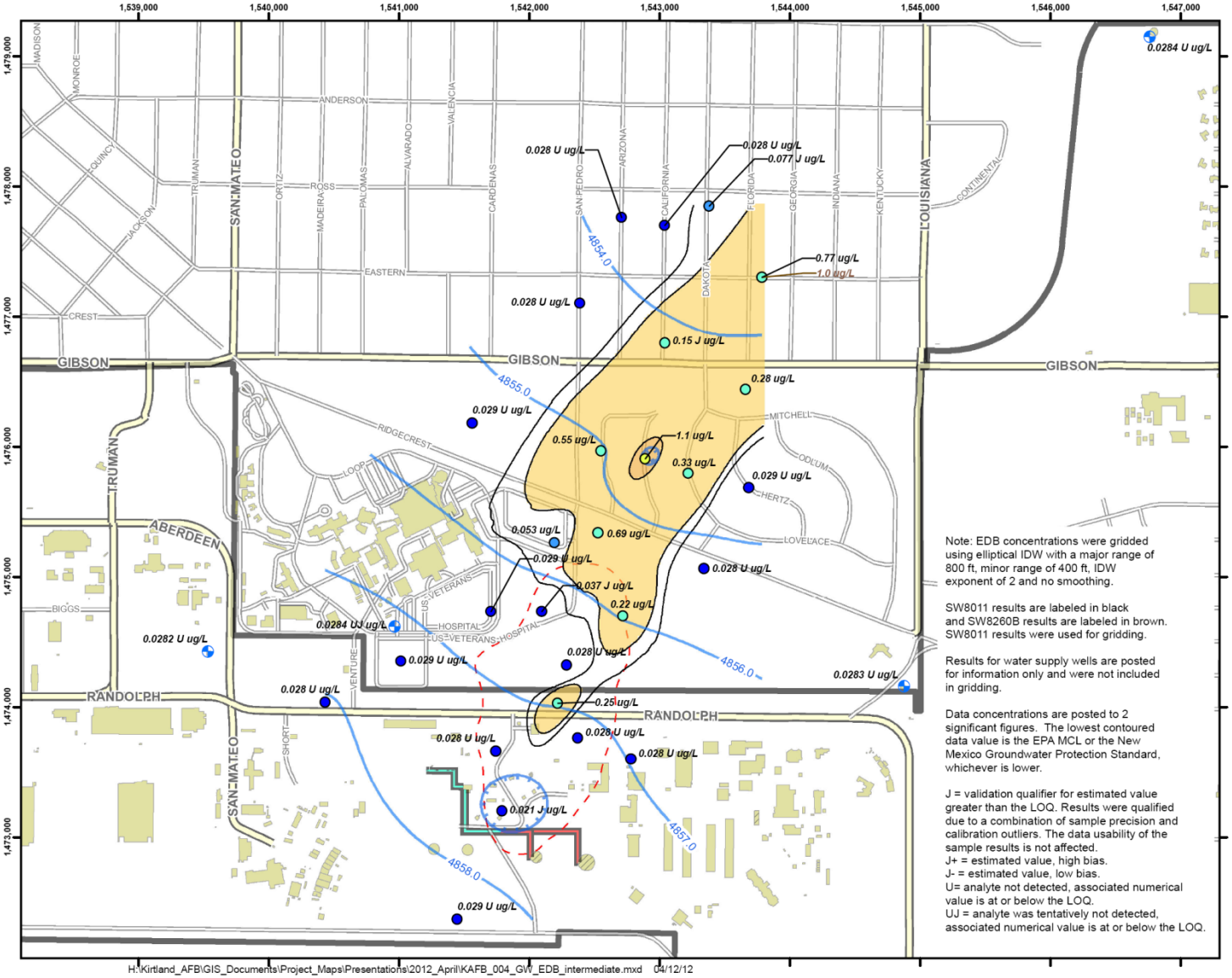
Intermediate Wells
October – December 2011



Note: EDB concentrations were gridded using elliptical IDW with a major range of 800 ft, minor range of 400 ft, IDW exponent of 2 and no smoothing.

SW8011 results are labeled in black and SW8260B results are labeled in brown. SW8011 results were used for gridding.

Results for water supply wells are posted for information only and were not included in gridding.

Data concentrations are posted to 2 significant figures. The lowest contoured data value is the EPA MCL or the New Mexico Groundwater Protection Standard, whichever is lower.

J = validation qualifier for estimated value greater than the LOQ. Results were qualified due to a combination of sample precision and calibration outliers. The data usability of the sample results is not affected.
J+ = estimated value, high bias.
J- = estimated value, low bias.
U= analyte not detected, associated numerical value is at or below the LOQ.
UJ = analyte was tentatively not detected, associated numerical value is at or below the LOQ.

Legend

- Water Supply Well
- EDB Result (ug/L)
  - 0.021 - 0.050
  - 0.051 - 0.10
  - 0.11 - 1.0
  - 1.1
- EDB Concentration Contour (ug/L)
- EDB Concentration (ug/L)
  - 0.01 - 0.1
  - 0.1 - 1.0
  - 1.0 - 1.1
- Historical Area of Observed NAPL (July 2009)
- Groundwater Level Contour (ft msl)
- Groundwater Depression
- Major Road
- Road
- Aboveground Fuel Transfer Line
- Aboveground Fuel Transfer Line
- Existing Structure
- Previously Existing Structure
- Installation Boundary

