

10-Year Financial Plan Update

FY 2020-21 through FY 2029-30

Eric Sandler, Chief Financial Officer
February 11, 2020



FY 2020-21 to FY 2029-30 10-Year Financial Plan Development

- City Charter requires annual update to plans
- Inputs
 - Proposed biennial operating and capital budgets
 - Adopted rate increases
 - Sales volumes assumptions
- Constraints
 - Balanced sources and uses
 - Commission financial policies—fund balance, debt service coverage and capital financing
- Outputs
 - Revenue requirements
 - Future potential rate adjustments
- New enhancement
 - Sensitivity to different sales volumes assumptions

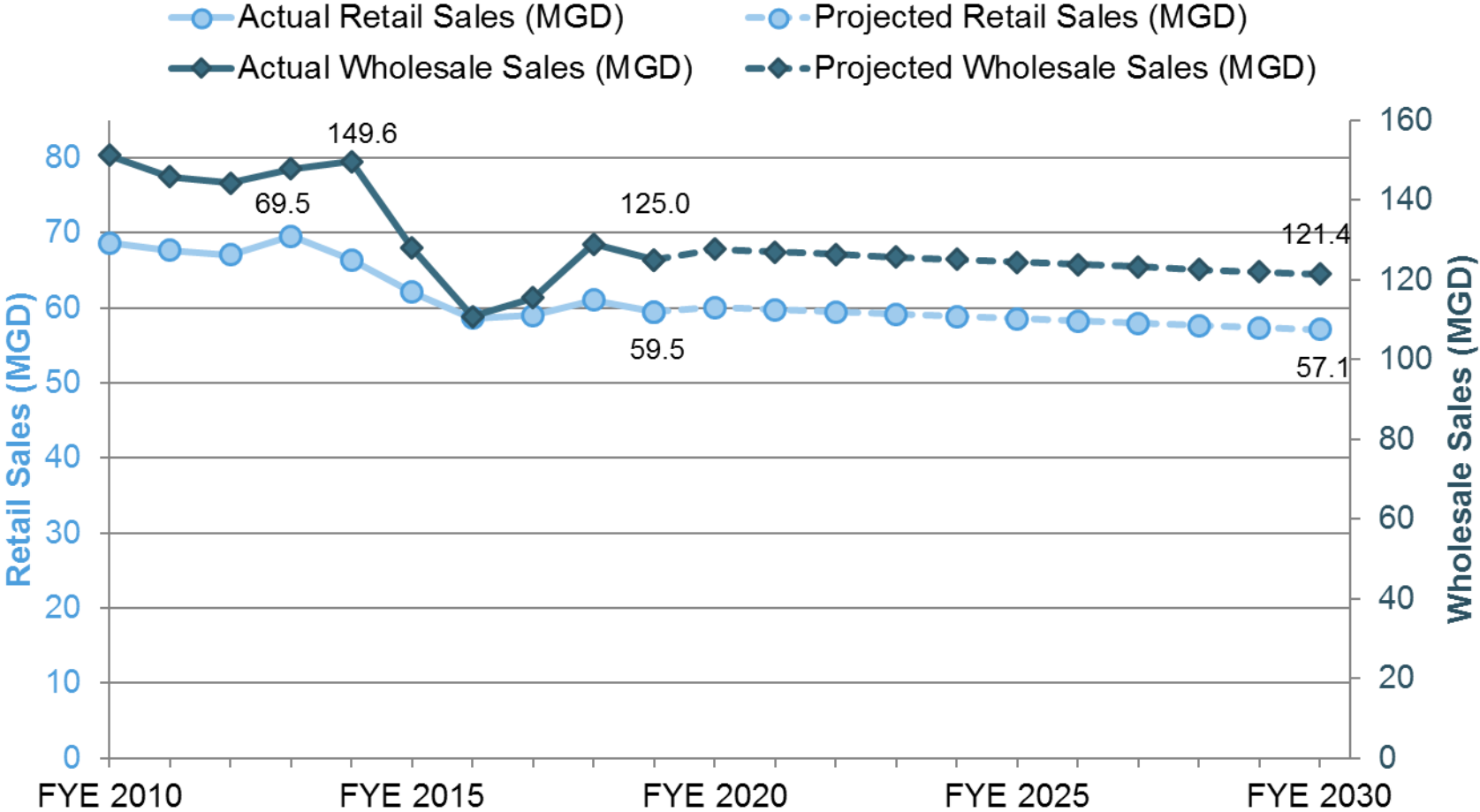


Key Assumptions — Water

- Base Case sales volumes projections decline 0.5% annually – conservative financial planning purposes
 - Upside sales volume sensitivity, 0.5% average annual increase from projected FY 2019-20 volumes
- Incorporated in this Plan update:
 - FY 2019-20 projected results as of Q2
 - FY 2020-21, FY 2021-22 Operating and Capital Budget
 - FY 2020-21 10-Year Capital Plan update
 - Adopted retail water rate increases through FY 2021-22
- Conforms with Commission-approved financial policies



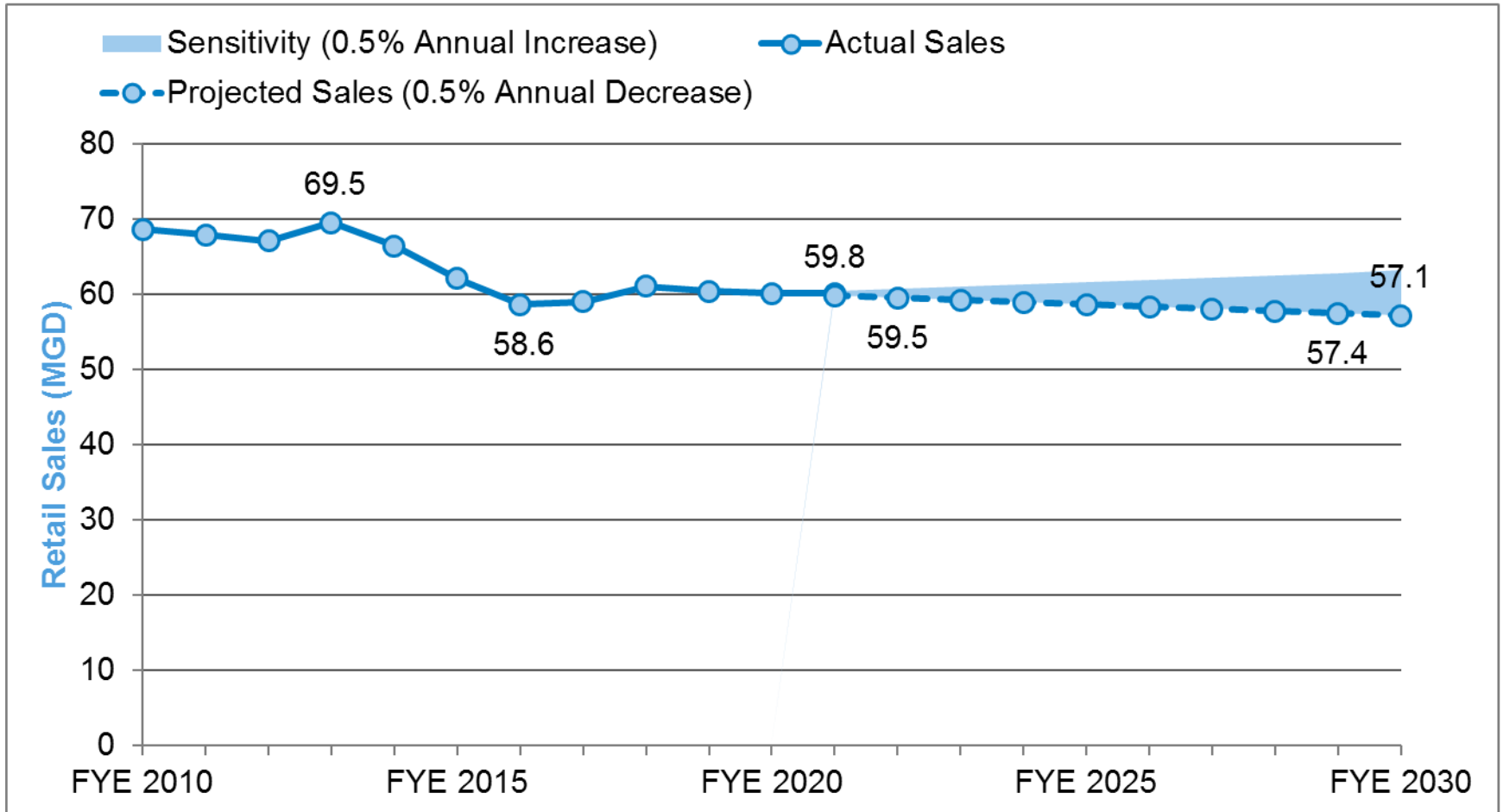
10-Year Financial Plan – Actuals and Base Case Volume Projections



