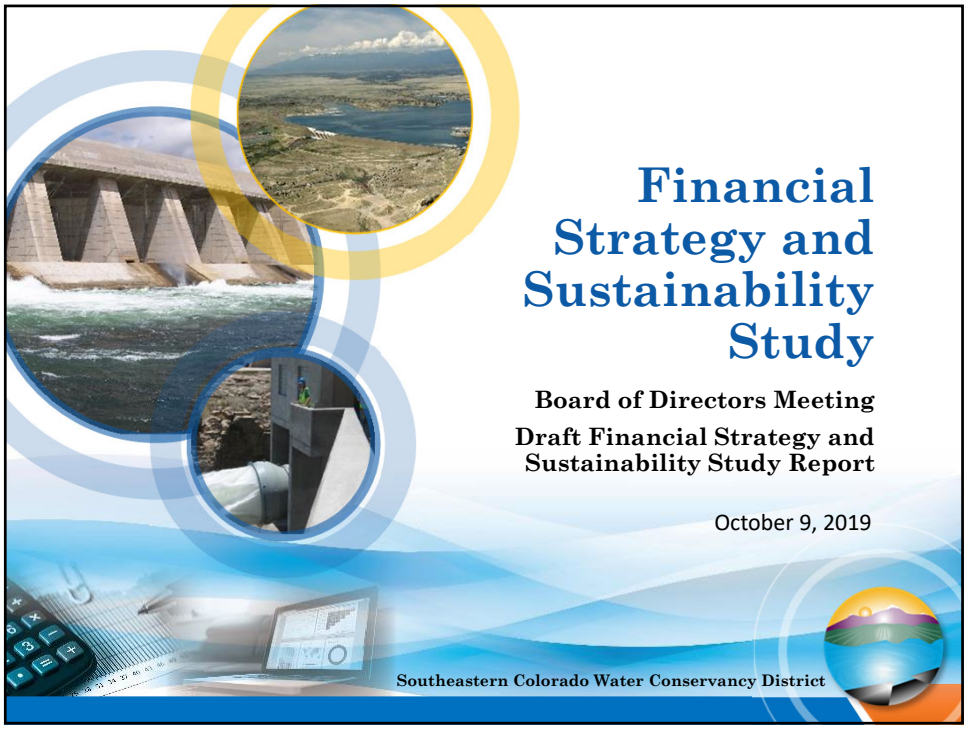
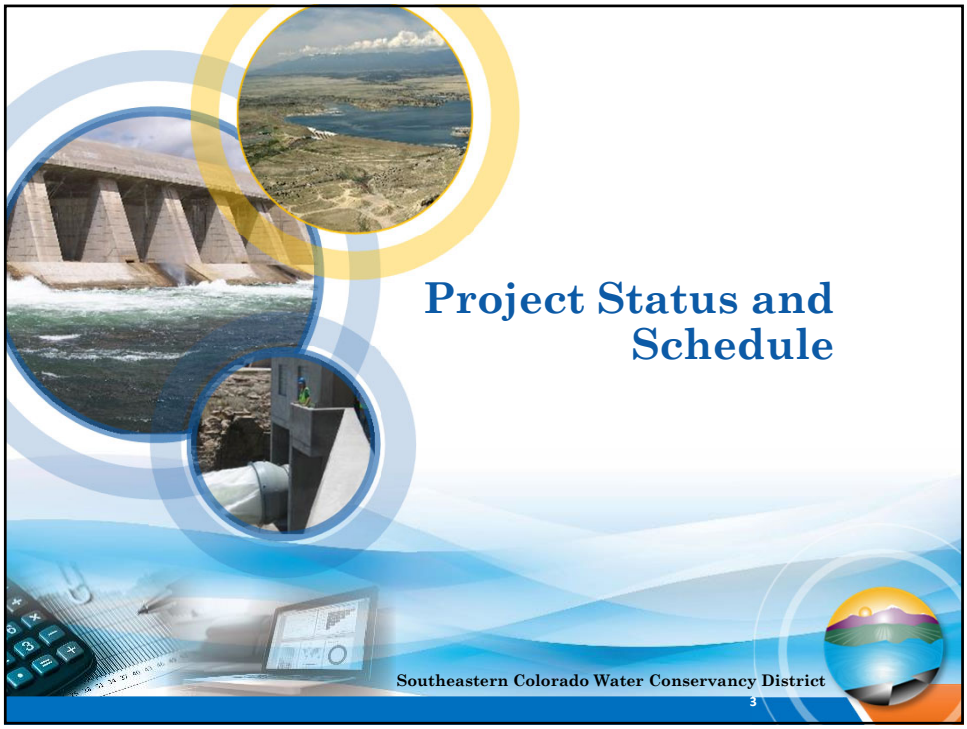


Agenda

- **Project Status and Schedule**
- **Overview of Draft Study Report**
  - Introduction and Background
  - Financial Plan
  - Cost of Service
  - Water Rate Design and Analysis
  - Benchmarking Analysis
  - Recommendations
- **Comments and Questions**