Revision Date: 04/12/12

N

0 400 800 1,600

Feet
1 inch = 800 feet

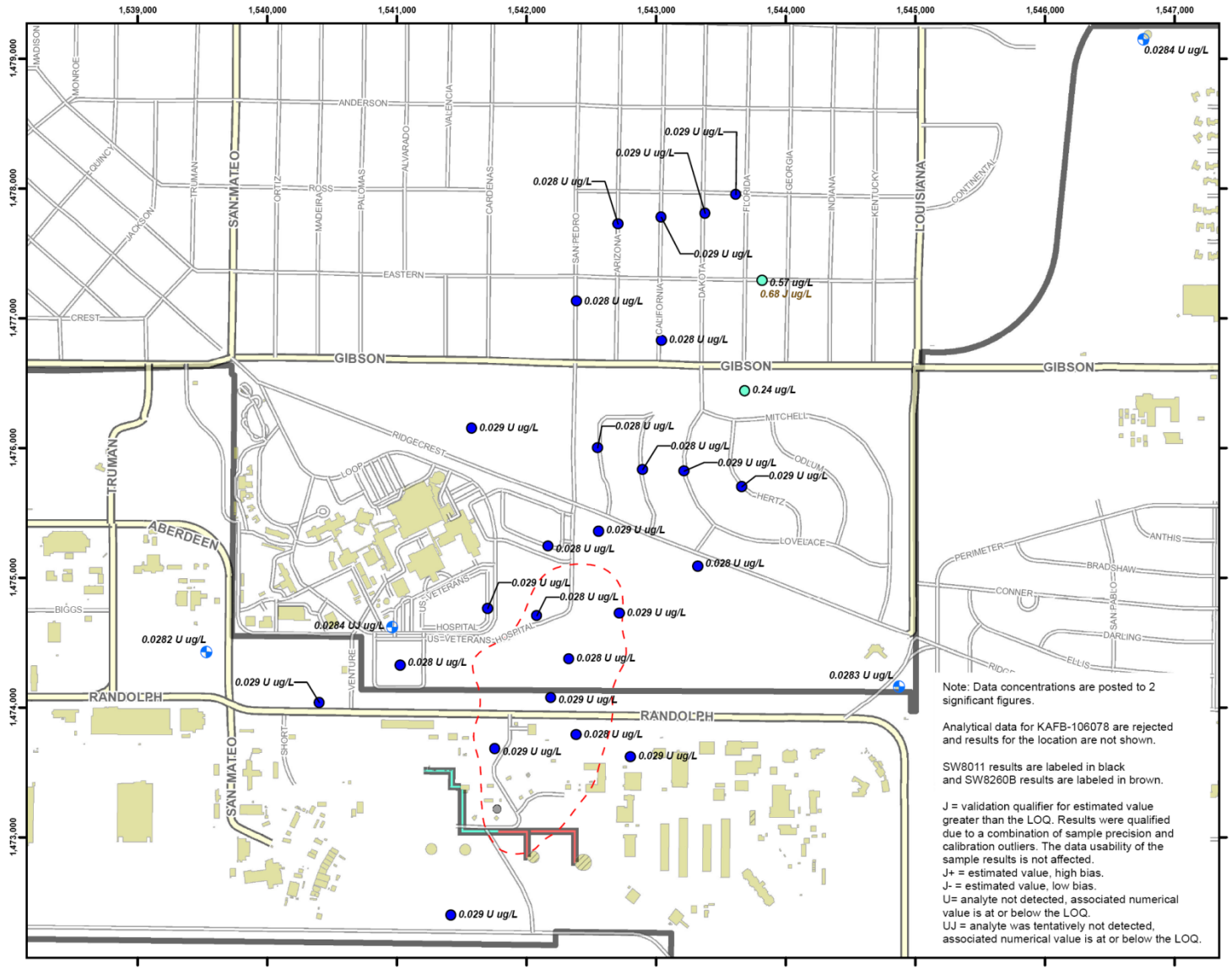
Projection : NAD83 State Plane New Mexico Central FIPS3002 Feet

2011 QUARTERLY REPORT 04
BULK FUELS FACILITY
KIRTLAND AIR FORCE BASE, NEW MEXICO

FIGURE 5-22

1,2-DIBROMOETHANE
CONCENTRATIONS IN
INTERMEDIATE GROUNDWATER

DeepWells
October – December 2011



Legend

- Water Supply Well

EDB Result (ug/L)

- 0.028 - 0.050
- 0.051 - 0.10
- 0.11 - 0.57
- Analytical Results Were Rejected
- Historical Area of Observed NAPL (July 2009)
- Major Road
- Road
- Aboveground Fuel Transfer Lines
- Underground Fuel Transfer Lines
- Structure
- Previously Existing Structure
- Installation Boundary

Note: Data concentrations are posted to 2 significant figures.

Analytical data for KAFB-106078 are rejected and results for the location are not shown.

SW8011 results are labeled in black and SW8260B results are labeled in brown.

J = validation qualifier for estimated value greater than the LOQ. Results were qualified due to a combination of sample precision and calibration outliers. The data usability of the sample results is not affected.
J+ = estimated value, high bias.
J- = estimated value, low bias.
U= analyte not detected, associated numerical value is at or below the LOQ.
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N

Revision Date: 04/12/12

0 400 800 1,600

Feet
1 inch = 800 feet

Projection : NAD83 State Plane New Mexico Central FIPS3002 Feet

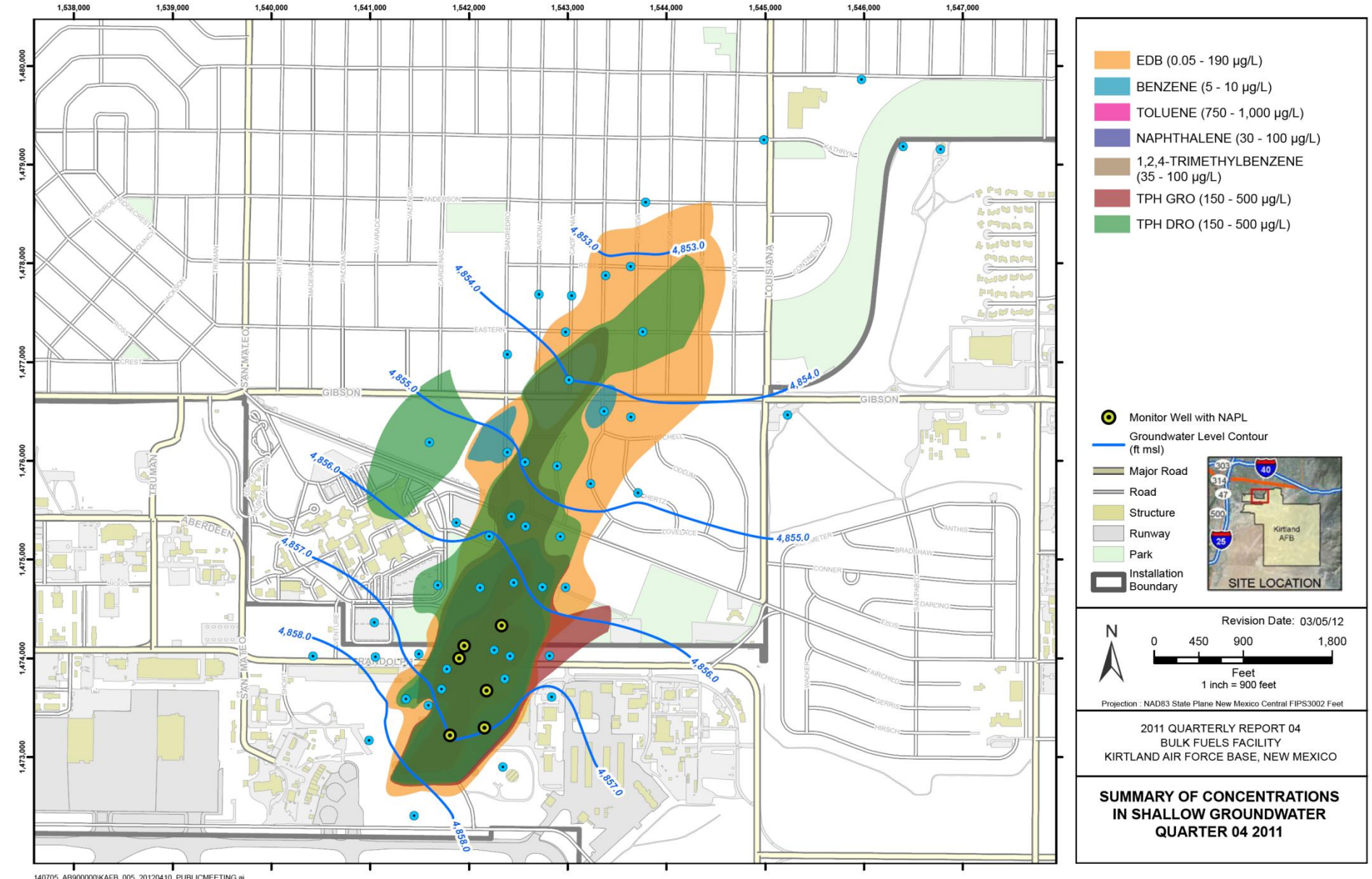
2011 QUARTERLY REPORT 04
BULK FUELS FACILITY
KIRTLAND AIR FORCE BASE, NEW MEXICO

