

Cost of Service and Rate Adjustments for Water and Wastewater

Public Hearing, December 17th, 2020

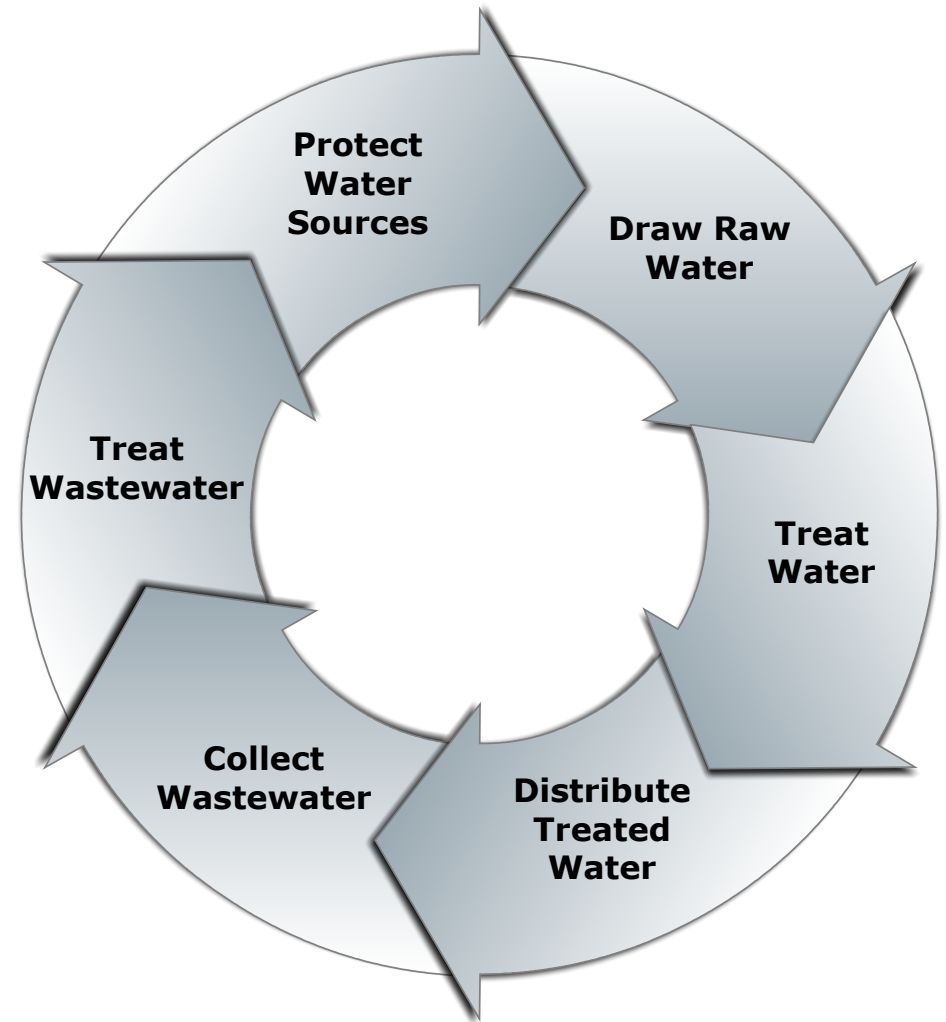
LINDEN COUNTY WATER DISTRICT

OVERVIEW

Role of LCWD; Purpose of Rate Studies
California Law; Key Terms

Linden County Water District

- Provide reliable water and wastewater utility services to about 600 customers
- Protect public health
- Protect water resources
- Manage & maintain infrastructure
- Support fire protection



Purpose of the Studies

- **Revenue Sufficiency** - Make sure sufficient money to operate the water and wastewater systems for the next 5 years to provide residents and business with clean, safe potable water and a reliable wastewater system that meets State and Federal regulatory standards
- **CIP** - Create adequate revenue for funding of capital improvement projects (CIP)
- **Cost of Service** - Allocate costs as equitably as possible for all customer classes
- **Rate Structure** – Design rate structures that comply with California law and meet multiple District objectives

California Law: Proposition 218

1. Revenues from the fee shall not exceed funds required to provide the service.
2. Revenues from the fee shall not be used for any purpose other than that for which it was imposed.
3. The amount of the fee imposed as an incident of property ownership shall not exceed the proportional cost of service to the parcel.
4. No fee may be imposed for service unless the service is used OR is immediately available to the parcel.
5. No fee may be imposed for general governmental services (such as police, fire, library) where the service is available to the public at large in much the same manner as to the parcels charged the fee.

Why Change Monthly Water Fees?

Revenue Sufficiency	Ensure the District can continue to operate the system per State requirements
1. Capital Improvements	Identified improvements needed for the water and wastewater systems.
2. Operations & Maintenance Costs	Personnel, professional services, supplies, insurance, utilities, testing services.
California laws for water fees	Cost of Service demonstration
1. Proposition 218	The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
2. Government Code 54999.7 (c)	Required every 10 years by Govt. Code when service is provided to public schools.

Best Practices

Best Practice	Linden County Water District
Rate study every 3 to 5 years	Last rate study conducted in 2015; on 5-year cycle
Collect for system rehabilitation (for upkeep of existing infrastructure) in rates	Rehabilitation (as approximated by depreciation of assets) is included in the rates
Regular customer communications to educate on the utility system(s) and value of service	The District uses monthly bill inserts and its website to provide current information
Meet bond covenants	The District currently does not have any debt; however, it will be repaying a \$2.4 M loan for the water system, starting in 2022
Self-sufficient funds	Revenues cover operating costs and the District has healthy cash reserves for both systems; however, several large capital improvement projects are planned the next 5 years
Meet target cash balance	The rate study recommends at least \$200,000 cash balance in the capital outlay fund as well as at least 6 months of operating expenses in both the water and wastewater funds

Revenue Requirement



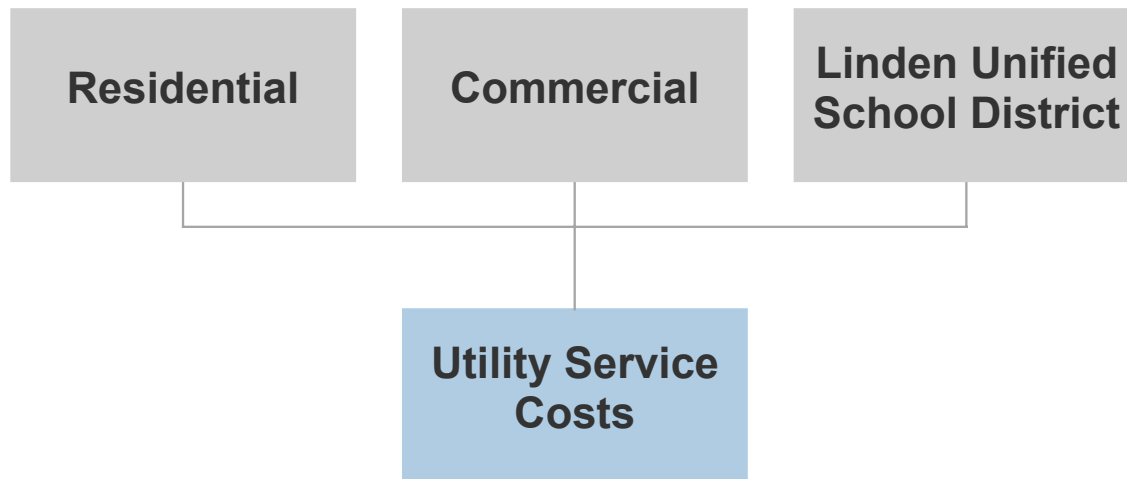
Determine funding needed to meet financial needs

