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Meeting Date: May 20, 2020  
Staff Contact: Stan Allred, Chief Financial Officer

**TITLE: R-20-11 – Appropriating Funds for the Capital Implementation Program of the Albuquerque Bernalillo County Water Utility Authority for the Fiscal Year Beginning July 1, 2020 and Ending June 30, 2021**

**ACTION: Recommend Approval**

**SUMMARY:**

This legislation appropriates funding for the FY21 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 FY21 capital implementation program appropriation totals \$71.6 million. \$61.0 million is appropriated for the level one priority basic capital programs, \$4.0 million for growth related projects, \$0.6 million for Water 2120 projects, and \$6.0 million is appropriated for special projects.

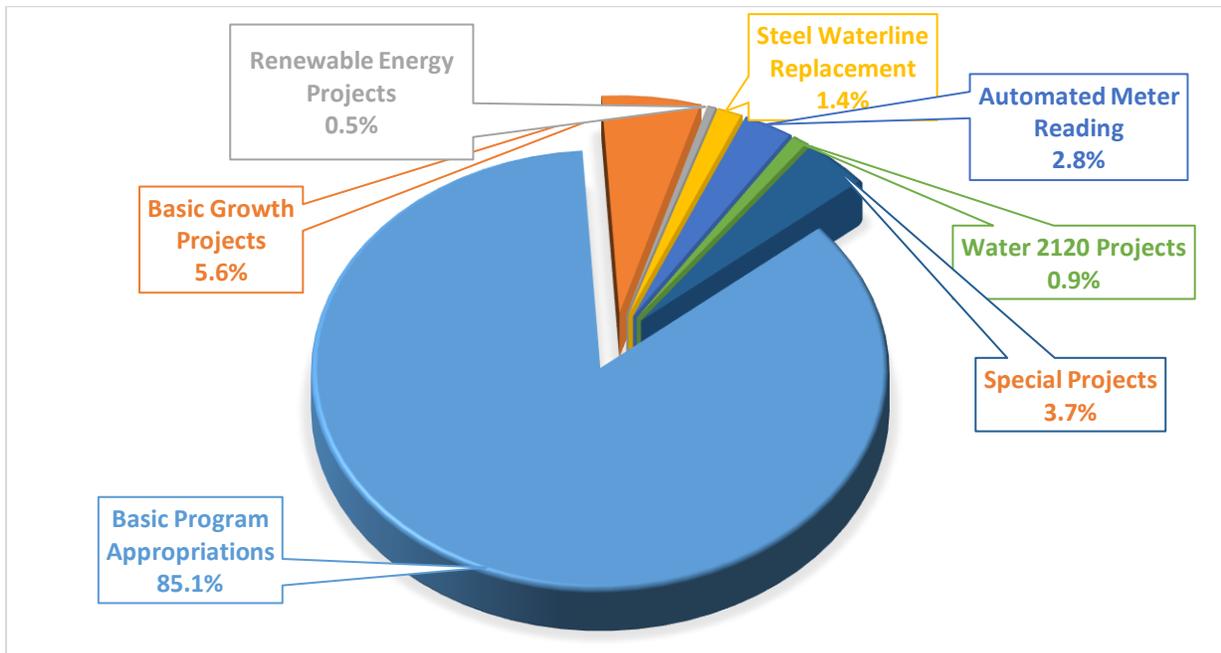
The \$6.0 million for special projects is comprised of \$2.0 million for the Automated Meter Infrastructure (AMI), \$1.0 million for steel water line replacement, \$0.4 million for various renewable energy projects, and \$2.6 million for the State of New Mexico Legislative Capital Outlay- awarded projects.

The current Rate Ordinance requires no less than \$30.0 million for Basic rehabilitation program. Additionally, \$2.0 million is budgeted annually for the Automated Meter Infrastructure (AMI) program. There are no appropriations in the proposed FY21 CIP budget for projects that will be funded with revenues from FY22 or later.