FIGURE 5-23

1,2-DIBROMOETHANE CONCENTRATIONS IN DEEP GROUNDWATER

H:\Kirtland AFB\GIS Documents\Project Maps\Presentations\2012 April\KAFB 003 GW EDB deep.mxd 04/12/12

Shallow Wells
July-September 2011



2011 QUARTERLY REPORT 04
BULK FUELS FACILITY
KIRTLAND AIR FORCE BASE, NEW MEXICO

SUMMARY OF CONCENTRATIONS IN SHALLOW GROUNDWATER QUARTER 04 2011

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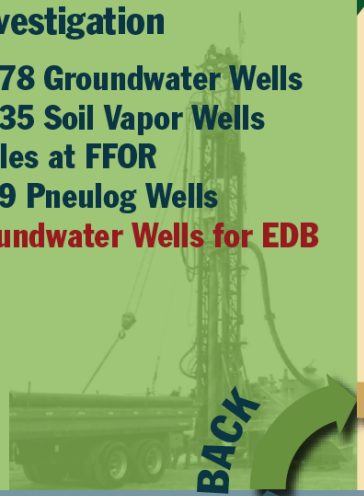
Path Forward

CHARACTERIZATION

RCRA Facility Investigation

- ✔ Installation of 78 Groundwater Wells
- ✔ Installation of 35 Soil Vapor Wells
- ✔ DPT Soil Samples at FFOR
- ✔ Installation of 9 Pneulog Wells
- • Additional Groundwater Wells for EDB



EVALUATION

Corrective Measures Evaluations

- ✔ Baildown Testing
- ✔ ROI Testing
- ■ Quarterly Monitoring
- • Pneulog Well Testing
- ■ Slug Testing
- • Use Phase II IM to Conduct Extended ROI Testing
- • Continue to Evaluate Early Treatment

FEEDBACK

FEEDBACK

Interim Measures

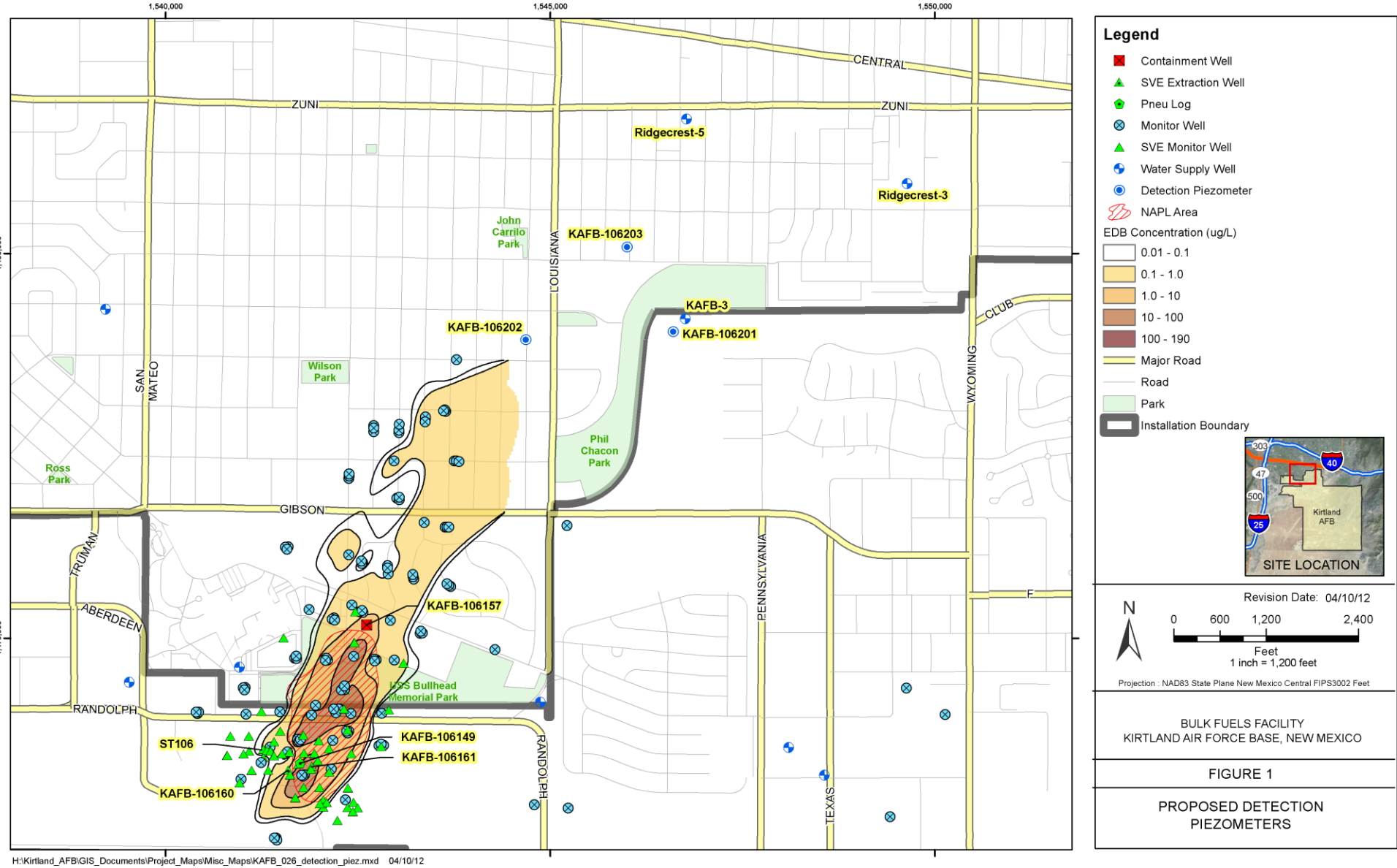
- ■ ICE Unit Operation - Pre-Remedy O&M
- ■ LNAPL Containment
- • Soil Removal at FFOR - Phase I Interim Measures
- ■ SVE Treatment System - Phase II Interim Measures
- • Move ICE Units to New SVE Wells
- • Continue Design of Centralized SVE Treatment System

