



## MEMORANDUM

TO: SLDMWA Finance and Administration Committee and Board of Directors, Alternates

FROM: Frances Mizuno, Special Projects Administrator

DATE: July 6, 2020

RE: San Luis Transmission Project (SLTP) Funding Options

---

### BACKGROUND

The Water Authority has been working on the SLTP since 2016 and the project is now ready for construction, which requires funding to proceed. At the June 4, 2020 Board of Directors meeting, the Board was briefed on the potential of the Bureau of Reclamation (Reclamation) applying for the Transmission Infrastructure Program (TIP) funding to fund the SLTP with the Water Authority serving as the backer for the loan. At the conclusion of the briefing, the Board directed staff to bring back to the Board options for funding the SLTP including the Water Authority financing.

The latest estimated total SLTP Project cost is \$298,808,449 which includes costs already expended for planning and design. The amount actually needed for construction is \$282,072,890. This amount includes \$32.5M for Management Reserves for known risks and \$26.5M contingency for unknown risk.

### OPTIONS AND RECOMMENDATION

Reclamation applying for TIP funding with the Water Authority as the backer is no longer a feasible option as Reclamation is unable to be an applicant for TIP funding. Therefore, based on current information, the various options for potential funding include:

1. Water Authority apply for TIP funding to fund 100% of the SLTP construction cost.
2. Water Authority fund 100% of the cost through a Bond issuance.
3. Public Private Partnership
  - A. Work with a Private investor for a Public Private Partnership (P3) to fund 100% of the Project.
  - B. Water Authority fund 50% and Private investor fund 50% of the Project.

Staff's recommendation is to continue to explore Option 3.B as it is likely to be the least costly and most expedient option.

## **ANALYSIS**

### **OPTION 1 – TRANSMISSION INFRASTRUCTURE PROGRAM (TIP) FUNDING**

**LOAN PROGRAM:** TIP is not a loan guarantee or grant program, and only provides secured (direct) loans.

**TYPICAL LOAN TENOR:** Preference is for shorter-term loans, primarily through construction and up to 10 years.

**INTEREST RATES:** Interest rates set based on equivalent U.S. Treasury rate (plus a credit-based spread if applicable). Working assumption is the interest rate will be around 4%.

**EQUITY:** Most projects are expected to follow customary industry equity requirements.

**LOAN SIZE:** Typical TIP loan financings can range from \$40 million to \$1 billion. TIP may work with co-lenders on larger projects. WAPA TIP strongly prefers to exit transaction at commercial operations in favor of capital market and institutional investor participation.

**TYPICAL PROGRAM PARTICIPATION COSTS:** Project applicants must submit funds to WAPA TIP to cover all costs related to the intake, reviews, underwriting activities, and other program underwriting costs, which may include affiliated agency activities and outside advisors.

- Costs can range between \$400,000 and \$750,000 plus borrower payment for lender directed consultants.
- Costs vary significantly depending on the complexity of the project.
- Borrowers must bear costs of required annual loan servicing and monitoring.
- Commitment Fees are determined for each transaction.
- Interest rates are based upon applicable United States Treasury rates, plus a credit risk premium determined during underwriting credit assessment(s).
- An annual loan administration cost can average \$350,000 per year.

Reclamation's analysis for TIP financing for \$300M with a 4% interest and 30- year term is an annual debt service of \$17.4M. The estimated time for a TIP application process is approximately one-year.

### **OPTION 2 - WATER AUTHORITY FINANCING WITH A PUBLIC BOND ISSUANCE**

Water Authority staff requested an analysis from Fieldman, Rolapp & Associates for Public Bond Issuance. The attached analysis includes financing a \$300M project for a term of 30 years. The analysis assumes the 600 MW capacity north to south would be utilized for the CVP and SWP, public purposes and therefore 50% of the Bond would be tax exempt with an interest of 2.8% and an annual debt service of \$7.6M. The 600 MW of south to north capacity would be marketed

for solar projects for private purposes, therefore, 50% would be a taxable Bond with an interest of 3.22% and an annual debt service of \$8.0M. Therefore, the total annual debt service would be \$15.6M.

Under the scenario where the Water Authority funds 100% of the Project cost whether it be by TIP or Bond issuance, the Water Authority could own the 600 MW bi-directional capacity (assuming the Water Authority can own transmission capacity). Four Hundred MW of the North to South Capacity would be turned over to Reclamation for CVP use where that portion of the cost would be borne by CVP Contractors. The remaining capacity would be marketed and contracted to others such as DWR and solar developers. Revenue from these contracts would be used to pay for debt service. This could be a revenue generator for the Water Authority.

Another option would be for the Water Authority to provide the financing and contribute the funds to Western Area Power Administration (WAPA) and have the entire annual debt service be an obligation of the CVP Contractors. WAPA can market the excess capacity and the revenue derived could be used to offset CVP Contractor costs.

### **OPTION 3 – PUBLIC PRIVATE PARTNERSHIP**

#### **A. Work with a private investor for a Public Private Partnership (P3) to fund 100% of the Project.**

Using the analysis provided by Fieldman, Rolapp, it can be assumed that a private investor financing would be similar to the taxable bond portion of the Water Authority financing. Therefore, the total annual debt service would be \$16M (\$8M x 2). This would be \$400k higher than Authority financing 100% of the Project. In addition, the private investor would expect a rate of return for their investment. Therefore, under this scenario with the financing instrument being taxable and the investor's need for a rate of return for their investment, the cost to the CVP for an agreement with the private investor for use of the 400 MW capacity would likely be higher than the Water Authority financing for CVP needs.

#### **B. Water Authority Finances 50% and Private Investor finances 50%**

Under this scenario, Water Authority would fund and own or turnover to WAPA the 600 MW of north to south capacity. The annual debt would be the tax exempt portion of the analysis described above with an annual debt service of \$7.6M. With CVP use of only 400 MW of capacity, the 200 MW of excess capacity can be marketed as an example to the Department of Water Resources under a long-term contract to generate revenue to reduce CVP cost.