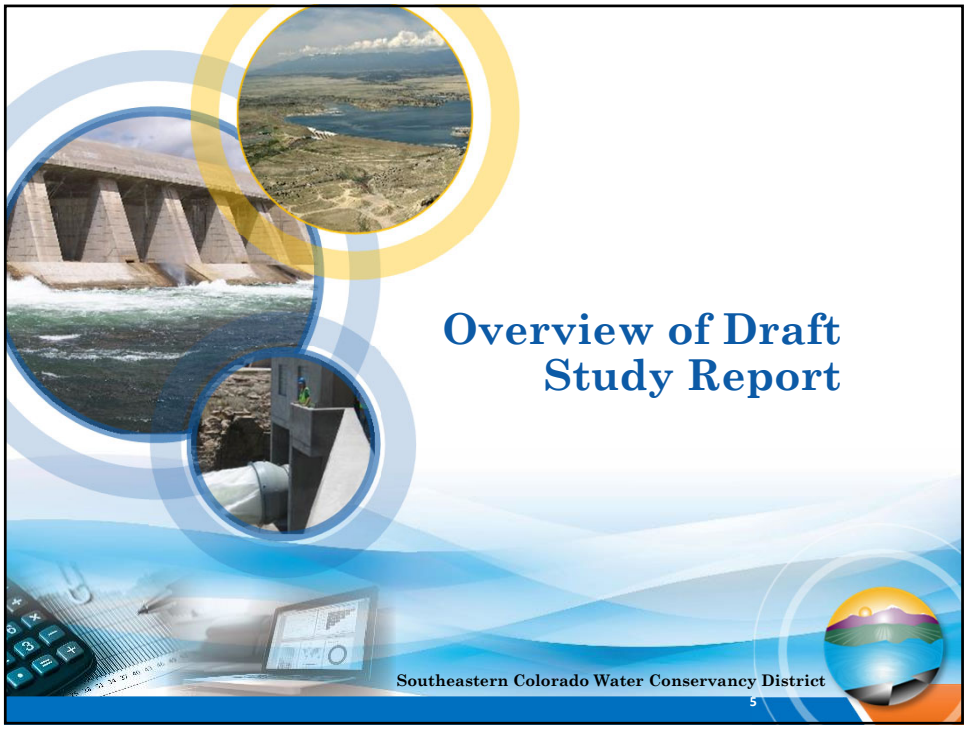
Project Schedule

JACOBS

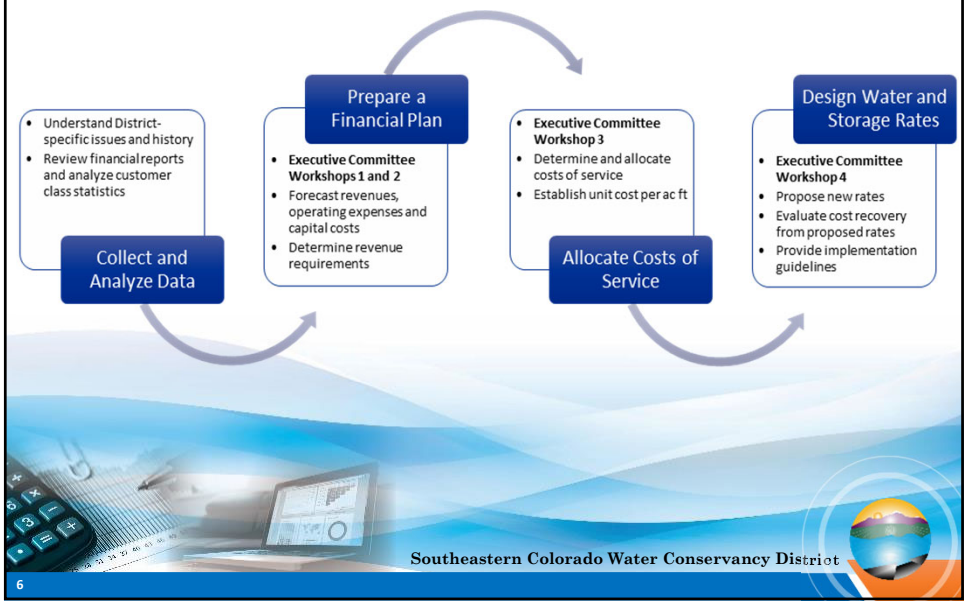
The Southeastern Colorado Water Conservancy District
Financial Strategy and Sustainability Study
Project Timeline

Task	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
Task 1 Initial Project Meeting										
Task 2 Data Collection and Analysis										
Task 3 Capital Improvement and Capital Project Plan										
Task 4 Revenue Requirements Analysis										
Task 5 Cost-of-Service Analysis										
Task 6 Rate Design Analysis										
Task 7 Comparison of Rates and Financial Performance Measures										
Task 8 Draft Report of Findings										
Task 9 The Southeastern District Board Meeting										
Task 10 Final Report and Presentations										

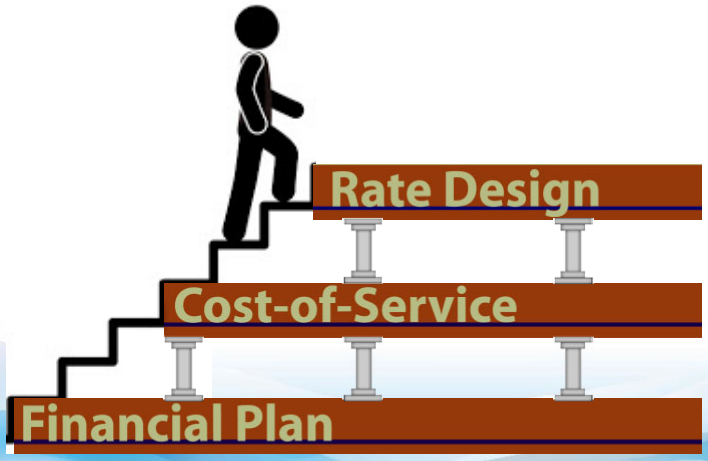
November 2019 Completion



Financial Strategy and Sustainability Study Process and Executive Committee Workshops

