



**Fiscal Year 2018
Strategic Plan, Annual Operating Plan,
Multi-Year Capital Improvement Plan, and Long
Range Financial Plan**

**Board of Directors Workshop
July 31, 2017**



Strategic Plan

***Presented by
Jim Forte'
Planning & Development Manager***



Strategic Plan

Meeting the Needs of the Brazos Basin

The Strategic Plan of the Brazos River Authority

Mission Statement

The Brazos River Authority (BRA) exists to develop, manage, and protect the water resources of the Brazos River basin.

Guiding Principles

Quality People – The right people for the right job

Integrity and Respect

Commitment to Service and Stewardship

Innovation and Continuous Improvement



Goals, Objectives and Strategies

- I. The BRA will develop water resources, including both surface and groundwater.
 - a. Support the development of surface water projects based on economic feasibility, environmental sensitivity and customer needs
 - 1. Allens Creek Reservoir
 - 2. System Operation Permit
 - 3. Lake Aquilla Re-allocation Assessment (Pool Rise)
 - b. Develop groundwater responsibly and efficiently
 - 1. Trinity Well
 - 2. Brazos Alluvium Research
 - 3. Monitor groundwater regulation, development, and opportunities
 - c. Support reuse and conjunctive use to increase benefit of existing water resources
 - 1. System Operation Permit
 - 2. East Williamson County Regional Water System
 - 3. Lake Somerville Augmentation



Goals, Objectives and Strategies

- d. Support the development of economically feasible alternative water sources, such as Aquifer Storage and Recovery (ASR), and seawater and brackish groundwater desalination treatment technology**
- e. Research and develop infrastructure for the conveyance/transportation of water from areas of surplus to areas of need**
 - 1. Lake Belton-Stillhouse Hollow Pipeline**
 - 2. Lake Somerville Augmentation**



Goals, Objectives and Strategies

- II. The BRA will manage water resources as a service to BRA customers and to support beneficial use by citizens of the Brazos River basin.**
 - a. Manage water resources as a system**
 - 1. Possum Kingdom – Granbury Water Management.**
 - 2. Supply downstream contracts from multiple reservoirs**
 - 3. East Williamson County Regional Water System**
 - b. Operate and maintain the BRA water supplies and associated infrastructure in a safe, responsible manner in compliance with water right permits, water supply contracts, and other applicable regulatory requirements**
 - 1. Reservoir asset management and long-term preventive maintenance of BRA Dams**
 - a. Possum Kingdom Lake**
 - b. Lake Limestone**
 - c. Lake Granbury**
 - 2. Manage floodwater releases from BRA reservoirs**
 - 3. Williamson County Regional Raw Water Line**
 - 4. Brazos Watermaster Program**

Goals, Objectives and Strategies

- c. Encourage water conservation strategies to address projected water shortages in the basin
 - 1. Support efforts to accomplish water conservation goals within the Regional and State Water Plans**
 - 2. Assist in achievement of water conservation goals through implementation of strategies by water user groups**

- d. Manage water and wastewater treatment operations in support of water supply needs
 - 1. East Williamson County Regional Water Supply System**
 - 2. Brushy Creek WWTP Operations**
 - 3. Hutto WWTP Operations**
 - 4. Clute/Richwood WWTP Operations**
 - 5. Sugar Land WWTP Operations**
 - 6. Temple/Belton WWTP Operations**
 - 7. Sandy Creek WTP Operations**
 - 8. Doshier Farm WWTP Operations**



Goals, Objectives and Strategies

- III. The BRA will protect water resources, and where possible improve water quality **and habitat**, to support responsible and efficient use of the Brazos River basin's natural resources.
 - a. Evaluate and monitor water quality throughout the basin for compliance with applicable regulatory requirements
 - 1. Clean Rivers Program and Water Quality Initiatives
 - b. Monitor and assess stream **and reservoir** biology and morphology to determine the effectiveness of instream flows in maintaining healthy riparian **areas** and aquatic life conditions
 - 1. Baseline instream flow monitoring and assessment to inform on SB3 environmental flow standards
 - 2. Fresh Water Mussel Rapid Risk Assessment
 - 3. Reservoir Habitat Improvement Program
 - 4. Participate with state and federal agencies on issues related to Threatened and Endangered Species or Invasive Species



Goals, Objectives and Strategies

- c. Provide for environmental flows through reservoir operations and participate in state-wide instream flow initiatives**
 - 1. Participate in state-sponsored, advisory groups related to environmental flow standard development and revision**
- d. Participate in local watershed protection management efforts**
 - 1. Navasota Watershed Protection Plan being conducted by the Texas Water Resources Institute**
- e. Support development of new water supplies through environmental impact studies**
 - 1. Allens Creek 404 Permit**
- f. Manage BRA-owned properties and administer rules and regulations relative to state-delegated programs for the protection of water resources and overall water quality**
 - 1. Possum Kingdom Natural Resource Inventory**



Goals, Objectives and Strategies

- IV. The BRA will proactively engage in strategic planning and effective resource management.**
 - a. Support the development of strategies to meet the needs of the Water Supply System with a sensitivity to the System Water Rate**
 - 1. Involvement in State Water Planning Process**
 - 2. Internal Water Management Strategy Analyses**
 - 3. Long Range Financial Plan**
 - 4. Review and Adoption of Strategic Plan**



Goals, Objectives and Strategies

- V. The BRA will establish communications and public relations to support the BRA's mission and service to the Brazos River basin communities.**
 - a. Be proactive in providing public information to support the BRA's mission and goals**
 - 1. Speaker's Bureau**
 - 2. Website and Facebook**
 - 3. BRA email newsletter**
 - 4. Water school section of website**
 - 5. Major Rivers Educational Program**
 - b. Allow public access to BRA records and information in compliance with Freedom of Information Act and Texas Open Government provisions**
 - 1. Open records requests via the BRA website**



Goals, Objectives and Strategies

- c. Develop positive working relationships with legislators, local elected officials, customers, and other stakeholders in order to strategically position BRA to accomplish its goals**
 - 1. Meetings and briefings held to provide information and updates**
 - 2. Act as a source of information for policy discussions**
 - 3. Manage local issues as needed for elected officials**
 - 4. Annual regional customer meetings**
 - 5. Create local stakeholder groups to facilitate dialogue where possible and appropriate**

- d. Ensure transparency in all BRA programs and services by providing information on the BRA website, through social media, and to interested stakeholders**
 - 1. Continual updates of BRA website and Facebook page with new content**
 - 2. BRA email newsletter**



Goals, Objectives and Strategies

- e. Maintain transparency in BRA's finances and operations**
 - 1. Comprehensive Annual Financial Report (CAFR)**
 - 2. Annual Operating Plan (Budget)**
 - 3. Check Registers**
 - 4. Annual Retirement Financial Report**
 - 5. Quarterly Financial reports**
 - 6. Quarterly Investment Reports**
 - 7. Annual Debt Information**
 - 8. Long Range Financial Plan (last updated in FY 2011)**

- f. Ensure accountability to our customers, the legislature, and the public by cooperatively participating in statutorily required external audits and review processes**
 - 1. 5-year Management audits as needed**
 - 2. Sunset review process**



