



# **Fiscal Year 2022 Business and Capital Plans**

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**Lower Colorado River Authority**



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The Board of Directors is composed of 15 members appointed to six-year terms by the governor with the advice and consent of the Texas Senate. Directors represent counties in LCRA’s electric and water service areas. The Board meets regularly to set strategic corporate direction for the general manager and staff, to approve projects and large expenditures, and to review progress on major activities and issues.

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# Table of Contents

LCRA’s Mission and Vision .....	4
Serving Texans Through Unprecedented Times.....	6
LCRA Financial Summary.....	9
Wholesale Power.....	11
LCRA Transmission Services Corporation.....	12
Water.....	15
Public Service Fund.....	19
Strategic Services.....	20
Enterprise Support.....	21
Capital Plan.....	22
Appendix .....	50

These business and capital plans present a long-term vision and summary of operational plans for LCRA and its nonprofit corporations. The business and capital plans should not be used as a basis for making a financial decision with regard to LCRA or any of its securities or other obligations. These business and capital plans are intended to satisfy the official intent requirements set forth in IRS Treasury Regulations Section 1.150-2. For more complete information on LCRA and its obligations, refer to LCRA's annual financial report, the official statements relating to LCRA's bonds, and the annual and material event disclosures filed by LCRA with nationally recognized municipal securities information repositories and the State Information Depository pursuant to Rule 15c2-12 of the U.S. Securities and Exchange Commission. The information in this report and within each of the documents referenced applies only as of the report's date. The business and capital plans include forecasts based on current assumptions used for planning purposes only and are subject to change. Copies of the documents referenced in this report may be obtained from Stephen Kellicker, senior vice president of Finance, LCRA, 3700 Lake Austin Blvd., Austin, TX 78703.





OUR *Mission*

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To enhance the quality of life of the Texans we serve through water stewardship, energy and community service.





OUR *Vision*

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We will be the public utility  
that sets the standard for excellence.

# Serving Texans Through Unprecedented Times

As we emerge from a time of extraordinary challenges at home and across the world, LCRA is proud to have continued delivering critical services for Texans despite unprecedented hurdles. And we are committed to continuing to serve the people of Texas in an exemplary manner in the years ahead.

We're running an effective, cost-aware business to provide power for cooperatives and small towns in Central Texas. We're also investing in transmission projects, at a level expected to reach about \$2.1 billion over the next five years, to increase reliability and support growth throughout the state.

We plan to invest about \$59.4 million over the next five years for new water supply projects as we continue to explore a variety of strategies for increasing water supplies in the lower Colorado River basin. And we plan to invest more than \$47.1 million in that time frame on projects at our dams for their continued safe and effective operation.

All of our work aligns with our mission, vision, strategic goals and values, with an uncompromising determination to deliver for the people who will depend on us for years to come.

## Our mission

**To enhance the quality of life of the Texans we serve through water stewardship, energy and community service.**

## Our vision

**We will be the public utility that sets the standard for excellence.**

## Our strategic goals

- **Run an effective, cost-aware business.**
- **Manage and develop water.**
- **Implement digital tools and use data effectively.**
- **Build today's workforce for the future.**

## Our values

- **Focus on safety.**
- **Operate with integrity.**
- **Show respect.**
- **Take initiative.**
- **Focus on service.**





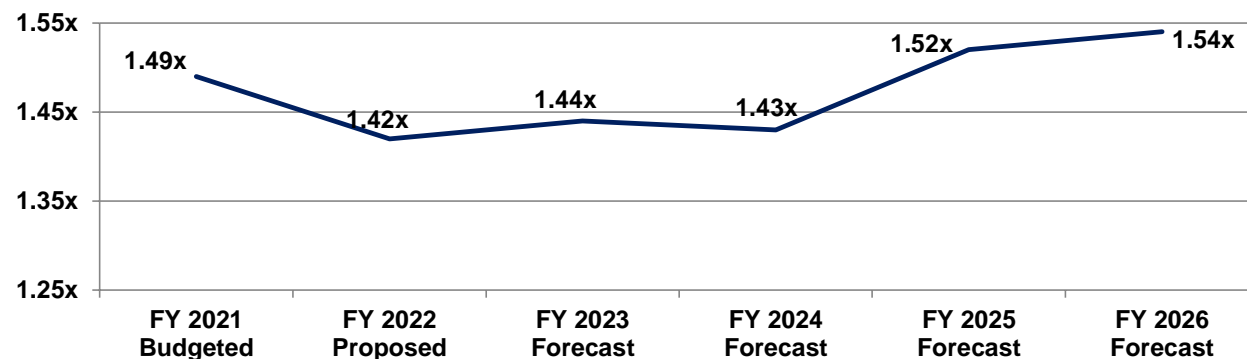


**TOGETHER.**

# LCRA Financial Summary

- Approval of this business plan authorizes LCRA to spend \$395.5 million for operations in fiscal year 2022.
- Debt service coverage, a widely used measure of financial performance, is forecast to be 1.42x in FY 2022.
- Debt service coverage is projected to remain between 1.42x and 1.54x over the five-year planning horizon.
- Stable debt service coverage reflects LCRA's commitment to manage costs and grow our business to support growth in Texas.

## LCRA Debt Service Coverage



(Dollars in millions)

		Budgeted	Proposed	Forecast			
		FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Revenues <sup>1</sup>	\$	982.3	1,039.3	1,079.7	1,111.9	1,240.6	1,285.9
Expenses <sup>1</sup>		528.4	572.9	608.3	615.8	629.7	661.3
<b>Net Operating Margin</b>		453.8	466.4	471.4	496.0	610.9	624.5
Less: GenTex Funds <sup>2</sup>		(0.5)	(3.2)	(1.6)	(1.8)	(2.3)	(1.5)
<b>Net Margin for Debt Service, Adjusted</b>		453.3	463.2	469.7	494.3	608.6	623.0
<b>Debt Service</b>	\$	304.6	325.3	325.9	345.7	399.9	404.9
<b>Debt Service Coverage</b>		1.49x	1.42x	1.44x	1.43x	1.52x	1.54x

<sup>1</sup> Revenues and expenses are net of intracompany transfers. Revenues include interest income. Expenses exclude the LCRA TSC capital charge, which is a capital expense for LCRA consolidated.

<sup>2</sup> Includes adjustments related to GenTex capital funding and reserve funding.

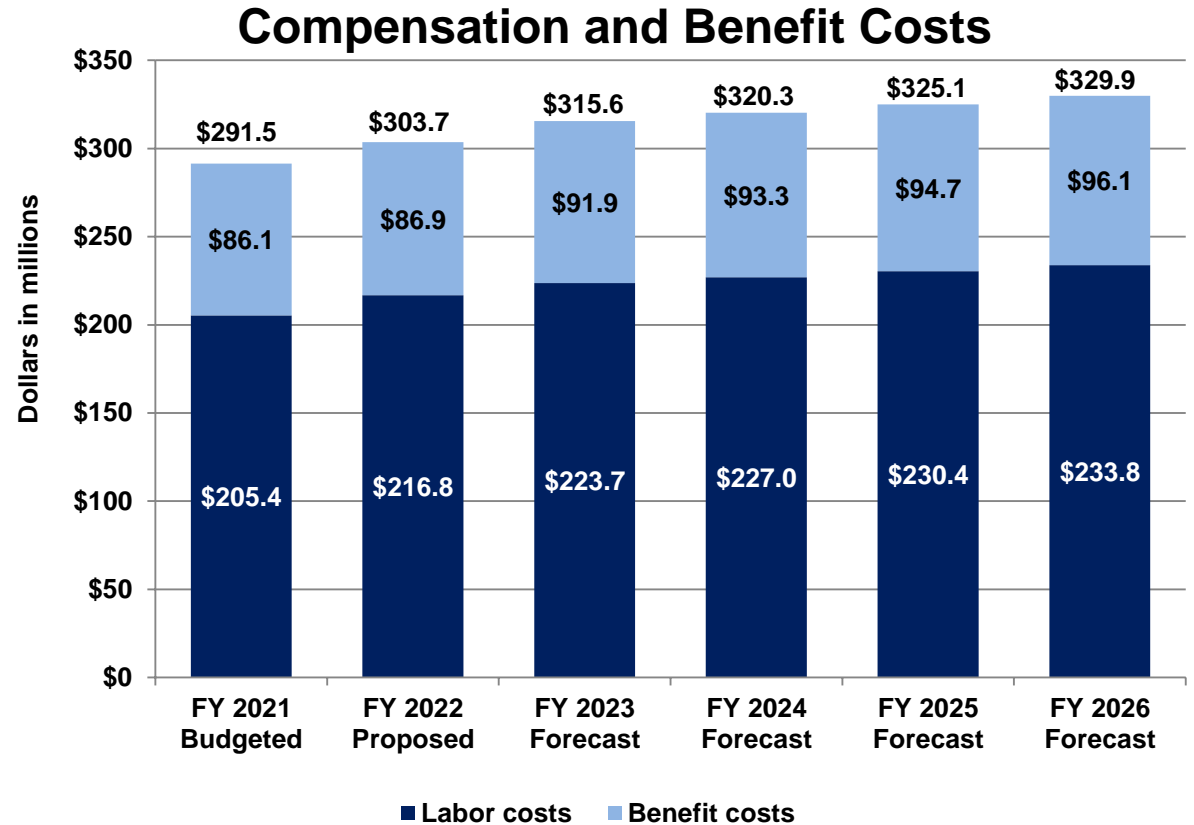


# Compensation and Benefits

Compensation and benefits are key drivers of LCRA's budget.

- Budgeted positions for FY 2022 are 2,187<sup>1</sup>, which is an increase of 33 positions (less than 2%) from the FY 2021 budget.
  - The new positions are to support and sustain growth of the transmission system and Digital Services.
  - The remaining positions are to support the other areas of LCRA as they meet sustained growth in Texas.
- FY 2022 compensation and benefit costs will increase by \$12.1 million, reflecting:
  - Position increases discussed above.
  - Merit increase planned in FY 2022.
  - Maintaining competitive pay in key areas.

<sup>1</sup> Excludes seasonal workers.



- 1.5% base pay increases are planned in FY 2023 through FY 2026.
- LCRA continues to manage benefit costs, which range from 41% to 42% of labor costs for the next five years.

# Wholesale Power – Financial Summary

Wholesale Power shows continued financial strength for a sustainable business.

- Debt service coverage is projected to range between 1.33x and 1.48x over the five-year planning horizon.
- Financials remain strong and support our strategic goal to run an effective, cost-aware business.
- LCRA expects to continue to fund capital projects through FY 2026 from coverage dollars or existing funds, rather than issuing additional debt.

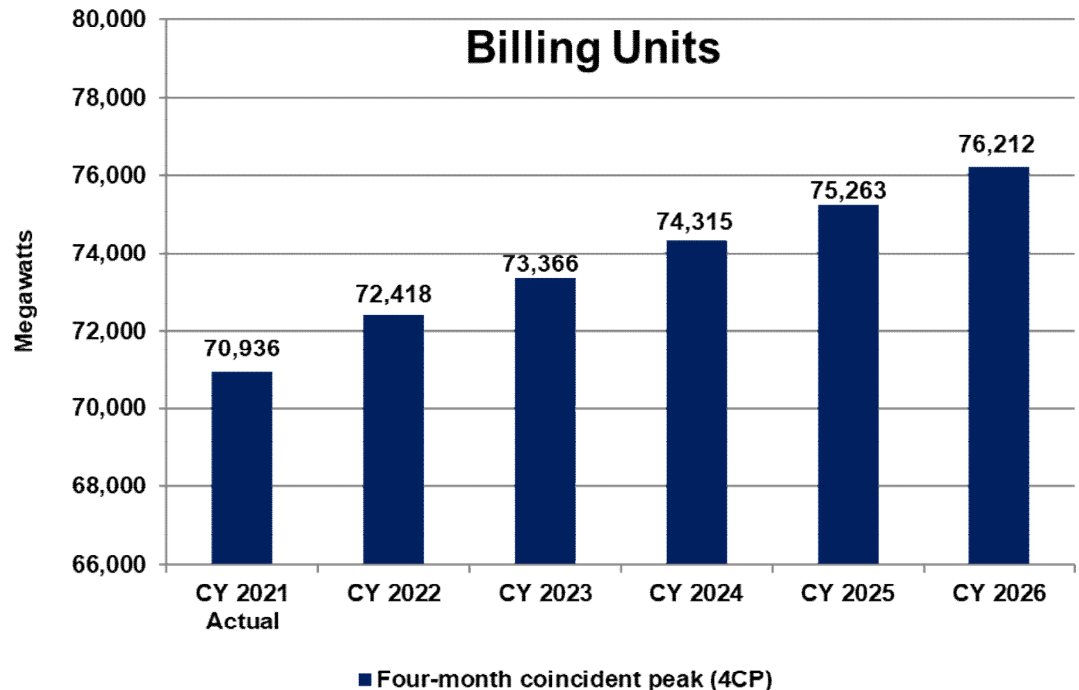
**Confidential competitive electric information has been removed from this version of the document.**



# LCRA Transmission Services Corporation – Billing Units

LCRA TSC’s billing unit is the four-month coincident peak in the Electric Reliability Council of Texas market.