FINAL REMEDY

REMEDY IN PLACE

EARLY/INITIAL TREATMENT

Path Forward



Path Forward

	Estimated/Actual Start Date	Notes on Schedule
Installation of Additional Monitoring Wells	18 June 2012	Pending NMED approval
Resume SVE ICE Unit Operations at Optimized Locations	23 April 2012	
SVE Unit Installation	Fall 2012	Design is in progress; pending approval partial and final design plans and part availability
Soil Excavation at FFOR	Summer 2012	Pending completion of sampling

Developing a Water Conservation Plan for the Next Ten Years

Presentation to the

Water Authority Board

April 18, 2012

Albuquerque Bernalillo County
Water Utility Authority

April – June 2012: Develop Ideas

- Meet with stakeholders to gather input on developing new water conservation approaches
- Analyze new approaches for water conservation savings potential and for costs to both the Water Authority and our customers
- Develop presentations for the public
- Develop a survey for the public for use online and at public meetings

Albuquerque Bernalillo County
Water Utility Authority

July – December 2012: Public Meetings

- District Coalitions
- Neighborhoods
- Focus Groups
- Surveys
- GOV-16
- Radio shows
- Bill inserts

Albuquerque Bernalillo County Water Utility Authority

Spring 2013: Town Hall

- Hold a Town Hall meeting to present the results of the input gathered from the public meetings and surveys
- From the Town Hall develop a water conservation plan for the next ten years
- Present the 10-Year Plan to the Board for approval