Goals, Objectives and Strategies

- VI. The BRA will develop and retain employees to support the BRA's strategic vision, enhance diversity in the workforce, and prepare the BRA to accomplish its mission.**
 - a. Recruit, develop and retain the right people for the right job**
 - 1. Attend job fairs and recruiting events to promote BRA employment opportunities**
 - 2. Provide Training and advancement opportunities**
 - 3. Maintain equitable compensation system**
 - 4. Provide a secure retirement benefit**
 - b. Promote an organizational culture that values employee contributions, encourages collaboration and recognizes achievements**
 - 1. Foster positive employee relations**
 - 2. Service and Safety Award Program**



Goals, Objectives and Strategies

- c. Ensure operational efficiency throughout programs and processes**
- d. Improve internal communication and coordination between functional groups**
 - 1. Utilize Staff Summary Sheets**
 - 2. Development of Project Management Guidelines**
- e. Conduct business with a customer service focus**
 - 1. Educate customers and the public on BRA reservoir operations, drought and flooding conditions, and system operations issues.**
- f. Encourage a healthy workforce through programs and initiatives**
 - 1. Holistic wellness initiative that includes health and wellness training, access to fitness and health-related materials, alternative work schedules to allow time for exercise, provide annual health fairs, biometric screenings, blood draws and immunizations.**



Goals, Objectives and Strategies

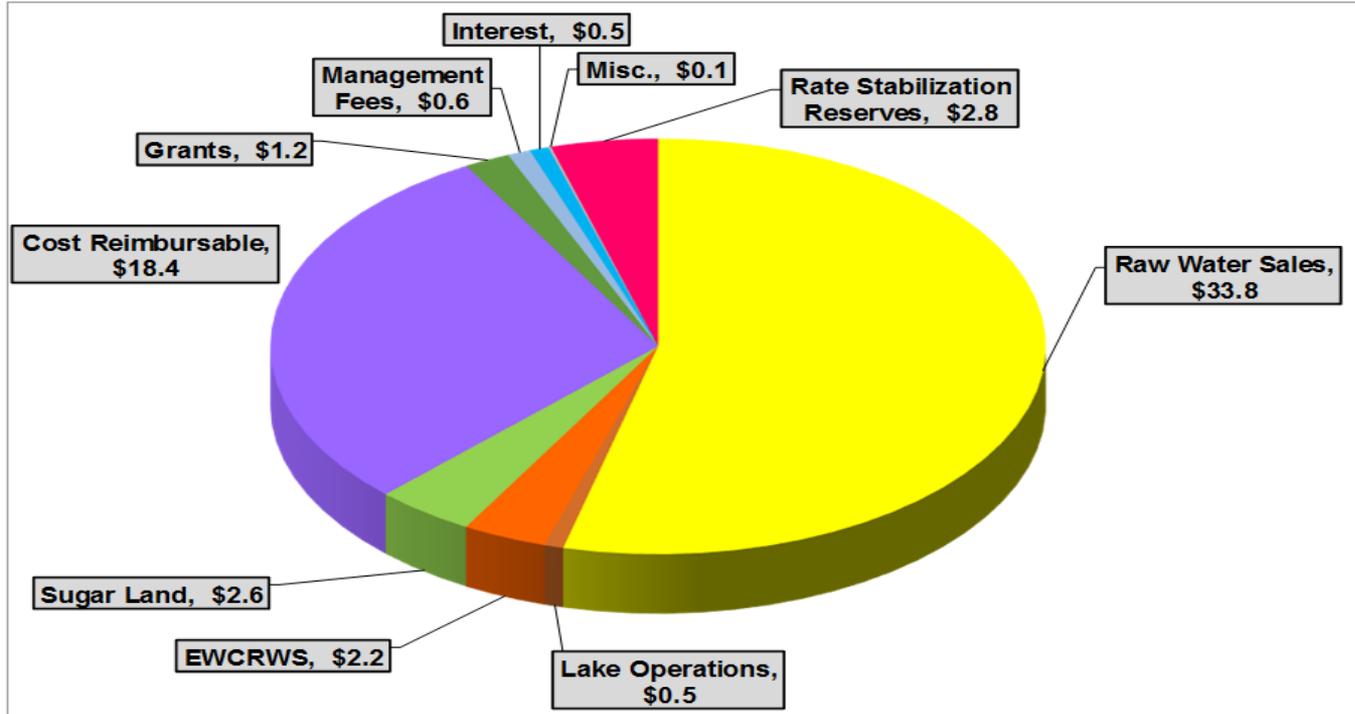
- g. Ensure a safe working environment, promote a safety conscious attitude in all employees and facilitate the implementation of proactive steps to reduce accidents and incidents**
 - 1. Conduct monthly employee safety training**
 - 2. Effectively utilize Engineering and Administrative Controls and Personal Protective Equipment (PPE)**