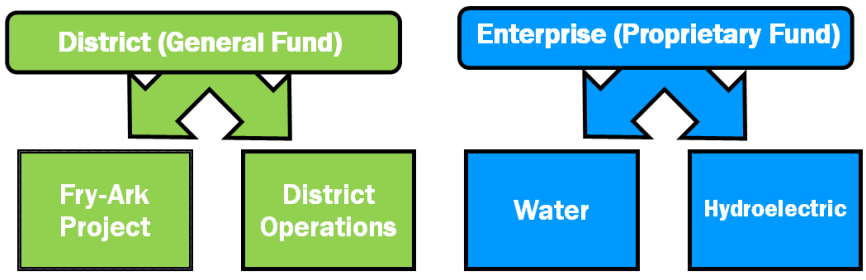


Each Step in a Rate Study Process Builds On the Prior Step



Southeastern Colorado Water Conservancy District

Background - Structure of Funds



Southeastern Colorado Water Conservancy District

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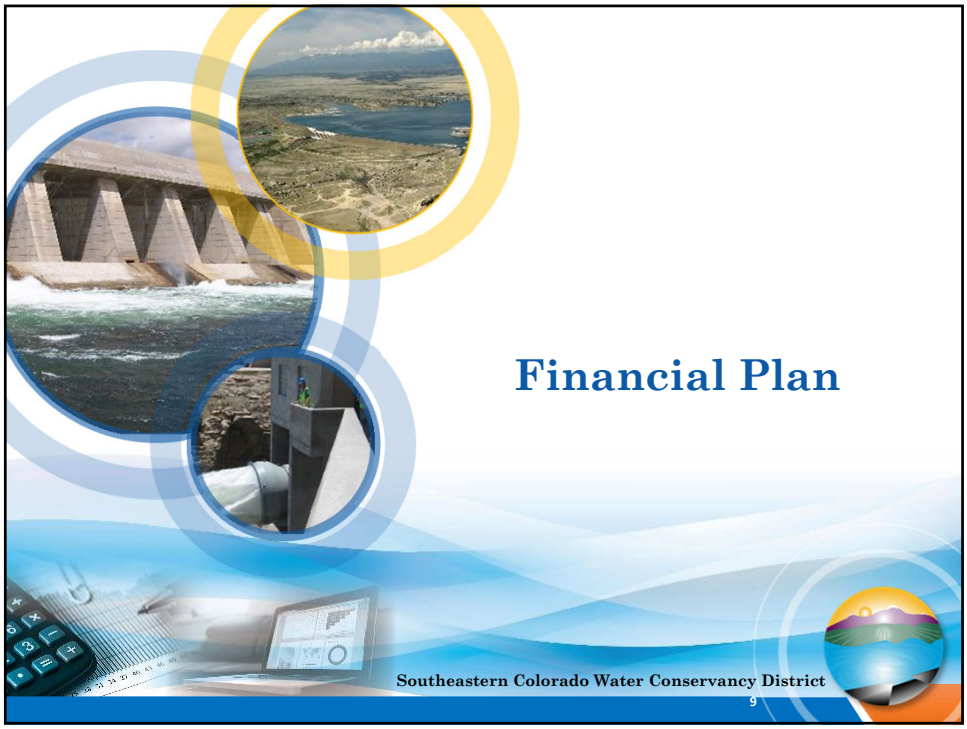

Financial Plan Timeline - Key Concepts

- **Study Period**
- **Rate Year**
- **Rate Period**
- **Forecast Period**

13-Year Study Period

FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Actual	Actual	Budget	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected

1-Year

3-Year Rate Period

10-Year Forecast Period

Southeastern Colorado Water Conservancy District

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Financial Plan Summary

Prepare a Financial Plan

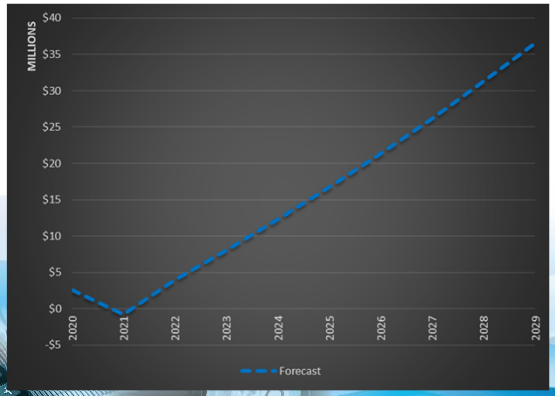
- **Executive Committee Workshops 1 & 2**
- Forecast revenues, operating expenses and capital costs
- Determine revenue requirements

- **Base Case projections forecast the unrestricted fund balances for the Forecast Period – the next 10 years.**
- **To maintain the Base Case, status quo, an approximate doubling of rate and fee revenue is needed over the next 10 years.**

Summary of Cash Flow Fry-Ark Project Subfund

Table 2-4. Summary of Cash Flow – Fry-Ark Project Subfund

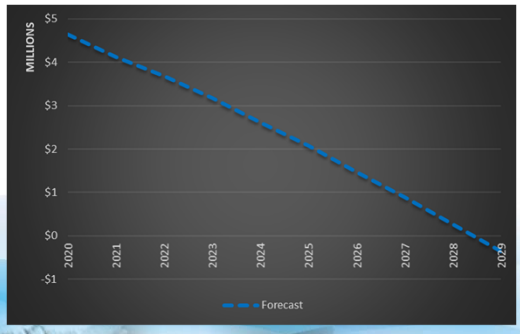
	2019 (Budget)	2020 (Projected)	2029 (Projected)
Total Revenue	$13,317,000	$13,565,000	$10,609,000
Total Expenses	13,780,000	14,837,000	5,311,000
Surplus / (Deficit)	**(463,000)**	**(1,272,000)**	**5,298,000**



Summary of Cash Flow
District Operations Subfund

Table 2-6. Summary of Cash Flow – District Operations Subfund

	2019 (Budget)	2020 (Projected)	2029 (Projected)
Total Revenue	$2,565,000	$2,630,000	$3,048,000
Total Expenses	3,256,000	3,236,000	3,665,000
Surplus / (Deficit)	**(691,000)**	**(606,000)**	**(617,000)**



Southeastern Colorado Water Conservancy District

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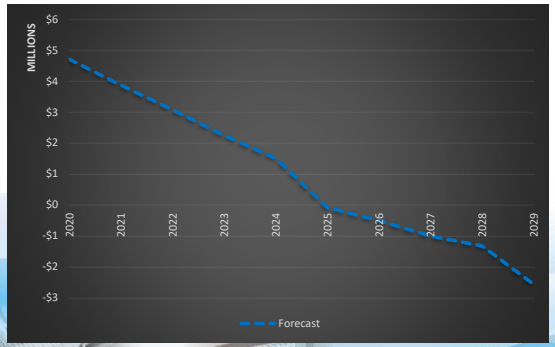
Summary of Cash Flow
Water Subfund

Table 2-8. Summary of Cash Flow – Water Subfund

	2019 (Budget)	2020 (Projected)	2029 (Projected)
Total Revenue	$1,930,000	$1,931,000	$1,931,000
Total Expenses	2,145,000	3,633,000	3,851,000
Surplus / (Deficit)	**(215,000)**	**(1,702,000)**	**(1,920,000)**



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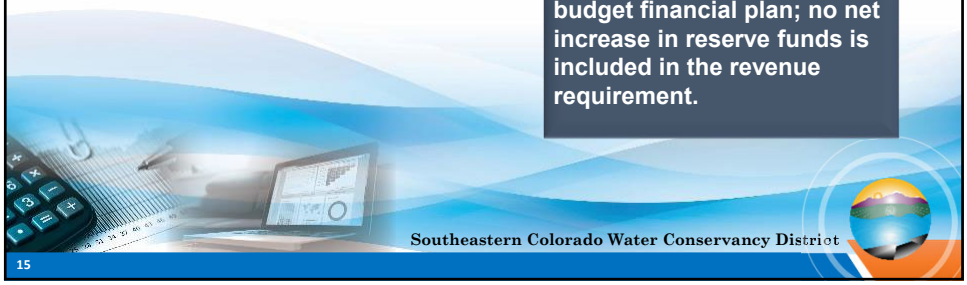
Combined Net Revenue Requirement

- **The combined net revenue requirement is a 10-year annual average**
- **District Operations Subfund**
  - $600,000 annually
- **Water Subfund**
  - $1,100,000 annually

The 10-year combined deficit (District Operations Subfund and Water Subfund) is $17.2 million over the Forecast Period, or an average $1.72 million annually. This amount is the additional or net revenue required from user charges.