- Operations & Maintenance
- Capital Improvements
- Debt Service
- Prudent Fund Reserves

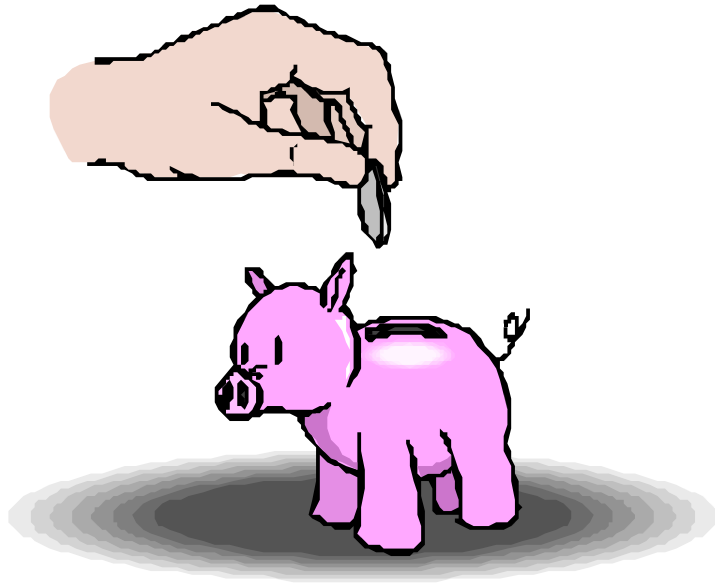
Cost of Service

Proportionate Allocation of Service Costs

- Each customer class pays for its cost share based on customer count, potential use (allocated capacity), and actual use of the water and wastewater systems

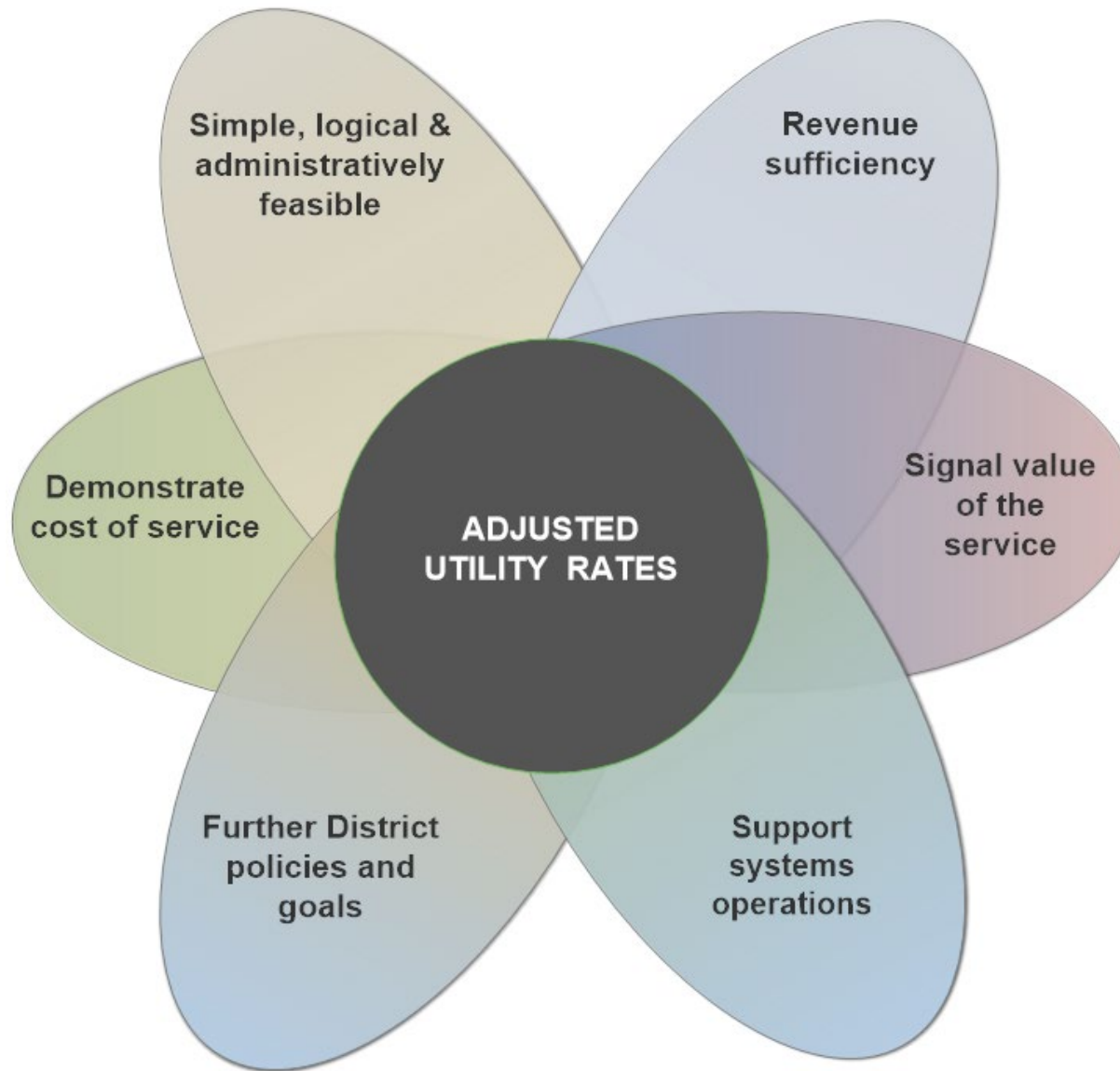


Rate Structure



How to collect the necessary revenue requirement

- Monthly Service and Use Charges
- Want to reflect local customer water and wastewater needs & demands
- Meet multiple District objectives



