
Meeting Date: May 18, 2016
Staff Contact: Stan Allred, Chief Financial Officer

TITLE: R-16-5 - Appropriating Funds for the Capital Implementation of the Albuquerque Bernalillo County Water Utility Authority for the Fiscal Year Beginning July 1, 2016 and Ending June 30, 2017

ACTION: Recommend Approval

SUMMARY:

This legislation appropriates funding for the FY17 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 FY17 capital program appropriation totals \$67.0million. \$59.0million is appropriated for the level one priority basic capital programs, \$4.0 million for growth related projects, and \$3.6 million is appropriated for special projects.

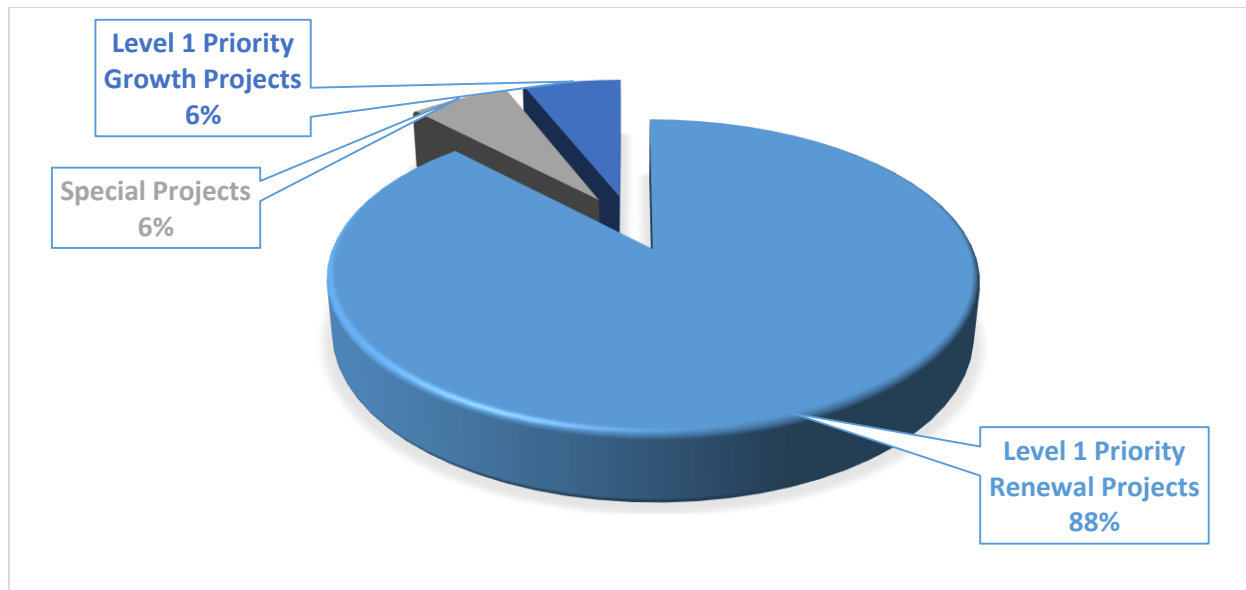
The \$3.6 million for special projects is comprised of \$2.0 million for the Automated Meter Infrastructure (AMI), \$1.0 million for steel water line replacement, \$0.4 million for various renewable energy projects, and \$0.3 million for the addition of supplemental fluoride in the drinking water supply (see Program Highlights, below, for details).

The current Rate Ordinance requires no less than \$30.0million for Basic rehabilitation program. Additionally, \$2.0million is budgeted annually for the Automated Meter Infrastructure (AMI) program. There are no appropriations in the proposed FY17 CIP budget for projects that will be funded with revenues from FY18 or later.

The growth program is funded by Utility Expansion Charge (UEC) revenue which is tied to economic growth in the Water Authority's service area. The non-discretionary portion of the growth program includes funding for the low income connection program managed by Bernalillo County and development repayment agreements as connections are made to the System.