Current annual CAISO TAC Cost for San Luis transmission since 2016 has been:

Year	CAISO TAC for Federal Facilities	CAISO TAC for CADWR Facilities
2016*	\$2,364,822	\$548,378
2017	\$5,788,409	\$4,498, 634
2018	\$5,869,337	\$3,210,246
2019	\$5,697,560	\$4,531,918

**\*PG&E's 2207A Contract ended in April 2016. TAC assessments began at that time.**

With the forecast for future TAC fees to continue to increase, having a fixed level cost for the next 30-years of \$7.6M is a prudent investment. See attached break-even analysis.

An investor (e.g. a solar developer) can fund 50% and own the 600 MW of south to north capacity for its own use or market to other investors or solar developers. Preliminary discussions with a solar developer indicates there is strong interest for such a partnership.

#### **ISSUES REQUIRING FURTHER EVALUATION**

Based on this preliminary analysis, staff's recommendation is to continue to explore Option 3.B as it is likely to be the least costly and most expedient option. However, additional work is required. At a minimum, the following issues requires further evaluation:

1. Can the Water Authority build, own, and market transmission capacity?
2. Need for methodology/agreement with Reclamation to collect payment from CVP Contractors that are not Water Authority O&M rate payers that have obligation for their share of SLTP cost (Water Authority PUE collection pays for approximately 80% of all PUE costs with 20% paid by other CVP Contractors). An alternative may be an offset for future O&M payments for Water Authority members that opt to pay for the other CVP Contractor's obligations.

**San Luis Delta Mendota Water Authority  
San Luis Transmission Plant Financing**

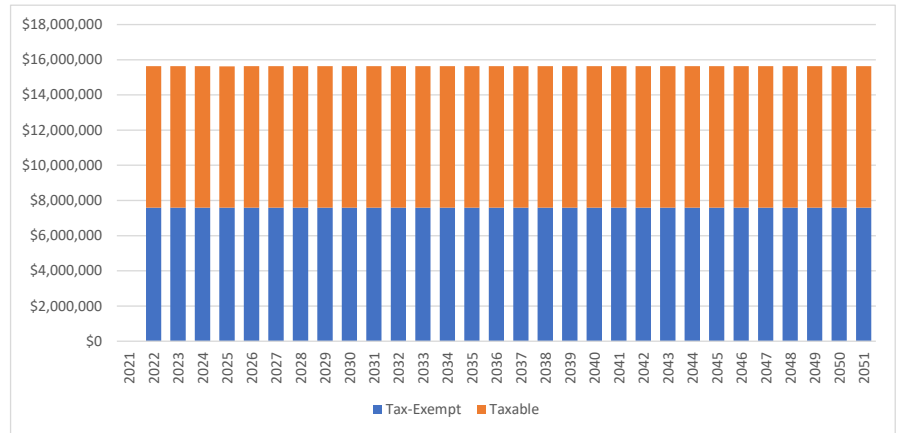
**Total Capital Cost** **\$300,000,000**

**2020 Bond Issue**

Fiscal Year Ended February 28 or 29		Tax-Exempt	Taxable	Total
0	2021	-	-	-
1	2022	\$7,587,600	\$8,043,965	\$15,631,565
2	2023	7,591,100	8,043,779	15,634,879
3	2024	7,589,600	8,044,597	15,634,197
4	2025	7,588,100	8,040,996	15,629,096
5	2026	7,591,350	8,040,611	15,631,961
6	2027	7,588,850	8,043,874	15,632,724
7	2028	7,590,600	8,043,970	15,634,570
8	2029	7,591,100	8,040,149	15,631,249
9	2030	7,590,100	8,042,286	15,632,386
10	2031	7,592,350	8,041,555	15,633,905
11	2032	7,592,350	8,039,660	15,632,010
12	2033	7,589,850	8,044,175	15,634,025
13	2034	7,589,600	8,041,600	15,631,200
14	2035	7,591,100	8,041,715	15,632,815
15	2036	7,588,850	8,044,021	15,632,871
16	2037	7,587,600	8,042,990	15,630,590
17	2038	7,591,850	8,040,200	15,632,050
18	2039	7,590,850	8,043,487	15,634,337
19	2040	7,589,350	8,043,837	15,633,187
20	2041	7,591,850	8,043,662	15,635,512
21	2042	7,587,600	8,042,799	15,630,399
22	2043	7,592,600	8,040,514	15,633,114
23	2044	7,589,200	8,041,870	15,631,070
24	2045	7,592,400	8,041,531	15,633,931
25	2046	7,591,600	8,044,331	15,635,931
26	2047	7,591,600	8,039,936	15,631,536
27	2048	7,592,000	8,043,189	15,635,189
28	2049	7,587,400	8,043,049	15,630,449
29	2050	7,587,600	8,044,342	15,631,942
30	2051	7,592,000	8,041,717	15,633,717
<b>TOTAL</b>		<b>\$227,708,000</b>	<b>\$241,274,405</b>	<b>\$468,982,405</b>

Bond Statistics	Tax-exempt	Taxable	Total
Par Amount	\$125,465,000	\$153,920,000	\$279,385,000
Project Cost	\$150,000,000	\$150,000,000	\$300,000,000
Cost of Issuance	\$269,445	\$330,555	\$600,000
Underwriter's Discount	\$627,325	\$769,600	\$1,396,925
Bond Insurance	\$2,277,080	\$2,412,744	\$4,689,824
DSRF Surety premium	\$379,630	\$402,230	\$781,860
True Interest Cost	2.80%	3.22%	3.01%

*\*All numbers are preliminary, subject to change. Based on market conditions as of June 26, 2020.*



## SOURCES AND USES OF FUNDS

### SLTP Bond Financing (50/50 Tax-exempt and Taxable Issuance) San Luis Delta Mendota Water Authority San Luis Transmission Project Preliminary, subject to change

Dated Date                    11/01/2020  
Delivery Date                11/01/2020