Fiscal Year 2018 O&M Budget



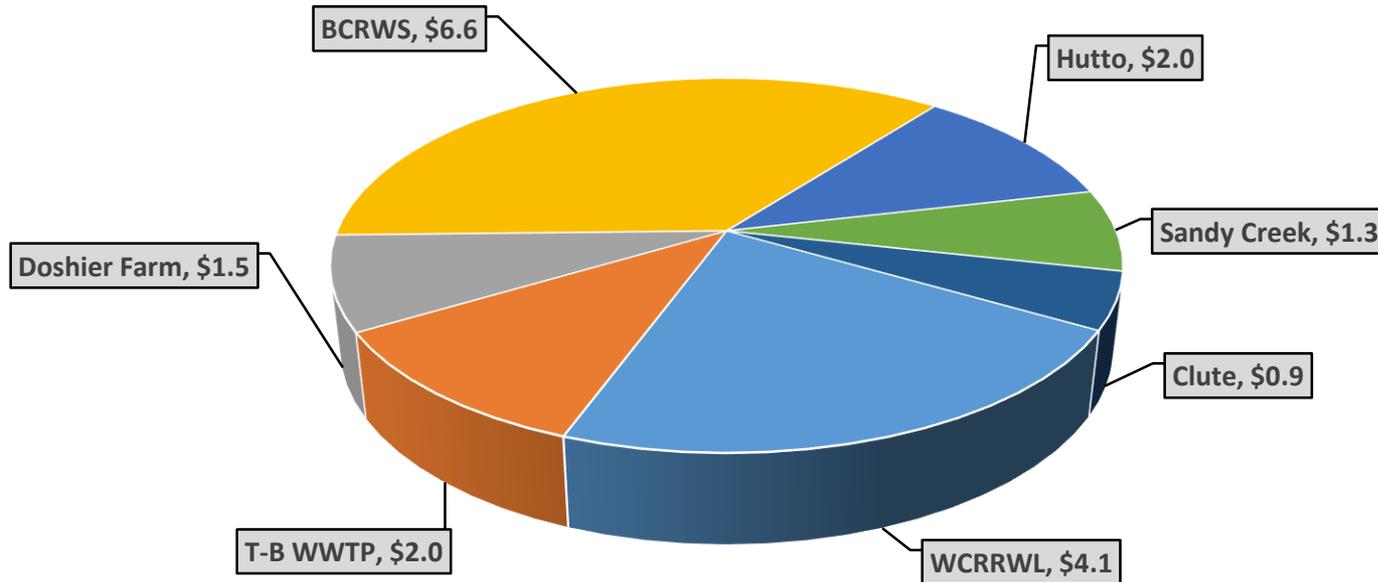
FY2018 Total Proposed Revenues \$62.7M





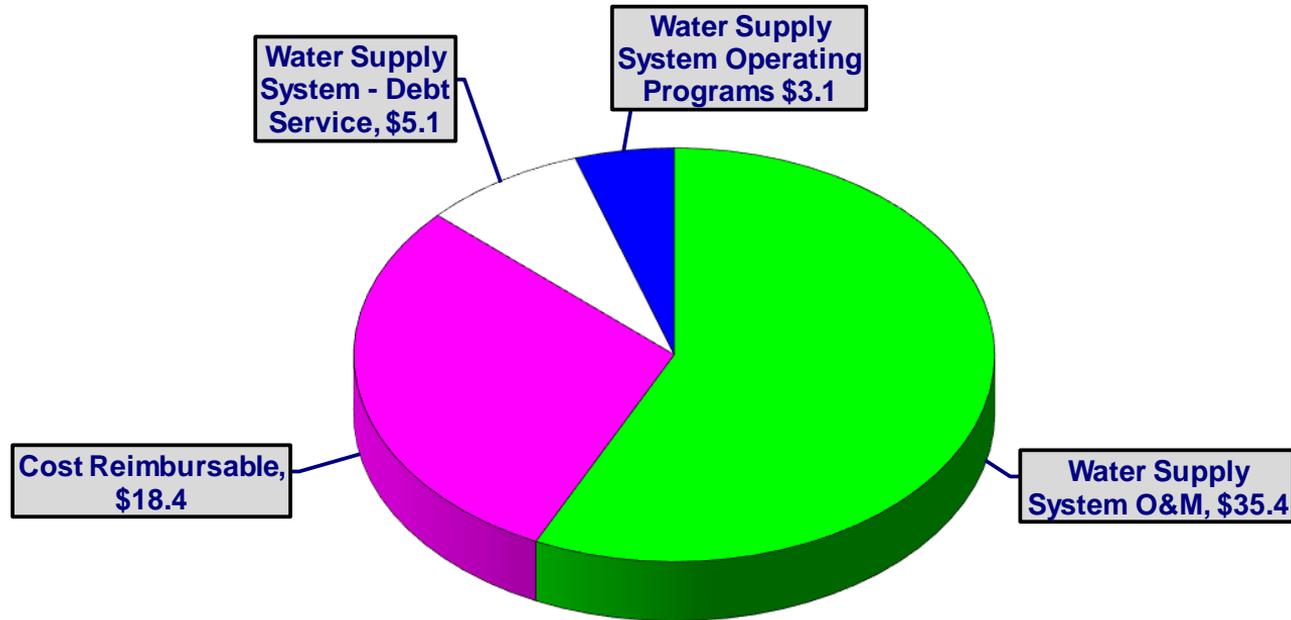
FY2018 Revenues

Cost Reimbursable - \$18.4M



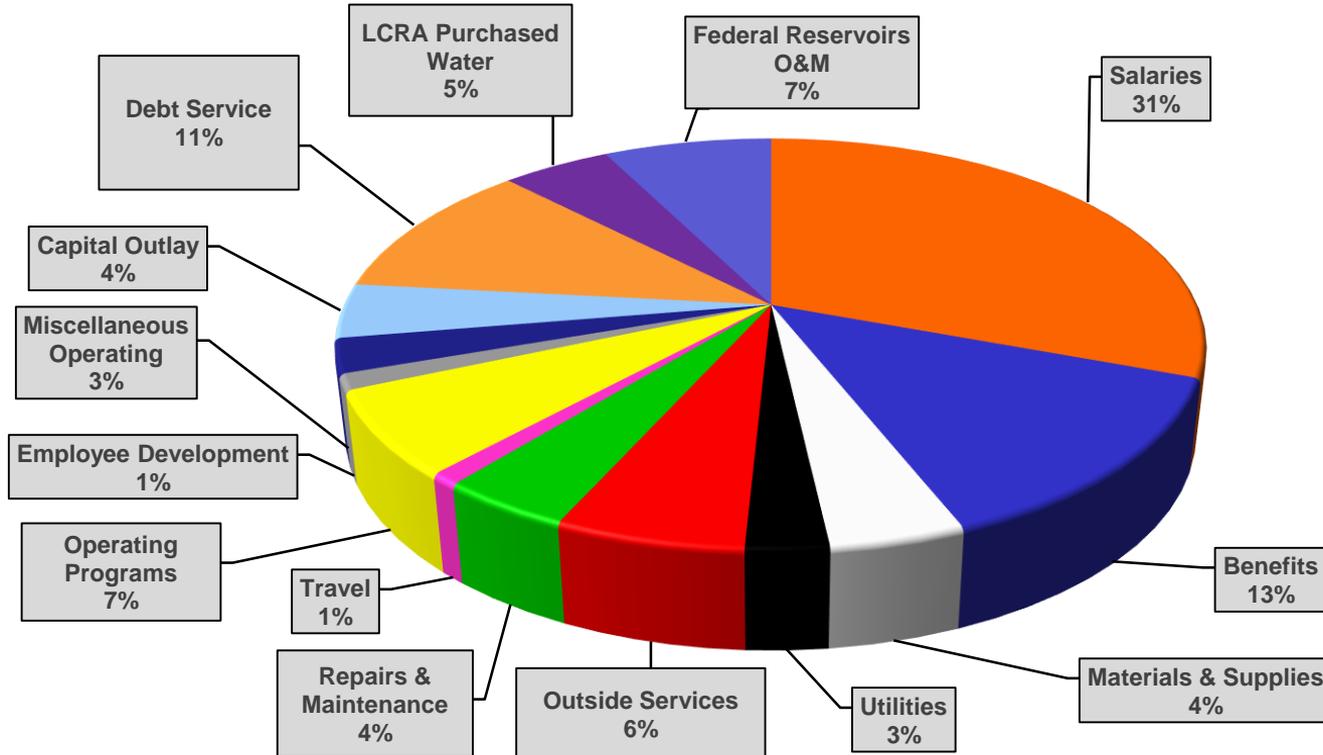


FY2018 Total Proposed O&M Expenses \$62.0M





FY 2018 Proposed Water Supply System O&M Expenses by Category





Expense Assumptions

- **Employee compensation & benefits**
 - **2.1% Authority-Wide Salary Adjustment**
 - **2.9% Performance/Incentive Pay Pool**
 - **Benefits – 7.25% increase (primarily health care costs)**
 - **Net increase of five full-time positions**
- **Ongoing costs of maintaining the System Operations Permit are being migrated to the O&M budget**



FY2018 Operating Programs

(in thousands)