Note: Conservative sales volume forecast for financial planning purposes



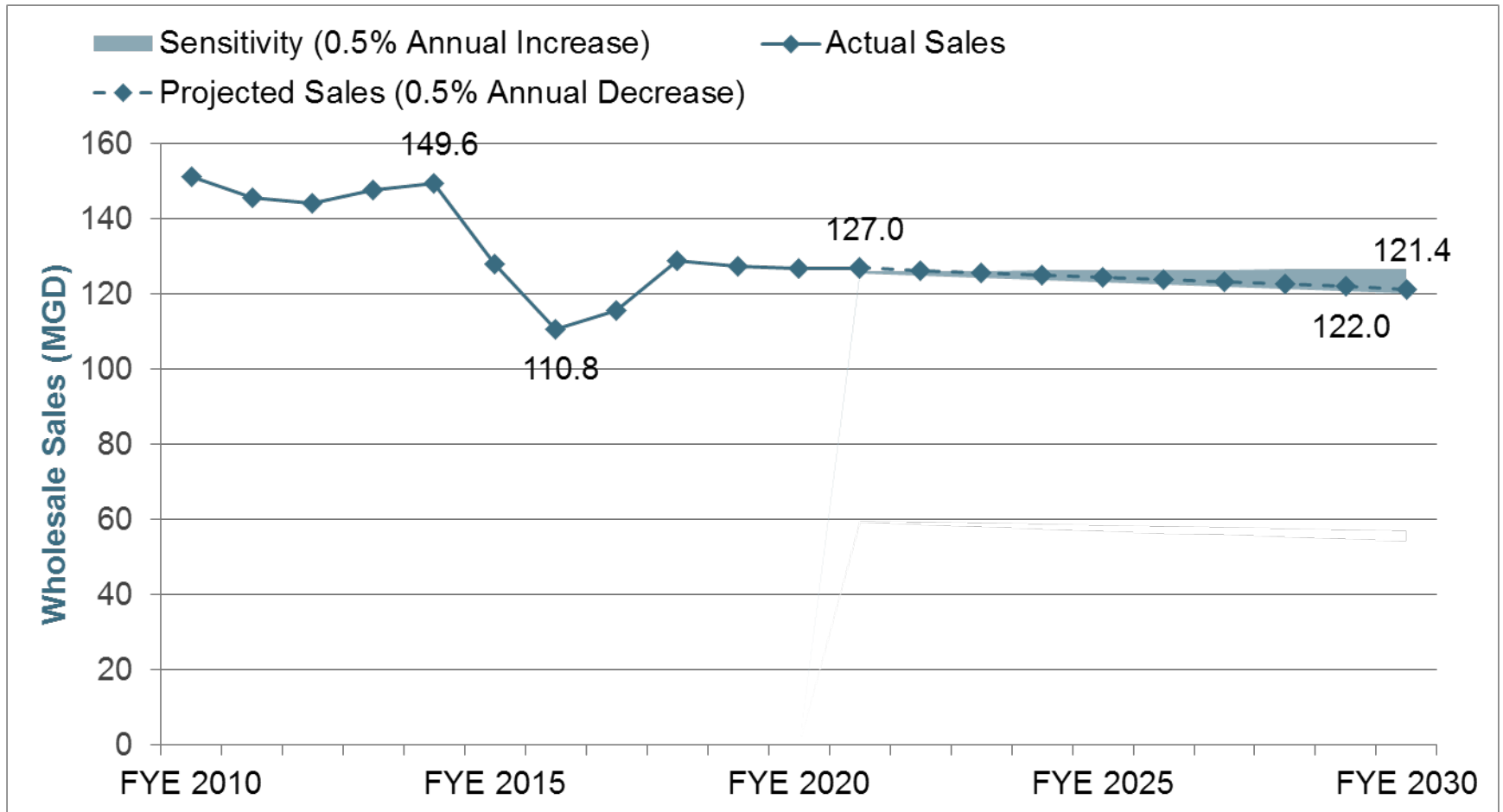
10-Year Financial Plan – Retail Water Sales Volumes Sensitivity



Note: Conservative sales volume forecast for financial planning purposes



10-Year Financial Plan – Wholesale Water Sales Volumes Sensitivity



Note: Conservative sales volume forecast for financial planning purposes



Water Enterprise 10-Year Financial Plan

(\$M)	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030
Beginning Fund Balance	\$ 223.5	\$ 198.0	\$ 169.9	\$ 144.1	\$ 118.0	\$ 102.5	\$ 92.7	\$ 101.0	\$ 125.7	\$ 136.7
Sources										
Retail Water Sales	319.3	343.0	368.9	393.0	414.8	437.9	453.4	469.6	486.3	503.6
Wholesale Water Sales	258.4	257.1	274.2	290.8	325.0	340.9	347.0	363.7	384.7	396.4
Other Miscellaneous Income	216.5	64.8	64.7	64.7	64.6	64.7	65.0	65.8	67.1	67.9
Total Sources	\$ 794.1	\$ 665.0	\$ 707.8	\$ 748.5	\$ 804.4	\$ 843.4	\$ 865.5	\$ 899.0	\$ 938.1	\$ 967.9
Uses										
Operations & Maintenance	267.7	269.8	278.6	285.7	296.3	305.1	313.6	321.2	328.6	337.9
Hetchy Transfer	47.3	48.6	47.6	49.1	50.6	52.1	53.7	55.2	56.8	58.5
Debt Service	304.1	317.7	342.9	368.9	397.5	414.6	425.9	444.4	472.8	503.9
Revenue-Funded Projects	202.2	58.6	67.1	73.6	78.6	83.6	65.1	56.6	72.3	63.3
Total Uses	\$ 821.3	\$ 694.7	\$ 736.2	\$ 777.2	\$ 823.0	\$ 855.4	\$ 858.3	\$ 877.5	\$ 930.5	\$ 963.5
Net Revenues	\$ (27.2)	\$ (29.7)	\$ (28.4)	\$ (28.8)	\$ (18.5)	\$ (11.9)	\$ 7.2	\$ 21.6	\$ 7.6	\$ 4.4
Ending Fund Balance	\$ 198.0	\$ 169.9	\$ 144.1	\$ 118.0	\$ 102.5	\$ 92.7	\$ 101.0	\$ 125.7	\$ 136.7	\$ 144.0
Rate Increase - Retail	7.8%	7.9%	8.0%	7.0%	6.0%	6.0%	4.0%	4.0%	4.0%	4.0%
Rate Increase - Wholesale	0.0%	0.0%	8.0%	6.1%	13.4%	4.9%	2.1%	5.4%	6.6%	3.4%
Fund Balance as % of Op. Expenses	63%	53%	44%	35%	30%	26%	28%	33%	35%	36%
Debt Service Coverage (Current)	1.11	1.12	1.12	1.13	1.16	1.18	1.18	1.18	1.17	1.14
Debt Service Coverage (Indenture)	1.80	1.71	1.62	1.52	1.46	1.43	1.40	1.41	1.44	1.41
Revenue-Funded % of Capital	30%									