- 4CP is the average of the peak ERCOT electrical demands (measured in kilowatts) during the months of June, July, August and September of the previous calendar year.
- The Public Utility Commission of Texas approves the average of these four ERCOT system peaks each year to establish a 4CP for the following calendar year.
- 4CP is forecast to grow about 1.3% per year across ERCOT.

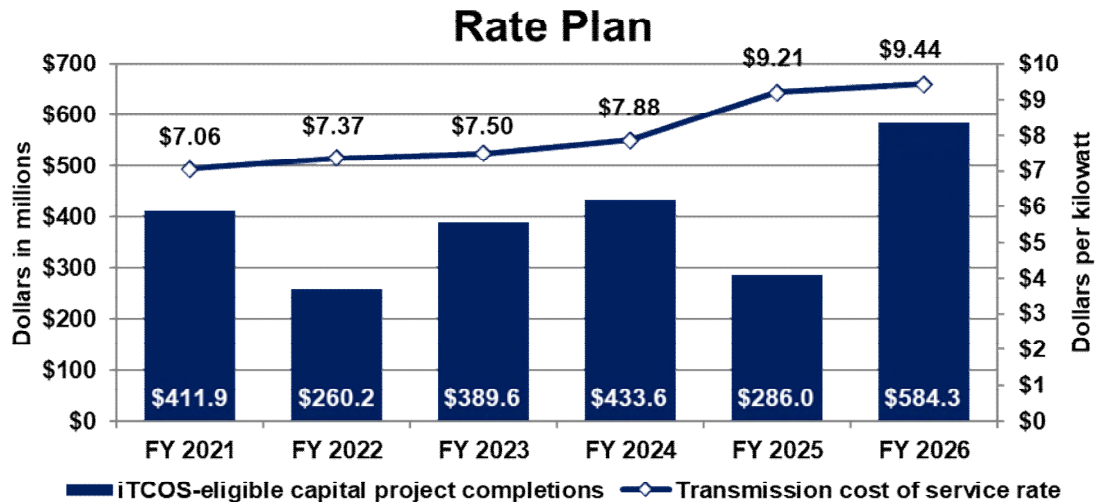
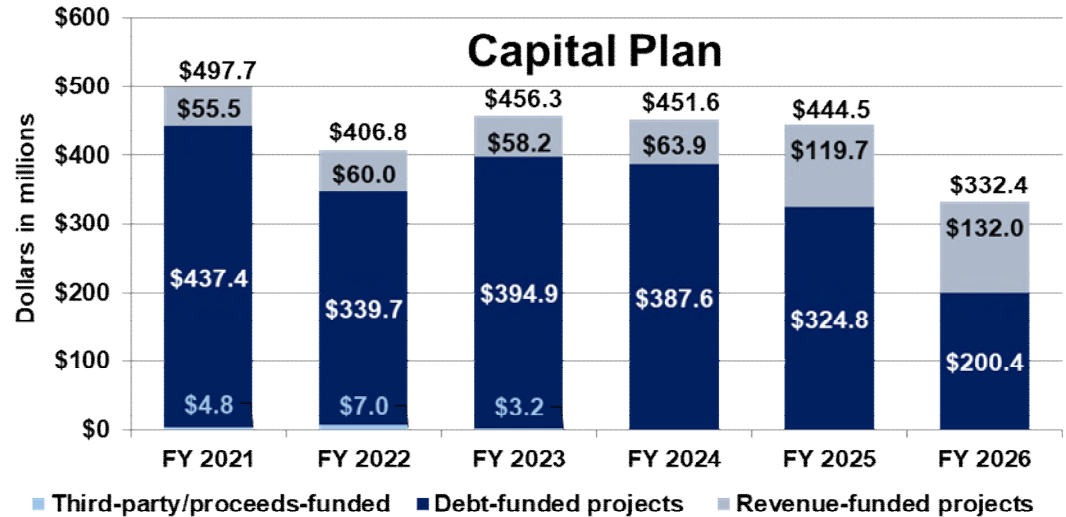


Note: One megawatt equals 1,000 kilowatts.

# LCRA TSC – Capital and Rates

We're growing the transmission system to meet customer needs:

- LCRA TSC plans to invest about \$2.1 billion on capital projects over the five-year planning period to support the needs of the ERCOT and LCRA TSC systems.
- LCRA TSC plans to recover its investment in capital costs for projects that are completed and energized through interim transmission cost of service filings in FY 2022 through FY 2026. Additionally, LCRA TSC plans to file a TCOS rate case using an FY 2023 test year with new rates going into effect in FY 2025.
- LCRA TSC will continue to recover costs associated with additional projects beyond FY 2025 after they are completed and energized.



iTCOS: interim transmission cost of service



# LCRA TSC – Financial Summary

- LCRA continues to expand the Transmission organization, adding staff and equipment needed to increase its current capacity to operate and construct facilities for LCRA TSC and provide customer services.

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Revenues	\$ 494.0	538.8	560.7	590.3	704.5	731.2
Operations and Maintenance	131.2	136.7	144.9	150.9	147.7	155.3
<b>Net Operating Margin</b>	<b>362.8</b>	<b>402.2</b>	<b>415.7</b>	<b>439.5</b>	<b>556.8</b>	<b>576.0</b>
Plus: Interest Income	4.1	1.1	1.2	2.1	3.4	4.1
Less: Assigned Enterprise Expense	53.9	60.8	62.5	65.5	69.4	76.4
Public Service Fund	14.8	16.2	16.8	17.7	21.1	21.9
Resource Development Fund	9.9	10.8	11.2	11.8	14.1	14.6
<b>Net Margin Available for Debt Service</b>	<b>288.3</b>	<b>315.6</b>	<b>326.4</b>	<b>346.5</b>	<b>455.5</b>	<b>467.1</b>
<b>Debt Service</b>	<b>\$ 210.6</b>	<b>231.6</b>	<b>245.1</b>	<b>263.1</b>	<b>317.0</b>	<b>321.2</b>
<b>Debt Service Coverage</b>	<b>1.37x</b>	<b>1.36x</b>	<b>1.33x</b>	<b>1.32x</b>	<b>1.44x</b>	<b>1.45x</b>

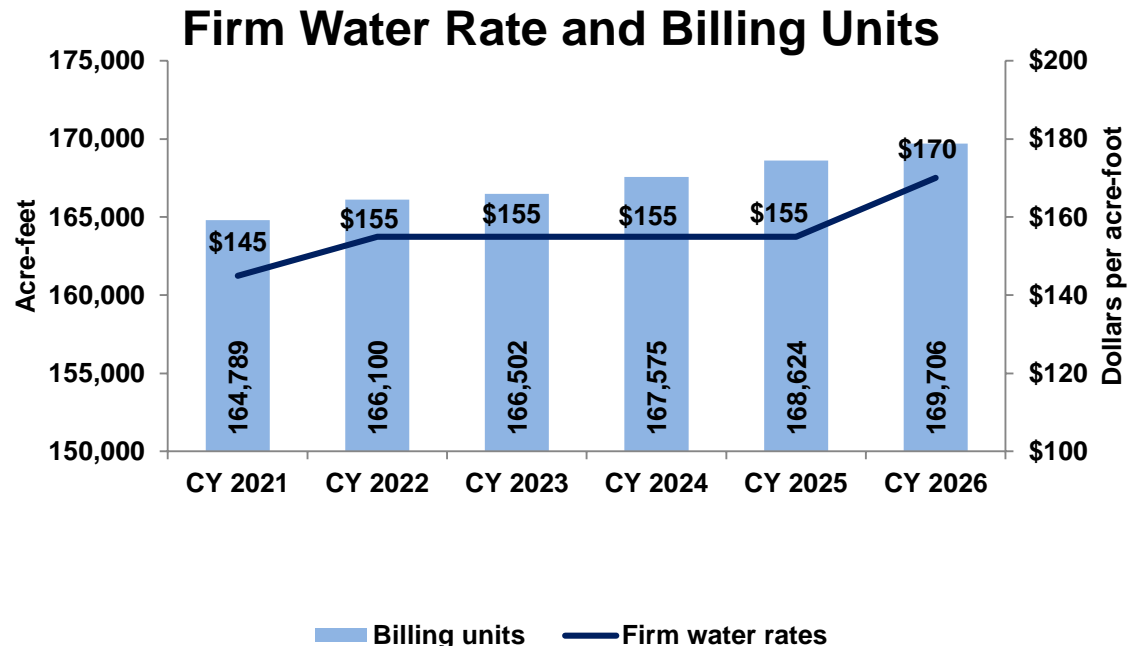
- Transmission plans to manage costs to maintain its debt service coverage ratios between 1.32x and 1.45x.

# Water – Firm Billing Units and Rates

The firm water rate will remain flat through calendar year 2021. LCRA has delayed the water rate increase previously projected for calendar year 2019 to calendar year 2022.

**We are managing costs with a delay in a planned firm water rate increase.**

- Billing units are forecast to rise by less than 1% in each calendar year of the five-year planning period.
- The firm water rate is projected to increase to \$155 per acre-foot beginning with the January 2022 billing period.
- All rates for 2022 and beyond are subject to change based on actual and projected costs and billing units.



Note: Water supplies managed by LCRA are divided into firm and interruptible water. Firm water is available even during a severe drought. During drought or times of shortage, interruptible water is cut back or cut off.

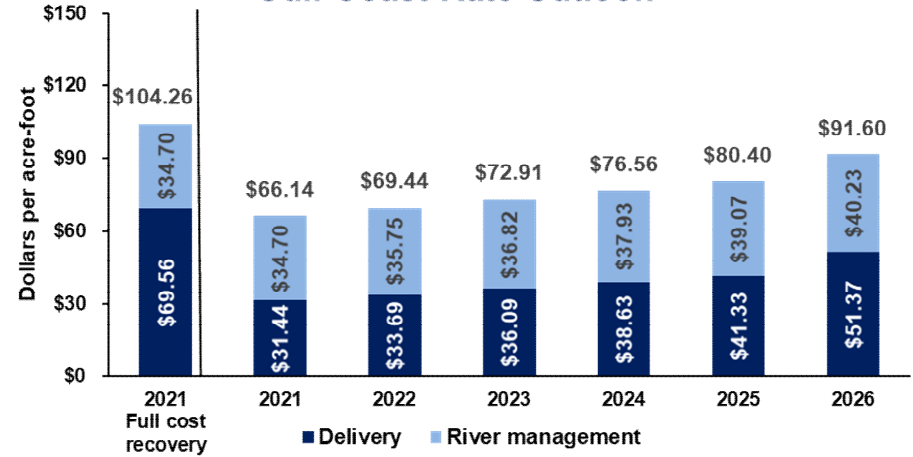


# Water – Interruptible Rates

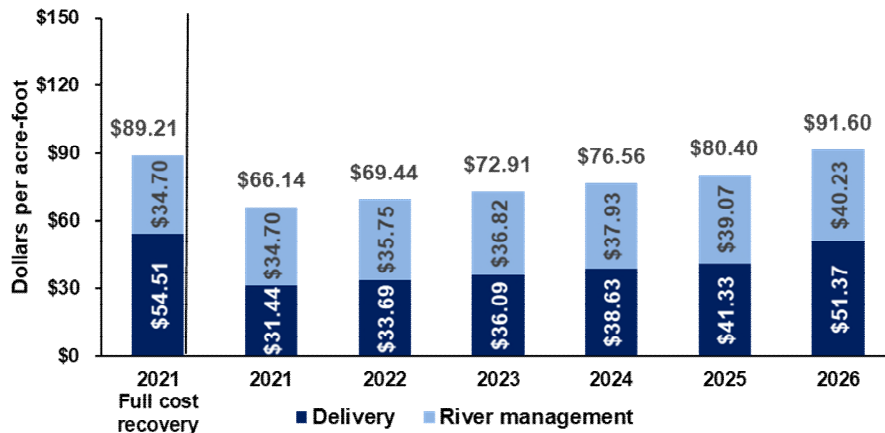
## Full cost recovery assumes a gradual approach.