<i>Sources:</i>	<i>TE Bond Issue for San Luis Transmission Project</i>	<i>TX Bond Issue for San Luis Transmission Project</i>	<i>Total</i>
Bond Proceeds:			
Par Amount	125,465,000.00	153,920,000.00	279,385,000.00
Premium	28,088,573.20		28,088,573.20
	153,553,573.20	153,920,000.00	307,473,573.20
<hr/>			
<i>Uses:</i>	<i>TE Bond Issue for San Luis Transmission Project</i>	<i>TX Bond Issue for San Luis Transmission Project</i>	<i>Total</i>
Project Fund Deposits:			
Project Fund	150,000,000.00	150,000,000.00	300,000,000.00
Delivery Date Expenses:			
Cost of Issuance	269,445.39	330,554.61	600,000.00
Underwriter's Discount	627,325.00	769,600.00	1,396,925.00
Bond Insurance (100 bps)	2,277,080.00	2,412,744.05	4,689,824.05
DSRF Surety Premium (5.00%)	379,630.00	402,229.85	781,859.85
	3,553,480.39	3,915,128.51	7,468,608.90
Other Uses of Funds:			
Additional Proceeds	92.81	4,871.49	4,964.30
	153,553,573.20	153,920,000.00	307,473,573.20

Note: Assumes Bond Insurance and a Surety Premium

## BOND SUMMARY STATISTICS

### SLTP Bond Financing (50/50 Tax-exempt and Taxable Issuance) San Luis Delta Mendota Water Authority San Luis Transmission Project Preliminary, subject to change

	TE Bond Issue for San Luis Transmission Project	TX Bond Issue for San Luis Transmission Project	Aggregate
Dated Date	11/01/2020	11/01/2020	11/01/2020
Delivery Date	11/01/2020	11/01/2020	11/01/2020
First Coupon	05/01/2021	05/01/2021	05/01/2021
Last Maturity	11/01/2050	11/01/2050	11/01/2050
Arbitrage Yield	2.840690%	2.840690%	2.840690%
True Interest Cost (TIC)	2.795360%	3.224395%	3.011890%
All-In TIC	2.943228%	3.387042%	3.167087%
Average Coupon	4.327169%	3.226899%	3.739679%
Average Life (years)	18.832	17.588	18.147
Weighted Average Maturity (years)	18.572	17.588	18.079
Duration of Issue (years)	13.306	13.028	13.165
Par Amount	125,465,000.00	153,920,000.00	279,385,000.00
Bond Proceeds	153,553,573.20	153,920,000.00	307,473,573.20
Total Interest	102,243,000.00	87,354,405.24	189,597,405.24
Net Interest	74,781,751.80	88,124,005.24	162,905,757.04
Total Debt Service	227,708,000.00	241,274,405.24	468,982,405.24
Maximum Annual Debt Service	7,592,600.00	8,044,596.96	15,635,931.40
Average Annual Debt Service	7,590,266.67	8,042,480.17	15,632,746.84
Underwriter's Fees (per \$1000)			
Average Takedown			
Other Fee	5.000000	5.000000	5.000000
Total Underwriter's Discount	5.000000	5.000000	5.000000
Bid Price	121.887577	99.500000	109.553716

<i>Bond Component</i>	<i>Par Value</i>	<i>Price</i>	<i>Average Coupon</i>	<i>Average Life</i>	<i>PV of 1 bp change</i>
Bond Component	134,620,000.00	113.707	3.921%	10.732	115,979.90
2040 Term Bond	16,175,000.00	100.000	3.250%	19.021	23,777.25
2044 Term Bond	30,710,000.00	100.000	3.347%	23.066	51,899.90
2045 Term Bond	27,775,000.00	116.078	4.000%	23.079	26,941.75
2050 Term Bond	70,105,000.00	107.375	3.739%	28.073	99,621.15
	279,385,000.00			18.147	318,219.95

## BOND SUMMARY STATISTICS

### SLTP Bond Financing (50/50 Tax-exempt and Taxable Issuance) San Luis Delta Mendota Water Authority San Luis Transmission Project Preliminary, subject to change

	TIC	All-In TIC	Arbitrage Yield
Par Value	279,385,000.00	279,385,000.00	279,385,000.00
+ Accrued Interest			
+ Premium (Discount)	28,088,573.20	28,088,573.20	28,088,573.20
- Underwriter's Discount	-1,396,925.00	-1,396,925.00	
- Cost of Issuance Expense		-600,000.00	
- Other Amounts		-5,471,683.90	-4,689,824.05
Target Value	306,076,648.20	300,004,964.30	302,783,749.15
Target Date	11/01/2020	11/01/2020	11/01/2020
Yield	3.011890%	3.167087%	2.840690%



**BOND PRICING**

**SLTP Bond Financing (50/50 Tax-exempt and Taxable Issuance)**  
**San Luis Delta Mendota Water Authority**  
**San Luis Transmission Project**  
**Preliminary, subject to change**