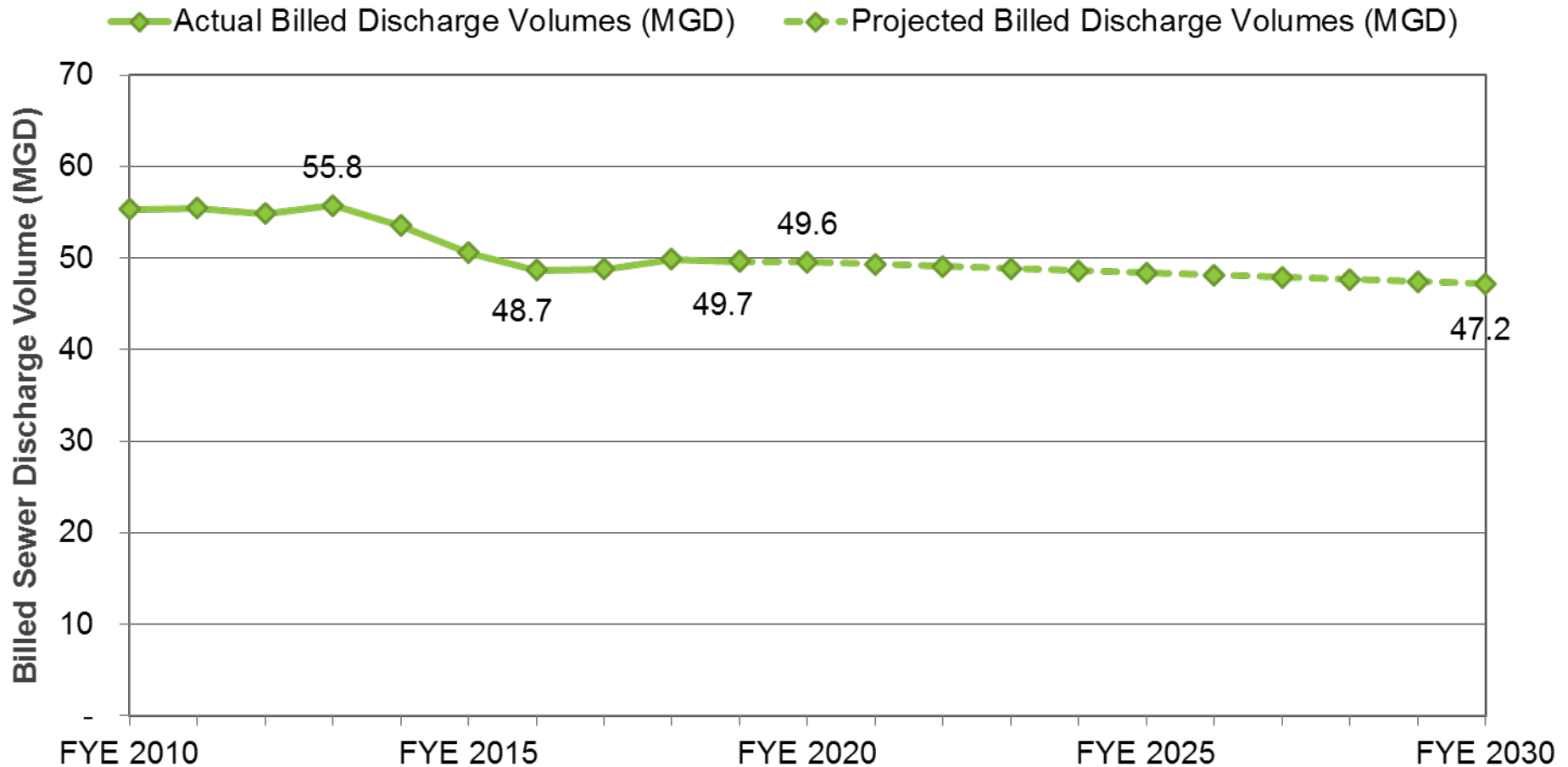


Key Assumptions — Wastewater

- Base Case sales volumes projections decline 0.5% annually – for conservative financial planning purposes
 - Upside sales volume sensitivity, 0.5% average annual increase from projected FY 20 volumes
- Incorporated in this Plan update:
 - FY 2019-20 projected results as of Q2
 - FY 2020-21 FY 2021-22 Operating and Capital Budget
 - FY 2020-21 10-Year Capital Plan update
 - Adopted wastewater rate increases through FY 2021-22
- Executed WIFIA and SRF Loan financing assumptions are included in the Plan
- Conforms with Commission-approved financial policies