<u>Project Name</u>	<u>FY2018 Proposed Expenditures</u>	
Freshwater Mussel Rapid Risk Assessment	\$	550
Potential Future Water Mgmt. Strategies		500
Enterprise Financial Software		400
Off Channel Reservoirs		250
HB 1437 No Net Loss *		200
Environmental Laboratory Assessment		200
LB Floodplain Protection Study Phase 1 & 2 *		189
Williamson County Sludge Disposal Study *		173
Polycom Replacements		160
PK Recreational Maintenance		145
Corps of Engineers Pool Rise Feasibility		119
Lake Somerville Augmentation Study		80
PK Dam Fiber Optic Cable Replacement		65
PK Natural Resource Inventory Study		50
Duck Creek Aquatic Life Assessment *		14
	\$	3,095
Less Grant/Stakeholder Funding *		(395)
Net BRA Expense	\$	2,700



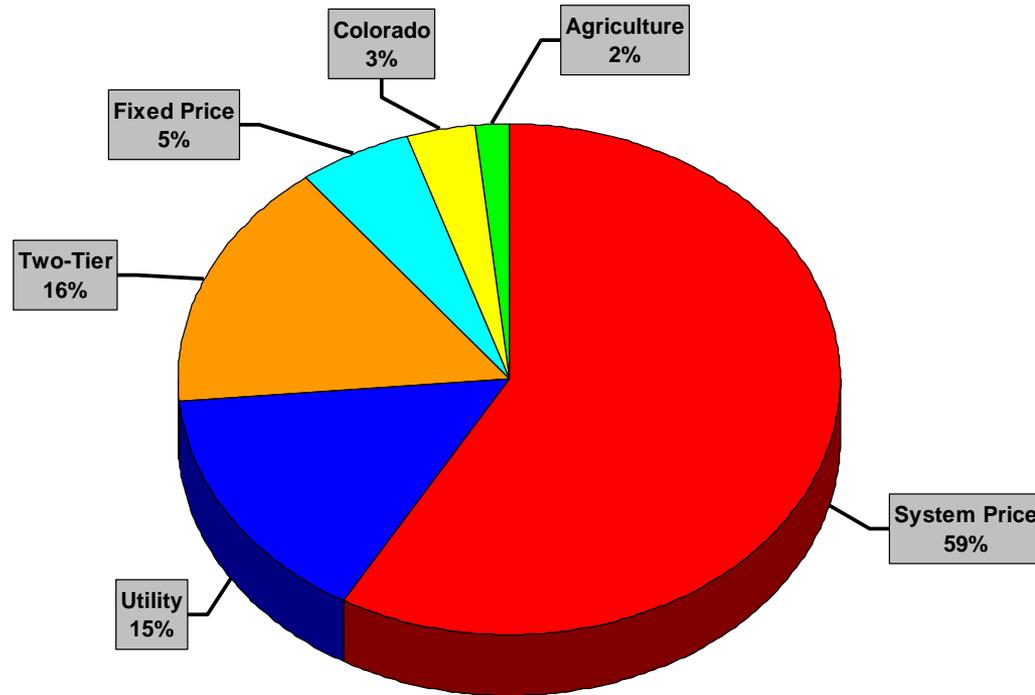
Water Supply System O&M Expenses

(excluding Central Services overhead) (in thousands)

	<u>FY2017 Budget</u>	<u>FY2017 Projected</u>	<u>FY2018 Proposed</u>
Possum Kingdom Lake	\$ 5,514	\$ 5,365	\$ 6,133
Lake Granbury	1,941	1,927	2,202
Lake Limestone	1,427	1,372	1,652
Allens Creek	159	5	50
East Williamson Co. RWS Ops	1,292	1,213	1,512
Sugar Land	2,108	1,764	2,425
Federal Reservoirs & Water Contracts	7,184	6,308	7,409
Regional Basin Management	2,604	2,410	2,657
Technical Services	3,678	3,601	4,647
Planning Services	204	203	221
Central Services	7,664	7,307	8,063
Central Services Allocated Out	(1,686)	(1,448)	(1,600)
Debt Service	5,128	5,128	5,134
Operating Programs	1,706	1,080	3,095
Total	<u>\$ 38,922</u>	<u>\$ 36,234</u>	<u>\$ 43,600</u>



FY2018 Long Term Raw Water Sales 626,162 AF





Raw Water System Rate Requirement

(in millions)

	FY 2017 Budget	FY 2018 Proposed
Water Supply Expenses		
Water Supply O&M Expenditures	\$ 32,078	\$ 35,407
Water Supply Debt Service (subject to coverage)	2,537	2,538
Water Supply Debt Service (not subject to coverage)	2,591	2,595
Operating Program Expenditures	1,686	3,095
Total Expenditures	38,892	43,635
Less:		
Non-System Water Revenues	7,523	6,858
Other Water Supply Revenues	6,364	7,730
Total Non-System Revenues	13,887	14,588
Plus:		
Debt Coverage Requirement (1.3 ratio)	761	761
Rate Stabilization Fund	1,000	(2,800)
Total Coverage and Reserve	1,761	(2,039)
System Water Revenue Requirement	\$ 26,766	\$ 27,008
Total System Water Billing Units (acre feet)	371,422	364,572
System Rate (System Rate Revenue Requirement divided by the number of System Rate Units)	\$ 72.00	\$ 74.00



Long Term Billing Units & Average Price

	FY2017			FY2018		
	Units	Avg Price	%	Units	Avg Price	%
System Rate	371,422	\$72.00	58%	364,572	\$74.00	59%
Agricultural	10,285	\$50.40	2%	10,285	\$51.80	2%
Two-Tier	98,999	\$17.25	16%	98,999	\$17.37	16%
Other Fixed Price	33,778	\$18.96	5%	33,778	\$19.02	5%
Utilities	97,000	\$18.58	15%	97,000	\$18.84	15%
Colorado Basin	25,000	\$79.72	4%	21,528	\$77.95	3%
	<u>636,484</u>		<u>100%</u>	<u>626,162</u>		<u>100%</u>



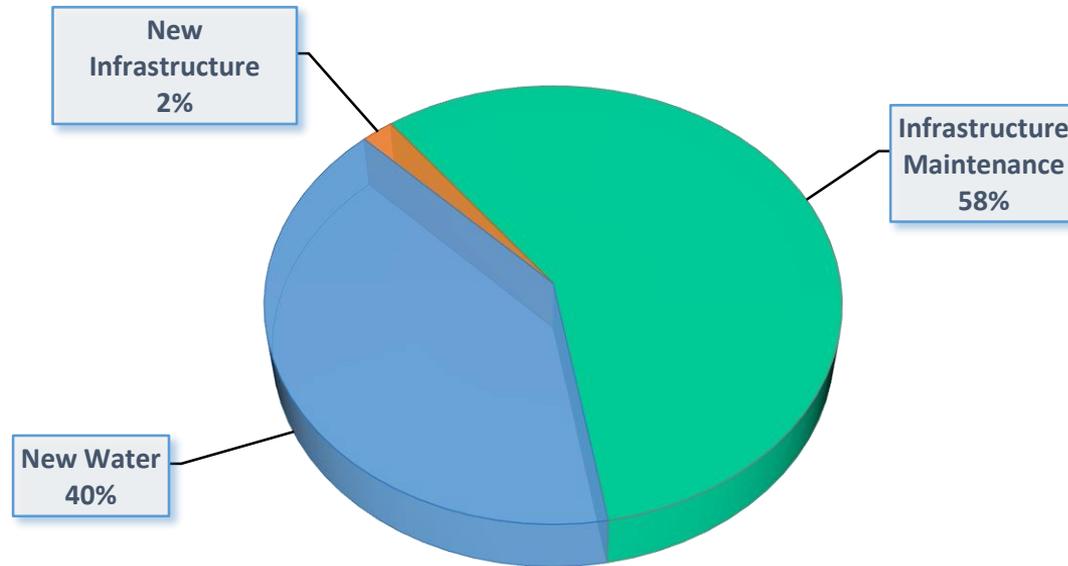
Fiscal Year 2018

Multi-Year Capital Improvement Plan



FY2018 CIP Projects by Type

\$22.3M





FY2018 Capital Improvement Projects

(in thousands)