Albuquerque Bernalillo County
Water Utility Authority

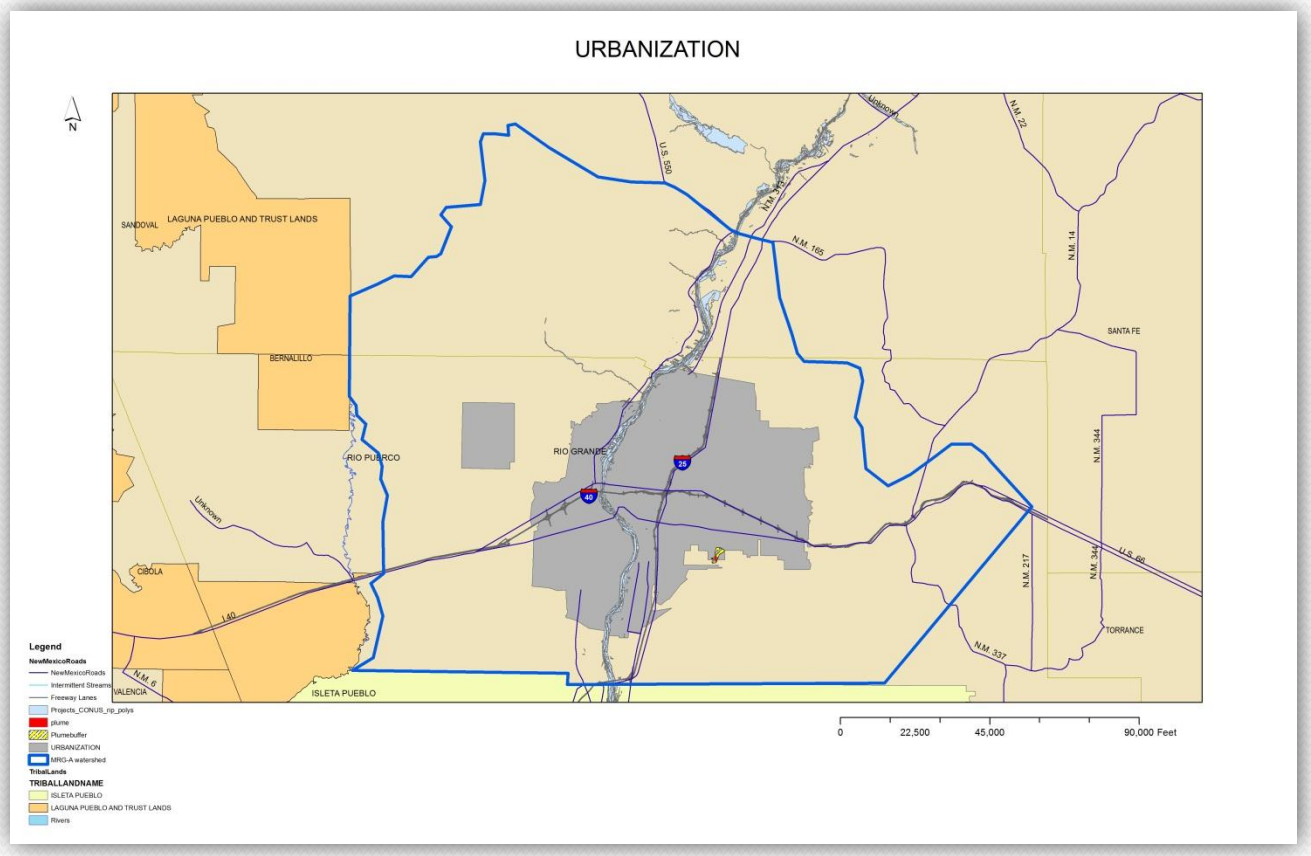
ANNUAL WATER BALANCE AND WATER AUDIT

NON-REVENUE WATER

ANGELIQUE MALDONADO,
RESEARCH ANALYST

Albuquerque Bernalillo County
Water Utility Authority

AREA & SCOPE


URBANIZATION
N
SANDOVAL
LAGUNA PUEBLO AND TRUST LANDS
BERNALILLO
RIO PUERCO
RIO GRANDE
CIBOLA
VALENCIA
ISLETA PUEBLO
SANTA FE
TORRANCE
U.S. 550
N.M. 22
N.M. 14
N.M. 165
N.M. 344
N.M. 217
N.M. 337
U.S. 66
I-40
I-25
N.M. 6
Unknown
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NewMexicoRoads
NewMexicoRoads
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plume
Plumebuffer
URBANIZATION
MRG-A watershed
TribalLands
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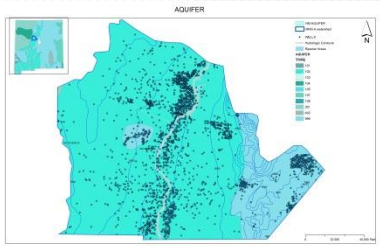
ISLETA PUEBLO
LAGUNA PUEBLO AND TRUST LANDS
Rivers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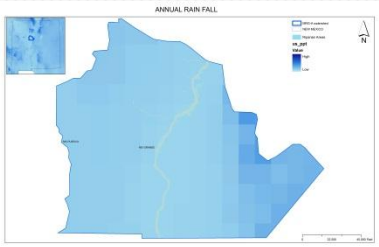
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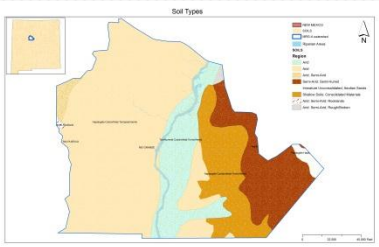
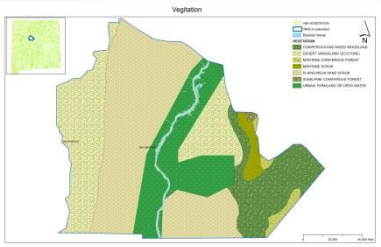
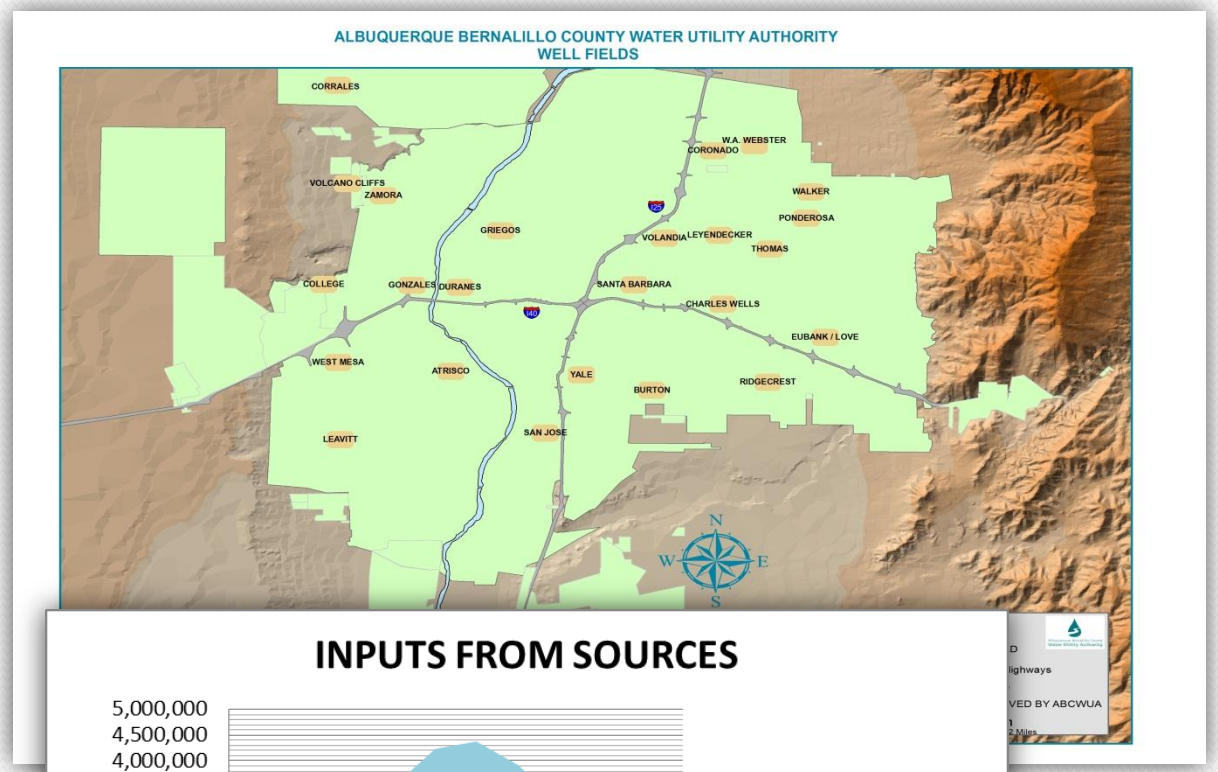
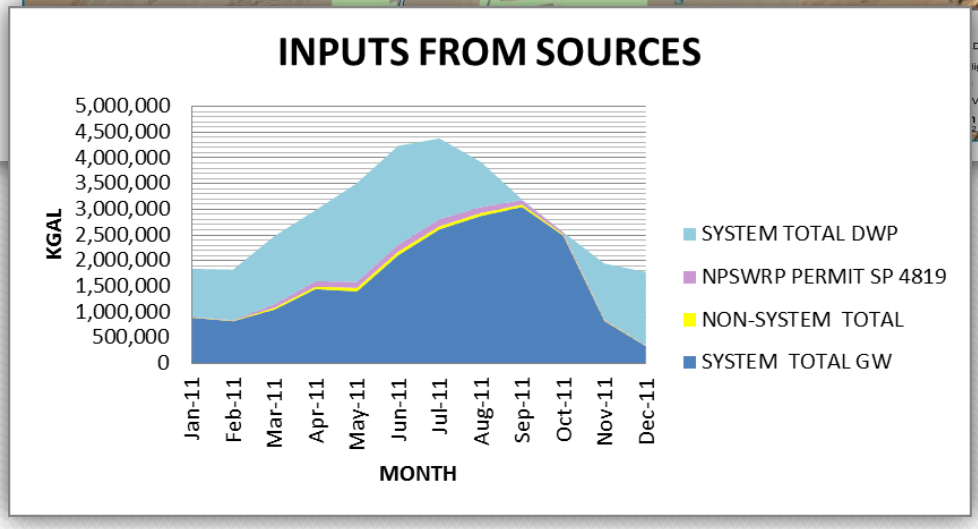
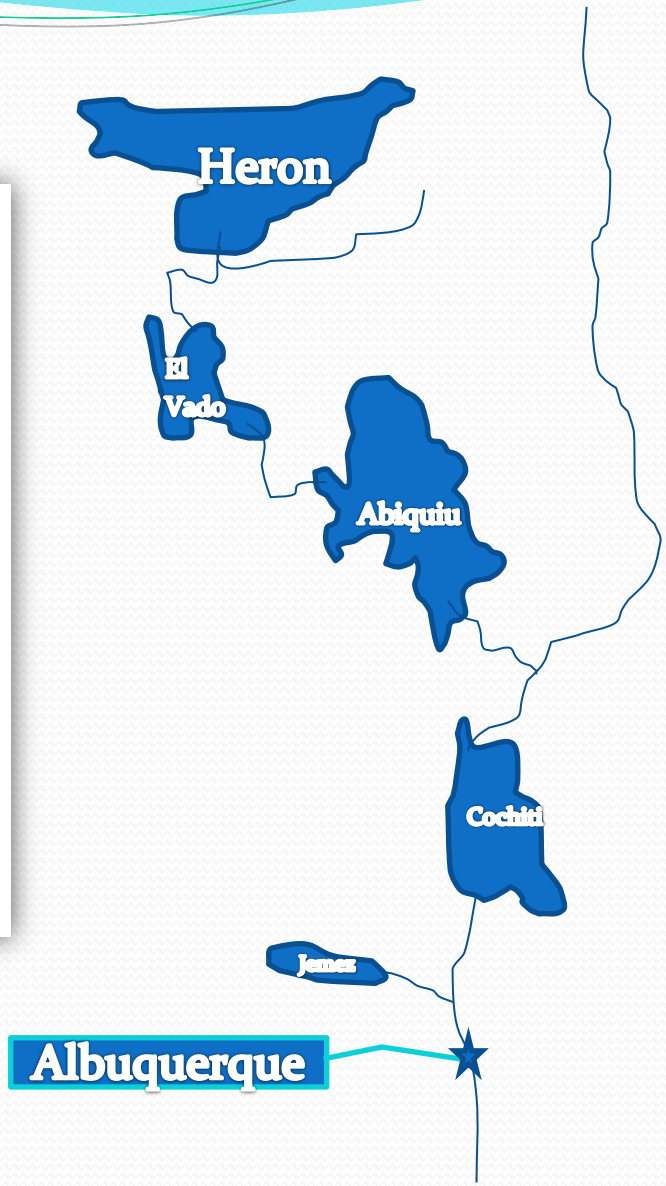