Balance of Multiple Objectives

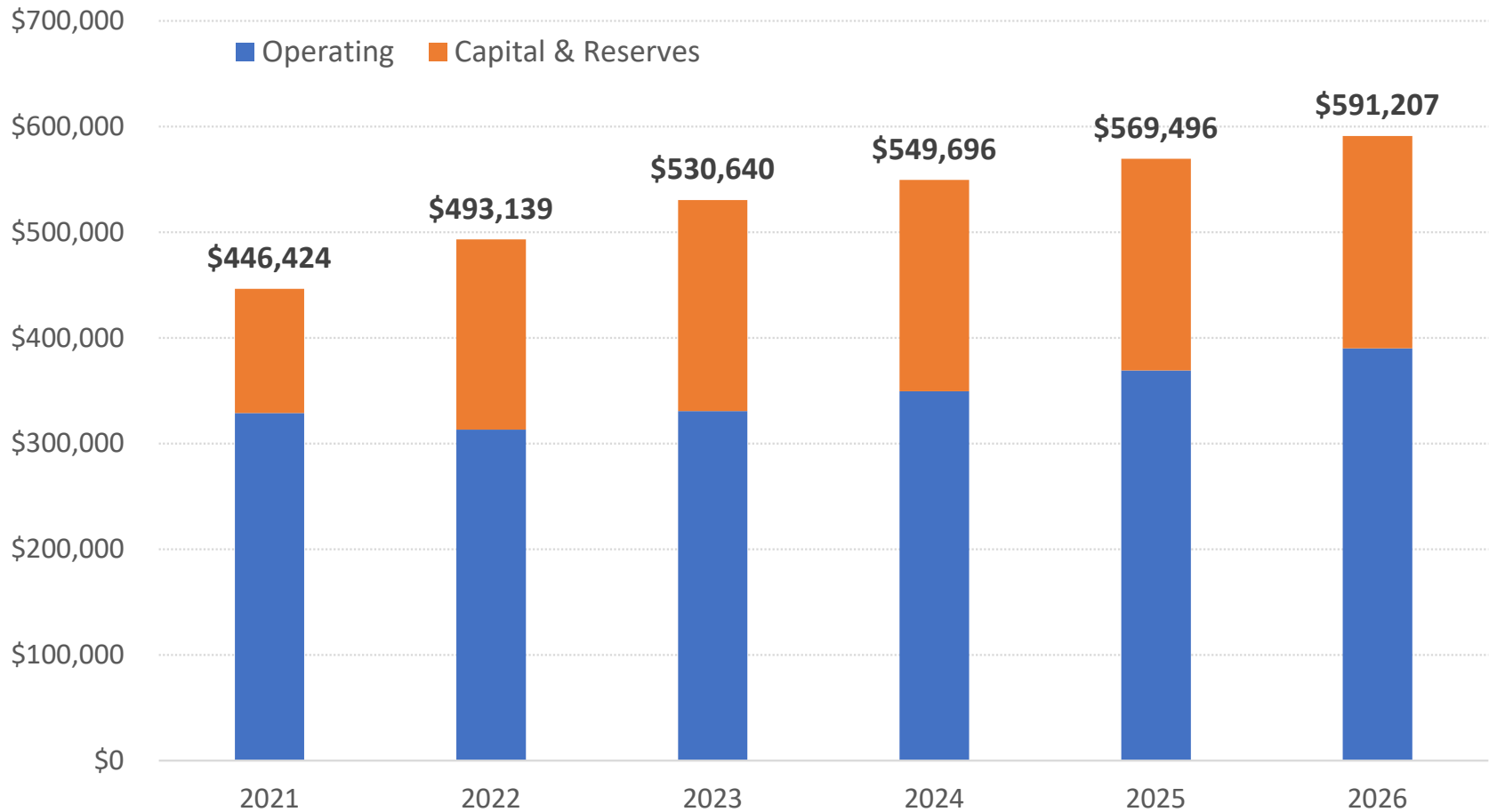
WATER

Capital Improvements, Revenue Requirement,
Cash Flow, Cost of Service, Rate Design

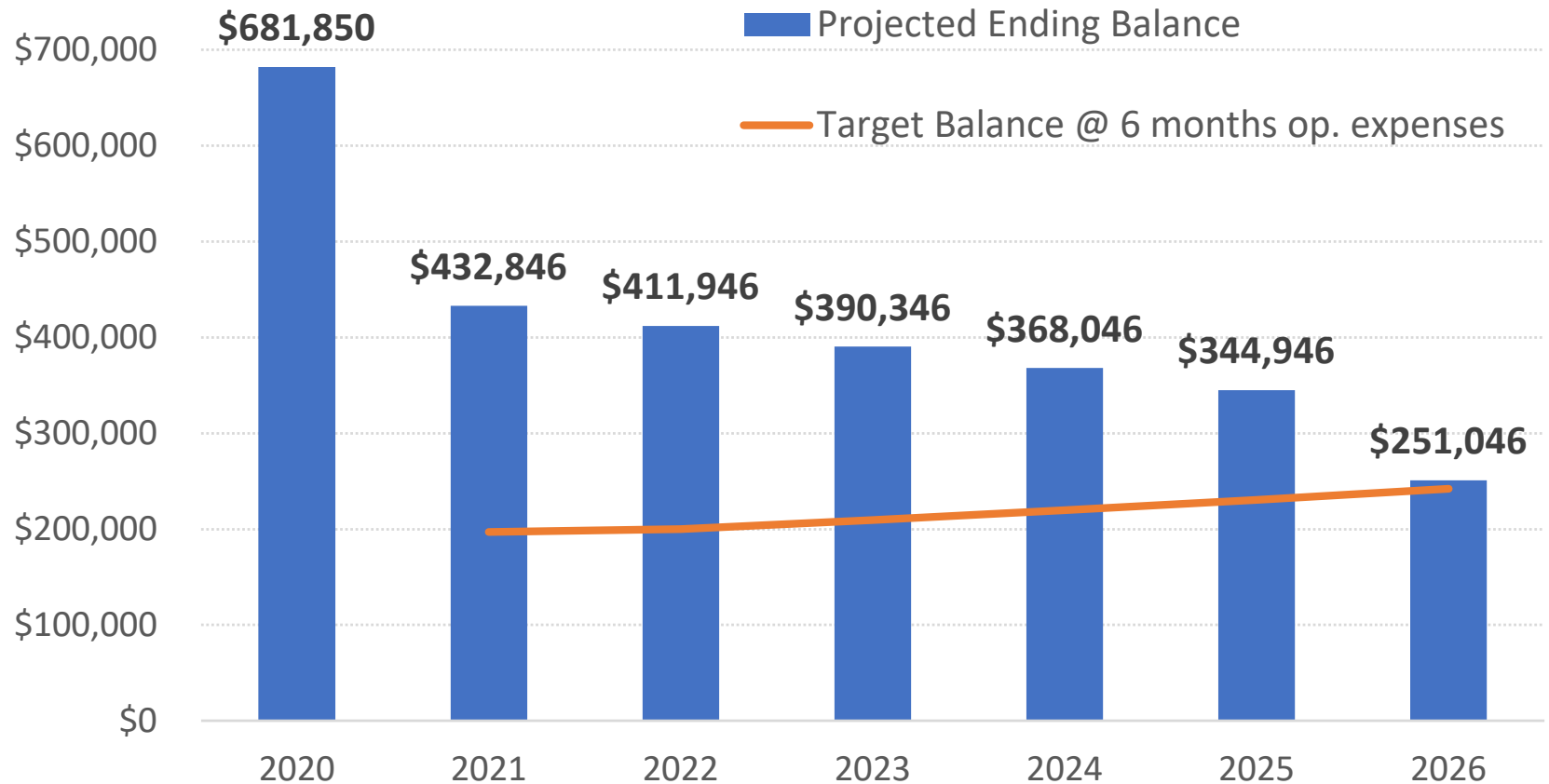
Estimated Water Capital Improvement Projects Costs

Improvement	Estimated Cost
New 8" Line Front St & Mill	\$346,500
New 8" Line lone	\$248,191
Replace Dry Barrel Hydrants	\$30,020
New 4" Water Lateral w/services Front St	\$72,919
Tank Project	\$2,415,985
TOTAL	\$3,113,615

Projected Revenue Requirement (amount to be collected in monthly water fees)