<u>Project Name</u>	<u>Total Project Cost</u>	<u>FY2018 Projected Expenditures</u>	<u>Est. Completion Date</u>
Allens Creek Reservoir	\$ 92,422	\$ 5,749	2022+
Trinity Groundwater	22,860	3,255	2022+
DeCordova Bend Dam Improvements	8,783	2,782	2019
Morris Sheppard Dam Improvements	10,416	4,050	2020
Sterling Robertson Dam Improvements	27,471	4,415	2022+
LG/LL Road Repairs	2,476	1,400	2021
Other	37,678	655	2022+
Total		<u>\$ 22,306</u>	



Current Debt Outstanding

(in millions)

	<u>Actual</u> <u>Aug. 31, 2016</u>	<u>Projected</u> <u>Aug. 31, 2017</u>
<u>Water Supply System (BRA)</u>		
Revenue Bonds	\$ 37.9	\$ 36.2
Federal Reservoirs	23.8	22.7
Subtotal	61.7	58.9
<u>Contract Revenue Debt</u>		
Water Supply (WCRRWL)	31.9	31.1
Total Debt Outstanding	<u>\$ 93.6</u>	<u>\$ 90.0</u>



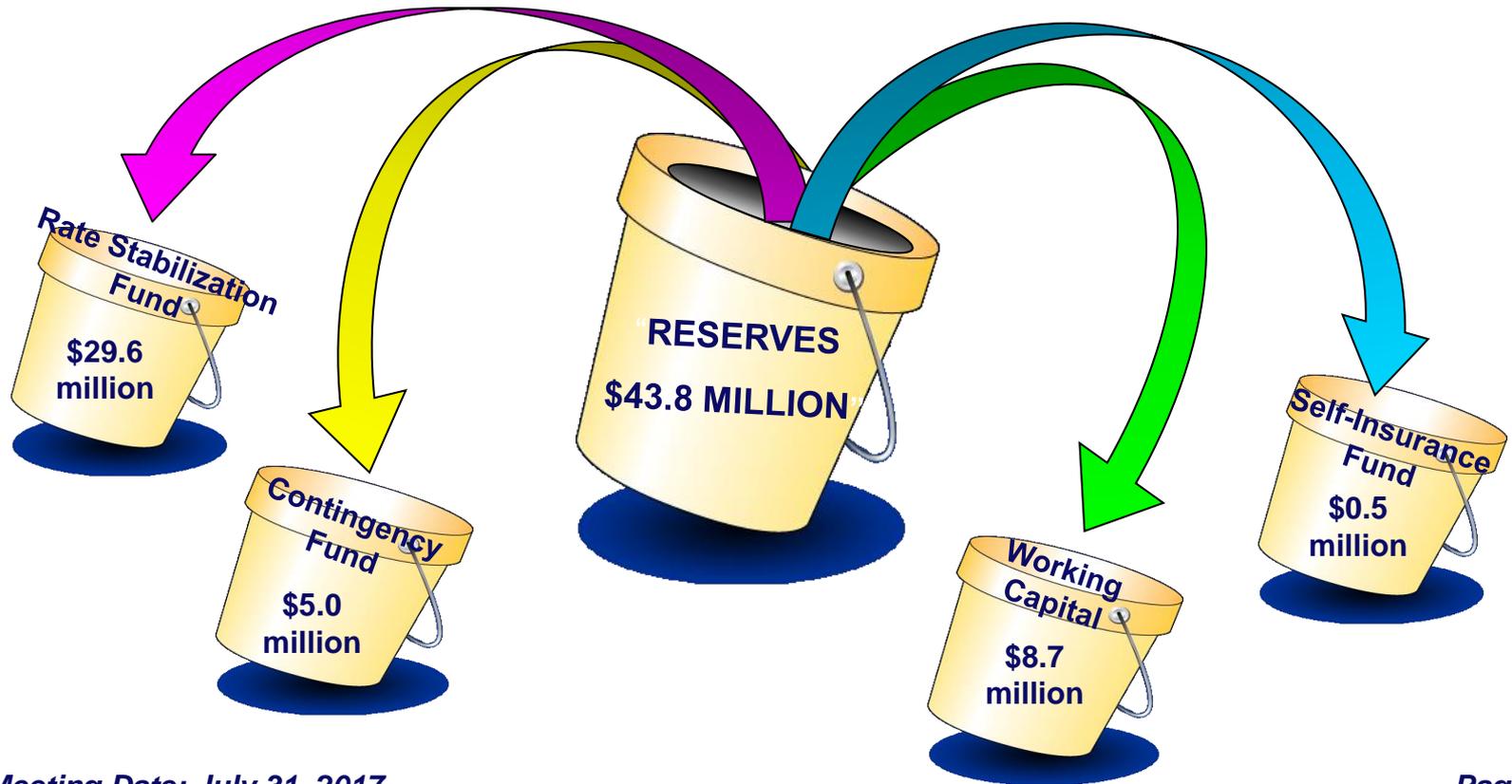
Water Supply System Reserves Overview (in millions)

	FY2018
Projected Beginning Balance (September 1, 2017)	\$ 68.6
Operations Surplus	\$ 0.8
Capital Expenditures	\$ (22.3)
Allens Creek Reservoir	(5.8)
Morris Sheppard Dam Improvements	(4.0)
DeCordova Bend Dam Improvements	(2.8)
Trinity Groundwater	(3.3)
Sterling Robertson Dam Improvements	(4.4)
LG/LL Road Repairs	(1.4)
Central Office (HVAC, Parking Lot)	(0.4)
Other	(0.2)
Addition to R&R Bond Reserve Requirements	\$ (0.5)
Rate Stabilization Reserves Utilized	\$ (2.8)
Ending Balance (August 31, 2018)	<u>\$ 43.8</u>



Reserve (Working Capital) Funds

Projected for August 31, 2018





FY2018 Budget Summary

All Lines of Business (in millions)