- The Board approved rates for calendar year 2021 in January 2021. The rates for 2022 and beyond are subject to change based on actual and projected costs and billing units.
- Rates for Gulf Coast and Lakeside agricultural divisions are projected to increase to gradually recover the divisions' costs, including river management costs, assuming full water availability. The Garwood Agricultural Division is not subject to river management costs. Rates for Gulf Coast, Lakeside and Garwood agricultural divisions are based on full recovery of delivery costs associated with operation of the divisions.
- The rates for Gulf Coast and Lakeside for 2020 through 2026 reflect an annual contribution from the Agriculture Reserve Fund. The fund is projected to be depleted by the end of 2026. The rate impact of the contributions are reflected in the delivery component of the rate.

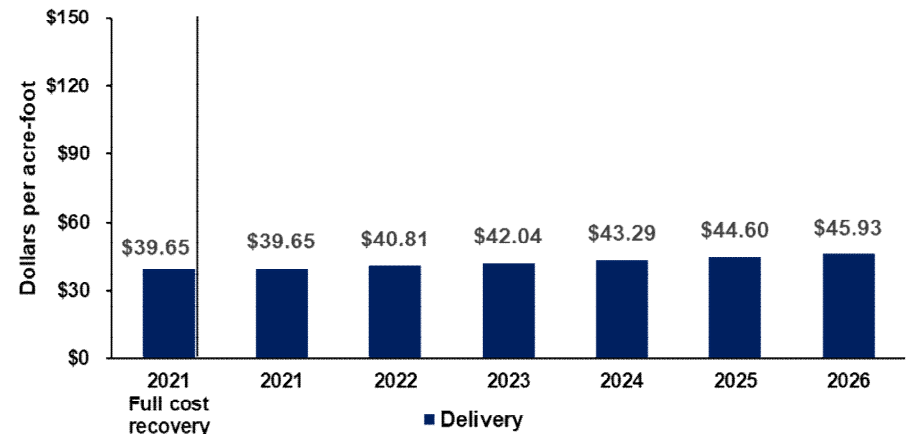
### Gulf Coast Rate Outlook



### Lakeside Rate Outlook



### Garwood Rate Outlook



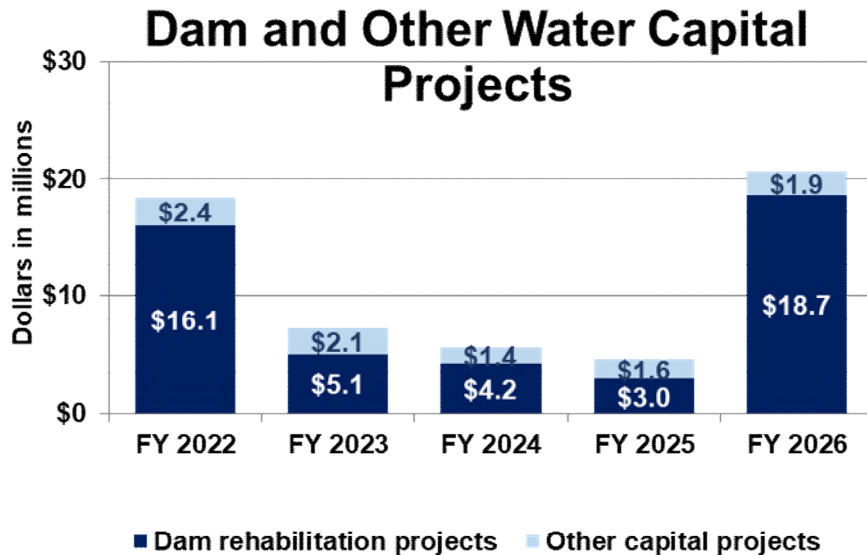
# Water – Capital

## Dam rehabilitation projects:

- LCRA plans to invest \$47.1 million in dam rehabilitation projects (excluding projects strictly for hydroelectric power generation) over the next five years for the continued safe and effective operation of the dams. As the projects continue, the costs to rehabilitate the dams could increase. LCRA primarily will issue debt to pay for these projects and recover the costs in the firm water rate. However, LCRA funds will pay for the Lane City Dam Rehabilitation project.

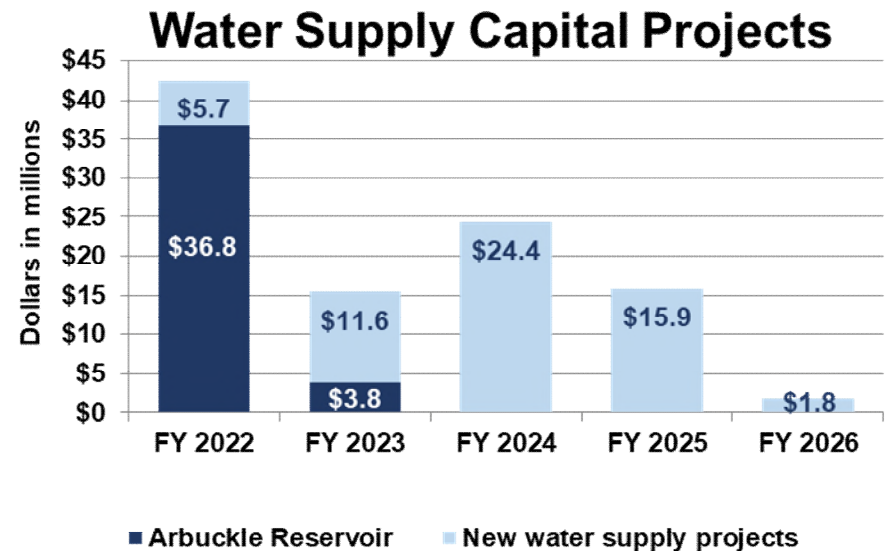
## Other capital projects:

- Other capital projects include capital for irrigation and minor capital needs for Water.



## New water supply capital projects:

- Capital spending for Arbuckle Reservoir will continue through FY 2023.
- LCRA plans to invest about \$59.4 million over the next five years for new water supply projects. LCRA expects to pay for these projects with existing funds or by issuing debt and recovering the costs in the firm water rate.
- LCRA continues to evaluate the timing and funding for the construction phases of future projects.



# Water – Financial Summary

We are providing long-term water supply at a low rate.

- The firm rate is projected to increase to \$155 per acre-foot beginning in the January 2022 billing period.
- The financial summary assumes agricultural water deliveries in every year using rolling historical averages for acres.
- Annual debt service includes the Texas Water Development Board Arbuckle Reservoir debt paid from the Resource Development Fund.

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
<b>Revenues</b>						
Firm Water	\$ 25.0	26.2	27.4	27.6	27.8	28.9
Agriculture	8.7	9.7	10.0	10.4	10.4	11.2
Other	2.1	3.0	2.4	2.1	2.1	2.1
<b>Total Revenues</b>	<b>35.7</b>	<b>38.9</b>	<b>39.8</b>	<b>40.1</b>	<b>40.3</b>	<b>42.2</b>
Operations and Maintenance	16.5	18.9	18.5	18.4	18.6	18.7
<b>Net Operating Margin</b>	<b>19.2</b>	<b>20.0</b>	<b>21.4</b>	<b>21.7</b>	<b>21.7</b>	<b>23.5</b>
Plus: Interest Income	0.8	0.6	0.6	0.9	1.2	1.4
Less: Assigned Enterprise Expense	5.6	5.6	7.4	7.3	7.6	7.6
Public Service Fund	1.0	1.1	1.1	1.1	1.1	1.2
Resource Development Fund	0.5	0.5	0.5	0.6	0.6	0.6
<b>Net Margin Available for Debt Service</b>	<b>13.0</b>	<b>13.3</b>	<b>12.9</b>	<b>13.6</b>	<b>13.6</b>	<b>15.4</b>
<b>Debt Service</b>	<b>\$ 17.9</b>	<b>18.3</b>	<b>17.9</b>	<b>19.1</b>	<b>19.2</b>	<b>19.7</b>
<b>Debt Service Coverage</b>	<b>0.72x</b>	<b>0.73x</b>	<b>0.72x</b>	<b>0.71x</b>	<b>0.71x</b>	<b>0.78x</b>
Plus: Resource Development Funding	\$ 13.3	13.5	14.1	14.4	14.3	14.6
<b>Debt Service Coverage, Adjusted</b>	<b>1.47x</b>	<b>1.47x</b>	<b>1.51x</b>	<b>1.47x</b>	<b>1.46x</b>	<b>1.52x</b>



# Public Service Fund

LCRA uses the Public Service Fund on statutory programs that do not fully recover their costs.

- FY 2022 Public Service Fund operating fund requirements include: (Dollars in millions)

- \$7.5 million for parks.
- \$4.4 million for water quality programs.
- \$3.1 million for natural resource protection.

- These services provide some revenue but require annual support to cover the costs of operations, Enterprise Support and capital.

- The PSF grants include \$2.1 million annually for the Community Development Partnership Program and \$500,000 annually for the Colorado River Land Trust.

- Fund sources include contributions from budgeted nonfuel Wholesale Power costs, budgeted LCRA WSC Energy net margin, and budgeted revenue from GenTex, LCRA TSC, Water and Strategic Services.

	Budgeted	Proposed	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
<b>Revenue</b>	\$ 5.0	5.1	5.7	6.1	6.9	7.3
<b>Total Operating Expense</b>	19.6	20.3	21.7	22.4	22.5	22.8
<b>Operating Fund Requirement</b>	14.6	15.2	16.0	16.3	15.6	15.6
Capital Spending	2.5	2.2	2.5	2.6	0.6	0.8
Assigned Enterprise Capital	0.4	0.4	0.5	0.5	0.6	0.5
Reserves	0.4	0.2	0.3	0.2	0.0	0.1
Grants	2.6	2.6	2.6	2.6	2.6	2.6
<b>Total Funding Requirement</b>	\$ 20.5	20.6	21.9	22.2	19.4	19.5

(Dollars in millions)

## Sources

### **Public Service Fund**

	Budgeted	Proposed	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Wholesale Power	\$ 6.9	6.9	6.8	6.6	6.7	6.7
GenTex Power Corporation	1.1	1.4	1.2	1.4	1.5	1.3
Water	1.0	1.1	1.1	1.1	1.1	1.2
LCRA TSC	14.8	16.2	16.8	17.7	21.1	21.9
LCRA WSC Energy	0.0	0.0	0.0	0.0	0.0	0.0
Strategic Services	0.5	0.3	0.4	0.4	0.4	0.4
Subtotal	24.3	25.9	26.3	27.3	30.8	31.6

## Uses

Public Service Activities	20.5	20.6	21.9	22.2	19.4	19.5
Resource Development Fund	1.0	1.0	1.0	1.0	1.0	1.0
Infrastructure Reserve	2.8	3.0	3.0	3.0	3.0	3.0
Strategic Reserve Fund	0.0	1.3	0.4	1.1	7.4	8.1
Subtotal	24.3	25.9	26.3	27.3	30.8	31.6

### **Remaining PSF Funds**

\$	0.0	0.0	0.0	0.0	0.0	0.0
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# Strategic Services

Strategic Services includes external services that people pay LCRA to provide.

- Strategic Services primarily includes:
  - Telecommunications radio sales.
  - Transmission Customer Service.
  - LCRA Environmental Laboratory Services.

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Revenues	\$ 18.2	12.0	12.7	13.3	13.6	13.9
Operations and Maintenance	11.8	8.4	8.4	8.6	8.7	8.7
<b>Net Operating Margin</b>	6.5	3.6	4.3	4.7	4.9	5.2
Less: Assigned Enterprise Expense	3.0	2.9	3.0	3.1	3.1	3.2
Public Service Fund	0.5	0.3	0.4	0.4	0.4	0.4
Resource Development Fund	0.2	0.1	0.1	0.1	0.2	0.2
<b>Net Margin Available</b>	\$ 2.7	0.2	0.8	1.1	1.2	1.4

# Enterprise Support

Enterprise costs consist of essential functions that support business operations across LCRA.