Soil Types


Vegitation

RESOURCE INVENTORY







HISTORY

- **1990:** UNITED KINGDOM DEVELOPED AND APPLIED NEW POLICIES AND PRACTICES LEADING TO LEAKAGE REDUCTION
- **1997-2000:** IWA /AWWA ESTABLISHED BEST MANAGEMENT PRACTICES
- **2003:** AWWA WATER LOSS CONTROL COMMITTEE ADVOCATES THE USE OF IWA/AWWA AUDIT METHODOLOGY AND PERFORMANCE INDICATORS IN *JOURNAL AWWA*
- **2010:** AWWA WATER AUDIT SOFTWARE

PERFORMANCE INDICATORS

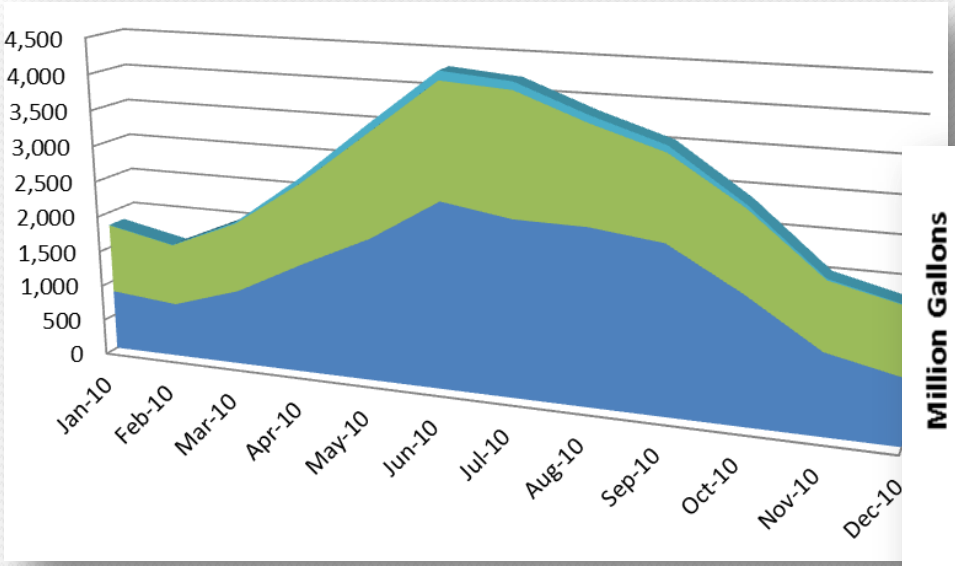
- UAW= $\frac{\text{production- metered use x (100\%)}}{\text{production}}$
  - OBSELETE, UNRELIABLE AND IMPRECISE
  - NO SUBSTANTIATION OF DATA
  - UNDERESTIMATING REAL LOSSES
  - 'GAMESMANSHIP REFLECTS POORLY ON THE WATER INDUSTRY', (AWWA, 2009)

- NRW= Apparent Losses + Real Losses + Unbilled Metered + Unbilled Unmetered

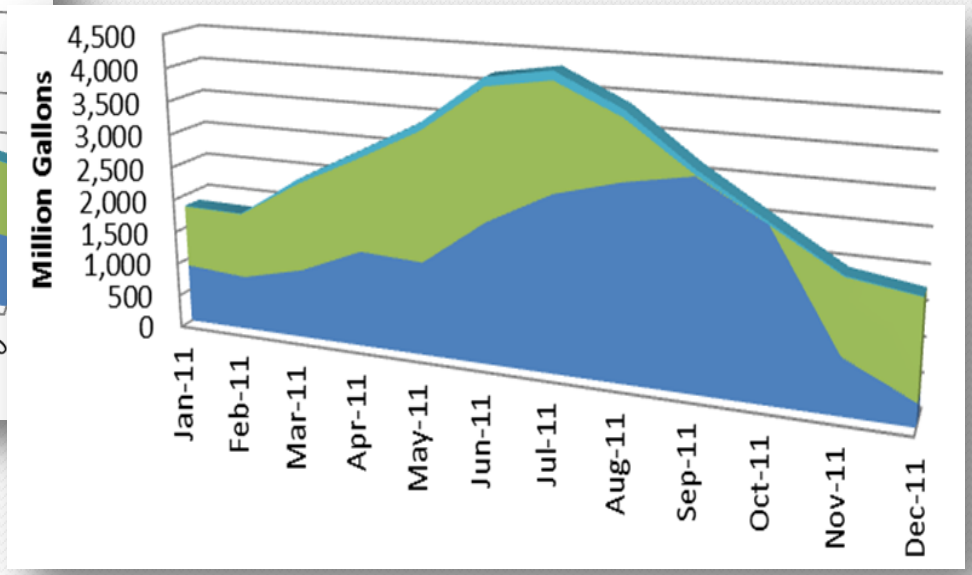
- NON-REVENUE WATER is water that has been produced and is "lost" before it reaches the customer. Losses can be real losses (through leaks or physical losses) or apparent losses (i.e. theft or metering inaccuracies).