Water Fund Projected Cash Flow



Functional Cost Allocation

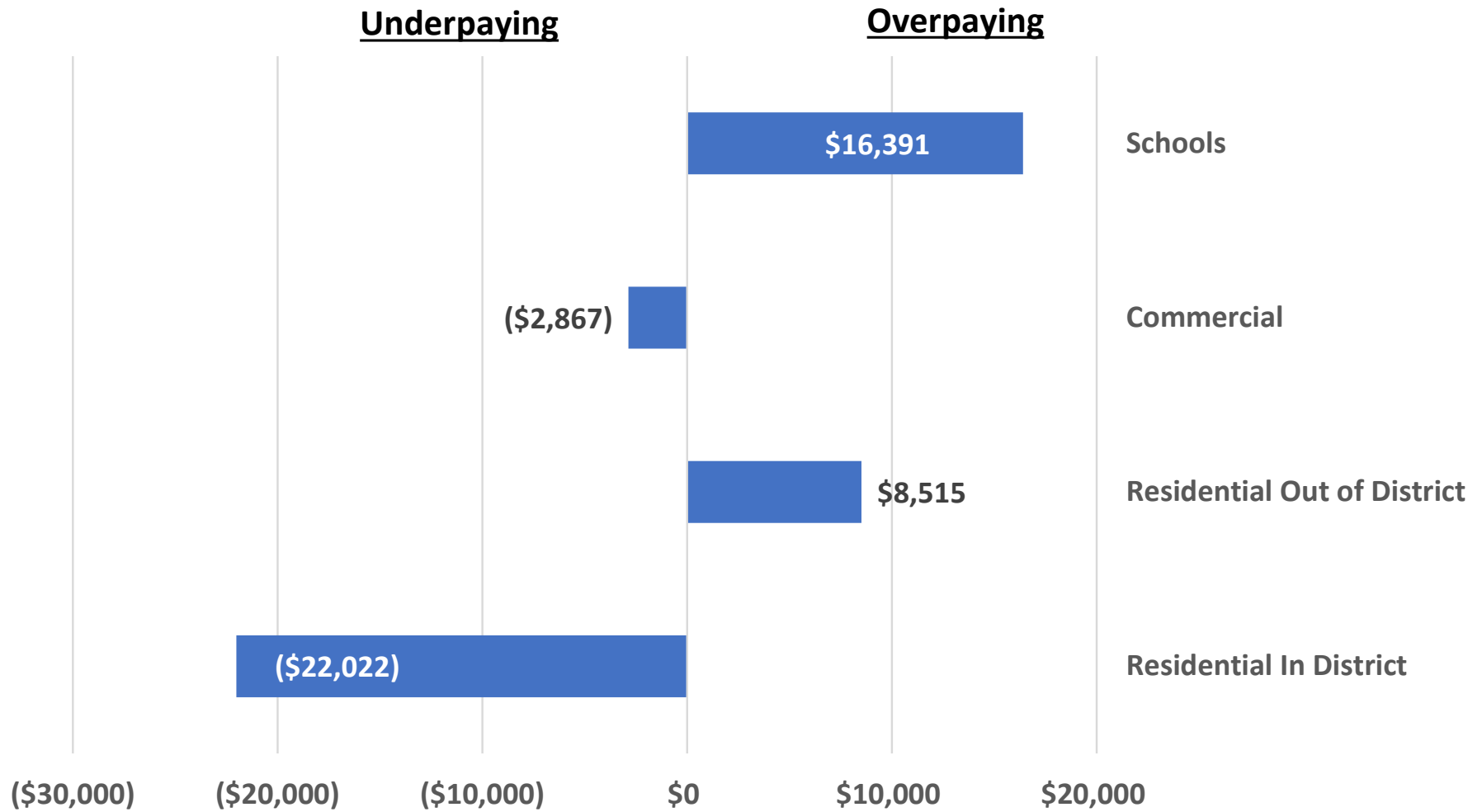
• Customer Charge	}	Fixed Charges	26%	= 63%
• Readiness to Serve Charge			37%	
• Capacity Peaking Charge	}	Variable Charges	20%	= 37%
• Commodity Charge			17%	

❖ Customer Charge = per Account

❖ Readiness to Serve Charge = per Meter

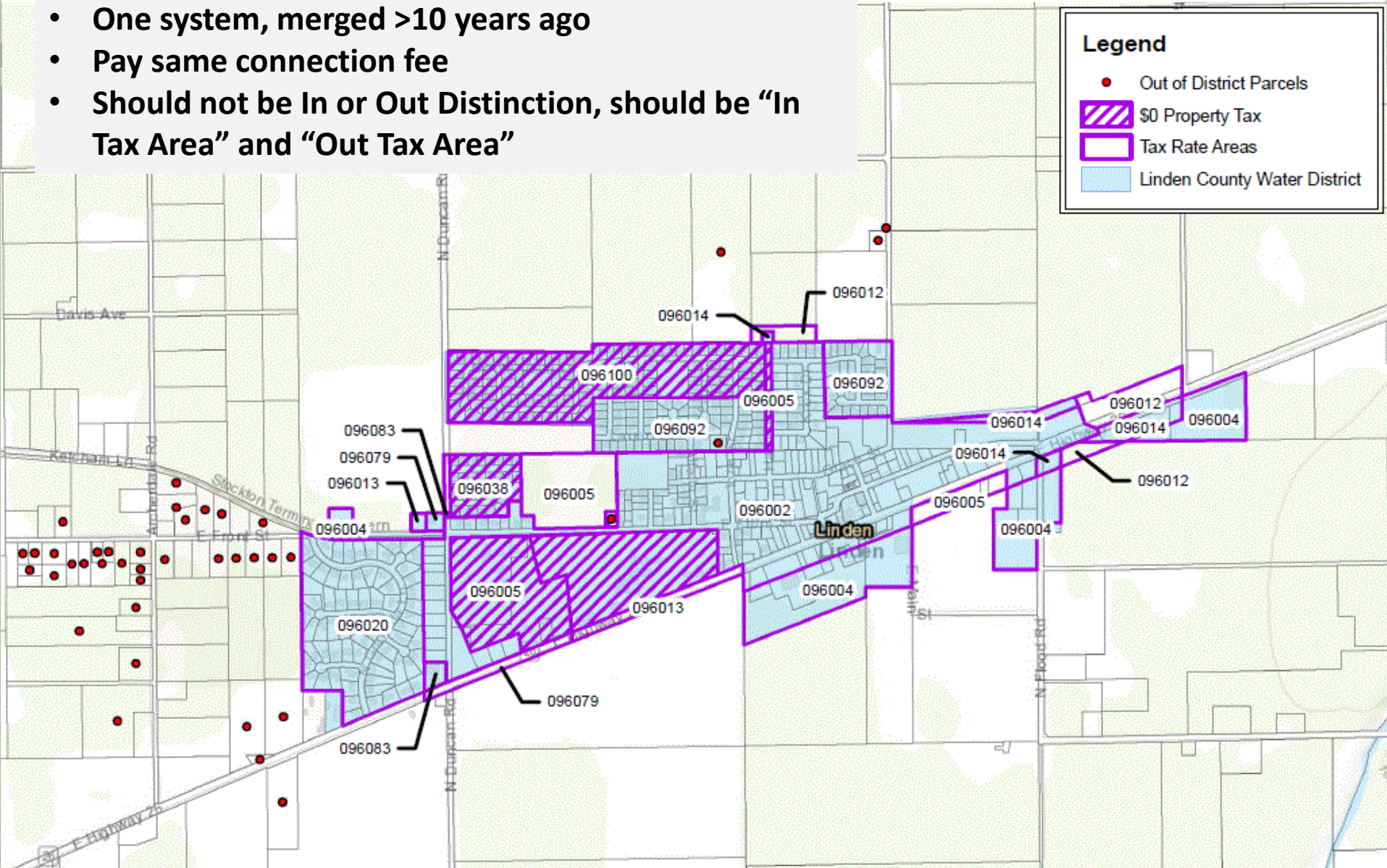
❖ Capacity Peaking & Commodity Charges = per HCF

Current Annual Cost of Service



In and Out of District Customers

- One system, merged >10 years ago
- Pay same connection fee
- Should not be In or Out Distinction, should be “In Tax Area” and “Out Tax Area”



Base Allowance

OK to continue a Base Allowance for all Metered Customers

- Should be based on necessary allowance for living / production functions

How? Change cutoff to median winter water use by customer type

Customer Group	Current Allowance	Proposed Allowance
	monthly	monthly
Residential In	10 HCF	6 HCF
--- Dual	20 HCF	12 HCF
Residential Out	14 HCF	6 HCF
--- Dual	28 HCF	12 HCF
Commercial	10 HCF	3 HCF
Schools	358 HCF	381 HCF