- Enterprise Support includes:

- Cybersecurity.
- Digital Services.
- Facilities.
- Legal.
- Finance.
- Public Safety.
- Regulatory.
- Telecommunications.
- Others.

- Some costs are direct-charged when specific services are performed for a product line.

- Most other costs are assigned based on a three-factor formula of assets, labor hours and revenue.

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
<b>Net Enterprise Costs</b>	\$ 129.4	133.8	139.1	141.6	144.4	146.0
<b>Cost Assignment</b>						
Wholesale Power and Nonprofit Corporations	31.4	32.1	32.7	32.5	31.7	31.6
LCRA TSC	53.9	60.8	62.5	65.5	69.4	76.4
Water	5.6	5.6	7.4	7.3	7.6	7.6
Public Service Fund Activities	3.2	3.6	3.8	3.9	4.0	4.1
Strategic Services	3.0	2.9	3.0	3.1	3.1	3.2
Capital/Other	32.4	28.8	29.7	29.3	28.4	23.1
<b>Total</b>	<b>129.4</b>	<b>133.8</b>	<b>139.1</b>	<b>141.6</b>	<b>144.4</b>	<b>146.0</b>
<b>Capital Expenditures</b>						
Revenue-Funded	30.2	30.2	33.4	31.5	34.5	30.0
Third Party or Proceeds-Funded	1.2	0.0	0.0	0.0	0.0	0.0
<b>Total Capital</b>	<b>\$ 31.4</b>	<b>30.2</b>	<b>33.4</b>	<b>31.5</b>	<b>34.5</b>	<b>30.0</b>

# LCRA Capital Plan – by Status

- Approval of this capital plan authorizes the initiation of all recommended projects at their individually stated lifetime budgets as shown in the plan.
- Staff may bring future projects individually to the Board for approval after scope and cost estimates have been further refined, and staff includes future projects in this document for financial planning purposes.
- Board approval of this plan also authorizes the proposed \$110.7 million budget for FY 2022 capital spending, which includes \$37.1 million for recommended projects and \$73.6 million for projects the Board approved previously.

## FY 2022-FY 2026 Capital Spending for Recommended, Approved and Future Projects

### LCRA Total (Excluding LCRA TSC and Including Austin Energy's Share and the City of San Marcos' Share)

(Dollars in millions)

	Budgeted Proposed		Forecast					Five-Year	
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total	Lifetime	
Recommended Projects	\$	37.1	2.6	0.0	0.0	0.0	39.7	39.7	
Approved Projects		73.6	13.7	9.3	3.0	15.0	114.6	455.9	
Subtotal Recommended and Approved		110.7	16.3	9.3	3.0	15.0	154.3	495.6	
Future Projects		2.7	60.0	79.0	77.9	62.2	281.8	308.6	
<b>Total FY 2022 Capital Plan</b>		<b>113.4</b>	<b>76.3</b>	<b>88.3</b>	<b>80.9</b>	<b>77.2</b>	<b>436.1</b>	<b>804.2</b>	
Less: Co-owners' Shares		3.3	1.9	2.2	1.6	1.5	10.5	10.9	
LCRA's Share		110.2	74.4	86.0	79.4	75.6	425.6	793.3	

### Comparison With Previous Plan

Total FY 2021 Capital Plan (With Co-owners)		99.4	89.4	85.3	74.4	55.0	0.0	403.5	798.6
Difference*	\$	n/a	24.0	(9.0)	13.8	26.0	77.2	32.6	5.6

\*Difference for five-year total is based on a rolling five-year comparison, i.e., FY 2022-FY 2026 spending from the current plan compared with FY 2021-FY 2025 from the plan the Board approved in May 2020.



# LCRA TSC Capital Plan – by Status

- Board approval of this plan authorizes the proposed \$406.8 million budget for FY 2022 capital spending, which includes \$205.8 million for projects the Board approved previously and \$200.9 million of potential future projects.
- Staff will bring future projects individually to the Board for approval after scope and cost estimates have been further refined and the budget has been established. Staff includes future projects in this document for financial planning purposes.

## FY 2022 Capital Spending for Approved and Future Projects LCRA Transmission Services Corporation

(Dollars in millions)

	Budgeted	Proposed	Forecast				Five-Year Total
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
Approved Projects	\$	205.8	87.3	3.8	0.0	0.0	297.0
Future Projects		200.9	369.0	447.8	444.5	332.4	1,794.6
<b>Total FY 2022 Capital Plan</b>		<b>406.8</b>	<b>456.3</b>	<b>451.6</b>	<b>444.5</b>	<b>332.4</b>	<b>2,091.6</b>

### Comparison With Previous Plan

Total FY 2021 Capital Plan	\$	497.7	471.6	415.9	384.3	292.1	2,061.6
Difference*		n/a	(64.9)	40.4	67.3	152.4	29.9

\*Difference for five-year total is based on a rolling five-year comparison, i.e., FY 2022-FY 2026 spending from the current plan compared with FY 2021-FY 2025 from the plan the Board approved in May 2020.

# LCRA Capital Plan – by Business

- LCRA’s share of the total FY 2022 capital budget for recommended, approved and future projects is \$516.9 million. Of that amount, about 26% will be revenue-funded or third-party or proceeds-funded.
- LCRA’s share of the five-year total capital budget, including recommended, approved and future projects, is about \$2.5 billion. Of that amount, about 30% will be revenue-funded or third-party or proceeds-funded.
- LCRA is using previously reserved funds to fund and accelerate certain critical infrastructure capital projects throughout the organization.

(Dollars in millions)

## LCRA Capital Expenditures

### Revenue-Funded

	Budgeted FY 2021	Proposed FY 2022	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Wholesale Power and Nonprofit Corporations	\$ 15.0	6.5	13.6	14.7	14.2	13.3
LCRA TSC	55.5	60.0	58.2	63.9	119.7	132.0
Water	7.2	7.8	8.7	8.4	8.4	8.2
Enterprise Support	30.2	30.2	33.4	31.5	34.5	30.0
Public Services	2.5	2.2	2.5	2.6	0.6	0.8
Strategic Services	0.2	0.3	0.4	0.4	0.3	0.3
	<b>110.7</b>	<b>107.0</b>	<b>116.8</b>	<b>121.6</b>	<b>177.7</b>	<b>184.6</b>

### Debt-Funded

Wholesale Power and Nonprofit Corporations	-	-	-	-	-	1.3
LCRA TSC	437.4	339.7	394.9	387.6	324.8	200.4
Water	28.0	40.9	13.4	21.3	11.8	13.9
Strategic Services	1.0	0.9	1.0	0.9	0.5	0.4
	<b>466.4</b>	<b>381.5</b>	<b>409.3</b>	<b>409.7</b>	<b>337.1</b>	<b>216.1</b>

### Third Party/Proceeds-Funded

Wholesale Power and Nonprofit Corporations	0.7	7.7	0.8	6.0	8.8	7.1
LCRA TSC	4.8	7.0	3.2	-	-	-
Water	9.7	12.2	0.6	0.3	0.3	0.3
Enterprise Support	1.2	-	-	-	-	-
Public Services	2.4	1.5	-	-	-	-
	<b>18.8</b>	<b>28.4</b>	<b>4.6</b>	<b>6.3</b>	<b>9.1</b>	<b>7.4</b>

### **Total LCRA Capital**

	<b>\$ 595.9</b>	<b>516.9</b>	<b>530.7</b>	<b>537.6</b>	<b>523.9</b>	<b>408.1</b>
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# LCRA Capital Plan – Approach

## Capital Planning Approach

LCRA includes projects in the capital plan with the goal of ensuring LCRA can continue to offer its customers energy, water and public services in a reliable, competitively priced, environmentally responsible and safe manner. Each project undergoes a thorough review by LCRA's Asset Management work group and other staff members who separate the projects into three categories: recommended (projects management has reviewed and recommended for Board approval); approved (projects the Board approved previously); and future (projects staff may recommend implementing within the next five years).

Staff does not submit future projects for Board approval until scope and cost estimates have been further refined, but includes them in this document for financial planning purposes. The cost and timing of future projects presented in this document could change. For this reason, LCRA continues planning activities throughout the year and updates the plan as necessary. LCRA will bring future projects back to the Board for approval.

## Determining Need and Financial Analysis

Capital plan projects must support the goals of the business plan within financial parameters established by LCRA's Board and chief financial officer.

LCRA includes projects based on multiple factors, such as current and anticipated demand for LCRA's services and the need to maintain or build facilities or infrastructure to meet those demands. Other factors include compliance with applicable state and federal regulations, safety and security needs, the potential for increased revenues, and better management and protection of natural resources.

Staff has reviewed and analyzed the recommended projects and the projects for which LCRA plans to seek approval during the fiscal year. The project criteria may vary, but typically will involve either a payback period test, net present value analysis or other analyses to ensure the project is the most cost-effective approach. Executive management reviews each project to ensure the project warrants funding and inclusion in the capital plan. When appropriate, affected customers and stakeholders have the opportunity to review and comment on the proposed project scope and budget.



# LCRA Capital Plan – Approach (Continued)

## Developing Project Estimates

LCRA staff develops project cost estimates. An estimate's accuracy is based on identifying the work and resources necessary to complete the project objectives. Cost estimates are revised and become more accurate as more information regarding the scope and deliverables is available.

The capital planning cycle involves these steps:

- Developing and refining a list of business needs based on planning criteria and asset owner input.
- Defining the scope and approach necessary to address those needs.
- Obtaining cost estimates and performing business analyses to establish a proposed project budget and to evaluate affordability, economic viability, portfolio prioritization and risk.
- Seeking approval of the capital plan to validate strategic direction, establish lifetime and fiscal year budgets, and allow business planning for the future.

LCRA may recommend or seek approval of some projects using less refined cost estimates because of the timing in determining the specific technology that would be implemented. Projects recommended that have less refined cost estimates are noted in the project description.

## Project Prioritization

LCRA reviews and prioritizes its projects based on criteria that include safety, cost, reliability, competitiveness, environmental considerations and other factors. The appropriate executive reviews staff recommendations.

Projects that are essential to ensure the continued reliable and cost-effective delivery of LCRA services, concern public safety or limit interruption of services receive the highest priority. LCRA also assigns higher priority to projects with regulatory issues that may result in substantial financial impacts for noncompliance, projects already in progress that have a substantial cost to stop, and projects with contractual requirements that could have substantial financial impacts to LCRA.

Medium priority projects include those in progress that have a moderate financial impact associated with stopping them or have contractual, regulatory or reliability issues that would have a moderate to minimal financial or health and safety impact to LCRA, customers and stakeholders.

# LCRA Capital Plan – Approach (Continued)

## Project Prioritization (Continued)

A lower priority project is not unimportant to LCRA or to stakeholders. Staff may assign lower priority rankings to projects that have a more moderate monetary or stakeholder impact and would have minimal impacts to safety, the environment, contractual obligations or revenue if they were stopped or delayed.

## Project Approval and Monitoring

LCRA brings each recommended capital project for the next fiscal year to the LCRA Board for approval with this plan. Board approval authorizes the release of funds to execute the identified projects. However, executives may authorize funding in stages or all at once for the entire project. Staff may bring future projects individually to the Board for approval throughout the fiscal year.

Regardless of the estimating level or the method used to generate the cost estimate, LCRA Board Policy 301 – Finance requires LCRA Board approval for any project expected to exceed its lifetime budget by 10% and \$300,000. However, the LCRA Board approved a resolution at its Jan. 20, 2021, meeting to delegate this authority to the LCRA general manager and CEO temporarily until Dec. 31, 2021, so long as additional funding does not cause total capital expenditures to exceed the approved capital plan or materially adversely impact business planning assumptions. LCRA TSC Board Policy T301 – Finance gives, on a permanent basis, the same approval authority and criteria to the CEO to approve additional funding for an approved capital project that is expected to exceed its lifetime budget.

For any project not previously authorized by the LCRA Board or LCRA TSC Board, Board policies 301 and T301 delegate to the CEO the authority to approve any capital project with a lifetime budget not to exceed \$1.5 million. Board Policy T301 also gives the CEO delegated authority to approve all capital projects associated with generation interconnection projects not previously authorized by the Board, in each case only after the generator has provided appropriate financial security to LCRA TSC for its expenses.

Staff will communicate any CEO-approved projects to the LCRA Board and LCRA TSC Board on a quarterly basis.