The base case is a balanced-budget financial plan; no net increase in reserve funds is included in the revenue requirement.



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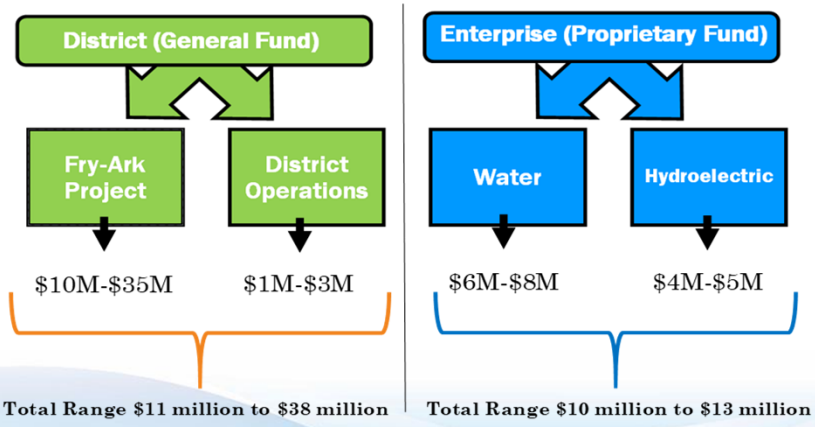
Financial Plan – Reserve Targets



Southeastern Colorado Water Conservancy District

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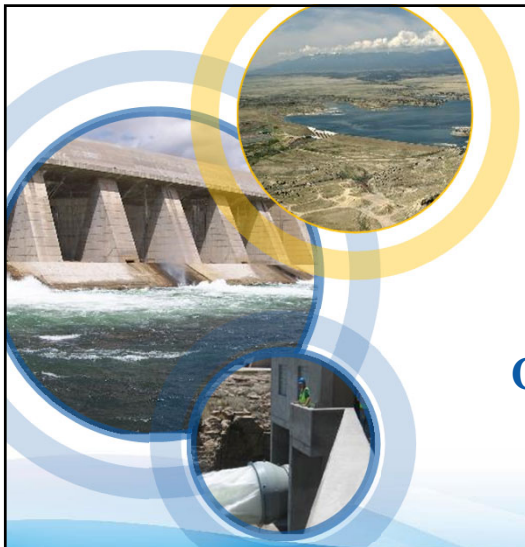
Financial Plan - Reserves

- **IMPORTANT NOTE – Reserve Fund targets were not established by the Executive Committee.**
- **As such, additional contributions to reserve funds from user charges (rates) were not considered in the financial plan revenue requirement and were not included in the water rates.**



Cost of Service

Cost of Service - Summary

- Executive Committee Workshop 3
- Determine and allocate costs of service
- Establish unit cost per acre-foot

Allocate Costs of Service

- **A cost of service basis was calculated for:**
  - Project Water
  - Municipal Carry-Over Project Water (M&I)
  - Return Flows
  - Winter Water Storage (Irrigation)
  - If-and-When Storage (Excess Capacity)
- **Surcharges were adopted by prior Board action and remain the same**
- **The approach isolates the cost of service for Project Water only – to determine equitable proportionality.**
- **The cost of service calculation is only a portion of the user charges and the a portion of the total user charge revenue requirement.**

Southeastern Colorado Water Conservancy District

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Cost of Service Approach versus the Total Revenue Requirement

- **The objective is the cost of service analysis is equitable proportionality – to calculate fair and equitable charges between customer classes (M&I and Irrigation).**
- **Percentages of revenue from various user charges**

– Project water –	$295,000	19%
– Winter Water –	$0	0%
– Storage charges	$0	0%
– Well Augmentation –	$13,000	1%
– Return Flows –	$45,000	3%
– Surcharges –	$580,000	37%
– Aurora IGA –	$100,000	6%
– Other user charges –	$518,000	34%
	$1,600,000	100%

  - Partnership Contributions
  - Participant Payments
  - Aurora IGA Admin Fee

Southeastern Colorado Water Conservancy District

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SECWCD Project Water Cost of Service Results

- **Uniform Cost of Service**

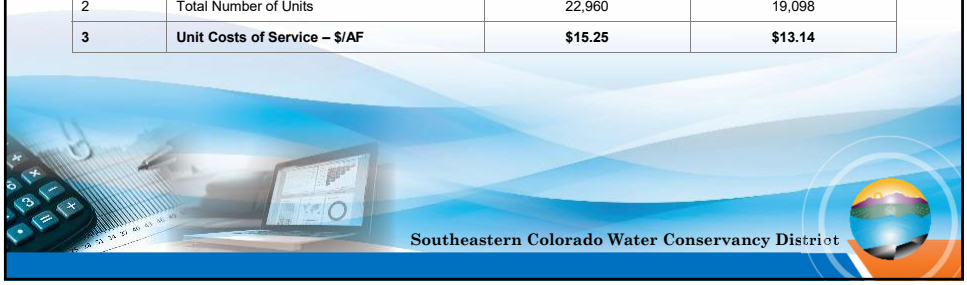
Table 3-2. Project Water Cost of Service ($/AF)

Allocation Method	Municipal/Industrial	Irrigation
Uniform – $/AF	$14.29	$14.29

- **Split Allocation Cost of Service**

Table 3-3. Project Water Unit Cost of Service ($/AF)

Line No.	Description	Municipal/Industrial	Irrigation
1	Net-Net Cost of Service	$350,000	$251,000
2	Total Number of Units	22,960	19,098
3	**Unit Costs of Service – $/AF**	**$15.25**	**$13.14**



Types of Storage

- **Municipal Carry-Over Project Water (M&I)**
- **Winter Water Storage (Irrigation)**
- **If-and-When Storage = Excess Capacity**

IMPORTANT: Storage revenue depends on both the rate charged and the amount, or acre-feet, subscribed.

Municipal Carryover of Project Water

- **Opportunity Cost Approach**
  - Evaporation losses
  - Transit losses
  - Foregone return flow sales

Cost causation is the driver for the opportunity cost approach. It complies with the intent and practice of cost of service analysis by definition. It is reflective of a real cost to the District.