<i>Bond Component</i>	<i>Maturity Date</i>	<i>Amount</i>	<i>Rate</i>	<i>Yield</i>	<i>Price</i>	<i>Yield to Maturity</i>	<i>Call Date</i>	<i>Call Price</i>	<i>Premium (-Discount)</i>
TE Bond Issue for San Luis Transmission Project, Bond Component:									
	11/01/2021	1,930,000	5.000%	0.390%	104.596				88,702.80
	11/01/2022	2,030,000	5.000%	0.400%	109.154				185,826.20
	11/01/2023	2,130,000	5.000%	0.420%	113.639				290,510.70
	11/01/2024	2,235,000	5.000%	0.460%	117.973				401,696.55
	11/01/2025	2,350,000	5.000%	0.560%	121.861				513,733.50
	11/01/2026	2,465,000	5.000%	0.730%	125.022				616,792.30
	11/01/2027	2,590,000	5.000%	0.880%	127.910				722,869.00
	11/01/2028	2,720,000	5.000%	0.980%	130.859				839,364.80
	11/01/2029	2,855,000	5.000%	1.060%	133.735				963,134.25
	11/01/2030	3,000,000	5.000%	1.080%	137.062				1,111,860.00
	11/01/2031	3,150,000	5.000%	1.170%	136.045 C	1.444%	11/01/2030	100.000	1,135,417.50
	11/01/2032	3,305,000	5.000%	1.250%	135.147 C	1.742%	11/01/2030	100.000	1,161,608.35
	11/01/2033	3,470,000	5.000%	1.370%	133.815 C	2.028%	11/01/2030	100.000	1,173,380.50
	11/01/2034	3,645,000	5.000%	1.430%	133.154 C	2.230%	11/01/2030	100.000	1,208,463.30
	11/01/2035	3,825,000	5.000%	1.510%	132.280 C	2.421%	11/01/2030	100.000	1,234,710.00
	11/01/2036	4,015,000	5.000%	1.550%	131.845 C	2.562%	11/01/2030	100.000	1,278,576.75
	11/01/2037	4,220,000	5.000%	1.600%	131.304 C	2.693%	11/01/2030	100.000	1,321,028.80
	11/01/2038	4,430,000	5.000%	1.670%	130.550 C	2.823%	11/01/2030	100.000	1,353,365.00
	11/01/2039	4,650,000	5.000%	1.710%	130.122 C	2.923%	11/01/2030	100.000	1,400,673.00
	11/01/2040	4,885,000	5.000%	1.750%	129.696 C	3.012%	11/01/2030	100.000	1,450,649.60
		<u>63,900,000</u>							<u>18,452,362.90</u>
TE Bond Issue for San Luis Transmission Project, 2045 Term Bond:									
	11/01/2041	5,125,000	4.000%	2.200%	116.078 C	3.074%	11/01/2030	100.000	823,997.50
	11/01/2042	5,335,000	4.000%	2.200%	116.078 C	3.074%	11/01/2030	100.000	857,761.30
	11/01/2043	5,545,000	4.000%	2.200%	116.078 C	3.074%	11/01/2030	100.000	891,525.10
	11/01/2044	5,770,000	4.000%	2.200%	116.078 C	3.074%	11/01/2030	100.000	927,700.60
	11/01/2045	<u>6,000,000</u>	4.000%	2.200%	116.078 C	3.074%	11/01/2030	100.000	<u>964,680.00</u>
		27,775,000							4,465,664.50
TE Bond Issue for San Luis Transmission Project, 2050 Term Bond:									
	11/01/2046	6,240,000	4.000%	2.280%	115.302 C	3.202%	11/01/2030	100.000	954,844.80
	11/01/2047	6,490,000	4.000%	2.280%	115.302 C	3.202%	11/01/2030	100.000	993,099.80
	11/01/2048	6,745,000	4.000%	2.280%	115.302 C	3.202%	11/01/2030	100.000	1,032,119.90
	11/01/2049	7,015,000	4.000%	2.280%	115.302 C	3.202%	11/01/2030	100.000	1,073,435.30
	11/01/2050	<u>7,300,000</u>	4.000%	2.280%	115.302 C	3.202%	11/01/2030	100.000	<u>1,117,046.00</u>
		33,790,000							5,170,545.80
TX Bond Issue for San Luis Transmission Project, Bond Component:									
	11/01/2021	3,620,000	0.972%	0.972%	100.000				
	11/01/2022	3,655,000	1.072%	1.072%	100.000				
	11/01/2023	3,695,000	1.180%	1.180%	100.000				
	11/01/2024	3,735,000	1.349%	1.349%	100.000				
	11/01/2025	3,785,000	1.499%	1.499%	100.000				
	11/01/2026	3,845,000	1.688%	1.688%	100.000				
	11/01/2027	3,910,000	1.888%	1.888%	100.000				
	11/01/2028	3,980,000	2.082%	2.082%	100.000				
	11/01/2029	4,065,000	2.232%	2.232%	100.000				
	11/01/2030	4,155,000	2.332%	2.332%	100.000				
	11/01/2031	4,250,000	2.482%	2.482%	100.000				
	11/01/2032	4,360,000	2.582%	2.582%	100.000				
	11/01/2033	4,470,000	2.682%	2.682%	100.000				
	11/01/2034	4,590,000	2.782%	2.782%	100.000				
	11/01/2035	4,720,000	2.882%	2.882%	100.000				
	11/01/2036	4,855,000	3.662%	3.662%	100.000				
	11/01/2037	<u>5,030,000</u>	3.712%	3.712%	100.000				
		70,720,000							
TX Bond Issue for San Luis Transmission Project, 2040 Term Bond:									
	11/01/2038	5,220,000	3.250%	3.250%	100.000				
	11/01/2039	5,390,000	3.250%	3.250%	100.000				
	11/01/2040	<u>5,565,000</u>	3.250%	3.250%	100.000				
		16,175,000							
TX Bond Issue for San Luis Transmission Project, 2044 Term Bond:									
	11/01/2041	5,745,000	3.347%	3.347%	100.000				

**BOND PRICING**

**SLTP Bond Financing (50/50 Tax-exempt and Taxable Issuance)  
San Luis Delta Mendota Water Authority  
San Luis Transmission Project  
Preliminary, subject to change**

<i>Bond Component</i>	<i>Maturity Date</i>	<i>Amount</i>	<i>Rate</i>	<i>Yield</i>	<i>Price</i>	<i>Yield to Maturity</i>	<i>Call Date</i>	<i>Call Price</i>	<i>Premium (-Discount)</i>
TX Bond Issue for San Luis Transmission Project, 2044 Term Bond:									
	11/01/2042	5,935,000	3.347%	3.347%	100.000				
	11/01/2043	6,135,000	3.347%	3.347%	100.000				
	11/01/2044	6,340,000	3.347%	3.347%	100.000				
	11/01/2045	6,555,000	3.347%	3.347%	100.000				
		<u>30,710,000</u>							
TX Bond Issue for San Luis Transmission Project, 2050 Term Bond:									
	11/01/2046	6,770,000	3.497%	3.497%	100.000				
	11/01/2047	7,010,000	3.497%	3.497%	100.000				
	11/01/2048	7,255,000	3.497%	3.497%	100.000				
	11/01/2049	7,510,000	3.497%	3.497%	100.000				
	11/01/2050	7,770,000	3.497%	3.497%	100.000				
		<u>36,315,000</u>							
		279,385,000							28,088,573.20