# LCRA Capital Plan – Approach (Continued)

## **Project Approval and Monitoring (Continued)**

Project Management staff provides to LCRA’s executives quarterly capital project status reports on approved projects. Reports include cost variances, estimated completion dates, comparisons of work completed to budget spent, fiscal year spending forecasts and project estimates at completion compared with the current capital plan. The reports also highlight any significant changes to the capital program, including project cancellations, delays and budget-to-actual expenditures.

## **Capital Plan Approval and Reporting**

LCRA Board approval of this capital plan authorizes the initiation of all recommended projects at their individually stated lifetime budgets. These recommended projects include annual budgets for general additions and minor capital. General additions are small capital additions or replacement projects that do not exceed \$300,000. Minor capital budgets are used to fund purchases of equipment that, essentially, is ready to place in service upon delivery, such as fleet assets or technology hardware.

Board approval of this plan also authorizes the proposed \$517.5 million budget for FY 2022 capital spending for recommended, approved and potential future projects. At this time, LCRA is not seeking Board approval for future projects. LCRA will bring any future project determined to require initiation in FY 2022 to the Board for approval individually.

LCRA incorporates spending projections in the capital plan into the financial performance and rate impacts shown in the business plan. Upon approval and throughout FY 2022, LCRA will provide to the Board regular reports on project progress and compliance with the project budgets and fiscal year spending constraints established in the plan.

The following pages include specific project details and proposed lifetime budgets for recommended projects, as well as annual spending projections for approved and future projects.

Note: The dollar amounts in parentheses after the project titles reflect lifetime budgets.

# Wholesale Power Projects

Information about Wholesale Power capital projects included in the capital plan is considered confidential and has been removed from this version of the document.



# Transmission Projects

Approved and potential future Transmission projects total \$406.8 million in FY 2022 and total \$2.1 billion over the next five years. Staff will bring potential future projects individually to the Board for approval throughout the fiscal year. LCRA TSC projects are required to meet anticipated electric load growth and electric load additions, operating constraints and long-term reliability criteria addressing transmission and transformation needs as well as reliability of service and equipment reliability limitations, and safety and environmental issues.

To assist in aligning the various goals and associated requirements listed above, the projects are organized in the following categories:

- **General addition projects** are primarily smaller construction projects that maintain electric transmission infrastructure and reliability.
- **Generator interconnection projects** are necessary to facilitate generator interconnections requested by participants in the ERCOT market.
- **Minor capital projects** are primarily for the acquisition of equipment that supports electric transmission needs and generally is ready to place in service upon delivery.
- **Service reliability projects** are driven by equipment obsolescence, operational improvements or transmission service reliability needs.
- **System capacity projects** are needed to provide new or increased transmission system capacity.
- **Third-party funded projects** are not driven by utility criteria; instead, external parties that will contribute a substantial portion of the project cost request the projects.

# Transmission Projects (Continued)

There are 79 approved projects with expected spending of \$205.8 million in FY 2022. See the appendix for details on LCRA TSC approved projects. This expected spending is categorized below:

## LCRA Transmission Services Corporation FY 2022 Capital Plan Approved Projects

(Dollars in millions)

Planning Category	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total
Generator Interconnection Projects	\$ 3.7	8.8	-	-	-	12.6
Service Reliability Projects	142.1	14.7	0.0	-	-	156.8
System Capacity Projects	60.0	63.8	3.8	-	-	127.6
Approved Subtotal	\$ 205.8	87.3	3.8	-	-	297.0

# Transmission Projects (Continued)

Staff continues to evaluate projects totaling almost \$1.8 billion of expected spending over the next five years. Staff will bring these projects individually to the Board for approval throughout the fiscal year. This spending is categorized below:

## LCRA Transmission Services Corporation FY 2022 Capital Plan Future Projects

(Dollars in millions)

Planning Category	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total
General Addition Projects	\$ 5.0	5.0	5.0	5.0	5.0	25.0
Generator Interconnection Projects	17.5	17.4	20.0	20.0	20.0	94.9
Minor Capital Projects	0.1	0.1	0.1	0.1	0.1	0.6
Service Reliability Projects	141.6	281.5	285.5	186.1	135.9	1,030.6
System Capacity Projects	29.7	62.5	137.1	233.3	171.4	633.9
Third-Party Funded Projects	7.0	2.5	-	-	-	9.5
<b>Future Subtotal</b>	<b>\$ 200.9</b>	<b>369.0</b>	<b>447.8</b>	<b>444.5</b>	<b>332.4</b>	<b>1,794.6</b>

# Transmission Projects (Continued)

Spending for approved and potential future projects totaling about \$2.1 billion over the next five years is categorized below:

## LCRA Transmission Services Corporation FY 2022 Capital Plan Approved and Future Projects

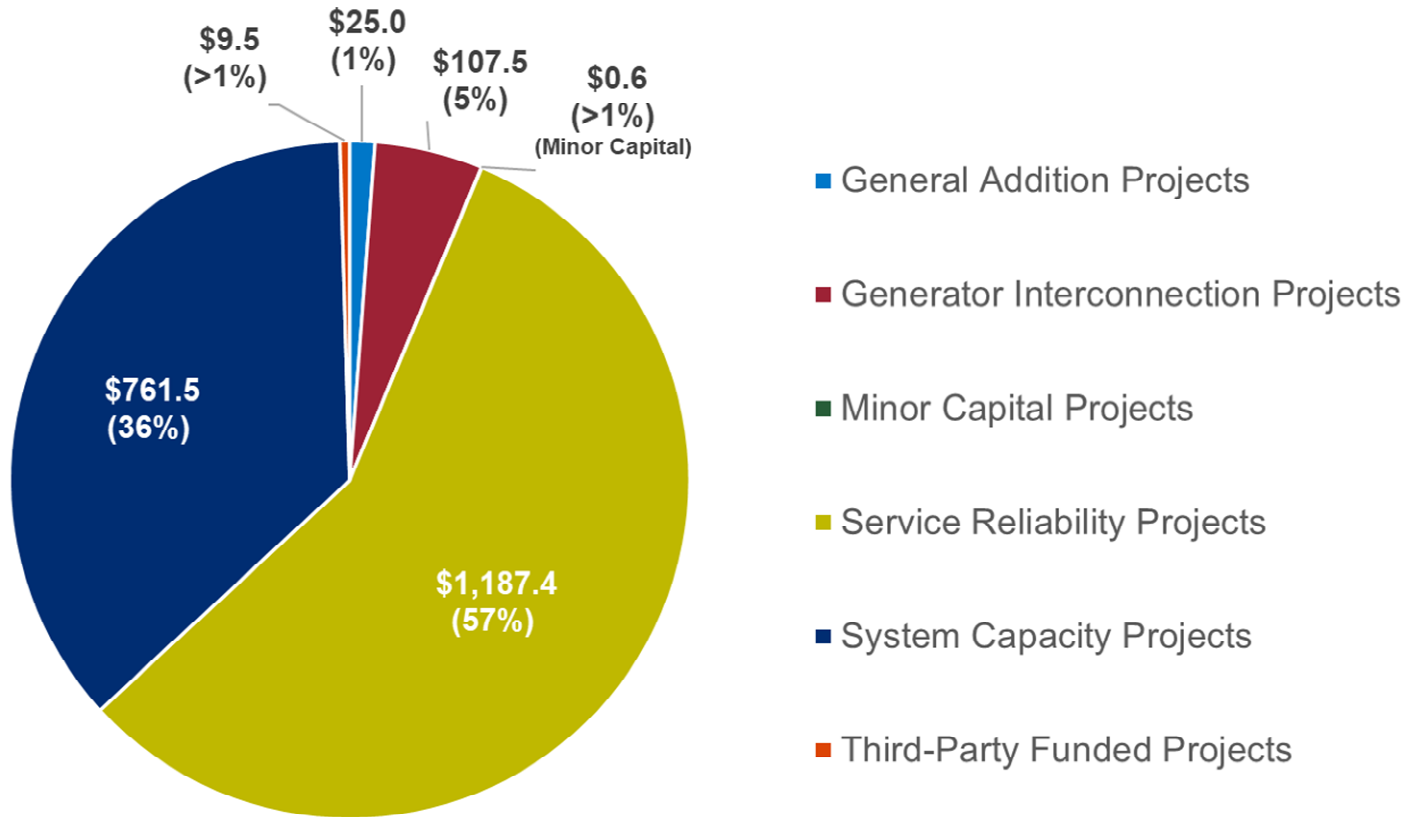
(Dollars in millions)

Planning Category	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total
General Addition Projects	\$ 5.0	5.0	5.0	5.0	5.0	25.0
Generator Interconnection Projects	21.2	26.2	20.0	20.0	20.0	107.5
Minor Capital Projects	0.1	0.1	0.1	0.1	0.1	0.6
Service Reliability Projects	283.7	296.2	285.5	186.1	135.9	1,187.4
System Capacity Projects	89.7	126.3	140.9	233.3	171.4	761.5
Third-Party Funded Projects	7.0	2.5	-	-	-	9.5
<b>Total LCRA Transmission Services Corporation</b>	<b>\$ 406.8</b>	<b>456.3</b>	<b>451.6</b>	<b>444.5</b>	<b>332.4</b>	<b>2,091.6</b>



# Transmission Projects (Continued)

Total spending on Transmission approved and potential future capital projects is about \$2.1 billion over the next five years. This spending is categorized below:



Dollars in millions

Details of the approved projects are shown in the appendix.

# Water Projects

Water projects in the capital plan include capital improvements for managing and delivering raw water. This plan focuses resources on managing the river, improving infrastructure – including LCRA’s Hydromet system – and planning to meet the basin’s future water needs.

Water recommended and approved projects total \$60.9 million in FY 2022 and total \$90.6 million over the next five years through FY 2026. Future projects total \$65.9 million through FY 2026.

## **FY 2022 Requested Project Budget Increase**

**Arbuckle Reservoir (\$333 million)** – Staff requests an \$18 million increase to the Arbuckle Reservoir project’s lifetime budget from \$315 million to \$333 million. While performing the initial filling of the reservoir, excessive seepage from the reservoir was discovered. The largest portion of this seepage occurred along the western side of the reservoir. The seepage mitigation project was initiated to install a seepage barrier wall around approximately the western half of the Arbuckle Reservoir, as well as install vibrating wire piezometers to monitor the subsurface aquifers. The Board approved the seepage mitigation project in FY 2019 based on an initial estimate of the costs to install the mitigating seepage barrier wall and monitoring devices on the east end of the reservoir. At that time, the lifetime budget increase to \$315 million was approved without the full design of the seepage barrier wall or monitoring devices fully priced. Staff requests this lifetime budget increase after completing the design, bidding the installation of the seepage barrier wall, bidding the vibrating wire piezometers and defining all anticipated project costs such as quality assurance testing.

# Water Projects (Continued)

## FY 2022 Recommended Projects

**General Additions** – General addition projects will maintain infrastructure and improve reliability and safety for the following:

- Hydromet (\$100,000).
- Irrigation systems (\$1.045 million).
- Raw water (\$250,000).

**Minor Capital** – The scope of minor capital projects is to purchase equipment that, essentially, is ready to place in service upon delivery for the following:

- Hydromet (\$95,000).
- Irrigation systems (\$493,000).

# Water Projects (Continued)

## Water

### FY 2022 Capital Plan Recommended and Approved Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total	Lifetime
<b>Recommended</b>							
General Additions – Hydromet	100	-	-	-	-	100	100
General Additions – Irrigation Systems	1,045	-	-	-	-	1,045	1,045
General Additions – Raw Water	250	-	-	-	-	250	250
Minor Capital – Hydromet	95	-	-	-	-	95	95
Minor Capital – Irrigation Systems	493	-	-	-	-	493	493
Recommended Subtotal	1,983	-	-	-	-	1,983	1,983
<b>Approved*</b>							
Arbuckle Reservoir	36,761	3,829	-	-	-	40,590	333,000
Buchanan Dam Spalling Concrete Rehabilitation – Phase 3	2,500	3,000	3,000	3,000	15,000	26,500	36,000
Garwood Automated Gates	387	377	-	-	-	764	1,100
Griffith League Ranch Groundwater	3,263	-	-	-	-	3,263	8,500
Lane City Dam Rehabilitation and Hurricane Harvey Recovery	11,642	-	-	-	-	11,642	13,760
Mansfield Dam Paradox Gate Rehabilitation – Phase 2	1,926	1,299	132	-	-	3,357	10,416
New Water Supply Projects – Phase 1	2,458	-	-	-	-	2,458	6,179
Approved Subtotal*	58,937	8,505	3,132	3,000	15,000	88,574	408,955

\*The \$333 million lifetime budget for Arbuckle Reservoir includes \$315 million approved previously and an \$18 million requested project budget increase as noted in the project description.