Table 3-4. Carry-Over Project Water Cost of Service

Step Description	Opportunity Cost ($/AF)
Step 1: M&I Project Water Cost per Acre Foot ($15.25)	
Step 2: Annual Evaporation Losses	$1.52
Step 3: Transit Losses (on evaporation replenishment)	$0.17
Step 4: Foregone Return Flow Sales	$10.17
Step 5: Total Opportunity Cost of Carryover Water	**$11.86**

Recall that this charge is phased-in as described in the rate design section

Southeastern Colorado Water Conservancy District

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Winter Water Storage

- **Simply apply the cost of service based percent water rate increase (104%) to the current winter water storage rate.**
- **Current rate: $2.80**
- **Cost of service: $5.72**

Southeastern Colorado Water Conservancy District

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If-and-When Storage (Excess Capacity Storage)

- Storage is not guaranteed
- Water is non-Project water
- Cost of service is reflected in current District surcharges
- No additional if-and-when water rate

Description	Current Water Rate and Surcharges ($/acre-foot)					
	Current Water Rate ($)	Safety of Dams ($)	Water Activity ($)	Environmental Stewardship ($)	Augmentation ($)	Current Total Charge ($)
Project Water Sales						
Irrigation	7.00	0.50	0.75	0.75	--	9.00
Municipal	7.00	0.50	1.50	0.75	--	9.75
Project Water Sales used for Well Augmentation						
Irrigation used for Well Augmentation	7.00	0.50	0.75	0.75	2.60	11.60
Municipal used for Well Augmentation	7.00	0.50	1.50	0.75	2.60	12.35
Storage Charges						
Winter Water Storage	2.00	0.25	--	0.75	--	3.80
Carry-Over Project Water		1.00	1.25	0.75	--	3.00
If and When Storage						
In District	--	0.50	0.50	0.75	--	1.75
Out of District	--	2.00	4.00	0.75	--	6.75
Aurora	--	--	10.00	--	--	10.00
Project Water Return Flows						
Return Flows	6.00	0.50	--	0.75	--	7.25

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Return Flows

- Return flows replace depletions within Southeastern District boundaries
- Return Flows require as much, if not more, administration (and cost) as Project Water.
- Return Flows are a full acre foot of fully-consumable water
- Return Flows cannot be stored (and on-demand)

Table 3-5. Return Flows Cost of Service

Step Description	M&I ($/AF)	Irrigation ($/AF)
Step 1: Project Water Cost per Acre Foot	$15.25	$13.14
Step 2: Project Water COS Value (full ac-ft)	$25.42	$21.90
Step 3: On-Demand Credit	($6.64)	($5.72)
Step 4: Return Flows COS	**$18.78**	**$16.18**

Southeastern Colorado Water Conservancy District

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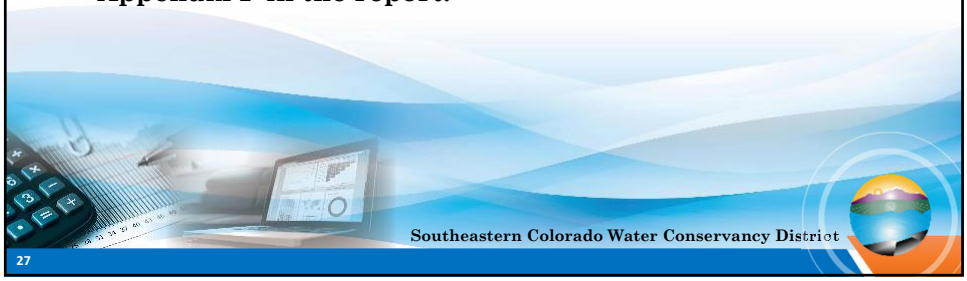
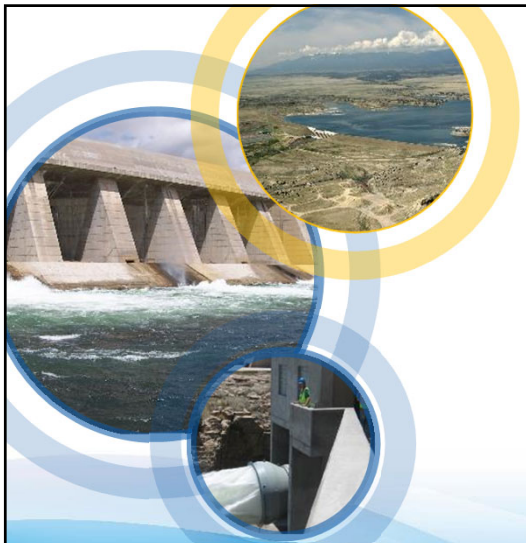
Irrigator Ability-to-Pay

- Ability-to-pay, or payment capacity, for irrigators has been an important factor in setting Project Water rates, based on the history of the District's ability-to-pay negotiations with Reclamation.
- Ability-to-pay is not a COS method, but rather follows guidance published by Reclamation.
- Based on this guidance, and analysis of recent regional farm data, the ability-to-pay rate for the irrigation customer class is determined to be $22.72 per ac-ft.
- Appendix F in the report.





Rate Design

Water Rate Design and Analysis

Design Water and Storage Rates

- **Executive Committee Workshop 4**
- Propose new rates
- Evaluate cost recovery from proposed rates
- Provide implementation guidelines

3 Water Rate Scenarios

- **Aggressive Rate Phase-In Scenario (1-year phase-in)**
- **Moderate Rate Phase-In Scenario (5-year phase-in)**
- **Gradual Rate Phase-In Scenario (10-year phase-in)**

Southeastern Colorado Water Conservancy District

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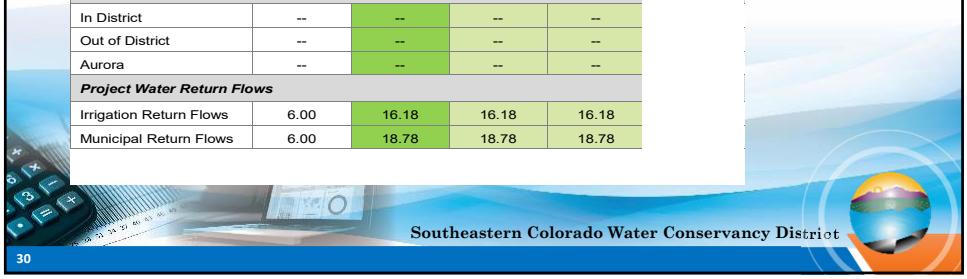
Water Rate Design and Analysis - Aggressive