Water Supply Surcharges

Change Nomenclature

- No longer in a Drought --Stockton and Modesto both have drought surcharges in their rate structures – they have been removed
- Purpose of Drought Management Plan (Ordinance 14-01) is a “Water Conservation, Supply Shortage and Sustainability Program”
- Eastern San Joaquin Groundwater Subbasin is in Critical Overdraft as defined by the State of California – in Stage 1 until new water supplies are secured

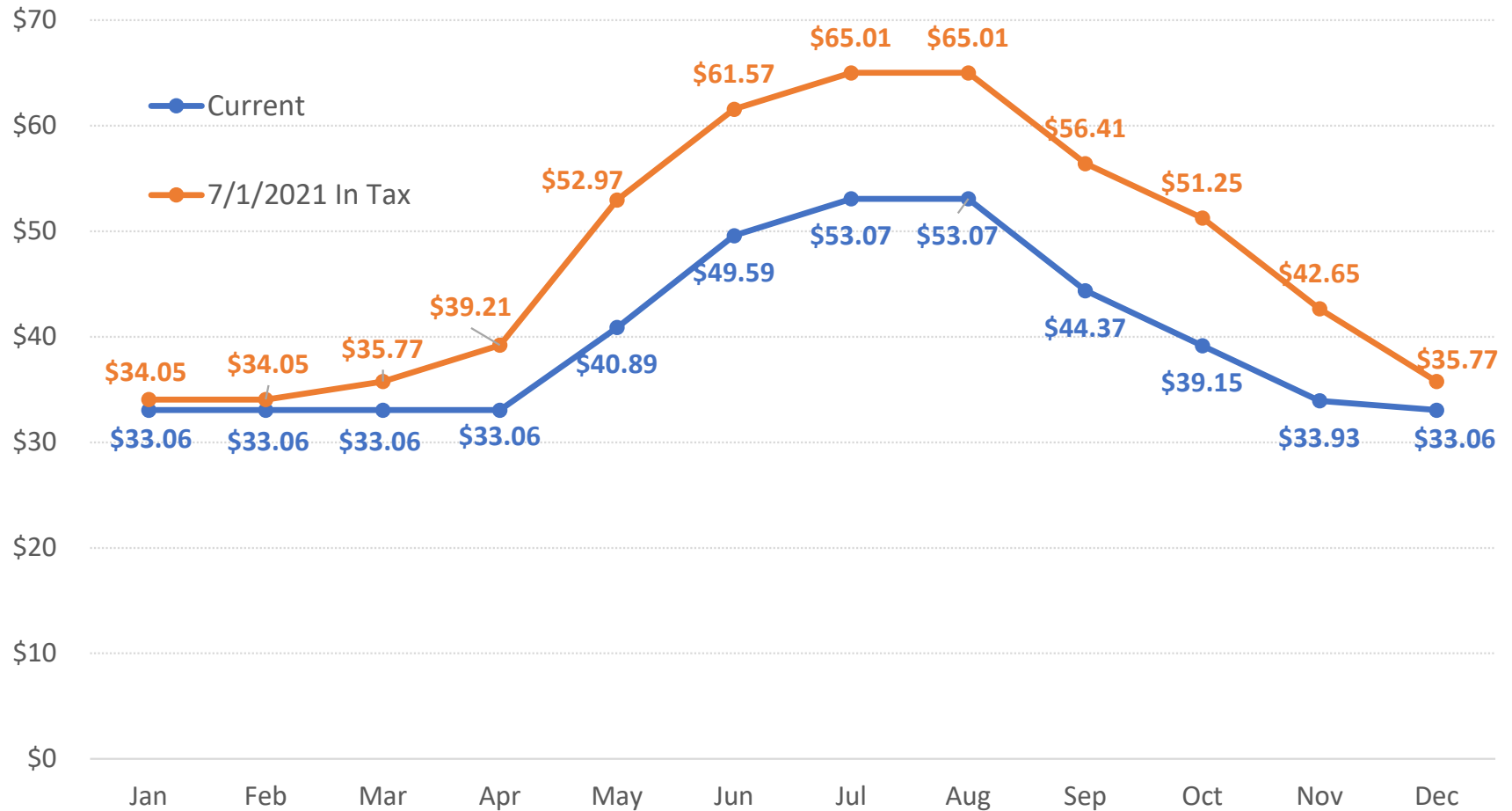
Proposed Changes

CURRENT	Applied to Use	PROPOSED	Applied to Use
Drought Surcharge Stage 1	13%	Rate Schedule	-----
Drought Surcharge Stage 2	27%	Conservation & Sustainability Surcharge	20%
Drought Surcharge Stage 3	51%	Emergency Supply Surcharge	54%
		E. San Joaquin GW Subbasin Relief	-13%