# Water Projects (Continued)

## Water

### FY 2022 Capital Plan Future Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total	Lifetime
<b>Future</b>							
Buchanan Dam Intake Structure – Phase 2	-	-	800	-	-	800	800
Buchanan Dam Seven-Gate Section Spillway Improvements – Phase 2	-	-	-	-	2,500	2,500	5,000
General Additions – Hydromet	-	100	100	100	100	400	400
General Additions – Irrigation Systems	-	940	440	640	390	2,410	2,410
General Additions – Raw Water	-	150	150	150	200	650	650
Griffith League Ranch Groundwater – Phase 2	-	6,500	6,500	-	-	13,000	13,000
Lakeside Lake Plant Building Office and Meeting Room	-	-	-	-	500	500	500
Lakeside Main Canal Gate Automation	-	-	300	300	300	900	1,500
Mansfield Dam Floodgate Hydraulic Piping	-	800	-	-	-	800	800
Mansfield Dam Parapet Wall End Replacement	-	-	312	-	-	312	312
Mansfield Dam Upstream Ring Follower Floodgates Rehabilitation	-	-	-	-	1,200	1,200	12,000
Matagorda Bay Brackish Groundwater Well	-	500	1,000	2,500	1,000	5,000	5,000
Minor Capital – Hydromet	-	176	-	-	-	176	176
Minor Capital – Irrigation Systems	-	357	350	350	350	1,407	1,407
Minor Capital – Water Resource Management	-	34	50	50	50	184	184
New Regional Water Supply Projects – Phase 2	-	4,613	16,864	13,379	844	35,700	35,700
<b>Future Subtotal</b>	-	14,170	26,866	17,469	7,434	65,939	79,839
<b>Total Water</b>	60,920	22,675	29,998	20,469	22,434	156,496	490,777



# Public Services Projects

Legislative authority and LCRA's Board provide direction for LCRA staff to develop and manage parks, recreation facilities and natural science centers in LCRA's statutory district, providing public recreation and water access along the lower Colorado River and its tributaries and at LCRA's power plant reservoirs. LCRA's park system includes more than 40 parks on roughly 11,000 acres. The parks enhance the public's use and enjoyment of LCRA lands and provide diverse outdoor recreation and education opportunities.

LCRA's public service funding aims to keep pace with the growing Texas population and expected increase in park visitation, protect natural resources and water quality along the Colorado River, and develop facilities that help achieve LCRA's cost-recovery goals for parks. As part of this development, staff seeks approval of using the Public Recreation and Conservation Land Acquisition Fund to fund capital in the first three years of the plan.

Public Services recommended and approved projects total \$3.7 million in FY 2022 and over the next five years through FY 2026. Future projects total \$6.4 million through FY 2026.

## FY 2022 Recommended Projects

**General Additions** – General addition projects will maintain infrastructure and make strategic improvements to enhance customer service in the following area:

- Parks (\$275,000).

**Minor Capital** – The scope of minor capital projects is to purchase equipment that, essentially, is ready to place in service upon delivery for the following:

- Parks (\$292,000).
- Other Public Services (\$290,000).

# Public Services Projects (Continued)

## Public Services

### FY 2022 Capital Plan Recommended, Approved and Future Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total	Lifetime
<b>Recommended</b>							
<b>Parks</b>							
General Additions	275	-	-	-	-	275	275
Minor Capital	292	-	-	-	-	292	292
<b>Other Public Services</b>							
Minor Capital	290	-	-	-	-	290	290
Recommended Subtotal	857	-	-	-	-	857	857
<b>Approved</b>							
<b>Parks</b>							
Matagorda Bay Nature Park Improvements	2,796	-	-	-	-	2,796	6,915
Approved Subtotal	2,796	-	-	-	-	2,796	6,915
<b>Future</b>							
<b>Parks</b>							
Black Rock Park Improvements	-	500	1,500	-	-	2,000	2,000
General Additions	-	425	275	335	550	1,585	1,585
Matagorda Bay Jetty Park Facility Improvements	-	750	-	-	-	750	750
Minor Capital	-	436	222	198	196	1,052	1,052
North Shore Park Improvements	-	-	500	-	-	500	500
<b>Other Public Services</b>							
Minor Capital	-	388	100	44	12	544	544
Future Subtotal	-	2,499	2,597	577	758	6,431	6,431
<b>Total Public Service</b>	<b>3,653</b>	<b>2,499</b>	<b>2,597</b>	<b>577</b>	<b>758</b>	<b>10,084</b>	<b>14,203</b>

# Strategic Services Projects

Strategic Services recommended projects total \$1.2 million in FY 2022 and over the next five years through FY 2026. Future projects total \$4.1 million through FY 2026.

## FY 2022 Recommended Projects

**General Additions** – General addition projects will maintain infrastructure and make strategic improvements to enhance customer service in the following area:

- Telecommunications (\$890,000).

**Minor Capital** – The scope of minor capital projects is to purchase equipment that, essentially, is ready to place in service upon delivery for the following:

- LCRA Environmental Laboratory Services (\$298,000).

# Strategic Services Projects (Continued)

## Strategic Services

### FY 2022 Capital Plan Recommended and Future Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total	Lifetime
<b>Recommended</b>							
<b>LCRA Environmental Laboratory Services</b>							
Minor Capital	298	-	-	-	-	298	298
<b>Telecommunications</b>							
General Additions	890	-	-	-	-	890	890
Recommended Subtotal	1,188	-	-	-	-	1,188	1,188
<b>Future</b>							
<b>LCRA Environmental Laboratory Services</b>							
Minor Capital	-	418	352	280	294	1,344	1,344
<b>Telecommunications</b>							
General Additions	-	1,010	860	510	410	2,790	2,790
Future Subtotal	-	1,428	1,212	790	704	4,134	4,134
<b>Total Strategic Services</b>	1,188	1,428	1,212	790	704	5,322	5,322

# Enterprise Support Projects

Enterprise Support capital projects provide the facility services, telecommunications and information technology infrastructure that support the business operations of the organization. LCRA's power, transmission and water rates fund the projects, which makes predicting costs to include in LCRA's rates especially important. Unless an emergency arises, LCRA adjusts Enterprise Support priorities throughout the year to stay within the approved capital plan budget for each fiscal year instead of seeking additional funding authority from the Board.

Enterprise Support recommended and approved projects total \$30.2 million in FY 2022 and total \$35.3 million over the next five years through FY 2026. Future projects total \$124.4 million through FY 2026.

## FY 2022 Recommended Projects

**Wholesale Power and Transmission Billing System (\$2.812 million)** – The project scope is to replace the existing Lodestar customized billing system with a new third-party solution. Several third-party solutions exist, based on an initial request for information. The project scope includes issuing a request for proposals to choose a solution based on Wholesale Power and Transmission requirements and then implementing that solution.

**General Office Complex Chiller 3 (\$620,000)** – The project scope is to replace the obsolete 100-ton Chiller 3 in the General Office Complex main campus mission-critical heating, ventilating and air conditioning plant with a 70-to-200-ton variable load chiller. Technology changes such as blade servers, laptops and LED lighting have reduced the average annual heat loads at the GOC. The physical size of the 30-year-old system is now either too large or too small to meet the current operating load curves. A smaller chiller that can operate in the correct ranges will increase the system's reliability and maintainability, reduce the electrical utility expense and noise levels, and defer the replacement of main chillers 1 and 2 by about five years.

**Communications Shelter Addition – FY 2022 Telecommunications Upgrade (\$2.507 million)** – The project scope is to increase the reliability, maintainability and flexibility of LCRA's telecommunications system by installing telecommunications shelters, fiber patch panels, power supply equipment and generators at seven fiber backbone facilities.



# Enterprise Support Projects (Continued)

## FY 2022 Recommended Projects (Continued)

**DWDM Build-Out – FY 2022 Telecommunications Upgrade (\$734,000)** – The project scope is to improve telecommunication system capacity and reliability by expanding the dense wavelength division multiplexing system to four sites east of Interstate 35 and create an additional tie-in for the East Backbone DWDM Ring to the Central Backbone DWDM Ring. The equipment will provide increased bandwidth across the fiber backbone and provide alternate circuit paths for telecommunications uses such as the GenDesk, physical security related traffic, the Energy Management System and the corporate network.

**Fayette County Network Telecommunications Upgrade (\$658,000)** – The project scope is to increase reliability and capacity of the telecommunications network in Fayette County by upgrading the aged fiber, developing a fiber ring in the vicinity of the Fayette Power Project campus, and upgrading the existing battery systems. The telecommunications infrastructure will be overhauled and rebuilt to modern standards to provide more reliability to the telecommunications system and address the growing capacity requirements in the campus.

**General Office Complex Campus Fiber Telecommunications Upgrade (\$538,000)** – The project scope is to increase reliability of the telecommunications network at the General Office Complex by upgrading the existing fiber network to accommodate current and future growth. The GOC telecommunications network supports mission-critical communications such as the LCRA corporate network, Tom Miller Dam, and Energy Management System and Gas Management System traffic. The network also acts as a backup hub for the entire telecommunications network.

**Hydro Video Infrastructure Telecommunications Upgrade (\$303,000)** – The project scope is to improve the reliability and capacity of the video surveillance transport infrastructure at six LCRA dams and two hydroelectric operations control centers by creating a new network that leverages the new LCRA dense wavelength division multiplexing network.

# Enterprise Support Projects (Continued)

## FY 2022 Recommended Projects (Continued)

**Network Stratification – FY 2022 Telecommunications Upgrade (\$325,000)** – The project scope is to improve the reliability, maintainability and operational efficiency of LCRA’s telecommunications system by separating the LCRA corporate network connectivity from LCRA business units with critical traffic at 15 locations.

**Radio System Power – FY 2022 Telecommunications Upgrade (\$447,000)** – The project scope is to improve reliability and resiliency of LCRA’s trunked radio system by upgrading aged and end-of-support telecommunications uninterruptable power supply units at 16 locations and installing a dedicated electrical service at one radio site.

**General Additions** – General addition projects will maintain infrastructure and improve reliability and safety for the following:

- Digital Services (\$1 million).
- Facilities (\$1.045 million).
- Public Safety (\$150,000).
- Telecommunications (\$1.88 million).

**Minor Capital** – The scope of minor capital projects is to purchase equipment that, essentially, is ready to place in service upon delivery for the following:

- Digital Services (\$1.15 million).
- Facilities (\$648,000).
- Public Safety (\$493,000).
- Telecommunications (\$480,000).
- Transmission support (\$9.328 million).