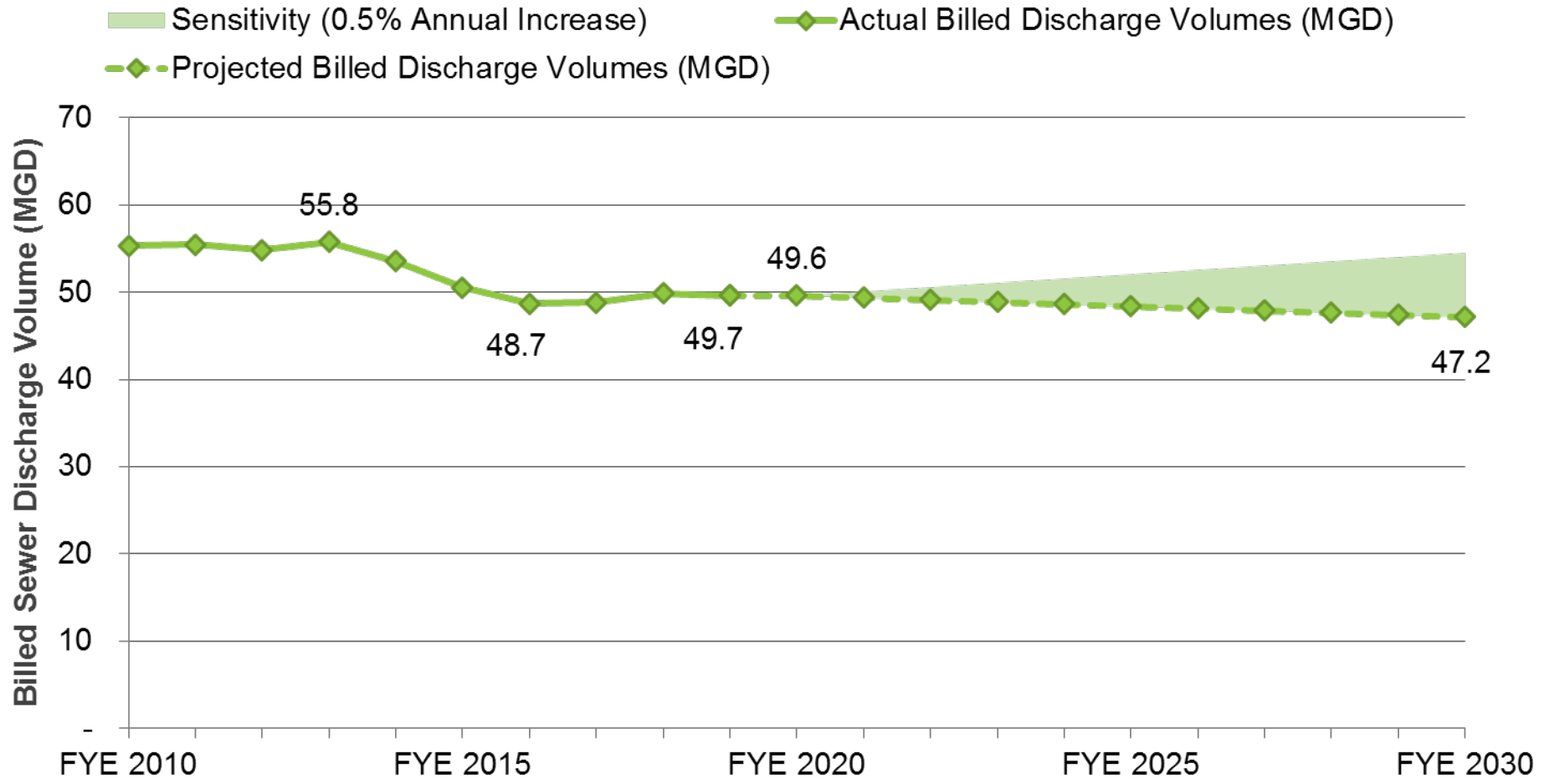
10-Year Financial Plan – Wastewater Actuals and Base Case Volume Projections



Note: Conservative sales volume forecast for financial planning purposes



10-Year Financial Plan – Wastewater Sales Volumes Sensitivity



Note: Conservative sales volume forecast for financial planning purposes



Wastewater Enterprise 10-Year Financial Plan

(\$M)	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030
Beginning Fund Balance	\$ 203.8	\$ 188.4	\$ 183.7	\$ 187.9	\$ 212.9	\$ 237.5	\$ 232.0	\$ 204.2	\$ 169.7	\$ 130.3
Sources										
Sewer Charges	367.7	395.1	424.5	456.0	490.0	526.8	566.2	602.9	635.8	670.7
Interest Income	5.1	4.7	4.5	4.7	5.3	6.1	5.9	5.2	4.5	3.5
Federal Bond Interest Subsidy	4.5	4.0	4.0	3.9	3.7	3.6	3.4	3.2	3.1	2.9
Other Miscellaneous Income	10.5	10.1	10.6	10.7	10.8	10.8	10.9	11.0	11.1	11.2
Total Sources	\$ 387.9	\$ 413.9	\$ 443.6	\$ 475.2	\$ 509.8	\$ 547.3	\$ 586.5	\$ 622.4	\$ 654.6	\$ 688.2
Uses										
Operations & Maintenance	195.2	201.9	207.7	213.5	219.5	225.7	232.1	238.7	245.5	252.5
Debt Service	84.3	91.2	103.4	105.9	132.3	191.2	243.7	277.2	304.6	339.2
Revenue-Funded Projects	123.7	125.6	128.4	130.8	133.3	135.9	138.5	141.1	143.8	146.6
Total Uses	\$ 403.2	\$ 418.7	\$ 439.4	\$ 450.2	\$ 485.2	\$ 552.8	\$ 614.3	\$ 656.9	\$ 693.9	\$ 738.2
Net Revenues	\$ (15.3)	\$ (4.8)	\$ 4.2	\$ 25.0	\$ 24.7	\$ (5.5)	\$ (27.8)	\$ (34.6)	\$ (39.3)	\$ (50.0)
Ending Fund Balance	\$ 188.4	\$ 183.7	\$ 187.9	\$ 212.9	\$ 237.5	\$ 232.0	\$ 204.2	\$ 169.7	\$ 130.3	\$ 80.4
Retail Rate Increase	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	7.0%	6.0%	6.0%
Fund Balance as % of Op. Expenses	97%	91%	90%	100%	108%	103%	88%	71%	53%	32%
Debt Service Coverage (Current)	2.31	2.34	2.30	2.49	2.20	1.79	1.60	1.51	1.45	1.38
Debt Service Coverage (Indenture)	4.72	4.41	4.07	4.26	3.81	3.11	2.65	2.31	2.05	1.79
Revenue-Funded % of Capital	26%									



Combined Water & Wastewater Average Single Family Monthly Bill

Actual

Projected

Fiscal Year	FYE 2021 Projection		
	Water Nominal	Wastewater Nominal	Combined Nominal
FYE 2020	8.3%	7.0%	7.6%
FYE 2021	7.8%	8.0%	7.9%
FYE 2022	7.9%	8.0%	8.0%
FYE 2023	8.0%	8.0%	8.0%
FYE 2024	7.0%	8.0%	7.5%
FYE 2025	6.0%	8.0%	7.1%
FYE 2026	6.0%	8.0%	7.1%
FYE 2027	4.0%	8.0%	6.3%
FYE 2028	4.0%	7.0%	5.7%
FYE 2029	4.0%	6.0%	5.2%
FYE 2030	4.0%	6.0%	5.2%
FYE 2031	3.0%	6.0%	4.8%
FYE 2032	3.0%	7.0%	5.4%
FYE 2033	3.0%	7.0%	5.4%
FYE 2034	1.0%	5.0%	3.5%
FYE 2035	1.0%	4.0%	2.9%