PRODUCTION

2010



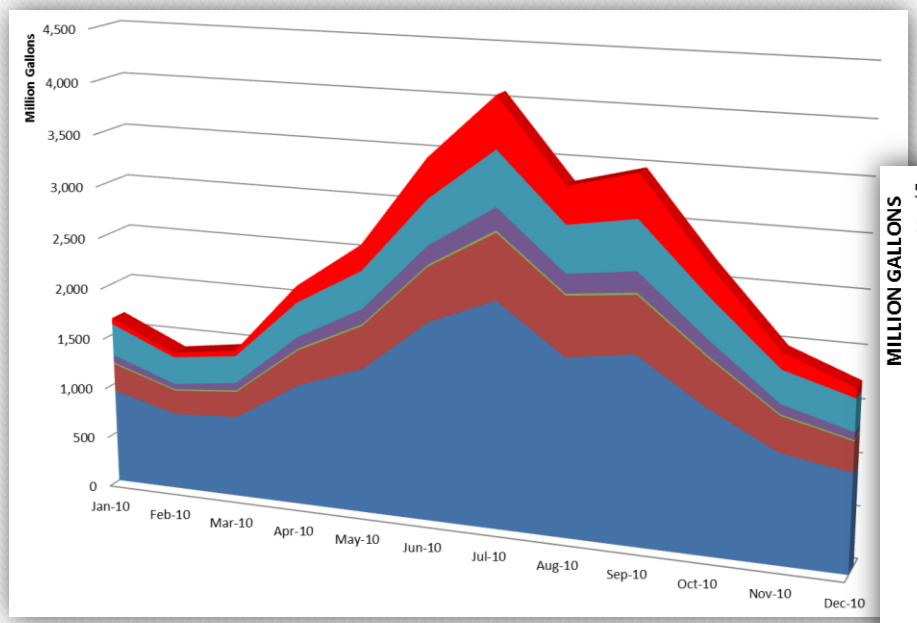
2011



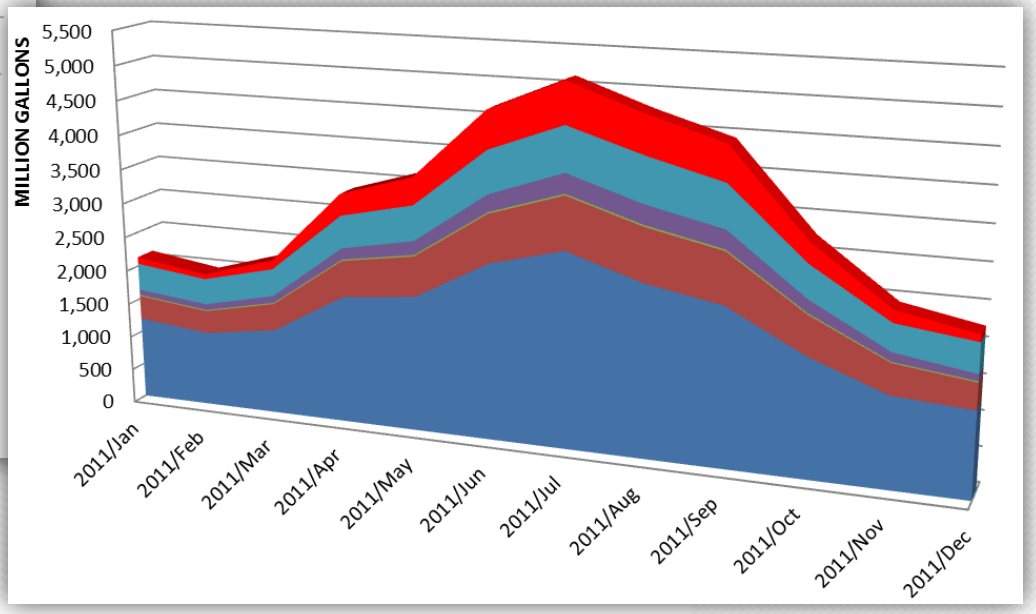
SYSTEM TOTAL GW SYSTEM TOTAL DWP SYSTEM TOTAL NSW

BILLED METERED CONSUMPTION

2010



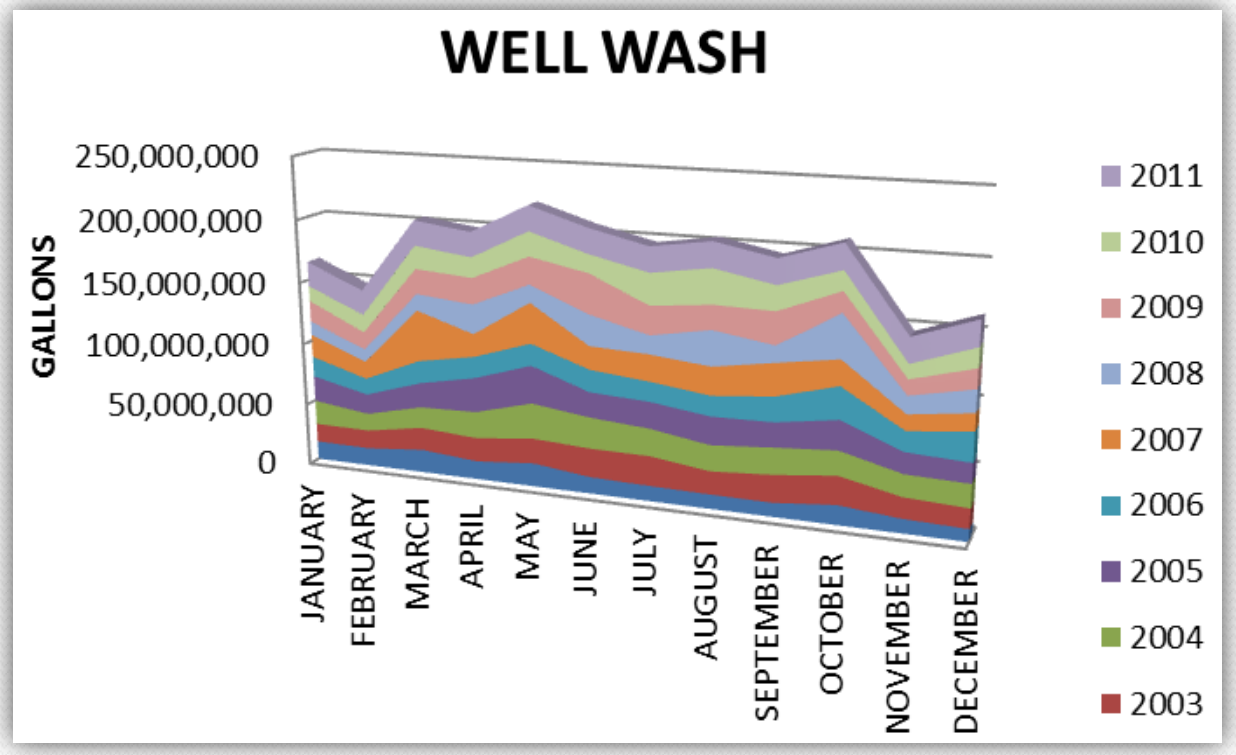
2011



RESIDENTIAL COMMERCIAL INDUSTRIAL INSTITUTIONAL MULTI-FAMILY OTHER

UNBILLED METERED CONSUMPTION

- ARSENIC TREATMENT
- SURFACE WATER TREATMENT
- HYDRANT FLUSHING
- PRESSURE REDUCTION
- RESERVOIR STORAGE
- RESERVOIR DRAINAGE