# Enterprise Support Projects (Continued)

## Enterprise Support

### FY 2022 Capital Plan Recommended Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total	Lifetime
<b>Recommended</b>							
<b>Digital Services</b>							
General Additions	1,000	-	-	-	-	1,000	1,000
Minor Capital	1,150	-	-	-	-	1,150	1,150
Wholesale Power and Transmission Billing System Replacement	2,812	-	-	-	-	2,812	2,812
<b>Facilities</b>							
General Additions	1,045	-	-	-	-	1,045	1,045
General Office Complex Chiller 3	620	-	-	-	-	620	620
Minor Capital	648	-	-	-	-	648	648
<b>Public Safety</b>							
General Additions	150	-	-	-	-	150	150
Minor Capital	493	-	-	-	-	493	493
<b>Telecommunications</b>							
Communications Shelter Addition – FY 2022 Telecommunications Upgrade	2,507	-	-	-	-	2,507	2,507
DWDM Build-Out – FY 2022 Telecommunications Upgrade	734	-	-	-	-	734	734
Fayette County Network Telecommunications Upgrade	264	394	-	-	-	658	658
General Additions	1,880	-	-	-	-	1,880	1,880
General Office Complex Campus Fiber Telecommunications Upgrade	538	-	-	-	-	538	538
Hydro Video Infrastructure Telecommunications Upgrade	303	-	-	-	-	303	303
Minor Capital	480	-	-	-	-	480	480
Network Stratification – FY 2022 Telecommunications Upgrade	325	-	-	-	-	325	325
Radio System Power – FY 2022 Telecommunications Upgrade	200	247	-	-	-	447	447
<b>Transmission Support</b>							
Minor Capital	9,328	-	-	-	-	9,328	9,328
<b>Recommended Subtotal</b>	<b>24,477</b>	<b>641</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>25,118</b>	<b>25,118</b>

# Enterprise Support Projects (Continued)

## Enterprise Support

### FY 2022 Capital Plan Approved and Future Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year		
						Total	Lifetime	
<b>Approved</b>								
<b>Digital Services</b>								
Campus Distribution Switches	475	-	-	-	-	475	800	
Core Switch Upgrade	63	-	-	-	-	63	500	
Edge Network Upgrade	792	1,082	949	-	-	2,823	3,500	
Network Architecture Security	1,714	885	-	-	-	2,599	3,900	
Online Payment Portal	80	-	-	-	-	80	510	
Security Information and Event Management	32	-	-	-	-	32	1,375	
Water Billing System	120	-	-	-	-	120	550	
<b>Facilities</b>								
Dalchau Service Center Building T Foundation Remediation	448	-	-	-	-	448	800	
General Office Complex Elevator Modernization	303	-	-	-	-	303	970	
<b>Telecommunications</b>								
Communications Shelter Telecommunications Upgrade	29	-	-	-	-	29	2,000	
East Backbone DWDM Telecommunications Upgrade	63	-	-	-	-	63	2,080	
Ferguson-Wirtz Fiber Upgrade	2	-	-	-	-	2	600	
LCRA Fiber Backbone – FY 2020 Telecommunications Upgrade	757	-	-	-	-	757	4,027	
Radio System Migration – FY 2021 Telecommunications Upgrade	724	724	762	-	-	2,210	2,240	
San Angelo Area Radio System Additions	18	-	-	-	-	18	778	
Sim Gideon Power Plant Network Telecommunications Upgrade	145	36	-	-	-	181	870	
Approved Subtotal	5,765	2,727	1,711	-	-	10,203	25,500	
<b>Future</b>								
<b>Digital Services</b>								
Asset and Work Management	-	-	1,000	-	-	1,000	1,000	
Digital Services Infrastructure	-	6,250	1,550	4,950	7,950	20,700	20,700	
Energy Trade and Deal Capture	-	-	-	1,000	-	1,000	1,000	
Enterprise Resource Planning System	-	-	2,000	-	-	2,000	2,000	
General Additions	-	1,000	1,000	1,000	1,000	4,000	4,000	
Generation Management System	-	-	1,200	-	-	1,200	1,200	
Minor Capital	-	1,050	1,050	1,050	1,050	4,200	4,200	

# Enterprise Support Projects (Continued)

## Enterprise Support

### FY 2022 Capital Plan Future Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year	
						Total	Lifetime
<b>Future (continued)</b>							
<b>Digital Services (continued)</b>							
Mobile Work Management	-	500	-	-	-	500	500
PeopleSoft Commitment Accounting	-	-	-	500	-	500	500
Security Information and Event Management	-	-	-	2,000	-	2,000	2,000
Virtual Private Network	-	-	500	-	-	500	500
Wholesale Markets Data Lake	-	1,000	-	-	-	1,000	1,000
<b>Facilities</b>							
Dalchau Service Center Stores Upgrades	-	450	-	-	-	450	450
Furniture Replacement	-	-	1,500	1,500	-	3,000	3,000
General Additions	-	1,400	500	990	785	3,675	3,675
General Office Complex Main Chillers 1 and 2	-	-	-	-	900	900	900
General Office Complex Redbud Center Chiller	-	-	-	-	300	300	300
Minor Capital	-	374	195	181	180	930	930
Redbud and Shapiro Buildings Uninterrupted Power Supply Flywheel to Battery Replacement	-	300	-	-	-	300	300
<b>Public Safety</b>							
Minor Capital	-	556	589	392	387	1,924	1,924
Physical Access Control System – Phase 5	-	-	500	-	-	500	500
<b>Telecommunications</b>							
Backup Generator Replacement – System Upgrade	-	500	-	-	-	500	500
Communications Shelter Addition – FY 2023 Telecommunications Upgrade	-	2,000	-	-	-	2,000	2,000
Communications Shelter Addition – FY 2024 Telecommunications Upgrade	-	-	2,000	-	-	2,000	2,000
Communications Shelter Addition – FY 2025 Telecommunications Upgrade	-	-	-	2,000	-	2,000	2,000
Communications Shelter Addition – FY 2026 Telecommunications Upgrade	-	-	-	-	2,000	2,000	2,000
DWDM Build-Out – FY 2023 Telecommunications Upgrade	-	700	-	-	-	700	700
DWDM Build-Out – FY 2024 Telecommunications Upgrade	-	-	700	-	-	700	700
DWDM Build-Out – FY 2025 Telecommunications Upgrade	-	-	-	700	-	700	700
DWDM Build-Out – FY 2026 Telecommunications Upgrade	-	-	-	-	700	700	700
Far West Radio Telecommunications Upgrades	-	-	800	800	800	2,400	2,400



# Enterprise Support Projects (Continued)

## Enterprise Support

### FY 2022 Capital Plan Future Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year	
						Total	Lifetime
<b>Future (continued)</b>							
<b>Telecommunications (continued)</b>							
General Additions	-	1,450	1,450	1,450	1,450	5,800	5,800
Hi Cross-Austin Fiber – FY 2023 Telecommunications Upgrade	-	500	-	-	-	500	500
Hi Cross-Austin Fiber – FY 2024 Telecommunications Upgrade	-	-	700	-	-	700	700
Hilbig Gas Storage Facility Transport – FY 2023 Telecommunications Upgrade	-	525	-	-	-	525	525
Hilbig Gas Storage Facility Transport – FY 2024 Telecommunications Upgrade	-	-	400	-	-	400	400
Minor Capital	-	314	454	762	525	2,055	2,055
Network Stratification – FY 2023 Telecommunications Upgrade	-	500	-	-	-	500	500
Network Stratification – FY 2024 Telecommunications Upgrade	-	-	500	-	-	500	500
Radio Subscriber – FY 2025 Telecommunications Upgrade	-	-	-	4,000	-	4,000	4,000
Radio Subscriber – FY 2026 Telecommunications Upgrade	-	-	-	-	4,000	4,000	4,000
Radio System Core Telecommunications Upgrade	-	-	1,000	1,000	-	2,000	2,000
Radio System Migration – FY 2024 Telecommunications Upgrade	-	-	1,250	1,250	-	2,500	2,500
Telecommunications Technology – FY 2023 System Upgrade	-	1,000	-	-	-	1,000	1,000
Telecommunications Technology – FY 2024 System Upgrade	-	-	1,000	-	-	1,000	1,000
Telecommunications Technology – FY 2025 System Upgrade	-	-	-	1,000	-	1,000	1,000
<b>Transmission Support</b>							
Minor Capital	-	9,685	8,000	8,000	8,000	33,685	33,685
<b>Future Subtotal</b>	-	30,054	29,838	34,525	30,027	124,444	124,444
<b>Total Enterprise Support</b>	30,242	33,422	31,549	34,525	30,027	159,765	175,062

# Appendix

# LCRA Consolidated

## (Including Nonprofit Corporations)

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
<b>Revenues</b>						
<b>Total Net Revenue<sup>1</sup></b>	\$ 982.3	1,039.3	1,079.7	1,111.9	1,240.6	1,285.9
<b>Expenses</b>						
<b>Total Net Expense<sup>1</sup></b>	528.4	572.9	608.3	615.8	629.7	661.3
<b>Net Operating Margin</b>	453.8	466.4	471.4	496.0	610.9	624.5
Less: GenTex Funds <sup>2</sup>	(0.5)	(3.2)	(1.6)	(1.8)	(2.3)	(1.5)
<b>Net Margin for Debt Service, Adjusted</b>	453.3	463.2	469.7	494.3	608.6	623.0
<b>Debt Service</b>	\$ 304.6	325.3	325.9	345.7	399.9	404.9
<b>Debt Service Coverage, Adjusted</b>	1.49x	1.42x	1.44x	1.43x	1.52x	1.54x
<b>Net Margin After Debt Service<sup>3</sup></b>	\$ 149.3	141.2	145.4	150.4	211.0	219.6
Less:						
Operating Reserves	12.7	23.4	22.4	17.1	15.2	16.6
Revenue-Funded Capital	110.7	107.0	116.8	121.5	177.7	184.6
Noncash Revenue	2.6	2.6	2.6	2.6	2.6	2.6
Restricted for Reserves	15.0	2.5	0.7	2.3	9.7	13.2
Restricted for Capital/Debt Retirement	5.6	3.2	0.4	4.3	3.2	0.0
Grants	2.6	2.6	2.6	2.6	2.6	2.6
<b>Net Cash Flow</b>	\$ 0.0	0.0	0.0	0.0	0.0	0.0

<sup>1</sup> Total net revenues and total net expenses are net of intracompany transfers. Total revenues include interest income. Operations and maintenance expense excludes the LCRA TSC capital charge, which is a capital expense for LCRA consolidated.

<sup>2</sup> Includes adjustments related to GenTex capital funding and reserve funding.

<sup>3</sup> Net margin after debt service includes funds dedicated to GenTex.

# **Wholesale Power (Including Nonprofit Corporations)**

**Confidential competitive electric information has been  
removed from this version of the document.**

# LCRA TSC

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Revenues	\$ 494.0	538.8	560.7	590.3	704.5	731.2
Operations and Maintenance	131.2	136.7	144.9	150.9	147.7	155.3
<b>Net Operating Margin</b>	<b>362.8</b>	<b>402.2</b>	<b>415.7</b>	<b>439.5</b>	<b>556.8</b>	<b>576.0</b>
Plus: Interest Income	4.1	1.1	1.2	2.1	3.4	4.1
Less: Assigned Enterprise Expense	53.9	60.8	62.5	65.5	69.4	76.4
Public Service Fund	14.8	16.2	16.8	17.7	21.1	21.9
Resource Development Fund	9.9	10.8	11.2	11.8	14.1	14.6
<b>Net Margin Available for Debt Service</b>	<b>288.3</b>	<b>315.6</b>	<b>326.4</b>	<b>346.5</b>	<b>455.5</b>	<b>467.1</b>
<b>Debt Service</b>	<b>\$ 210.6</b>	<b>231.6</b>	<b>245.1</b>	<b>263.1</b>	<b>317.0</b>	<b>321.2</b>
<b>Debt Service Coverage</b>	<b>1.37x</b>	<b>1.36x</b>	<b>1.33x</b>	<b>1.32x</b>	<b>1.44x</b>	<b>1.45x</b>
<b>Net Margin After Debt Service</b>	<b>\$ 77.7</b>	<b>83.9</b>	<b>81.3</b>	<b>83.4</b>	<b>138.5</b>	<b>145.8</b>
Less:						
Operating Reserves	7.9	12.1	12.8	12.4	11.1	10.9
Assigned Enterprise Capital	17.3	14.4	15.6	16.1	19.0	16.0
Assigned Transmission Minor Capital	7.3	9.2	9.6	7.9	7.9	7.9
Revenue-Funded Capital	55.6	60.0	58.2	63.9	119.7	132.0
Transfer to LCRA <sup>1</sup>	1.1	1.1	0.0	0.0	0.0	0.0
Plus:						
Amortization of Enterprise/Minor Capital <sup>2</sup>	11.4	12.8	14.9	16.9	19.2	21.1
<b>Net Cash Flow</b>	<b>\$ 0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<sup>1</sup> An initial transfer from LCRA TSC to LCRA was authorized by the LCRA and LCRA TSC boards of directors in April 2014. Under the initial contractual commitment, the LCRA and LCRA TSC boards must make an annual determination to authorize each year's transfer. Such annual transfers are payable only if all other financial commitments have been met as required by LCRA TSC's financial policies.

<sup>2</sup> In FY 2012, LCRA TSC began funding minor capital and its share of enterprise capital with current year revenues. It will include an amortization of the amount in each year to recover in rates.