Combined Water & Wastewater Average Single Family Monthly Bill

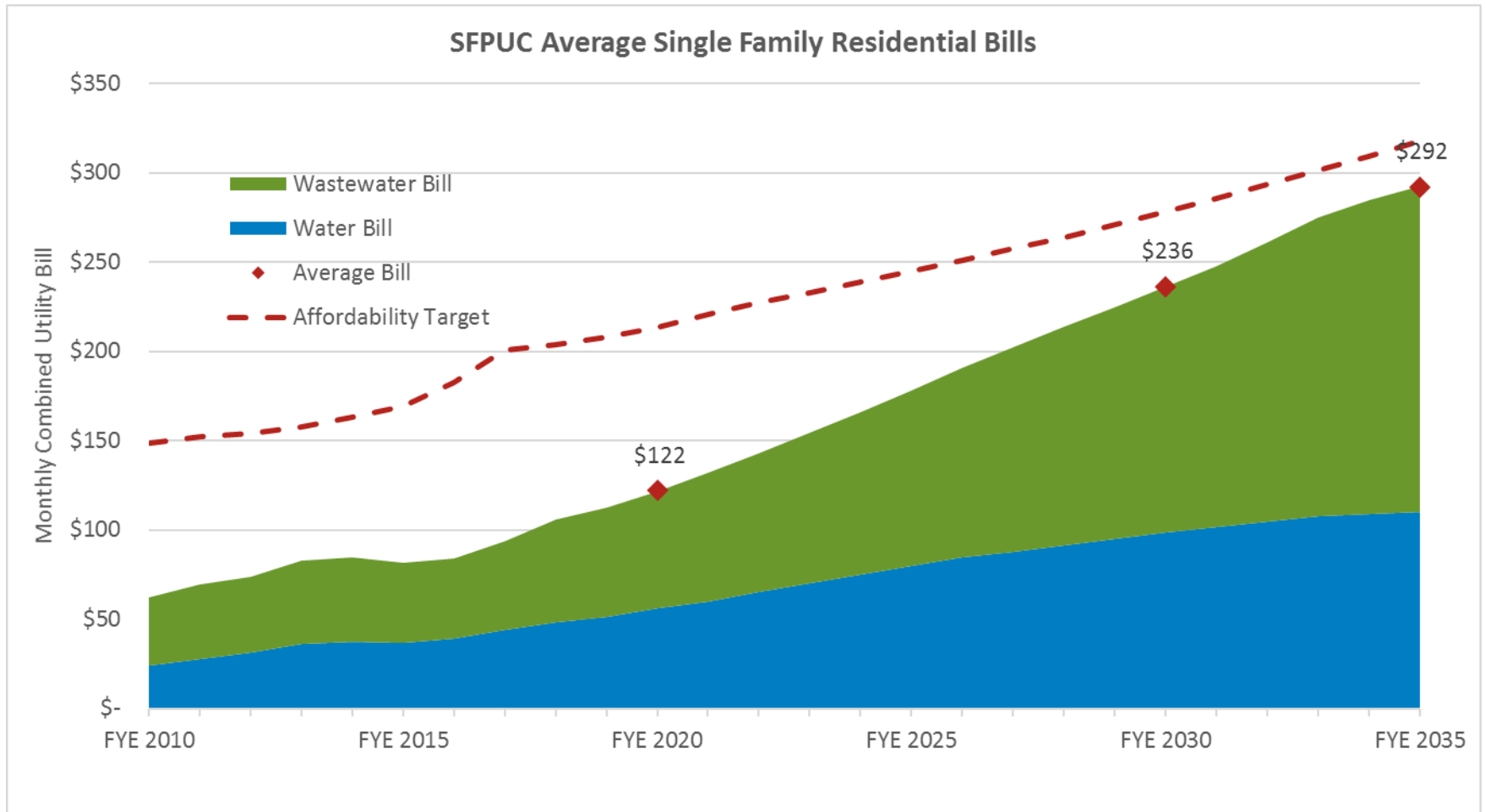
Actual

Projected

	FYE 2021 Projection		
Fiscal Year	Water	Wastewater	FYE 2021 Combined
FYE 2020	\$56	\$66	\$122
FYE 2021	\$60	\$72	\$132
FYE 2022	\$65	\$78	\$143
FYE 2023	\$70	\$84	\$154
FYE 2024	\$75	\$91	\$166
FYE 2025	\$80	\$98	\$178
FYE 2026	\$84	\$106	\$190
FYE 2027	\$88	\$114	\$202
FYE 2028	\$91	\$122	\$214
FYE 2029	\$95	\$130	\$225
FYE 2030	\$99	\$138	\$236
FYE 2031	\$102	\$146	\$248
FYE 2032	\$105	\$156	\$261
FYE 2033	\$108	\$167	\$275
FYE 2034	\$109	\$175	\$284
FYE 2035	\$110	\$182	\$292



Utility Affordability Cost as a Percent of Median Household Income



Projections assume 3% annual increase from 2017 median household income of \$96,265 and 0.5% annual decrease from FY 2019-20 average of 5.3 CCF monthly water usage

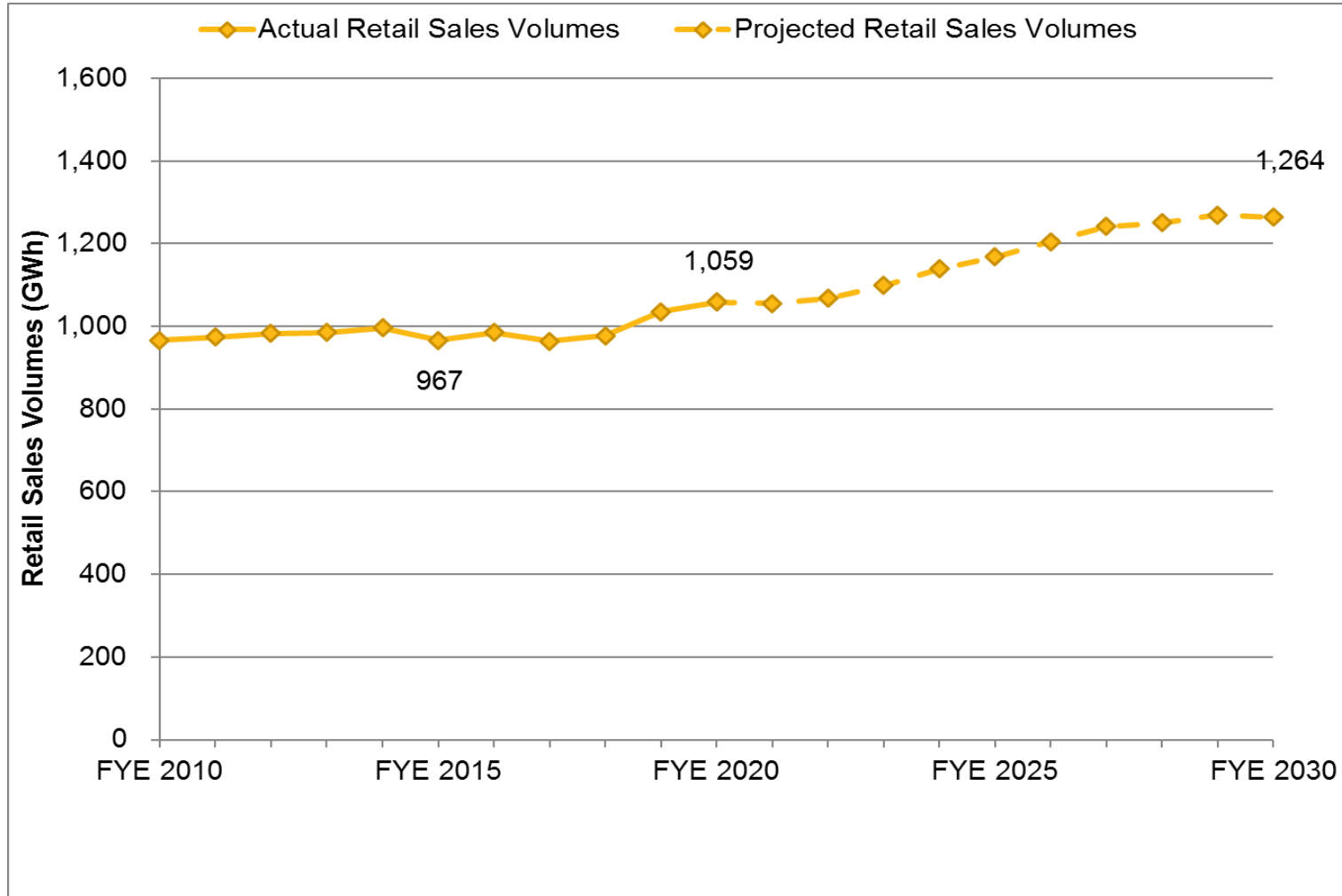


Key Assumptions — Hetch Hetchy Water and Power Enterprise

- Sales volumes
 - 1.8% average annual growth rate over ten years vs. 0.8% historically
 - Primary drivers of sales volume growth is projected load growth from current customers in redevelopment areas
- Incorporated in this Plan update:
 - FY 2019-20 projected results as of Q2
 - FY 2020-21 FY 2021-22 Operating and Capital Budget
 - FY 2020-21 10-Year Capital Plan update
 - Rate increases of 1 cent/year for General Use Municipal; 3% annually for other customers
- 10-Year Capital Plan
 - Reflects asset classification changes from amended WSA
 - Reflects Prop A power bond authorization from voters