BILLED UNMETERED

- CUSTOMER BILLING INACCURACIES
- ESTIMATED ACCOUNTS
- STOPPED METERS

UNBILLED UNMETERED

AUTHORIZED

- **FIRE FIGHTING**
  - **2010: 890 EVENTS & 136MG**
  - **2011: 917 EVENTS & 192 MG**
- **STREET CLEANING**
  - **600 GALLONS/TRUCK*10 REFILLS/DAY*150/YR=1.8 MG/Y**
- **FIELD OPERATIONS**
  - **Fire Hydrant flushing, line maintenance, Quality assurance**

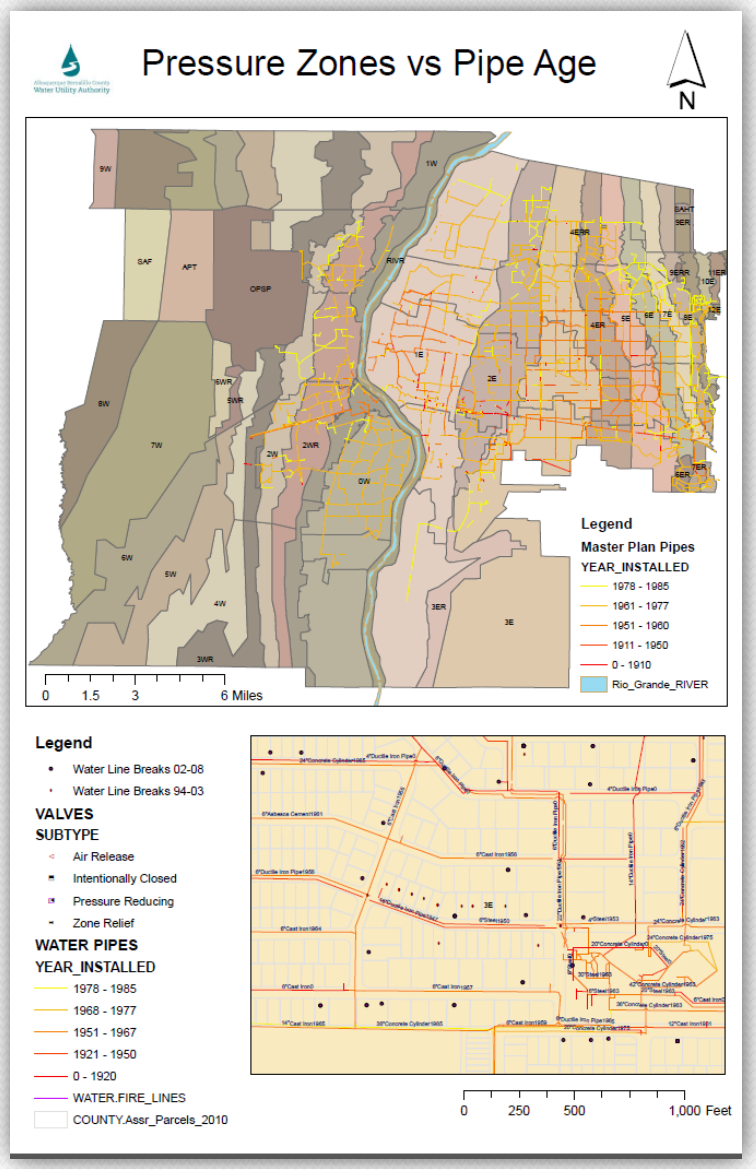
UNAUTHORIZED

- **THEFT**
  - **UNRELIABLE CUSTOMER READS**
  - **METER TAMPERING**
  - **ILLEGAL USE OF HYDRANTS**
  - **MISUSE OF FIRELINES**
  - **BYPASS METER**

WATER LOSSES

APPARENT LOSSES: THEFT/METERING INACCURACIES/DATA HANDLING ERRORS

REAL LOSSES: LEAKS, OVERFLOWS ETC…



AWWA METHODOLOGY

2010

Water Balance	Albuquerque Bernalillo County Water Utility Authority	Water Audit Report For:	Report Yr:
		ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY	2010

	Water Exported 178.195	Billed Water Exported			
Own Sources (Adjusted for known errors) 32,102.500	Water Supplied 31,924.305	Authorized Consumption 29,971.285	Billed Authorized Consumption 29,829.195	Billed Metered Consumption (inc. water exported) 29,011.495	Revenue Water 29,829.195
				Billed Unmetered Consumption 817.700	
			Unbilled Authorized Consumption 142.090	Unbilled Metered Consumption 5.250	Non-Revenue Water (NRW) 2,092.010 6.52%
				Unbilled Unmetered Consumption 136.840	
		Water Losses 1,953.020 6.08%	Apparent Losses 81.935 0.26%	Unauthorized Consumption 79.811	
				Customer Metering Inaccuracies 1.654	
				Systematic Data Handling Errors 0.470	
			Real Losses 1,871.086 5.83%	Leakage on Transmission and/or Distribution Mains 1294.38	
				Leakage and Overflows at Utility's Storage Tanks 215.03	
				Leakage on Service Connections 361.68	

AWWA METHODOLOGY

2011

Water Balance	Albuquerque Bernalillo County Water Utility Authority	Water Audit Report For:	Report Yr:
		ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY	2011

Own Sources (Adjusted for known errors) 33,345.523	Water Exported 172.522	Billed Water Exported			
	Water Supplied 33,173.001	Authorized Consumption 31,213.006	Billed Authorized Consumption 30,446.466	Billed Metered Consumption (inc. water exported) 30,128.872	Revenue Water 30,446.466
				Billed Unmetered Consumption 317.594	
			Unbilled Authorized Consumption 766.540	Unbilled Metered Consumption 572.740	Non-Revenue Water (NRW) 2,726.535 8.22%
				Unbilled Unmetered Consumption 193.800	
		Water Losses 1,959.995 5.91%	Apparent Losses 395.449 1.19%	Unauthorized Consumption 82.933	
				Customer Metering Inaccuracies 76.946	
				Systematic Data Handling Errors 235.570	
Water Imported 0.000			Real Losses 1,564.546 4.72%	Leakage on Transmission and/or Distribution Mains 972.3509	
				Leakage and Overflows at Utility's Storage Tanks 306.6151	
				Leakage on Service Connections 285.58	