Dated Date	11/01/2020	
Delivery Date	11/01/2020	
First Coupon	05/01/2021	
Par Amount	279,385,000.00	
Premium	28,088,573.20	
Production	307,473,573.20	110.053716%
Underwriter's Discount	-1,396,925.00	-0.500000%
Purchase Price	306,076,648.20	109.553716%
Accrued Interest		
Net Proceeds	306,076,648.20	

**BOND DEBT SERVICE BREAKDOWN**

**SLTP Bond Financing (50/50 Tax-exempt and Taxable Issuance)  
San Luis Delta Mendota Water Authority  
San Luis Transmission Project  
Preliminary, subject to change**

<i>Period Ending</i>	<i>TE Bond Issue for San Luis Transmission Project</i>	<i>TX Bond Issue for San Luis Transmission Project</i>	<i>Total</i>
02/28/2022	7,587,600	8,043,964.96	15,631,564.96
02/28/2023	7,591,100	8,043,778.56	15,634,878.56
02/28/2024	7,589,600	8,044,596.96	15,634,196.96
02/28/2025	7,588,100	8,040,995.96	15,629,095.96
02/28/2026	7,591,350	8,040,610.80	15,631,960.80
02/28/2027	7,588,850	8,043,873.66	15,632,723.66
02/28/2028	7,590,600	8,043,970.06	15,634,570.06
02/28/2029	7,591,100	8,040,149.26	15,631,249.26
02/28/2030	7,590,100	8,042,285.66	15,632,385.66
02/28/2031	7,592,350	8,041,554.86	15,633,904.86
02/28/2032	7,592,350	8,039,660.26	15,632,010.26
02/28/2033	7,589,850	8,044,175.26	15,634,025.26
02/28/2034	7,589,600	8,041,600.06	15,631,200.06
02/28/2035	7,591,100	8,041,714.66	15,632,814.66
02/28/2036	7,588,850	8,044,020.86	15,632,870.86
02/28/2037	7,587,600	8,042,990.46	15,630,590.46
02/28/2038	7,591,850	8,040,200.36	15,632,050.36
02/28/2039	7,590,850	8,043,486.76	15,634,336.76
02/28/2040	7,589,350	8,043,836.76	15,633,186.76
02/28/2041	7,591,850	8,043,661.76	15,635,511.76
02/28/2042	7,587,600	8,042,799.26	15,630,399.26
02/28/2043	7,592,600	8,040,514.10	15,633,114.10
02/28/2044	7,589,200	8,041,869.66	15,631,069.66
02/28/2045	7,592,400	8,041,531.20	15,633,931.20
02/28/2046	7,591,600	8,044,331.40	15,635,931.40
02/28/2047	7,591,600	8,039,935.56	15,631,535.56
02/28/2048	7,592,000	8,043,188.66	15,635,188.66
02/28/2049	7,587,400	8,043,048.96	15,630,448.96
02/28/2050	7,587,600	8,044,341.60	15,631,941.60
02/28/2051	7,592,000	8,041,716.90	15,633,716.90
	227,708,000	241,274,405.24	468,982,405.24

### BOND DEBT SERVICE BREAKDOWN

**SLTP Bond Financing (50/50 Tax-exempt and Taxable Issuance)  
San Luis Delta Mendota Water Authority  
San Luis Transmission Project  
Preliminary, subject to change**