Table 4-11. Current and Proposed Water Rates – Option 1 – Aggressive

Description	Current ($/AF)	2020 ($/AF)	2021 ($/AF)	2022 ($/AF)
Project Water Sales				
Irrigation	7.00	13.14	13.14	13.14
Municipal	7.00	15.25	15.25	15.25
Project Water Sales used for Well Augmentation				
Irrigation used for Well Augmentation	7.00	13.14	13.14	13.14
Municipal used for Well Augmentation	7.00	15.25	15.25	15.25
Storage Charges				
Winter Water Storage*	2.80	5.72	5.72	5.72
Carry-Over Project Water	--	--	2.97	5.93
If and When Storage				
In District	--	--	--	--
Out of District	--	--	--	--
Aurora	--	--	--	--
Project Water Return Flows				
Irrigation Return Flows	6.00	16.18	16.18	16.18
Municipal Return Flows	6.00	18.78	18.78	18.78



Southeastern Colorado Water Conservancy District

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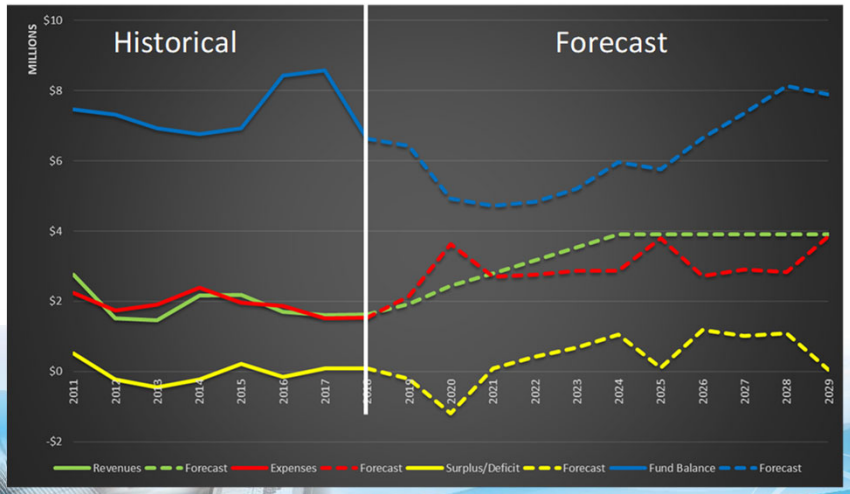
Water Rate Design and Analysis - Aggressive Water Subfund Cash Flow Forecast



Water Rate Design and Analysis – Aggressive Additional Revenue from Proposed Rates

Table 4-14. Additional District Revenue from Proposed Rates – Option 1 – Aggressive

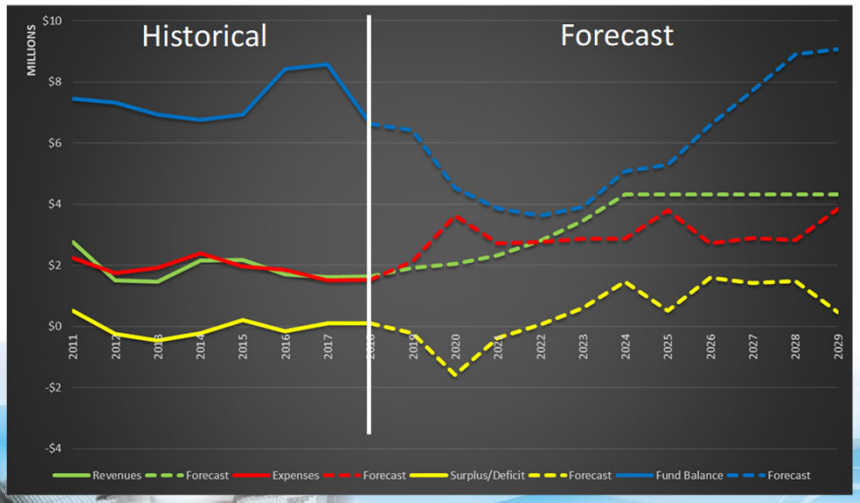
Description	FY 2020	FY 2021	FY 2022
Project water sales	$307,000	$307,000	$307,000
Winter water storage (District portion)	123,000	123,000	123,000
Carry-over project water sales	--	367,000	735,000
Return flow water sales	79,000	79,000	79,000
Total Projected Additional Revenue	**508,000**	**875,000**	**1,243,000**
Required Revenue (Both Funds)	**2,308,000**	**1,307,000**	**1,266,000**
% Difference Projected and Required Revenue	-354%	-49%	-2%

Water Rate Design and Analysis - Moderate

Table 4-12. Current and Proposed Water Rates – Option 2 – Moderate

Description	Current ($/AF)	2020 ($/AF)	2021 ($/AF)	2022 ($/AF)
Project Water Sales				
Irrigation	7.00	8.64	10.37	12.17
Municipal	7.00	9.08	11.27	13.57
Project Water Sales used for Well Augmentation				
Irrigation used for Well Augmentation	7.00	8.64	10.37	12.17
Municipal used for Well Augmentation	7.00	9.08	11.27	13.57
Storage Charges				
Winter Water Storage*	2.80	3.41	4.05	4.72
Carry-Over Project Water	--	--	1.28	3.92
If and When Storage				
In District	--	--	--	--
Out of District	--	--	--	--
Aurora	--	--	--	--
Project Water Sales used for Well Augmentation				
Irrigation Return Flows	6.00	8.44	11.01	13.70
Municipal Return Flows	6.00	8.99	12.13	15.42

Water Rate Design and Analysis – Moderate Water Subfund Cash Flow Forecast



Water Rate Design and Analysis – Moderate Additional Revenue from Proposed Rates

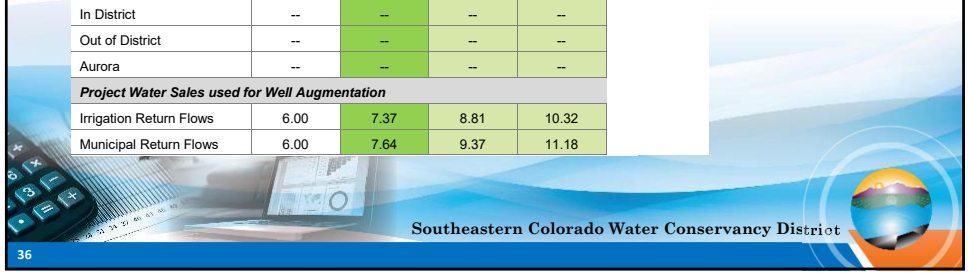
Table 4-15. Additional District Revenue from Proposed Rates – Option 2 – Moderate