Demonstrated in the graph below is the overall percentage of each CIP category:

COMMENTS:



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. There must always be an approved two year planning element in place before the Board can approve a current year capital program appropriation. FY16 was the first year in the current FY 2016 – FY 2025 Decade Plan. Listed below are the detailed projects for year two:

	FY17 Budget
Basic Program Appropriations:	
Sanitary Sewer Pipeline Renewal	\$13,600,000
Drinking Water Pipeline Renewal	8,630,000
Southside Water Reclamation Plant Renewal	26,520,000
Soil Amendment Facility (SAF) Renewal	50,000
Lift Station and Vacuum Station Renewal	2,375,000
Odor Control Facilities Renewal	60,000
Drinking Water Plant Groundwater System Renewal	2,400,000
Drinking Water Plant Treatment System Renewal	1,800,000
Reuse Line and Plant Rehab	70,000
Compliance	195,000
Shared Renewal	400,000
Franchise Agreement Compliance	2,000,000
Vehicles and Heavy Equipment	900,000
Level 1 Priority Renewal Projects Total	\$59,000,000

	FY17 Budget
Special Projects:	
Steel Waterline Rehab	\$1,000,000
Automated Meter Infrastructure (AMI)	2,000,000
Renewable Energy Projects	350,000
Water Rights Enhancements	474,000
Supplemental Fluoride	250,000
Special Projects Total	\$4,074,000
Combined Level 1 Priority Renewal and Special Projects	\$63,074,000
Growth Projects:	
Development Agreements	1,250,000
MIS/GIS	2,000,000
Master Plans	500,000
Miscellaneous	250,000
Level 1 Priority Growth Projects Total	\$4,000,000
Grand Total	\$67,074,000

FY17 Capital Program Highlights

A capital investment of \$250,000 will be necessary to add supplemental fluoride to the drinking water supply. The Water Authority ceased adding fluoride to the municipal drinking water supply in 2011 pending final recommendation on optimal fluoride levels from the federal government. The Centers for Disease Control (CDC) eventually issued a recommended optimal level of 0.7 mg/L in 2015. Water Authority staff responded by developing a fluoridation plan to meet – as closely as possible – the recommended optimal level system-wide. That plan calls for the addition of fluoride at the Water Authority's San Juan-Chama plant, which treats all water used throughout the Water Authority's system. This is a secure facility, designed for safe handling of bulk chemicals.

One of the major projects in the basic rehabilitation program is the Solids Dewatering Facility (SDF). During FY15, an evaluation was completed to determine if it would be more cost effective in terms of life-cycle costs to rehab the existing SDF or construct a new facility. The results of this evaluation determined that a rehab alternative is the most efficient and cost effective method in moving forward with this project. Design for this project and advertising is scheduled during FY16 with construction to begin in early FY17. Funding will be used to design and construct improvements to the SDF. The improvements will provide a safer work environment, better and more reliable solids dewatering performance, and reduce maintenance costs.

Another significant project is the replacement of the Water Authority's wells. Over 40 percent of the wells are older than fifty years. Sixty years is the typical maximum life of a well before replacement is required. Funding will be used to contract with a consultant to recommend the location of replacement wells. An estimate for each well replacement is \$2.0 million. The Decade Plan shows funding for the replacement of twelve wells.

The Corrales Trunk Collector Pipeline project will be in construction in FY17. This project will reactivate the Corrales Well #2 to provide water to the existing arsenic treatment system at the Corrales Well #3 site, improving the supply in the trunk by 2 to 3 MGD.

A smaller but significant project ongoing at the Southside Water Reclamation Plant (SWRP) is the continuing effort to upgrade the plant wide electrical and instrumentation controls. In FY17, designs for replacement of underrated Power Panels, Motor Control Centers (MCC), and Switchgears (SWGR) at the SWRP will be complete and construction of the replacements is anticipated to begin. The electrical gear at the reclamation plant has reached or has passed its design life which makes it difficult for the plant to keep the electronics in a good and safe working condition. There are negative impacts on reliability as a result which has impacted treatment processes during plant wide facility power outages and been responsible for NPDES discharge permit violations.

The funding plan of capital improvement spending for renewing the existing digesters and adding additional capacity is established into phases. Phase 1 will be to fix the existing mechanical, electrical, and instrumentation systems. The spending for this work will be covered in Decade Plan Line No. 304.