<i>Period Ending</i>	<i>TE Bond Issue for San Luis Transmission Project</i>	<i>TX Bond Issue for San Luis Transmission Project</i>	<i>Total</i>	<i>Annual Total</i>
08/28/2021	2,828,800	2,211,982.48	5,040,782.48	
02/28/2022	4,758,800	5,831,982.48	10,590,782.48	15,631,564.96
08/28/2022	2,780,550	2,194,389.28	4,974,939.28	
02/28/2023	4,810,550	5,849,389.28	10,659,939.28	15,634,878.56
08/28/2023	2,729,800	2,174,798.48	4,904,598.48	
02/28/2024	4,859,800	5,869,798.48	10,729,598.48	15,634,196.96
08/28/2024	2,676,550	2,152,997.98	4,829,547.98	
02/28/2025	4,911,550	5,887,997.98	10,799,547.98	15,629,095.96
08/28/2025	2,620,675	2,127,805.40	4,748,480.40	
02/28/2026	4,970,675	5,912,805.40	10,883,480.40	15,631,960.80
08/28/2026	2,561,925	2,099,436.83	4,661,361.83	
02/28/2027	5,026,925	5,944,436.83	10,971,361.83	15,632,723.66
08/28/2027	2,500,300	2,066,985.03	4,567,285.03	
02/28/2028	5,090,300	5,976,985.03	11,067,285.03	15,634,570.06
08/28/2028	2,435,550	2,030,074.63	4,465,624.63	
02/28/2029	5,155,550	6,010,074.63	11,165,624.63	15,631,249.26
08/28/2029	2,367,550	1,988,642.83	4,356,192.83	
02/28/2030	5,222,550	6,053,642.83	11,276,192.83	15,632,385.66
08/28/2030	2,296,175	1,943,277.43	4,239,452.43	
02/28/2031	5,296,175	6,098,277.43	11,394,452.43	15,633,904.86
08/28/2031	2,221,175	1,894,830.13	4,116,005.13	
02/28/2032	5,371,175	6,144,830.13	11,516,005.13	15,632,010.26
08/28/2032	2,142,425	1,842,087.63	3,984,512.63	
02/28/2033	5,447,425	6,202,087.63	11,649,512.63	15,634,025.26
08/28/2033	2,059,800	1,785,800.03	3,845,600.03	
02/28/2034	5,529,800	6,255,800.03	11,785,600.03	15,631,200.06
08/28/2034	1,973,050	1,725,857.33	3,698,907.33	
02/28/2035	5,618,050	6,315,857.33	11,933,907.33	15,632,814.66
08/28/2035	1,881,925	1,662,010.43	3,543,935.43	
02/28/2036	5,706,925	6,382,010.43	12,088,935.43	15,632,870.86
08/28/2036	1,786,300	1,593,995.23	3,380,295.23	
02/28/2037	5,801,300	6,448,995.23	12,250,295.23	15,630,590.46
08/28/2037	1,685,925	1,505,100.18	3,191,025.18	
02/28/2038	5,905,925	6,535,100.18	12,441,025.18	15,632,050.36
08/28/2038	1,580,425	1,411,743.38	2,992,168.38	
02/28/2039	6,010,425	6,631,743.38	12,642,168.38	15,634,336.76
08/28/2039	1,469,675	1,326,918.38	2,796,593.38	
02/28/2040	6,119,675	6,716,918.38	12,836,593.38	15,633,186.76
08/28/2040	1,353,425	1,239,330.88	2,592,755.88	
02/28/2041	6,238,425	6,804,330.88	13,042,755.88	15,635,511.76
08/28/2041	1,231,300	1,148,899.63	2,380,199.63	
02/28/2042	6,356,300	6,893,899.63	13,250,199.63	15,630,399.26
08/28/2042	1,128,800	1,052,757.05	2,181,557.05	
02/28/2043	6,463,800	6,987,757.05	13,451,557.05	15,633,114.10
08/28/2043	1,022,100	953,434.83	1,975,534.83	
02/28/2044	6,567,100	7,088,434.83	13,655,534.83	15,631,069.66
08/28/2044	911,200	850,765.60	1,761,965.60	
02/28/2045	6,681,200	7,190,765.60	13,871,965.60	15,633,931.20
08/28/2045	795,800	744,665.70	1,540,465.70	
02/28/2046	6,795,800	7,299,665.70	14,095,465.70	15,635,931.40
08/28/2046	675,800	634,967.78	1,310,767.78	
02/28/2047	6,915,800	7,404,967.78	14,320,767.78	15,631,535.56
08/28/2047	551,000	516,594.33	1,067,594.33	
02/28/2048	7,041,000	7,526,594.33	14,567,594.33	15,635,188.66
08/28/2048	421,200	394,024.48	815,224.48	
02/28/2049	7,166,200	7,649,024.48	14,815,224.48	15,630,448.96
08/28/2049	286,300	267,170.80	553,470.80	
02/28/2050	7,301,300	7,777,170.80	15,078,470.80	15,631,941.60
08/28/2050	146,000	135,858.45	281,858.45	
02/28/2051	7,446,000	7,905,858.45	15,351,858.45	15,633,716.90
	227,708,000	241,274,405.24	468,982,405.24	468,982,405.24

**BOND DEBT SERVICE**

**Authority Contracts**  
**TE Bond Issue for San Luis Transmission Project**  
**San Luis Delta Mendota Water Authority**

<i>Period Ending</i>	<i>Principal</i>	<i>Coupon</i>	<i>Interest</i>	<i>Debt Service</i>
02/28/2022	1,930,000	5.000%	5,657,600	7,587,600
02/28/2023	2,030,000	5.000%	5,561,100	7,591,100
02/28/2024	2,130,000	5.000%	5,459,600	7,589,600
02/28/2025	2,235,000	5.000%	5,353,100	7,588,100
02/28/2026	2,350,000	5.000%	5,241,350	7,591,350
02/28/2027	2,465,000	5.000%	5,123,850	7,588,850
02/28/2028	2,590,000	5.000%	5,000,600	7,590,600
02/28/2029	2,720,000	5.000%	4,871,100	7,591,100
02/28/2030	2,855,000	5.000%	4,735,100	7,590,100
02/28/2031	3,000,000	5.000%	4,592,350	7,592,350
02/28/2032	3,150,000	5.000%	4,442,350	7,592,350
02/28/2033	3,305,000	5.000%	4,284,850	7,589,850
02/28/2034	3,470,000	5.000%	4,119,600	7,589,600
02/28/2035	3,645,000	5.000%	3,946,100	7,591,100
02/28/2036	3,825,000	5.000%	3,763,850	7,588,850
02/28/2037	4,015,000	5.000%	3,572,600	7,587,600
02/28/2038	4,220,000	5.000%	3,371,850	7,591,850
02/28/2039	4,430,000	5.000%	3,160,850	7,590,850
02/28/2040	4,650,000	5.000%	2,939,350	7,589,350
02/28/2041	4,885,000	5.000%	2,706,850	7,591,850
02/28/2042	5,125,000	4.000%	2,462,600	7,587,600
02/28/2043	5,335,000	4.000%	2,257,600	7,592,600
02/28/2044	5,545,000	4.000%	2,044,200	7,589,200
02/28/2045	5,770,000	4.000%	1,822,400	7,592,400
02/28/2046	6,000,000	4.000%	1,591,600	7,591,600
02/28/2047	6,240,000	4.000%	1,351,600	7,591,600
02/28/2048	6,490,000	4.000%	1,102,000	7,592,000
02/28/2049	6,745,000	4.000%	842,400	7,587,400
02/28/2050	7,015,000	4.000%	572,600	7,587,600
02/28/2051	7,300,000	4.000%	292,000	7,592,000
	125,465,000		102,243,000	227,708,000