	<u>Water Supply</u>	<u>Cost Reimbursable</u>	<u>Total</u>
<u>Beginning Reserves</u>	<u>\$ 68.6</u>	<u>\$ -</u>	<u>\$ 68.6</u>
Revenues	44.4	18.4	62.8
Expenses - O & M	(35.4)	(15.7)	(51.1)
Expenses - Debt Service	(5.1)	(2.7)	(7.8)
Operating Programs	(3.1)	-	(3.1)
Surplus	0.8	(0.0)	0.8
Capital Improvement Projects	(22.3)	-	(22.3)
Increase R&R Reserve	(0.5)	-	(0.5)
Rate Stabilization Reserves Used	(2.8)	-	(2.8)
<u>Ending Reserves</u>	<u>\$ 43.8</u>	<u>\$ (0.0)</u>	<u>\$ 43.8</u>
90 Day Working Capital Reserve - Per Board Policy			<u>\$ 8.7</u>



Five-Year Financial Forecast Water Supply System FY2018 - FY2022



Assumptions - Revenues

- **Raw Water System rate – 3.1% to 3.4% Increase – FY2019–FY2022**
- **Raw Water Non-System – Consistent with Current Contract Terms**
- **Grants – Increased by Five Year Index Rolling Averages for FY2018-FY2022**
- **Interest Income – Average Rate of Return of .65% to .80% for FY2018–FY2022**



Assumptions - Expenses

- **O&M Expense Increased by Historical Five Year Index Rolling Averages for FY2019 - FY2022**
- **Debt Service – Assumes Existing Debt, No Refunding and Potential New Debt for FY2019 - FY2022**
- **Capital Improvement Projects – consistent with CIP Plan**



Five-Year Financial Forecast

(in millions)

<u>WATER SUPPLY SYSTEM</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>
Beginning Reserves	\$ 68.6	\$ 43.8	\$ 29.0	\$ 18.6	\$ 20.4
Revenues	44.4	45.5	48.3	51.5	54.7
Expenses	(41.1)	(40.9)	(42.6)	(43.5)	(46.0)
Revenue Available for Coverage	3.3	4.6	5.7	8.0	8.7
Debt Service Subject to Coverage:	(2.5)	(2.9)	(3.2)	(3.8)	(5.0)
Net Surplus (Deficit)	0.7	1.7	2.5	4.2	3.7
Capital Projects	(22.3)	(20.5)	(23.5)	(17.4)	(35.9)
Bond Proceeds	-	5.0	12.7	16.0	38.1
Increase R&R Reserve	(0.5)	-	-	-	-
Rate Stabilization Reserves Used	(2.8)	(1.0)	(2.0)	(1.0)	(3.0)
Ending Reserves	\$ 43.8	\$ 29.0	\$ 18.6	\$ 20.4	\$ 23.3

Working Capital Reserve

8.7

9.1

9.4

9.8

10.4

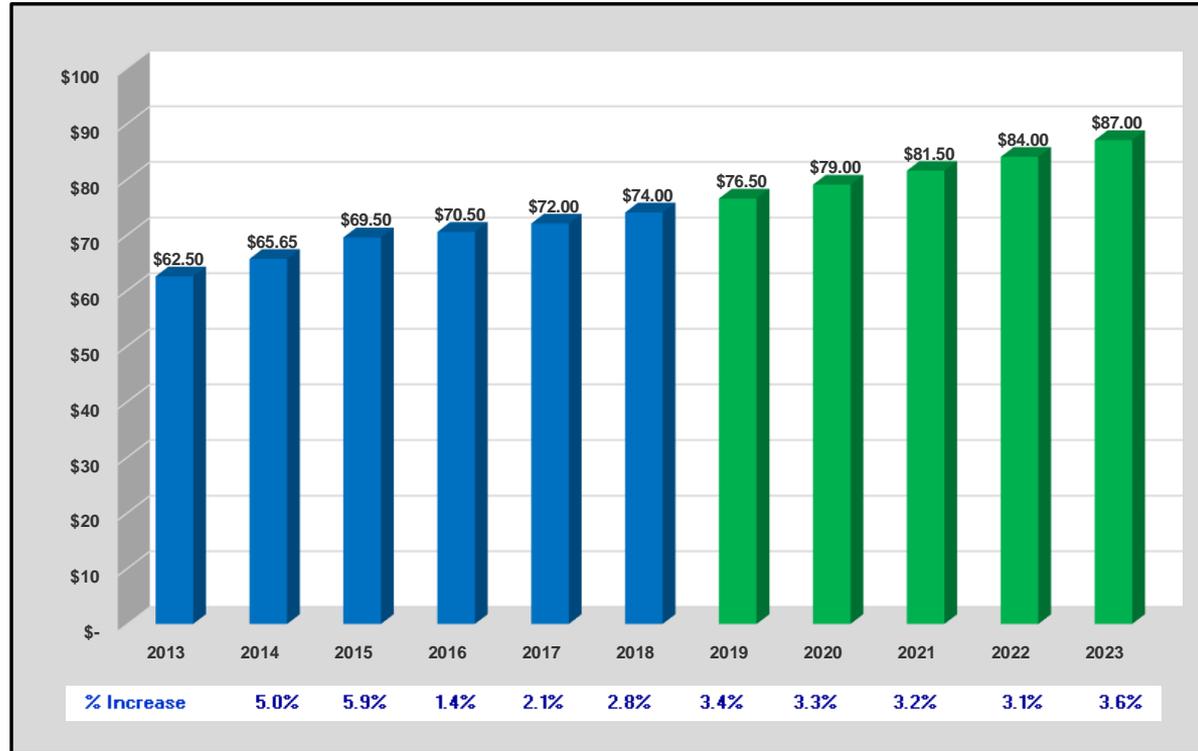


Five-Year Financial Forecast

WATER SUPPLY SYSTEM	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
System Rate Projection	\$74.00	\$76.50	\$79.00	\$81.50	\$84.00
Percentage Increase	2.78%	3.38%	3.27%	3.16%	3.07%
Debt Service Coverage	1.30	1.59	1.79	2.09	1.73