Description	FY 2020	FY 2021	FY 2022
Project water sales	$79,000	$162,000	$250,000
Winter water storage (District portion)	26,000	53,000	81,000
Carry-over project water sales	--	158,000	486,000
Return flow water sales	19,000	39,000	59,000
Total Projected Additional Revenue	124,000	**412,000**	**876,000**
Required Revenue (Both Funds)	**2,308,000**	**1,307,000**	**1,266,000**
% Difference Projected and Required Revenue	-1,766%	-218%	-45%

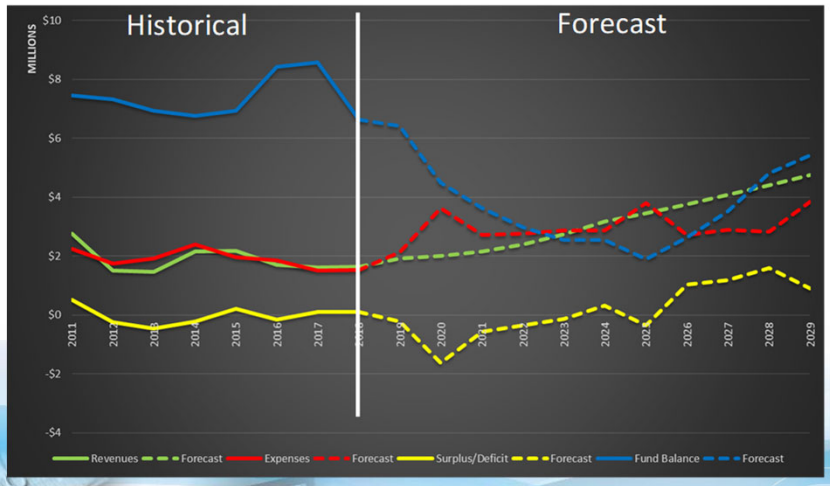
Water Rate Design and Analysis - Gradual

Table 4-13. Current and Proposed Water Rates – Option 3 – Gradual

Description	Current ($/AF)	2020 ($/AF)	2021 ($/AF)	2022 ($/AF)
Project Water Sales				
Irrigation	7.00	7.99	9.03	10.12
Municipal	7.00	8.22	9.50	10.85
Project Water Sales used for Well Augmentation				
Irrigation used for Well Augmentation	7.00	7.99	9.03	10.12
Municipal used for Well Augmentation	7.00	8.22	9.50	10.85
Storage Charges				
Winter Water Storage*	2.80	3.11	3.43	3.76
Carry-Over Project Water	--	--	0.64	1.97
If and When Storage				
In District	--	--	--	--
Out of District	--	--	--	--
Aurora	--	--	--	--
Project Water Sales used for Well Augmentation				
Irrigation Return Flows	6.00	7.37	8.81	10.32
Municipal Return Flows	6.00	7.64	9.37	11.18



Water Rate Design and Analysis – Gradual
Water Subfund Cash Flow Forecast



Water Rate Design and Analysis – Gradual
Additional Revenue from Proposed Rates

Table 4-16. Additional District Revenue from Proposed Rates – Option 3 – Gradual

Description	FY 2020	FY 2021	FY 2022
Project water sales	$47,000	$96,000	$148,000
Winter water storage (District portion)	13,000	26,000	40,000
Carry-over project water sales	--	79,000	244,000
Return flow water sales	11,000	22,000	33,000
Total Projected Additional Revenue	**70,000**	**224,000**	**466,000**
Required Revenue (Both Funds)	**2,308,000**	**1,307,000**	**1,266,000**
% Difference Projected and Required Revenue	-3,181%	-485%	-172%

Benchmarking Results

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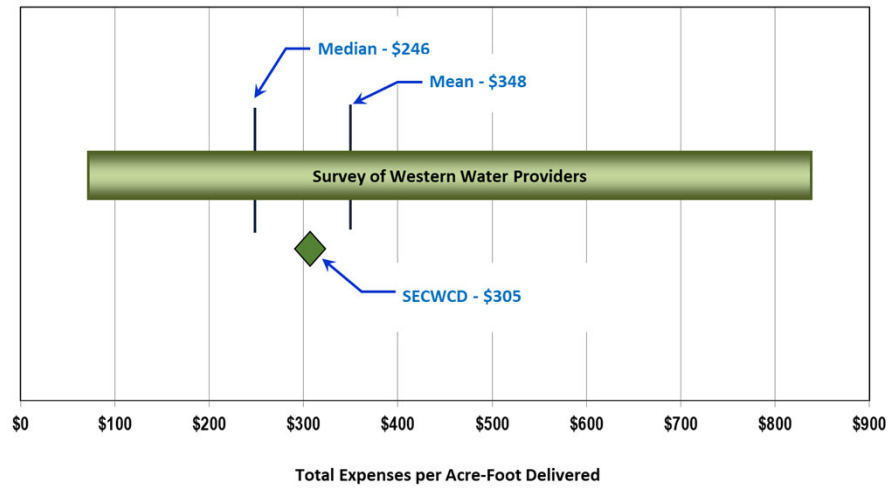
Benchmark Survey of Water Providers (2015-2017)

1. Southeastern Colorado Water Conservancy District
2. Northern Colorado Water Conservancy District
3. Central Arizona Water Conservancy District
4. Southern Nevada Water Authority
5. Central Utah Water Conservancy District
6. Tarrant Regional Water District (Texas)
7. Denver Water (Raw Water Only)
8. Oakdale Irrigation District (California)
9. Central Nebraska Public Power and Irrigation District