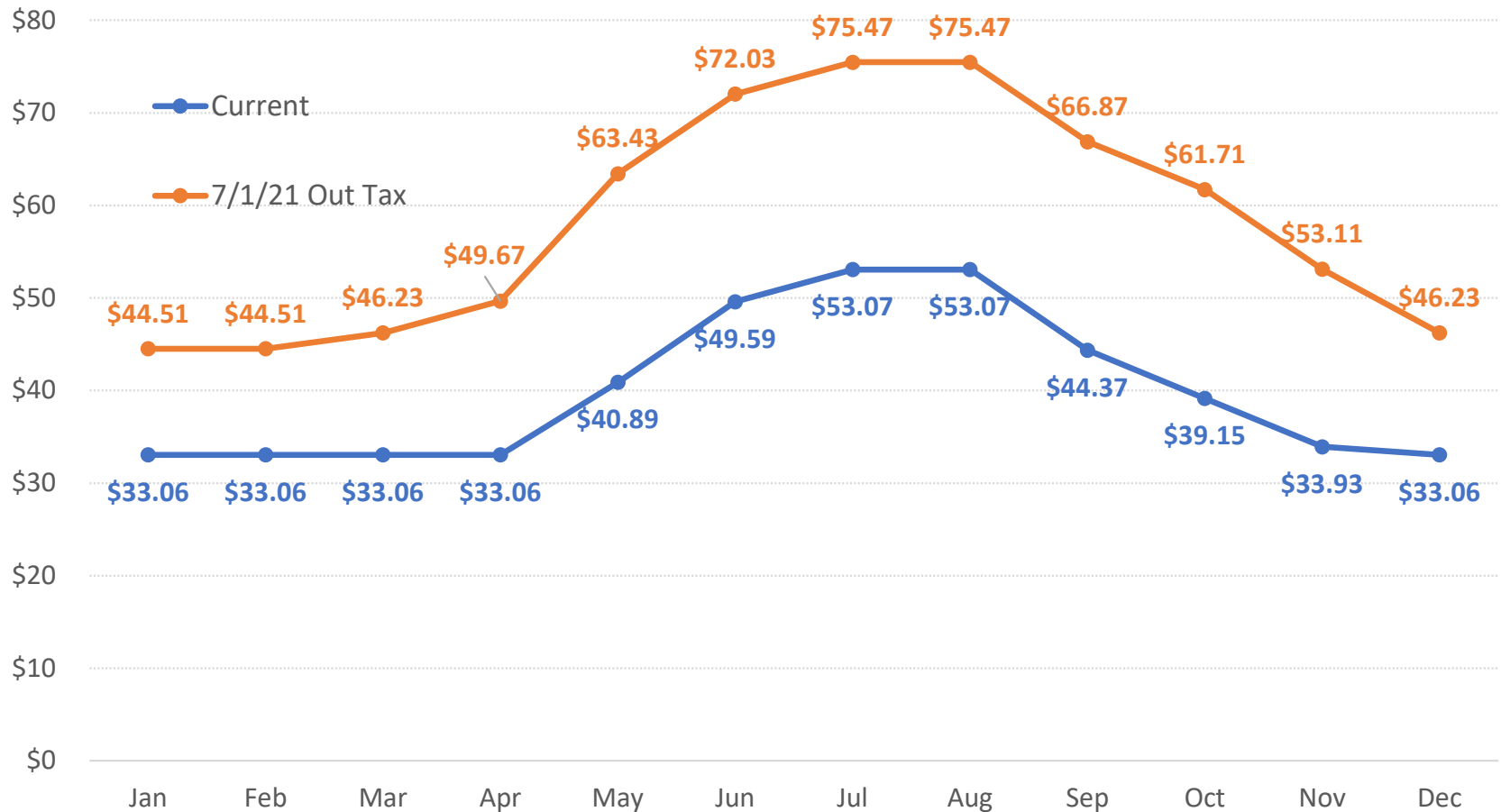
WATER

Residential Bill Impacts

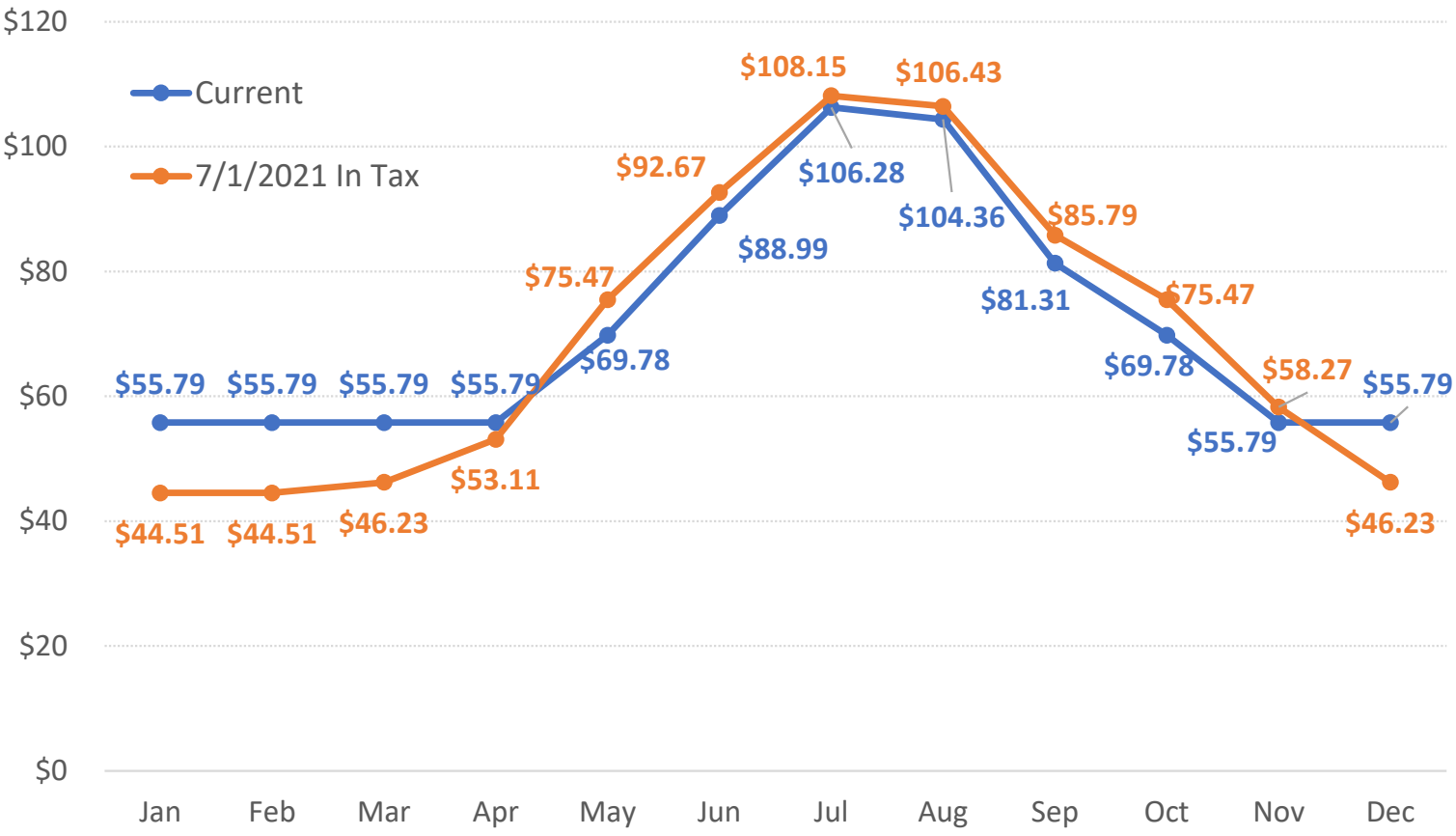
Typical In District Residential Customer Paying Property Tax to LCWD



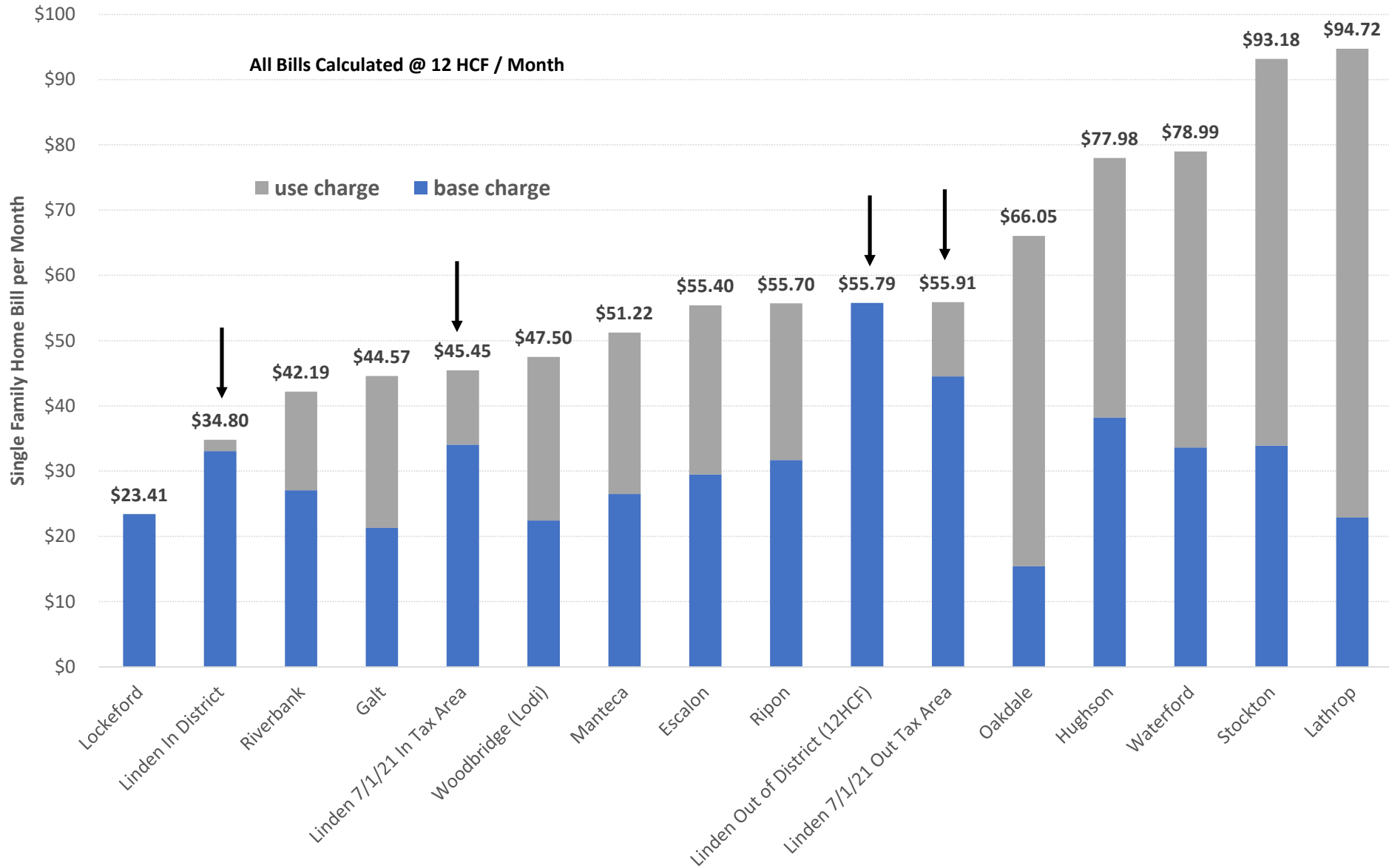
Typical In District Residential Customer Not Paying Property Tax to LCWD