System Rate History/Forecast





Long Range Financial Plan

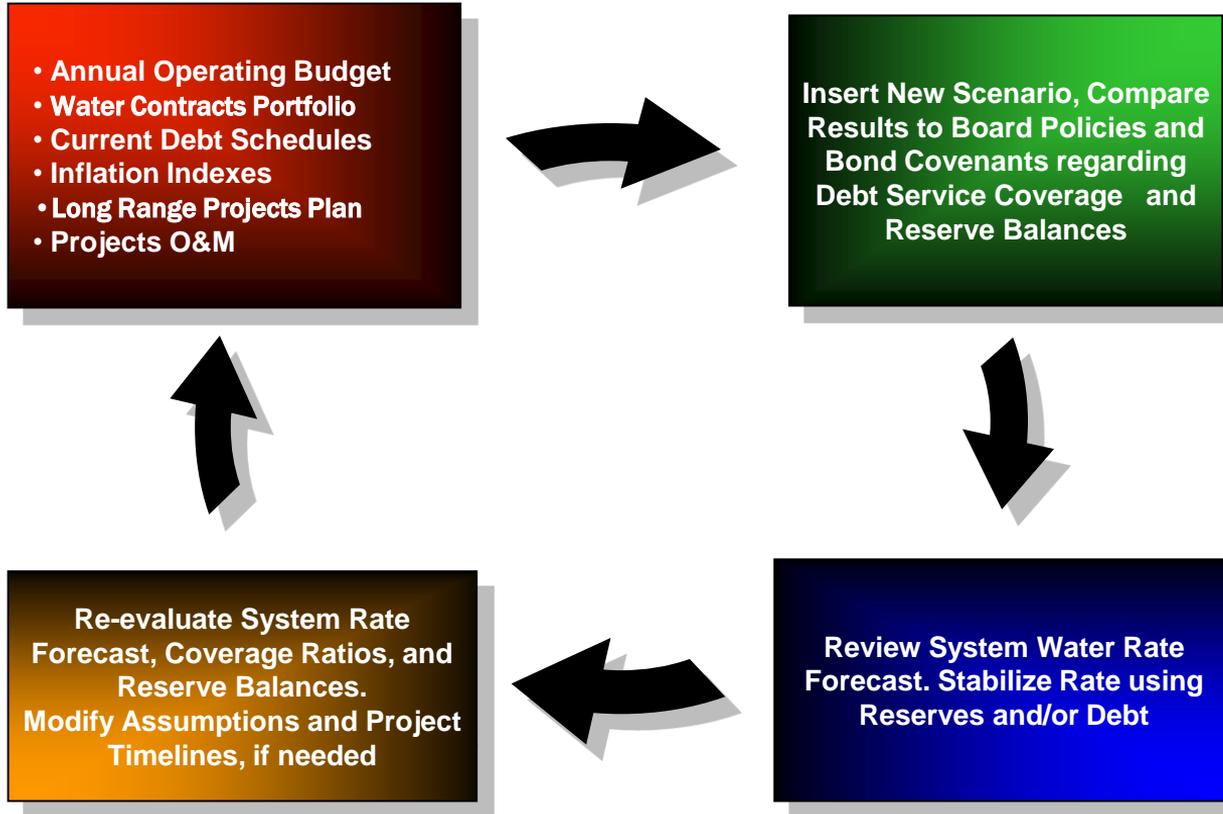
Presented by

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Planning and Development Manager