Benchmark – Total Expenses per Acre-Foot Delivered



Southeastern Colorado Water Conservancy District

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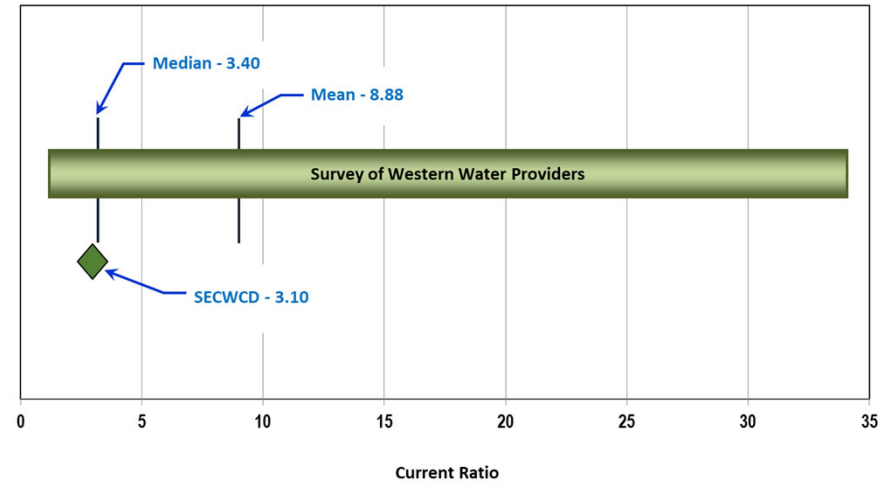
Benchmark – Current Ratio



Southeastern Colorado Water Conservancy District

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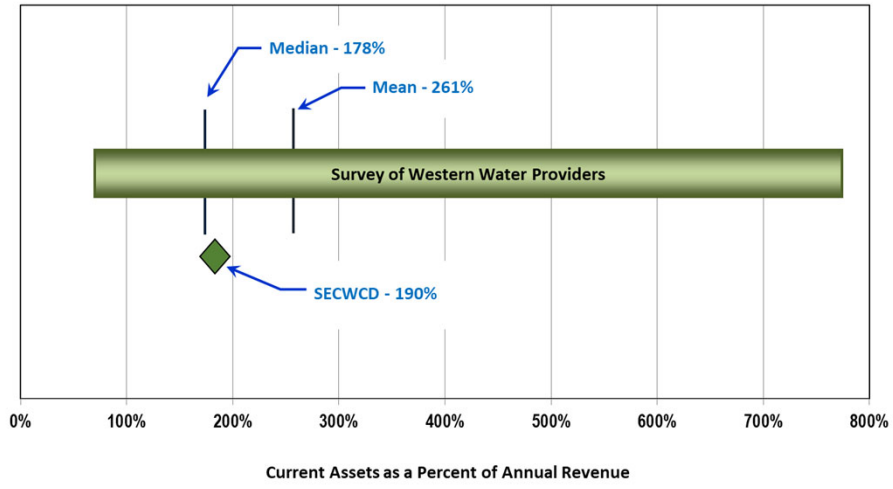
Benchmark – Current Assets as a Percent of Annual Revenue



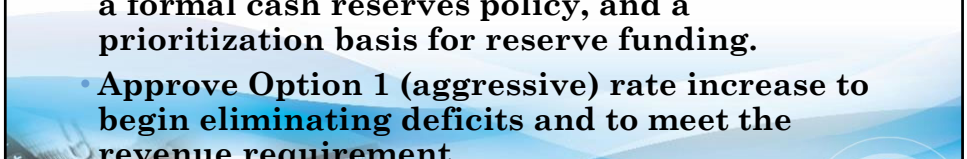
Recommendations

Recommendations included in this study

- Separately retain an independent registered financial advisor to provide advice on issuance of debt securities and financial products, if necessary.
- Calculate an average annual deficit over the Forecast Period using a cash-flow analysis. The resulting average annual deficit ($1.72 million) is the additional revenue requirement.
- Utilize a split cost allocation basis for the determination of fair and equitable water rates by customer class.
- Utilize a future test year of 2020.
- Keep existing surcharges in place.
- Utilize two customer classes: M&I and Irrigation.

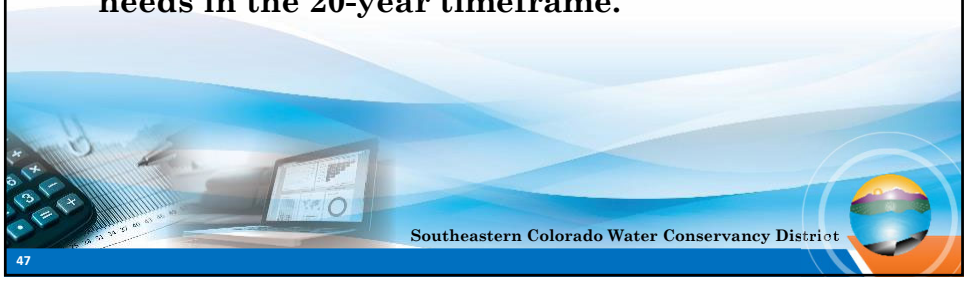
Recommendations included in this study

- Introduce a first-time water rate for Carry-over Project water to reflect the opportunity cost of carryover storage. A Carry-over Project water rate also provides a cost-based pricing signal to storage customers, which improves allocative efficiency.
- Review and consider the draft policies included in Appendix B for eventual adoption. Most importantly, the District should establish a formal cash reserves policy, and a prioritization basis for reserve funding.
- Approve Option 1 (aggressive) rate increase to begin eliminating deficits and to meet the revenue requirement.



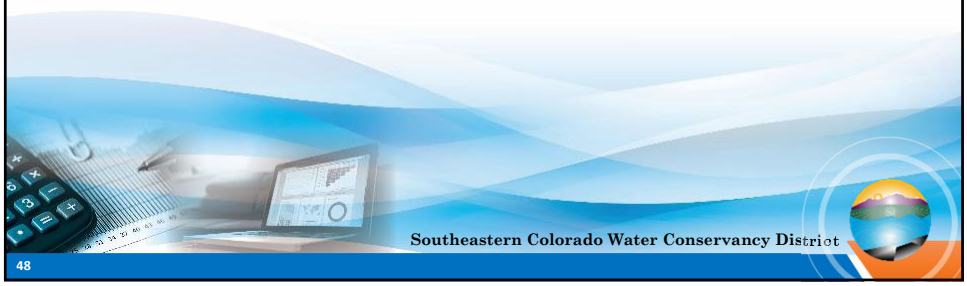
Recommendations for Future Consideration

- **Perform a follow-up COS rate study in approximately 3 years. This study should address the relevance and potential phase-out of the surcharges.**
- **Revisit the Hydroelectric Enterprise financials following startup and steady-state operations.**
- **Begin discussions on approaches for funding or financing the significant capital investment needs in the 20-year timeframe.**



Recommendations for Future Consideration

- **Quantify and conduct sensitivity analysis of significant financial risks facing the District.**
- **Establish the Reserve Categories listed below and define specific targets for each**
  - Cash Reserve
  - Operating Reserve
  - Contingency/Exposure Reserve
  - Capital Reserve

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