Typical Out of District Residential Customer Not Paying Property Tax to LCWD



Comparison Bill @ 12 HCF



WASTEWATER

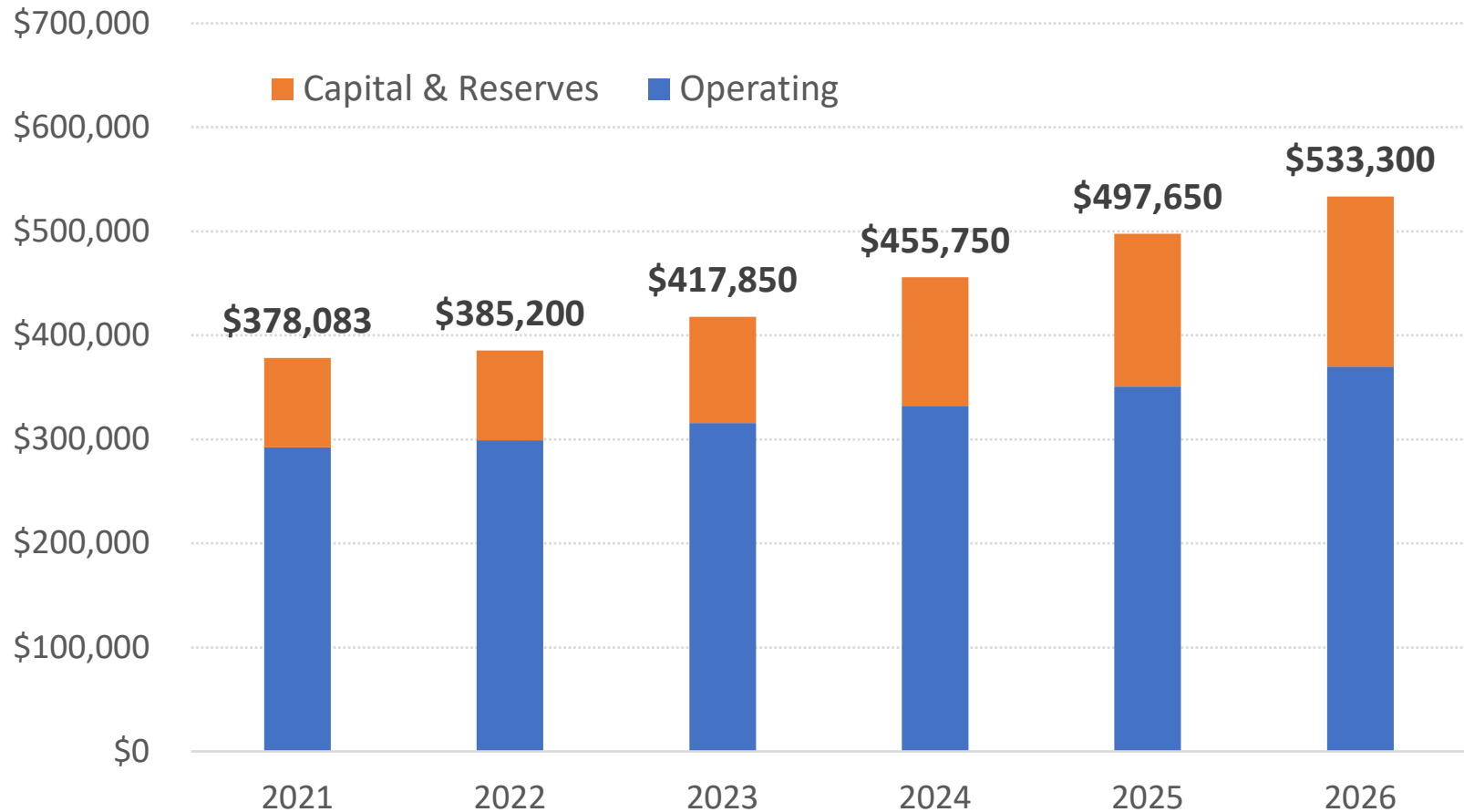
Capital Improvements, Revenue Requirement,
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Estimated Wastewater Capital Improvement Projects Costs