At the same time as the Phase 1 Rehab, the first phase of capacity increases will occur through the addition of more liquid digested sludge storage (i.e., the construction of a new 2.0-mil gal tank). Designs for the conversion from secondary to primary digestion will be complete in FY17. A second phase of capacity increase is indicated at the end of the decade. The spending for capacity expansion will be covered in Decade Plan Line No. 325.

Decade Plan Line No. 332 will cover the second phase of the rehab of the existing digesters. This work can be done once there is more available liquid digested sludge storage and two additional primary digesters. This will allow pairs of primary digesters to be taken off-line for several months to allow structural repairs and the renewal of interior coatings.

The largest planned project other than at the water reclamation plant is the sanitary interceptor system, which is the backbone of the Water Authority's current sewer collection system. It is designed to carry large flows from the collection line system for delivery to the plant for treatment. There are over 242 miles throughout the service area of interceptor lines which range in size.

46 percent of the current interceptors within the system are made of concrete and have suffered substantial hydrogen sulfide corrosion damage along the upper portions of pipe. This ultimately results in complete pipe failure which could cause a sinkhole to form at any time within the public right-of-way. Funding for this program will provide evaluation, planning, design, construction, and related activity necessary for sanitary sewer interceptor rehabilitation or complete removal and replacement of severely deteriorated

sewer interceptor lines that are beyond rehabilitation. The spending is dedicated in Decade Plan Line No. 102.

Related to the interceptor rehab program is the Odor Control System in the collections system. In FY17, the Yucca/Central interceptor will be re-routed to eliminate the odor problems experienced at the intersection. The incorporation of vortex-type manholes will allow the flows and the air to move through the system and not escape into the environment as it did in the past. The Odor Control System Master Plan development is also to begin in FY17. This master plan will guide the rehab and replacement of the existing systems with the intent of improving the efficiency and effectiveness of the overall system.

The non-potable water system at the SWRP has been in operation for over two years now. During the initial start-up, issues with the disinfection system were encountered. The addition of ammonium sulfate was found to be the key to keeping the disinfectant residuals to acceptable standards for proper compliance reporting. During FY17, the new Ammonium Sulfate Storage and Feed Facility construction will be complete and operational. This will eliminate the need for the existing temporary feed system in place.

The remainder of the Basic rehabilitation program is primarily focused on line contingency work and normal maintenance work in the groundwater plant system with minimal planned projects.

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. R-16-5

1 **RESOLUTION**

2 **APPROPRIATING FUNDS FOR THE CAPITAL IMPLEMENTATION PROGRAM FOR**
3 **THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY FOR**
4 **THE FISCAL YEAR BEGINNING JULY 1, 2016 AND ENDING JUNE 30, 2017**

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

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

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

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

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

17 WHEREAS, appropriations for the Capital Implementation Program of the Water
18 Authority must be approved by the Board; and

19 WHEREAS, the appropriation of these Capital Implementation Program funds to
20 projects with their respective purposes are timely and necessary for Water Authority to
21 serve its customers.

22 **BE IT RESOLVED BY THE WATER AUTHORITY:**

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

25 Basic Program Appropriations:

26 Sanitary Sewer Pipeline Renewal	13,600,000
27 Drinking Water Pipeline Renewal	8,630,000

1	Southside Water Reclamation Plant Renewal	26,520,000
2	Soil Amendment Facility (SAF) Renewal	50,000
3	Lift Station and Vacuum Station Renewal	2,375,000
4	Odor Control Facilities Renewal	60,000
5	Drinking Water Plant Groundwater System Renewal	2,400,000
6	Drinking Water Plant Treatment Systems Renewal	1,800,000
7	Reuse Line and Plant Rehab	70,000
8	Compliance	195,000
9	Shared Renewal	400,000
10	Franchise Agreement Compliance	2,000,000
11	Vehicles and Heavy Equipment	900,000
12	<u>Special Projects:</u>	
13	Steel Waterline Rehab	1,000,000
14	Automated Meter Infrastructure (AMI)	2,000,000
15	Renewable Energy Projects	350,000
16	Water Rights Enhancements	474,000
17	Supplemental Fluoride	250,000
18	<u>Growth:</u>	
19	Development Agreements	1,250,000
20	MIS/GIS	2,000,000
21	Master Plans	500,000
22	Miscellaneous	250,000
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