## BOND DEBT SERVICE

### Authority Contracts TX Bond Issue for San Luis Transmission Project San Luis Delta Mendota Water Authority

<i>Period Ending</i>	<i>Principal</i>	<i>Coupon</i>	<i>Interest</i>	<i>Debt Service</i>
02/28/2022	3,620,000	0.972%	4,423,964.96	8,043,964.96
02/28/2023	3,655,000	1.072%	4,388,778.56	8,043,778.56
02/28/2024	3,695,000	1.180%	4,349,596.96	8,044,596.96
02/28/2025	3,735,000	1.349%	4,305,995.96	8,040,995.96
02/28/2026	3,785,000	1.499%	4,255,610.80	8,040,610.80
02/28/2027	3,845,000	1.688%	4,198,873.66	8,043,873.66
02/28/2028	3,910,000	1.888%	4,133,970.06	8,043,970.06
02/28/2029	3,980,000	2.082%	4,060,149.26	8,040,149.26
02/28/2030	4,065,000	2.232%	3,977,285.66	8,042,285.66
02/28/2031	4,155,000	2.332%	3,886,554.86	8,041,554.86
02/28/2032	4,250,000	2.482%	3,789,660.26	8,039,660.26
02/28/2033	4,360,000	2.582%	3,684,175.26	8,044,175.26
02/28/2034	4,470,000	2.682%	3,571,600.06	8,041,600.06
02/28/2035	4,590,000	2.782%	3,451,714.66	8,041,714.66
02/28/2036	4,720,000	2.882%	3,324,020.86	8,044,020.86
02/28/2037	4,855,000	3.662%	3,187,990.46	8,042,990.46
02/28/2038	5,030,000	3.712%	3,010,200.36	8,040,200.36
02/28/2039	5,220,000	3.250%	2,823,486.76	8,043,486.76
02/28/2040	5,390,000	3.250%	2,653,836.76	8,043,836.76
02/28/2041	5,565,000	3.250%	2,478,661.76	8,043,661.76
02/28/2042	5,745,000	3.347%	2,297,799.26	8,042,799.26
02/28/2043	5,935,000	3.347%	2,105,514.10	8,040,514.10
02/28/2044	6,135,000	3.347%	1,906,869.66	8,041,869.66
02/28/2045	6,340,000	3.347%	1,701,531.20	8,041,531.20
02/28/2046	6,555,000	3.347%	1,489,331.40	8,044,331.40
02/28/2047	6,770,000	3.497%	1,269,935.56	8,039,935.56
02/28/2048	7,010,000	3.497%	1,033,188.66	8,043,188.66
02/28/2049	7,255,000	3.497%	788,048.96	8,043,048.96
02/28/2050	7,510,000	3.497%	534,341.60	8,044,341.60
02/28/2051	7,770,000	3.497%	271,716.90	8,041,716.90
	153,920,000		87,354,405.24	241,274,405.24

## BOND DEBT SERVICE

### Authority Contracts TE Bond Issue for San Luis Transmission Project San Luis Delta Mendota Water Authority

<i>Period Ending</i>	<i>Principal</i>	<i>Coupon</i>	<i>Interest</i>	<i>Debt Service</i>	<i>Annual Debt Service</i>
08/28/2021			2,828,800	2,828,800	
02/28/2022	1,930,000	5.000%	2,828,800	4,758,800	7,587,600
08/28/2022			2,780,550	2,780,550	
02/28/2023	2,030,000	5.000%	2,780,550	4,810,550	7,591,100
08/28/2023			2,729,800	2,729,800	
02/28/2024	2,130,000	5.000%	2,729,800	4,859,800	7,589,600
08/28/2024			2,676,550	2,676,550	
02/28/2025	2,235,000	5.000%	2,676,550	4,911,550	7,588,100
08/28/2025			2,620,675	2,620,675	
02/28/2026	2,350,000	5.000%	2,620,675	4,970,675	7,591,350
08/28/2026			2,561,925	2,561,925	
02/28/2027	2,465,000	5.000%	2,561,925	5,026,925	7,588,850
08/28/2027			2,500,300	2,500,300	
02/28/2028	2,590,000	5.000%	2,500,300	5,090,300	7,590,600
08/28/2028			2,435,550	2,435,550	
02/28/2029	2,720,000	5.000%	2,435,550	5,155,550	7,591,100
08/28/2029			2,367,550	2,367,550	
02/28/2030	2,855,000	5.000%	2,367,550	5,222,550	7,590,100
08/28/2030			2,296,175	2,296,175	
02/28/2031	3,000,000	5.000%	2,296,175	5,296,175	7,592,350
08/28/2031			2,221,175	2,221,175	
02/28/2032	3,150,000	5.000%	2,221,175	5,371,175	7,592,350
08/28/2032			2,142,425	2,142,425	
02/28/2033	3,305,000	5.000%	2,142,425	5,447,425	7,589,850
08/28/2033			2,059,800	2,059,800	
02/28/2034	3,470,000	5.000%	2,059,800	5,529,800	7,589,600
08/28/2034			1,973,050	1,973,050	
02/28/2035	3,645,000	5.000%	1,973,050	5,618,050	7,591,100
08/28/2035			1,881,925	1,881,925	
02/28/2036	3,825,000	5.000%	1,881,925	5,706,925	7,588,850
08/28/2036			1,786,300	1,786,300	
02/28/2037	4,015,000	5.000%	1,786,300	5,801,300	7,587,600
08/28/2037			1,685,925	1,685,925	
02/28/2038	4,220,000	5.000%	1,685,925	5,905,925	7,591,850
08/28/2038			1,580,425	1,580,425	
02/28/2039	4,430,000	5.000%	1,580,425	6,010,425	7,590,850
08/28/2039			1,469,675	1,469,675	
02/28/2040	4,650,000	5.000%	1,469,675	6,119,675	7,589,350
08/28/2040			1,353,425	1,353,425	
02/28/2041	4,885,000	5.000%	1,353,425	6,238,425	7,591,850
08/28/2041			1,231,300	1,231,300	
02/28/2042	5,125,000	4.000%	1,231,300	6,356,300	7,587,600
08/28/2042			1,128,800	1,128,800	
02/28/2043	5,335,000	4.000%	1,128,800	6,463,800	7,592,600
08/28/2043			1,022,100	1,022,100	
02/28/2044	5,545,000	4.000%	1,022,100	6,567,100	7,589,200
08/28/2044			911,200	911,200	
02/28/2045	5,770,000	4.000%	911,200	6,681,200	7,592,400
08/28/2045			795,800	795,800	
02/28/2046	6,000,000	4.000%	795,800	6,795,800	7,591,600
08/28/2046			675,800	675,800	
02/28/2047	6,240,000	4.000%	675,800	6,915,800	7,591,600
08/28/2047			551,000	551,000	
02/28/2048	6,490,000	4.000%	551,000	7,041,000	7,592,000
08/28/2048			421,200	421,200	
02/28/2049	6,745,000	4.000%	421,200	7,166,200	7,587,400
08/28/2049			286,300	286,300	
02/28/2050	7,015,000	4.000%	286,300	7,301,300	7,587,600
08/28/2050			146,000	146,000	
02/28/2051	7,300,000	4.000%	146,000	7,446,000	7,592,000
	125,465,000		102,243,000	227,708,000	227,708,000