The recent rate revenue increases alleviate future borrowing and increases the level of funding for infrastructure rehab projects.

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. FY21 is the second year in the current FY 2020 – FY 2029 Decade Plan. Listed below are the detailed projects for year two:

	<b>FY21 Budget</b>
<b>Basic Program Appropriations:</b>	
Sanitary Sewer Pipeline Renewal	\$11,000,000
Drinking Water Pipeline Renewal	6,050,000
Southside Water Reclamation Plant Renewal	23,340,000
Soil Amendment Facility (SAF) Renewal	50,000
Lift Station and Vacuum Station Renewal	3,205,000
Odor Control Facilities Renewal	250,000
Drinking Water Plant Groundwater System Renewal	8,125,000
Drinking Water Plant Treatment System Renewal	3,900,000
Reuse Line and Plant Rehab	150,000
Compliance	390,000
Shared Renewal	40,000
Franchise Agreement Compliance	3,500,000
Vehicles and Heavy Equipment	1,000,000
<b>Level 1 Priority Renewal Projects Total</b>	<b>\$61,000,000</b>

	<b>FY21 Budget</b>
<b>Special Projects:</b>	
Steel Waterline Rehab	\$1,000,000
Automated Meter Infrastructure (AMI)	2,000,000
Renewable Energy Projects	350,000
Miscellaneous (State of NM Capital Outlay Projects)	2,682,900
<b>Special Projects Total</b>	<b>\$6,032,900</b>
<b>Combined Level 1 Priority Renewal and Special Projects</b>	<b>\$67,032,900</b>
<b>Growth Projects:</b>	
Development Agreements	1,440,000
Land & Easement Acquisition	500,000
MIS/GIS	2,000,000
Miscellaneous	60,000
Growth Total	4,000,000
Water 2120 Projects	636,772
<b>Level 1 Priority Growth/Other Projects Total</b>	<b>\$4,636,772</b>
<b>Grand Total</b>	<b>\$71,669,672</b>

### **FY21 Capital Program Highlights**

The Water Authority will continue to spend \$250 million to upgrade its wastewater treatment plant and add an additional \$36 million per year to Capital Improvement Program (CIP) funding to cover the costs of routine replacement of aging pipes, pumps and other infrastructure as recommended in the most recent asset management study commissioned by the Water Authority. Infrastructure renewal backlog is being addressed over the coming years to maintain service levels and protect the health, safety, and economic viability of our community.

Various projects include:

The sanitary sewer interceptor system 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. 46-percent (approximately 111 miles) of the current interceptors within the system are made of concrete and have suffered substantial hydrogen sulfide corrosion damage along the upper portions of the pipe. This ultimately results in complete pipe failure which could cause a sinkhole to form at any time within the public right-of-way. The FY21 budget reflects an increase of \$1.9 million from FY20 that will be used to continue to evaluate, plan, design, and construct for sanitary sewer interceptor rehabilitation or complete removal and replacement of severely deteriorated sewer interceptor lines that are beyond feasible rehabilitation.

The construction of a new Dewatering Facility at the San Juan Chama Water Treatment Plant (SJCWTP) has begun and will improve the ability to separate the water from the waste solids generated by the Actiflo clarification process. The SJCWTP feeds ferric chloride to the influent water to the plant to assist in removing clay particles. This results in a dilute solids stream consisting of ferric hydroxide and clay. It is important to remove as much water from this stream

as possible to reduce the weight of the solids that have to be hauled off-site for disposal. The water separated from the solids is returned to the head of the plant, where it is combined with the plant influent and treated.

The Supervisory Control and Data Acquisition (SCADA) system hardware replacement and software upgrade will start in FY21. The SCADA process computers provide continuous operations 24 hours a day 365 days a year. Due to the age of the process control computers, Dell will not warranty them any longer. If the SCADA equipment should fail, it would be extremely difficult to produce, treat or distribute water manually.