# Water

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
<b>Revenues</b>						
Firm Water	\$ 25.0	26.2	27.4	27.6	27.8	28.9
Agriculture	8.7	9.7	10.0	10.4	10.4	11.2
Other	2.1	3.0	2.4	2.1	2.1	2.1
<b>Total Revenues</b>	<b>35.7</b>	<b>38.9</b>	<b>39.8</b>	<b>40.1</b>	<b>40.3</b>	<b>42.2</b>
Operations and Maintenance	16.5	18.9	18.5	18.4	18.6	18.7
<b>Net Operating Margin</b>	<b>19.2</b>	<b>20.0</b>	<b>21.4</b>	<b>21.7</b>	<b>21.7</b>	<b>23.5</b>
Plus: Interest Income	0.8	0.6	0.6	0.9	1.2	1.4
Less: Assigned Enterprise Expense	5.6	5.6	7.4	7.3	7.6	7.6
Public Service Fund	1.0	1.1	1.1	1.1	1.1	1.2
Resource Development Fund	0.5	0.5	0.5	0.6	0.6	0.6
<b>Net Margin Available for Debt Service</b>	<b>13.0</b>	<b>13.3</b>	<b>12.9</b>	<b>13.6</b>	<b>13.6</b>	<b>15.4</b>
<b>Debt Service</b>	<b>\$ 17.9</b>	<b>18.3</b>	<b>17.9</b>	<b>19.1</b>	<b>19.2</b>	<b>19.7</b>
<b>Debt Service Coverage</b>	<b>0.72x</b>	<b>0.73x</b>	<b>0.72x</b>	<b>0.71x</b>	<b>0.71x</b>	<b>0.78x</b>
Plus: Resource Development Funding	\$ 13.3	13.5	14.1	14.4	14.3	14.6
<b>Debt Service Coverage, Adjusted</b>	<b>1.47x</b>	<b>1.47x</b>	<b>1.51x</b>	<b>1.47x</b>	<b>1.46x</b>	<b>1.52x</b>
<b>Net Margin After Debt Service</b>	<b>8.4</b>	<b>8.6</b>	<b>9.1</b>	<b>8.9</b>	<b>8.8</b>	<b>10.3</b>
Less:						
Operating Reserves	0.0	0.6	0.3	0.0	0.1	0.1
Assigned Enterprise Capital	1.5	1.0	1.2	1.1	1.2	1.1
Revenue-Funded Capital	7.2	7.8	8.7	8.4	8.4	8.2
Noncash Revenues	1.9	1.9	1.9	1.9	1.9	1.9
Plus:						
Agricultural Reserve	2.1	2.7	2.9	2.5	2.8	0.9
<b>Net Cash Flow</b>	<b>\$ 0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>



# Strategic Services

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Revenues	\$ 18.2	12.0	12.7	13.3	13.6	13.9
Operations and Maintenance	11.8	8.4	8.4	8.6	8.7	8.7
<b>Net Operating Margin</b>	6.5	3.6	4.3	4.7	4.9	5.2
Less: Assigned Enterprise Expense	3.0	2.9	3.0	3.1	3.1	3.2
Public Service Fund	0.5	0.3	0.4	0.4	0.4	0.4
Resource Development Fund	0.2	0.1	0.1	0.1	0.2	0.2
<b>Net Margin Available</b>	\$ 2.7	0.2	0.8	1.1	1.2	1.4
<b>Debt Service</b>	\$ 0.0	0.0	0.0	0.1	0.1	0.1
<b>Net Margin After Debt Service</b>	2.7	0.2	0.7	1.0	1.1	1.3
Less:						
Revenue-Funded Capital	0.2	0.3	0.4	0.4	0.3	0.3
Assigned Enterprise Capital	0.5	0.6	0.6	0.7	0.8	0.6
Assigned Transmission Minor Capital	0.1	0.1	0.1	0.1	0.1	0.1
Noncash Revenues	0.7	0.0	0.0	0.0	0.0	0.0
Plus:						
Prior-Year Reserves	0.0	0.7	0.4	0.1	0.0	0.0
<b>Net Cash Flow</b>	\$ 1.2	0.0	0.0	0.0	0.0	0.3

# LCRA TSC Approved Projects

## LCRA Transmission Services Corporation

### FY 2022 Capital Plan Approved Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total	Lifetime
<b>Generation Interconnection Projects</b>							
Fort Mason Circuit Breaker Addition	118	-	-	-	-	118	3,306
Gilleland Creek Circuit Breaker Addition	3	-	-	-	-	3	2,672
Kimbrow Substation Addition	5	-	-	-	-	5	7,505
King Mountain Substation Upgrade	2,880	12	-	-	-	2,892	3,827
Schneeman Draw Circuit Breaker Addition	149	-	-	-	-	149	5,105
Soda Lake Circuit Breaker Addition	300	-	-	-	-	300	1,848
Soda Lake Substation Addition	240	-	-	-	-	240	5,238
Twelvemile Substation Addition	50	8,807	-	-	-	8,857	8,857
Generation Interconnection Projects Subtotal	3,745	8,819	-	-	-	12,564	38,358
<b>Service Reliability Projects</b>							
Asphalt Mines Substation Addition	4	1,914	-	-	-	1,918	2,416
Autotransformer Monitoring - FY 2021 Substation Upgrade	5	-	-	-	-	5	562
Burnet-Lampasas Transmission Line Overhaul	200	-	-	-	-	200	24,600
Clear Fork-Lockhart Transmission Line Overhaul	863	-	-	-	-	863	3,913
Clear Fork-Robert Brown Jr. Transmission Line Overhaul	8,180	19	-	-	-	8,199	8,731
Clear Springs Autotransformer Replacement	43	-	-	-	-	43	6,743
Coronado-Fairland Transmission Line Upgrade	6,355	21	-	-	-	6,376	7,600
Coronado-Sherwood Shores Transmission Line Storm Hardening	9,769	-	-	-	-	9,769	12,001
Crane Protective Relay Substation Upgrade	2	-	-	-	-	2	367
Dimmit Circuit Breaker Addition	1,105	-	-	-	-	1,105	5,108
Eckert-Nebo Transmission Line Overhaul	103	-	-	-	-	103	2,862
Fairland-Lago Vista Transmission Line Upgrade	983	10,900	-	-	-	11,883	13,700
Fayette Area Transmission Line Upgrades	63	-	-	-	-	63	31,266
Fayetteville Substation Upgrade	15,481	-	-	-	-	15,481	19,452
Ferguson-Sherwood Shores Transmission Line Storm Hardening	4	-	-	-	-	4	7,300
Ferguson-Wirtz Transmission Line Storm Hardening	5	-	-	-	-	5	4,400

# LCRA TSC Approved Projects (Continued)

## LCRA Transmission Services Corporation FY 2022 Capital Plan Approved Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year	
						Total	Lifetime
<b>Service Reliability Projects (continued)</b>							
Flood Mitigation – FY 2021 System Upgrade	48	-	-	-	-	48	2,172
Gabriel Substation Upgrade	10,369	-	-	-	-	10,369	23,696
Gabriel-Glasscock Transmission Line Storm Hardening	120	-	-	-	-	120	5,705
Gabriel-Rivery Transmission Line Storm Hardening	62	-	-	-	-	62	8,590
Georgetown-Rivery Transmission Line Upgrade	-	710	-	-	-	710	1,642
Goldthwaite-Lampasas Transmission Line Overhaul	169	-	-	-	-	169	11,139
Graphite Mine Circuit Breaker Addition	7,500	83	-	-	-	7,583	11,141
Grounding – FY 2021 Substation Upgrade	4	-	-	-	-	4	1,159
Hi Cross-Turnersville Transmission Line Storm Hardening	14	-	-	-	-	14	6,131
Hortontown Substation Upgrade	2,028	59	-	-	-	2,087	5,000
Instrument Transformer – FY 2021 Substation Upgrade	549	-	-	-	-	549	1,265
Kempner Circuit Breaker Addition	6,173	69	-	-	-	6,242	9,152
Kenedy Switch-Nordheim West Transmission Line Overhaul	256	6	-	-	-	262	309
LCRA TSC Fiber Build-out – FY 2019 Telecommunications Upgrade	22,397	-	-	-	-	22,397	31,898
LCRA TSC Fiber Build-out – FY 2020 Telecommunications Upgrade	5,746	3	-	-	-	5,749	9,459
Lockhart Substation Upgrade	82	-	-	-	-	82	2,142
Luling-Zorn Transmission Line Overhaul	101	-	-	-	-	101	13,572
Magnolia Mercer Circuit Breaker Addition	3,781	-	-	-	-	3,781	5,131
Obsolete Circuit Breaker Replacement – FY 2019 Substation Upgrade	465	-	-	-	-	465	2,279
Obsolete Circuit Breaker Replacement – FY 2020 Substation Upgrade	76	-	-	-	-	76	5,939
Obsolete Circuit Breaker Replacement – FY 2021 Substation Upgrade	7,760	-	-	-	-	7,760	8,457
Out-of-Band Management Switch Replacement – FY 2021 Telecommunications Upgrade	19	-	-	-	-	19	1,164
Physical Security – FY 2021 Substation Upgrade	5,176	215	37	-	-	5,428	13,400
Pooley Road Circuit Breaker Addition	55	-	-	-	-	55	4,265
Protective Relaying – FY 2021 System Upgrade	3,413	35	-	-	-	3,448	5,400
Ranch Road 12 Circuit Breaker Addition	27	-	-	-	-	27	3,952

# LCRA TSC Approved Projects (Continued)

## LCRA Transmission Services Corporation

### FY 2022 Capital Plan Approved Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total	Lifetime
<b>Service Reliability Projects (continued)</b>							
Red Rock-Tahitian Village Transmission Line Overhaul	14,586	222	-	-	-	14,808	15,700
Remote Terminal Unit MPLS Migration – FY 2021 Telecommunications Upgrade	10	-	-	-	-	10	1,360
Rim Rock-Turtle Creek Transmission Line Storm Hardening	62	-	-	-	-	62	11,830
Robert Brown Jr.-San Marcos Transmission Line Overhaul	5,462	135	-	-	-	5,597	6,306
Switch Automation – FY 2021 Substation Upgrade	250	-	-	-	-	250	1,433
Switch Replacement – FY 2020 Substation Upgrade	28	-	-	-	-	28	1,477
System Operations Control Center Outage Coordination Tool System Upgrade	69	-	-	-	-	69	1,890
System Operations Control Center Security Information and Event Management Tool System Upgrade	191	-	-	-	-	191	480
Transmission Metering – FY 2020 Substation Upgrade	174	312	1	-	-	487	2,060
Transport Network Power – FY 2021 Telecommunications Upgrade	67	-	-	-	-	67	531
Turtle Creek Substation Upgrade	4	-	-	-	-	4	7,028
Weimar Circuit Breaker Addition	1,633	-	-	-	-	1,633	3,499
<b>Service Reliability Projects Subtotal</b>	<b>142,091</b>	<b>14,703</b>	<b>38</b>	<b>-</b>	<b>-</b>	<b>156,832</b>	<b>398,774</b>
<b>System Capacity Projects</b>							
Andice-Bertram-Burnet Transmission Line Upgrade	90	-	-	-	-	90	10,238
Bakersfield-Solstice Transmission Line Addition	10	-	-	-	-	10	87,800
Bellville South-Prairie View Transmission Line Upgrade	-	636	227	-	-	863	2,601
Camp Wood-Leakey Transmission Line Overhaul	1,551	-	-	-	-	1,551	48,000
Cooks Point Substation and Transmission Line Addition	400	-	-	-	-	400	43,957
Crane Circuit Breaker Addition	1,232	3	-	-	-	1,235	1,396
Fort Stockton Switch Substation Upgrade	201	-	-	-	-	201	5,456
Glidden Area Transmission Line Upgrade	100	-	-	-	-	100	19,995
Hornsby Substation Addition	15,297	30,789	-	-	-	46,086	75,756
Kent Street Capacitor Bank Addition	16	-	-	-	-	16	1,997
Motorman Substation Addition	3,629	-	-	-	-	3,629	7,613

# LCRA TSC Approved Projects (Continued)

LCRA Transmission Services Corporation

FY 2022 Capital Plan Approved Projects

(Dollars in thousands)

Project Name	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Total	Lifetime
<b>System Capacity Projects (continued)</b>							
Mountain Home Substation and Transmission Line Addition	35,112	32,363	3,545	-	-	71,020	79,089
Rattler Substation Addition	167	-	-	-	-	167	5,917
Shadow Glen Substation Upgrade	436	-	-	-	-	436	795
Swiftex Substation Upgrade	1,605	-	-	-	-	1,605	2,848
Warda-Winchester Transmission Line Upgrade	135	-	-	-	-	135	4,500
Zorn Autotransformer Replacement	32	-	-	-	-	32	6,694
System Capacity Projects Subtotal	60,013	63,791	3,772	-	-	127,576	404,652
Approved Subtotal	205,849	87,313	3,810	-	-	296,972	841,784

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