**BOND DEBT SERVICE**

**Authority Contracts**  
**TX Bond Issue for San Luis Transmission Project**  
**San Luis Delta Mendota Water Authority**

<i>Period Ending</i>	<i>Principal</i>	<i>Coupon</i>	<i>Interest</i>	<i>Debt Service</i>	<i>Annual Debt Service</i>
08/28/2021			2,211,982.48	2,211,982.48	
02/28/2022	3,620,000	0.972%	2,211,982.48	5,831,982.48	8,043,964.96
08/28/2022			2,194,389.28	2,194,389.28	
02/28/2023	3,655,000	1.072%	2,194,389.28	5,849,389.28	8,043,778.56
08/28/2023			2,174,798.48	2,174,798.48	
02/28/2024	3,695,000	1.180%	2,174,798.48	5,869,798.48	8,044,596.96
08/28/2024			2,152,997.98	2,152,997.98	
02/28/2025	3,735,000	1.349%	2,152,997.98	5,887,997.98	8,040,995.96
08/28/2025			2,127,805.40	2,127,805.40	
02/28/2026	3,785,000	1.499%	2,127,805.40	5,912,805.40	8,040,610.80
08/28/2026			2,099,436.83	2,099,436.83	
02/28/2027	3,845,000	1.688%	2,099,436.83	5,944,436.83	8,043,873.66
08/28/2027			2,066,985.03	2,066,985.03	
02/28/2028	3,910,000	1.888%	2,066,985.03	5,976,985.03	8,043,970.06
08/28/2028			2,030,074.63	2,030,074.63	
02/28/2029	3,980,000	2.082%	2,030,074.63	6,010,074.63	8,040,149.26
08/28/2029			1,988,642.83	1,988,642.83	
02/28/2030	4,065,000	2.232%	1,988,642.83	6,053,642.83	8,042,285.66
08/28/2030			1,943,277.43	1,943,277.43	
02/28/2031	4,155,000	2.332%	1,943,277.43	6,098,277.43	8,041,554.86
08/28/2031			1,894,830.13	1,894,830.13	
02/28/2032	4,250,000	2.482%	1,894,830.13	6,144,830.13	8,039,660.26
08/28/2032			1,842,087.63	1,842,087.63	
02/28/2033	4,360,000	2.582%	1,842,087.63	6,202,087.63	8,044,175.26
08/28/2033			1,785,800.03	1,785,800.03	
02/28/2034	4,470,000	2.682%	1,785,800.03	6,255,800.03	8,041,600.06
08/28/2034			1,725,857.33	1,725,857.33	
02/28/2035	4,590,000	2.782%	1,725,857.33	6,315,857.33	8,041,714.66
08/28/2035			1,662,010.43	1,662,010.43	
02/28/2036	4,720,000	2.882%	1,662,010.43	6,382,010.43	8,044,020.86
08/28/2036			1,593,995.23	1,593,995.23	
02/28/2037	4,855,000	3.662%	1,593,995.23	6,448,995.23	8,042,990.46
08/28/2037			1,505,100.18	1,505,100.18	
02/28/2038	5,030,000	3.712%	1,505,100.18	6,535,100.18	8,040,200.36
08/28/2038			1,411,743.38	1,411,743.38	
02/28/2039	5,220,000	3.250%	1,411,743.38	6,631,743.38	8,043,486.76
08/28/2039			1,326,918.38	1,326,918.38	
02/28/2040	5,390,000	3.250%	1,326,918.38	6,716,918.38	8,043,836.76
08/28/2040			1,239,330.88	1,239,330.88	
02/28/2041	5,565,000	3.250%	1,239,330.88	6,804,330.88	8,043,661.76
08/28/2041			1,148,899.63	1,148,899.63	
02/28/2042	5,745,000	3.347%	1,148,899.63	6,893,899.63	8,042,799.26
08/28/2042			1,052,757.05	1,052,757.05	
02/28/2043	5,935,000	3.347%	1,052,757.05	6,987,757.05	8,040,514.10
08/28/2043			953,434.83	953,434.83	
02/28/2044	6,135,000	3.347%	953,434.83	7,088,434.83	8,041,869.66
08/28/2044			850,765.60	850,765.60	
02/28/2045	6,340,000	3.347%	850,765.60	7,190,765.60	8,041,531.20
08/28/2045			744,665.70	744,665.70	
02/28/2046	6,555,000	3.347%	744,665.70	7,299,665.70	8,044,331.40
08/28/2046			634,967.78	634,967.78	
02/28/2047	6,770,000	3.497%	634,967.78	7,404,967.78	8,039,935.56
08/28/2047			516,594.33	516,594.33	
02/28/2048	7,010,000	3.497%	516,594.33	7,526,594.33	8,043,188.66
08/28/2048			394,024.48	394,024.48	
02/28/2049	7,255,000	3.497%	394,024.48	7,649,024.48	8,043,048.96
08/28/2049			267,170.80	267,170.80	
02/28/2050	7,510,000	3.497%	267,170.80	7,777,170.80	8,044,341.60
08/28/2050			135,858.45	135,858.45	
02/28/2051	7,770,000	3.497%	135,858.45	7,905,858.45	8,041,716.90
	153,920,000		87,354,405.24	241,274,405.24	241,274,405.24



\$7.6M/YR SLTP Break Even Analysis