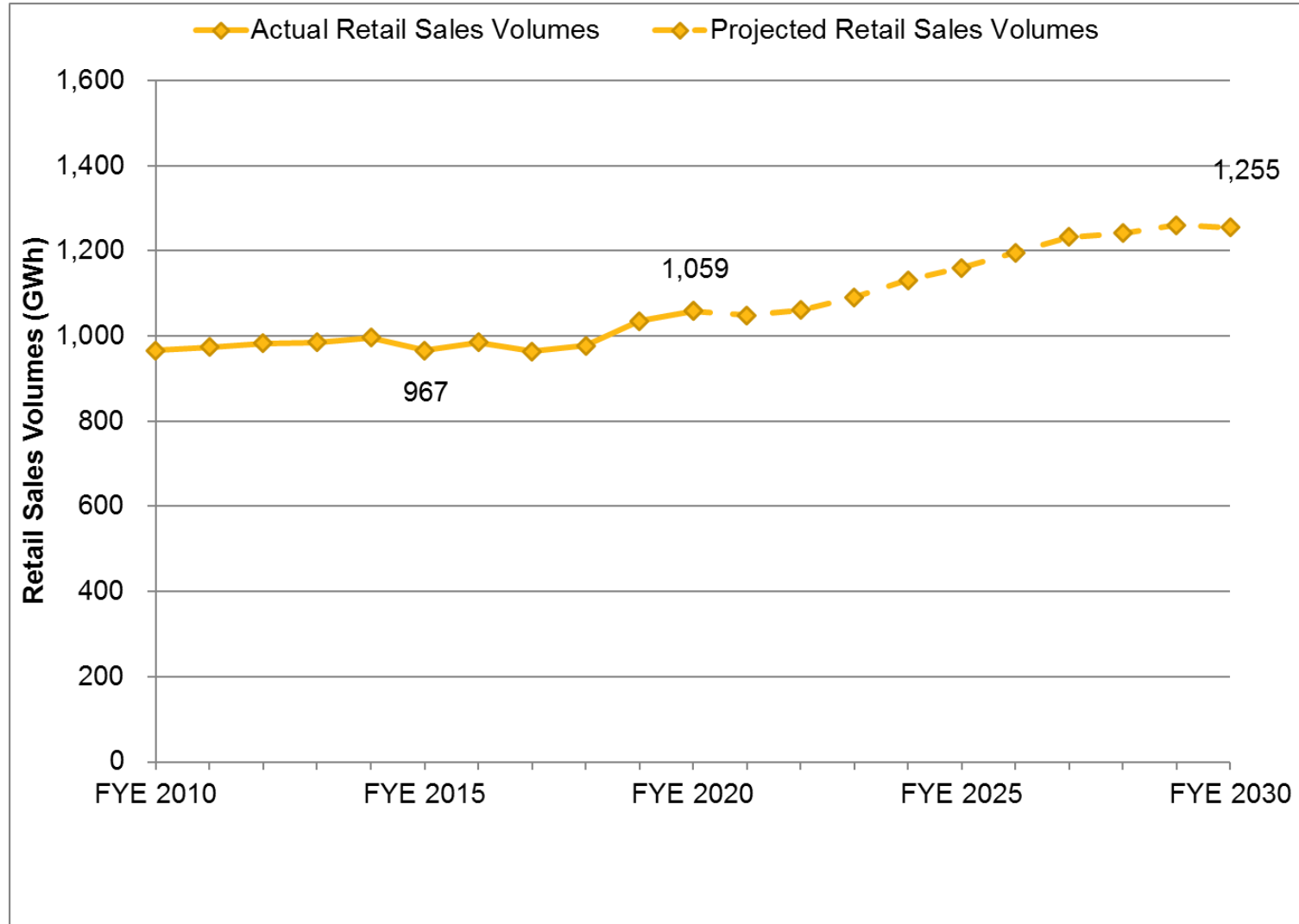
Power Enterprise 10-Year Financial Plan Actual and Base Case Volume Projections



Note: Conservative sales volume forecast for financial planning purposes



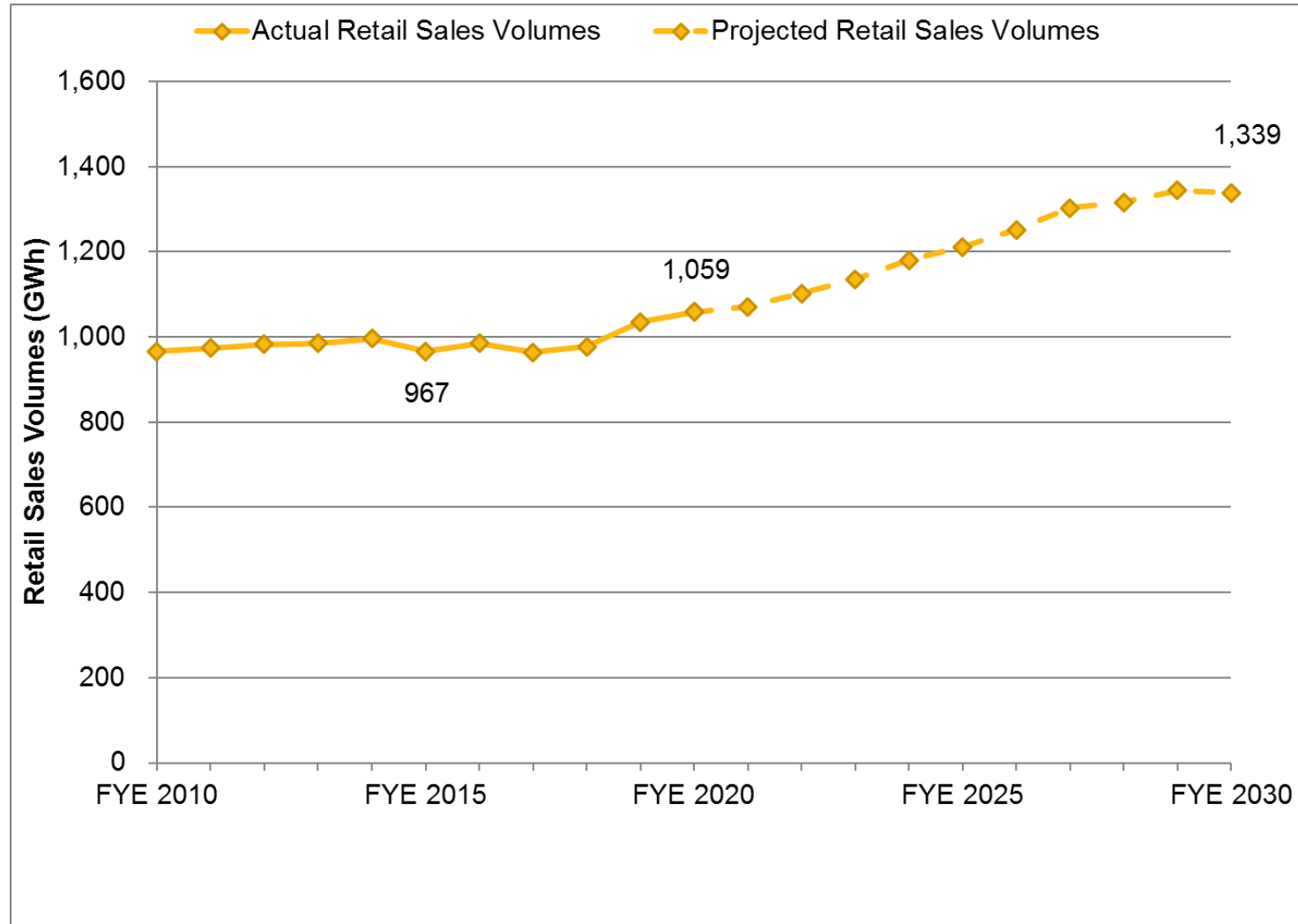
Power Enterprise 10-Year Financial Plan Actual and Downside Volume Sensitivity Projection