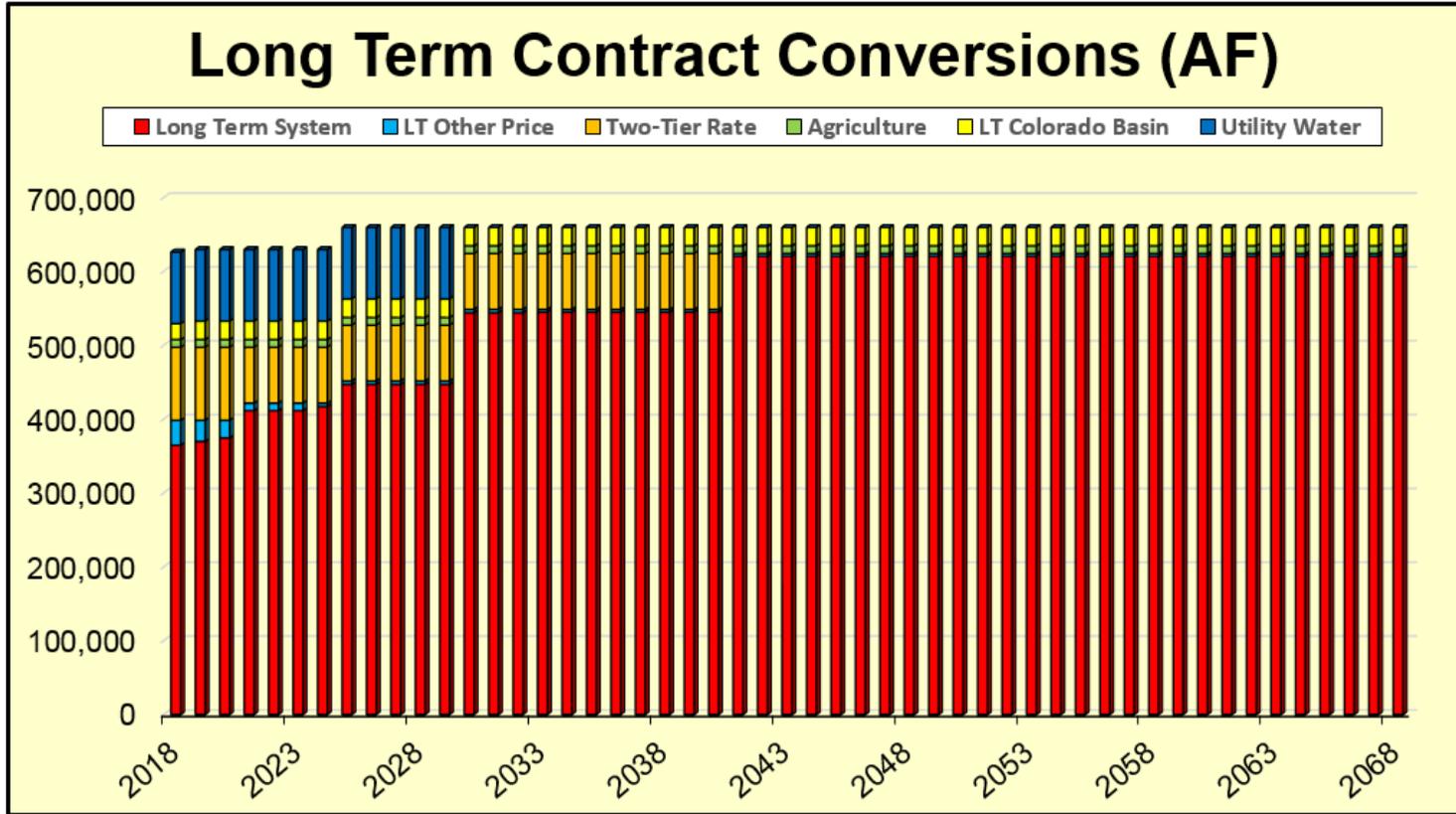


Long Range Financial Plan





Long Range Financial Plan



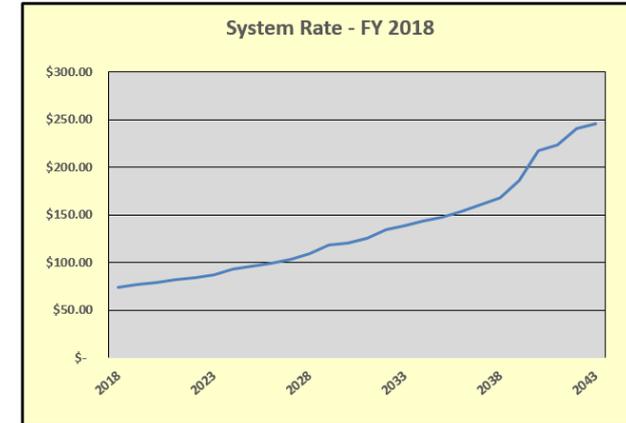
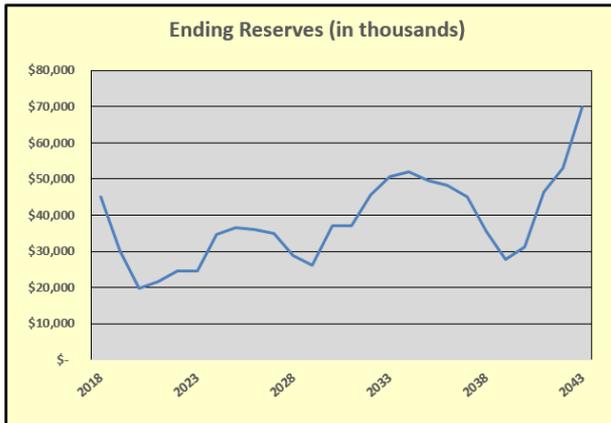
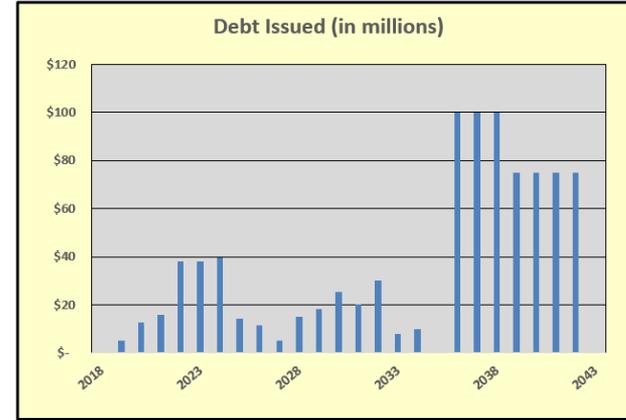
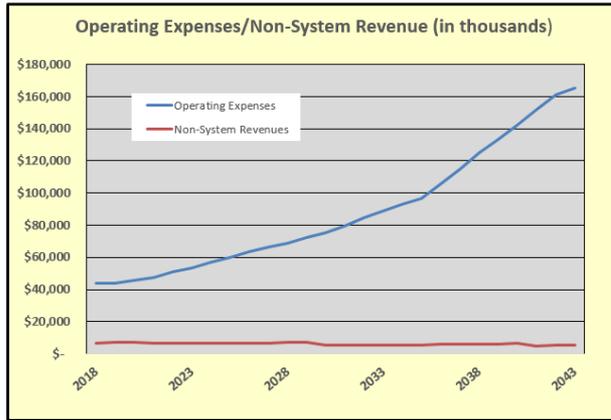


Long Range Projects Plan (in thousands)

Project Type	2018	2019	2020	2021	2022	2023-27	2028-32	2033-37	2038-42	2043-47	2048-68	Total
New Water	9,953	6,385	13,670	7,115	21,590	87,554	75,000	-	-	-	-	\$ 221,267
New Infrastructure	589	600	4,660	4,337	10,385	4,010	31,273	3,500	-	-	-	\$ 59,354
Infrastructure Maintenance	12,858	14,464	6,345	7,200	5,553	8,231	20,000	235,000	350,000	-	-	\$ 659,651
Water Quality	814	871	778	135	60	2,525	2,500	2,500	2,500	2,500	10,500	\$ 25,683
Other	1,187	-	-	-	-	2,500	2,500	2,500	2,500	2,500	10,500	\$ 24,187
ANNUAL TOTALS	\$ 25,401	\$ 22,320	\$ 25,453	\$ 18,787	\$ 37,588	\$ 104,820	\$ 131,273	\$ 243,500	\$ 355,000	\$ 5,000	\$ 21,000	\$ 990,142



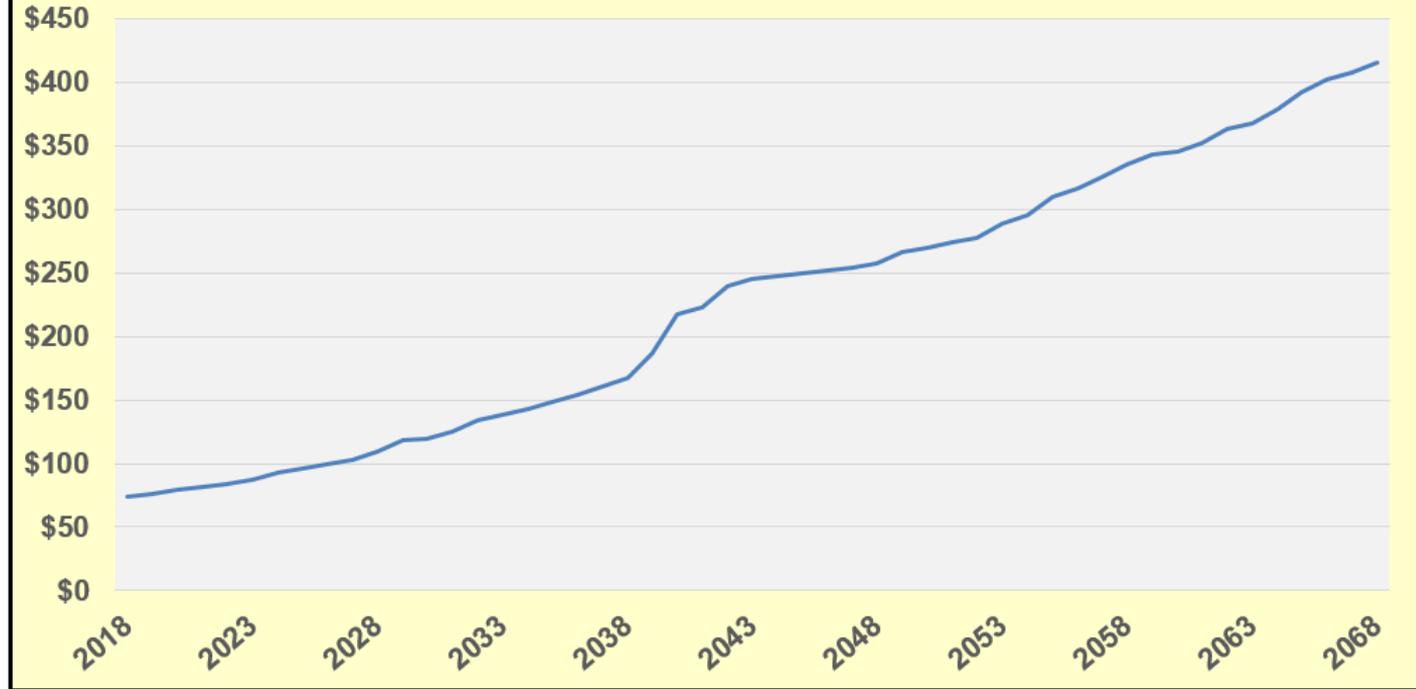
Long Range Financial Plan

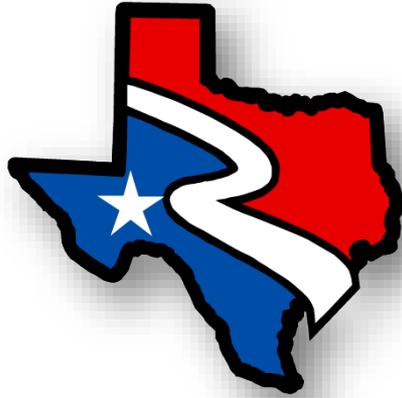




Long Range Financial Plan

System Rate - FY 2018 Baseline





Brazos River Authority