Construction of improvements to Lift Station No. 20 have begun and will conclude in FY21. These consist of the installation of a new electrical building, a new odor control system, renovation of the bar screen, bar screen building roof replacement, lift station roof replacement, and other associated infrastructure. All construction work is being completed while the Lift Station is fully operational. The total project is estimated to cost \$8.9 million.

At the Southside Water Reclamation Plant (SWRP), the existing Dissolved Air Flootation (DAF) Facility is used to concentrate activated sludge that is periodically wasted from the secondary treatment process. Sludge concentration using DAF also conserves volume needed in the anaerobic digesters to stabilize the sludge and allows for a more efficient sludge digestion process. The existing equipment within the DAF Facility is old and wearing out. Parts are becoming difficult to find. As the DAF equipment in the facility fails, it becomes more difficult to keep up with sludge wasting requirements for the activated sludge process. More efficient, better performing DAF technology is available; such as rotary drum thickeners (RDTs). Funding will be used for replacement of DAF with RDTs. Once constructed, the RDT facility will require less operations and maintenance expenses.

The two (2) cogeneration facilities at the SWRP use large internal combustion engines to burn biogas produced by the Anaerobic Digesters. The engines turn generator sets that produce electricity that is used to power the SWRP. The Cogen facilities also provide hot water for heating the digesters and other buildings at the plant. The FY21 budget includes \$3.5 million that will be used for the design and installation of emissions control equipment. Currently, the engine generators exhaust controlled substances such as carbon monoxide and nitrous oxides. The proposed emission control equipment will clean up the exhaust gas. These improvements will allow the Water Authority to dispense with the costs associated with a Title V Air Quality Operating Permit.

The Information Technology/GIS funding allocations will be utilized to purchase new/upgrade all hardware and software applications and the databases that support those applications. Applications include OneSolution, Kronos, LIMS and GIS, among others. Funding will be used to address the mobile, security and telecommunications environments and to provide continual efficiencies to reduce costs and maintain backups of mission critical systems.

The Water Authority has been awarded various Capital Outlay Projects from the 2020 NM State Legislative Session in the amount of \$2.7 million; \$1.4 million to plan, design, construct and equip a wastewater reclamation plant for the Water Authority to serve the Winrock site and public parks in Albuquerque; \$0.7 million to plan, design, construct and equip a water reuse facility, including a wastewater reuse plant, a reservoir and pipelines for distribution of non-potable water to irrigation sites and discharge into Tijeras arroyo; and \$0.6 million to plan and design a wastewater reuse plant.

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

# ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. R-20-11

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, 2020 AND ENDING JUNE 30, 2021**

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

24 Basic Program Appropriations:

25	Sanitary Sewer Pipeline Renewal	11,000,000
26	Drinking Water Pipeline Renewal	6,050,000
27	Southside Water Reclamation Plant Renewal	23,340,000
28	Soil Amendment Facility (SAF) Renewal	50,000

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

1	Lift Station and Vacuum Station Renewal	3,205,000
2	Odor Control Facilities Renewal	250,000
3	Drinking Water Plant Groundwater System Renewal	8,125,000
4	Drinking Water Plant Treatment Systems Renewal	3,900,000
5	Reuse Line and Plant Rehab	150,000
6	Compliance	390,000
7	Shared Renewal	40,000
8	Franchise Agreement Compliance	
9	3,500,000	
10	Vehicles and Heavy Equipment	1,000,000
11	<u>Special Projects:</u>	
12	Steel Waterline Rehab	1,000,000
13	Automated Meter Infrastructure (AMI)	2,000,000
14	Renewable Energy Projects	350,000
15	Miscellaneous (State of NM Capital Outlay Projects)	2,682,900
16	<u>Growth:</u>	
17	Development Agreements	1,440,000
18	Land & Easement Acquisition	500,000
19	MIS/GIS	2,000,000
20	Miscellaneous	60,000
21	<u>Other:</u>	
22	Water 2120 Project Fund	636,772
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