Note: Conservative sales volume forecast for financial planning purposes



Power Enterprise 10-Year Financial Plan Actual and Upside Volume Sensitivity Projection



Note: Conservative sales volume forecast for financial planning purposes



Hetch Hetchy Water and Power 10-Year Financial Plan

(\$M)	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030
Beginning Fund Balance	\$ 43.6	\$ 55.8	\$ 69.1	\$ 65.9	\$ 69.6	\$ 67.4	\$ 65.3	\$ 71.1	\$ 72.0	\$ 72.1
Sources										
Power Sales - Municipal General Fund Ra	32.2	36.3	40.1	43.8	47.4	51.1	54.8	58.5	62.2	65.9
Power Sales - Municipal Enterprise Rates	101.7	106.0	111.1	118.0	124.8	132.0	139.8	145.0	151.3	154.8
Power Sales - Retail	15.1	16.4	18.2	22.8	25.8	30.1	34.7	36.4	39.7	40.8
Power Sales - Wholesale	15.3	15.0	14.5	13.8	13.3	12.8	12.7	12.9	13.1	13.2
Gas & Steam Sales	11.2	11.6	11.9	12.3	12.6	13.0	13.4	13.8	14.2	14.6
Water Sales	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Hetchy Transfer	47.3	48.6	47.6	49.2	50.7	52.3	54.0	55.7	57.5	59.3
Other Misc Income	14.1	12.1	11.0	11.2	11.5	11.8	12.0	12.4	12.8	13.1
Total Sources	\$ 237.3	\$ 246.4	\$ 254.8	\$ 271.4	\$ 286.6	\$ 303.6	\$ 321.9	\$ 335.2	\$ 351.3	\$ 362.3
Uses										
Operations & Maintenance	216.8	224.4	232.9	242.3	252.2	263.1	268.6	279.6	288.3	297.2
Debt Service	4.2	4.1	4.1	4.3	15.6	21.5	26.4	33.8	41.9	49.4
Revenue-Funded Projects	4.1	4.7	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Uses	\$ 225.1	\$ 233.1	\$ 257.9	\$ 267.6	\$ 288.8	\$ 305.7	\$ 316.0	\$ 334.4	\$ 351.2	\$ 367.7
Net Revenues	\$ 12.2	\$ 13.3	\$ (3.2)	\$ 3.7	\$ (2.3)	\$ (2.1)	\$ 5.9	\$ 0.8	\$ 0.1	\$ (5.4)
Ending Fund Balance	\$ 55.8	\$ 69.1	\$ 65.9	\$ 69.6	\$ 67.4	\$ 65.3	\$ 71.1	\$ 72.0	\$ 72.1	\$ 66.7
Fund Balance as % of Power Op. Expen	33%	40%	36%	36%	34%	31%	34%	32%	32%	28%
Debt Service Coverage (Current)	4.15	5.14	5.44	6.74	2.21	1.88	2.02	1.64	1.50	1.31
Debt Service Coverage (Indenture)	23.85	29.94	35.51	28.82	7.12	5.25	4.66	3.82	3.24	2.79
Revenue-Funded % of Capital	17%									

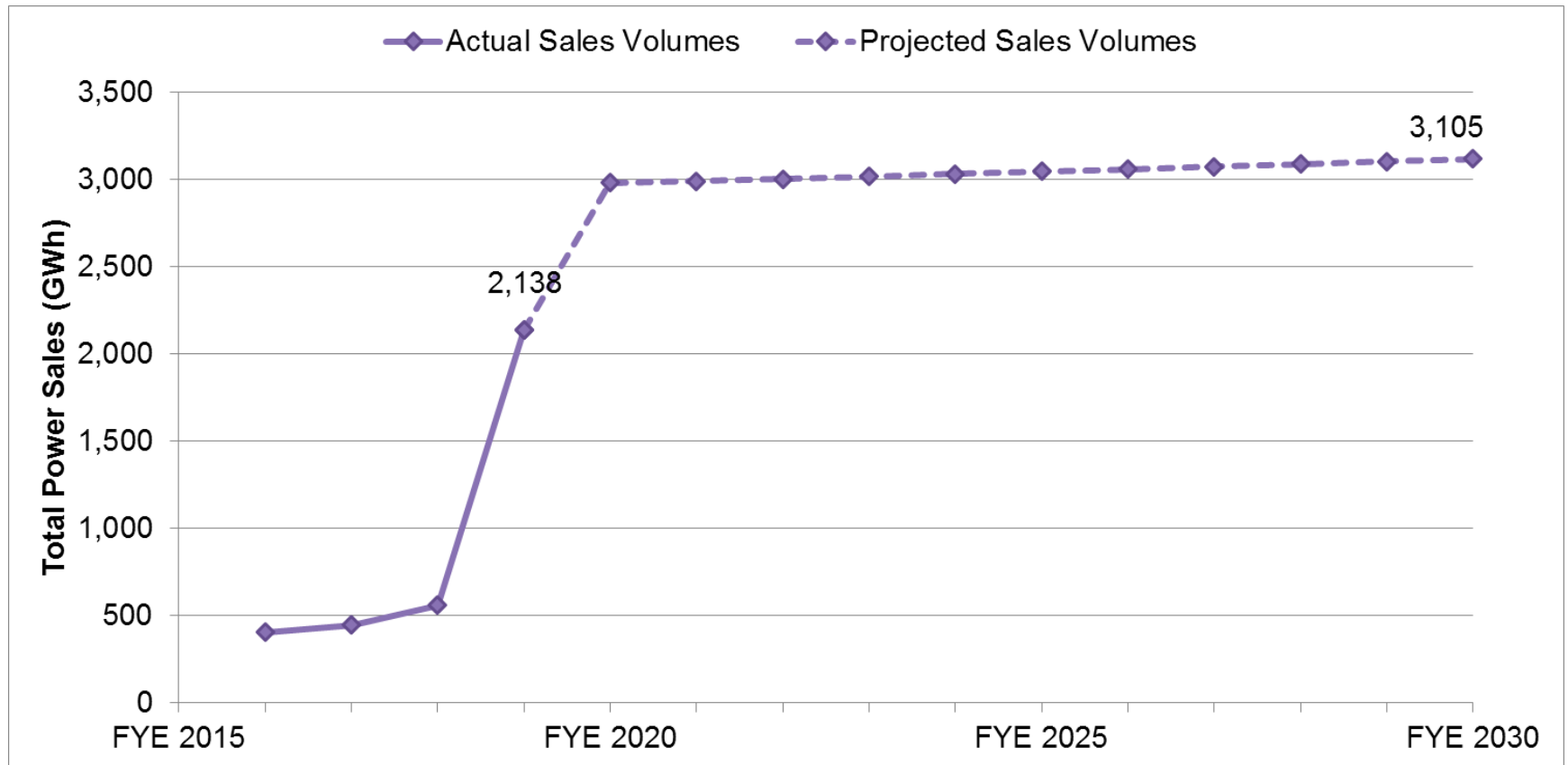


Key Assumptions — CleanPowerSF

- 0.5% average annual sales volume growth over ten years
 - Reflecting completion of major customer enrollment phases in FY2018-19
- Incorporated in this Plan update:
 - FY 2019-20 projected results as of Q2
 - FY 2020-21 FY 2021-22 Operating and Capital Budget
 - FY 2020-21 10-Year Capital Plan update
 - Rate increase assumption of 3% annually
- 10-Year Capital Plan
 - Inaugural 10 Year Capital Plan associated with local build generation; revenue funded



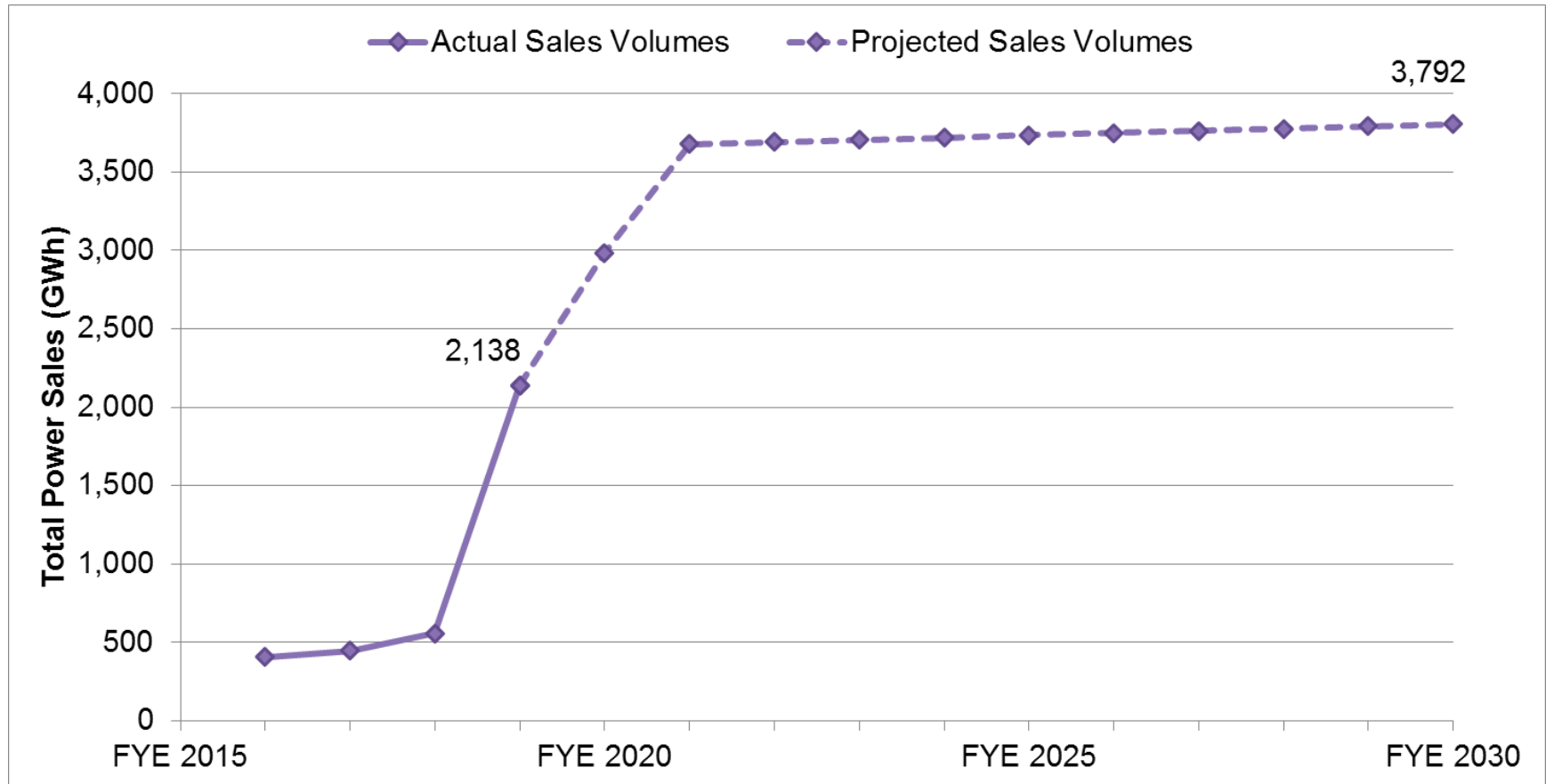
CleanPowerSF 10-Year Financial Plan Actual and Base Case Projected Volumes



Note: Conservative sales volume forecast for financial planning purposes



CleanPowerSF 10-Year Financial Plan Actual and Upside Volume Sensitivity Projection



Note: Conservative sales volume forecast for financial planning purposes



CleanPowerSF 10-Year Financial Plan

(\$M)	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030
Beginning Fund Balance	\$ 55.6	\$ 66.7	\$ 68.3	\$ 68.5	\$ 78.7	\$ 94.8	\$ 119.0	\$ 148.1	\$ 179.4	\$ 195.0
Sources										
Power Sales	227.2	231.6	239.7	248.0	256.6	265.6	274.8	284.4	294.3	304.5
Interest Earnings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Sources	\$ 227.2	\$ 231.6	\$ 239.7	\$ 248.0	\$ 256.6	\$ 265.6	\$ 274.8	\$ 284.4	\$ 294.3	\$ 304.5
Uses										
Supply	187.2	200.2	207.7	205.3	207.2	210.1	214.0	220.5	227.2	234.1
Operating Costs	26.6	26.7	27.4	28.1	28.8	29.5	30.3	31.1	31.9	32.7
Debt Service	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Revenue-Funded Projects	2.3	3.0	4.5	4.4	4.6	1.7	1.5	1.6	19.5	42.7
Total Uses	\$ 216.0	\$ 230.0	\$ 239.5	\$ 237.7	\$ 240.6	\$ 241.3	\$ 245.7	\$ 253.1	\$ 278.6	\$ 309.5
Net Revenues	\$ 11.1	\$ 1.6	\$ 0.1	\$ 10.3	\$ 16.0	\$ 24.2	\$ 29.1	\$ 31.3	\$ 15.7	\$ (5.0)
Ending Fund Balance	\$ 66.7	\$ 68.3	\$ 68.5	\$ 78.7	\$ 94.8	\$ 119.0	\$ 148.1	\$ 179.4	\$ 195.0	\$ 190.0
Fund Balance as % of Operating Expenses	31%	30%	29%	34%	40%	50%	61%	71%	75%	71%
Revenue-Funded % of Capital	100%									