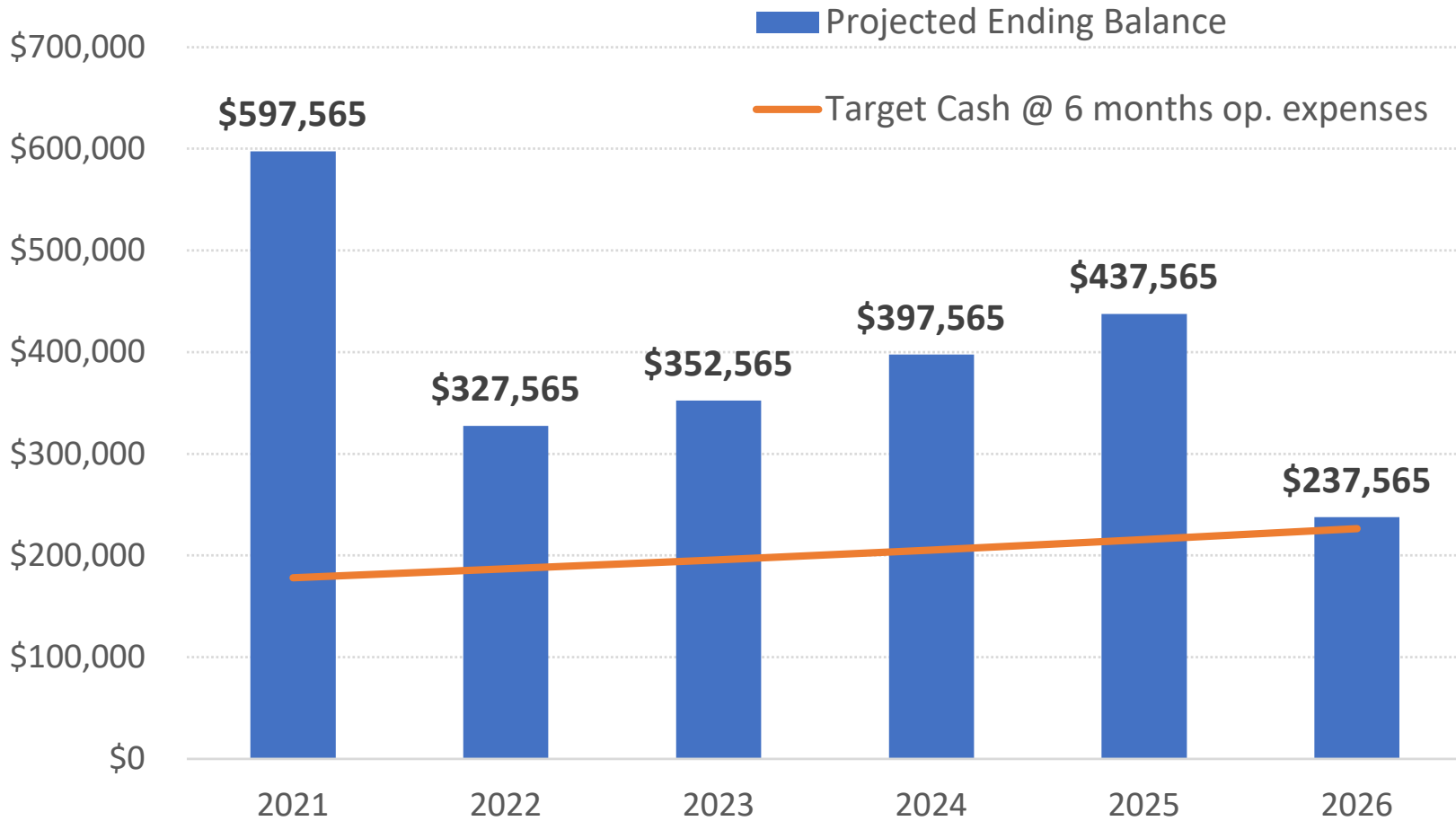
Improvement	Estimated Cost
Force Main Air Relief Valves	\$22,686
Manhole Channel Rehab & Replace Covers	\$119,714
Replace 45hp Pumps	\$105,352
Upgrade Electrical Controls	\$52,676
Replace Generator	\$87,793
Levee Roads Base Rocks	\$91,545
Replace Aerators (three)	\$126,989
Sludge Removal Pond 1	\$334,884
WWTP Access Road Micro-surfacing	\$39,700
TOTAL	\$981,607

Projected Revenue Requirement

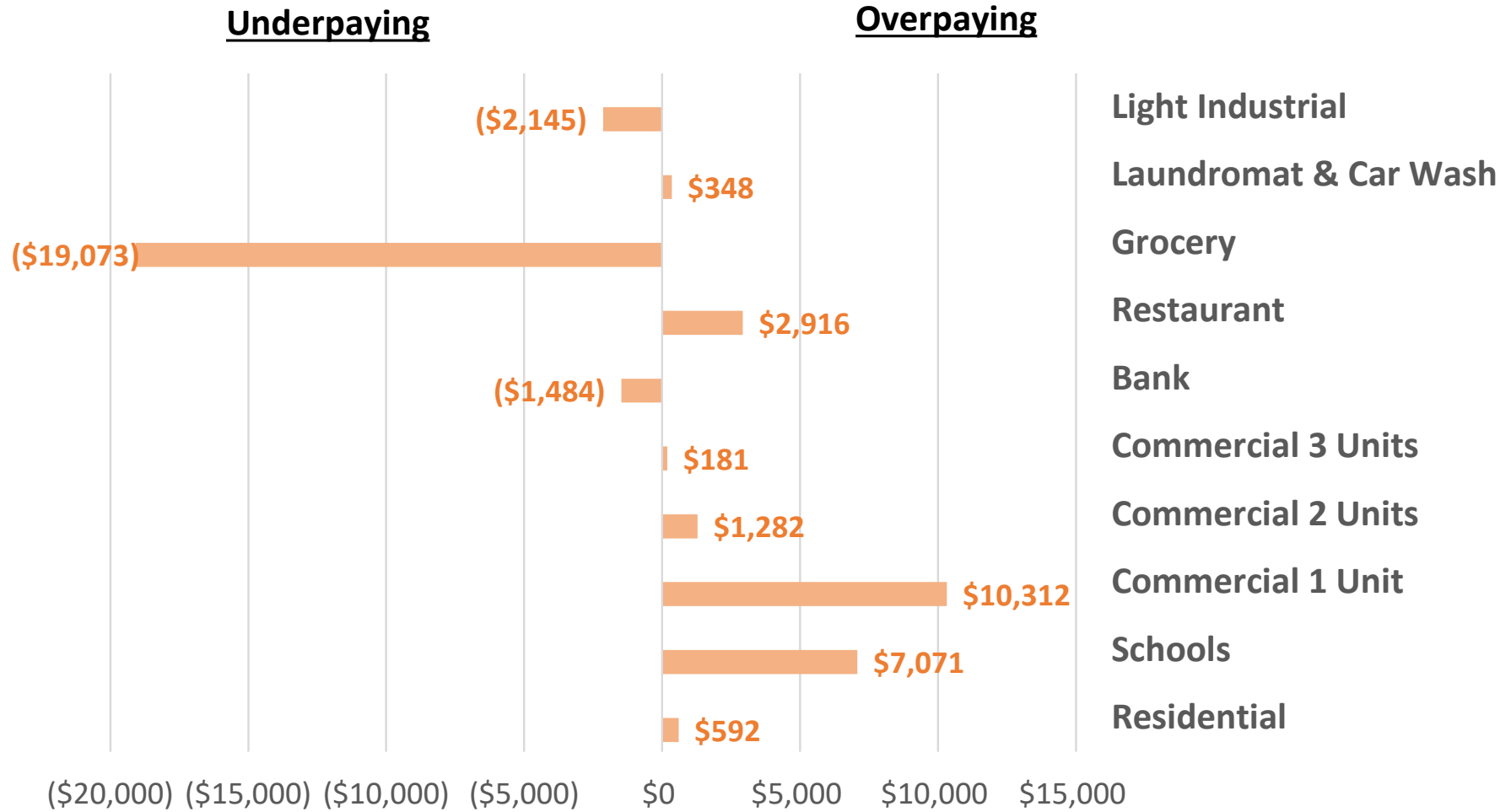
(amount to be collected in monthly wastewater fees)



Wastewater Fund Projected Cash Flow



Current Annual Cost of Service



Functionalized Costs

One-third of costs are “customer-related” (allocated based on number of customers)

Two-thirds of costs are “flow-related” (allocated based on estimated flow)

Expenditures	ACTUAL FY 2018-19	Allocation Basis	Customer- Related	Flow- Related	Unclassified
Salaries, Employee Benefits & Taxes - 50%	\$61,147	Plant in Service	13%	87%	0%
Salaries, Employee Benefits & Taxes - 50%	\$61,147	Customers	100%	0%	0%
Utilities	\$33,057	Utilities	10%	90%	0%
Professional & Special Services	\$39,573	Plant in Service	13%	87%	0%
Repairs and Maintenance	\$29,168	Plant in Service	13%	87%	0%
Insurance	\$9,605	Avg. of Classified	0%	0%	100%
Office Supplies, Postage & Printing	\$5,953	Customers	100%	0%	0%
Testing Services	\$8,639	Plant in Service	13%	87%	0%
Weed Control	\$3,160	Customers	100%	0%	0%
Total Expenses	\$251,448		\$90,908	\$150,935	\$9,605
Reallocation of Unclassified			\$3,610	\$5,995	
Allocation of Operating Expenses	\$251,448		\$94,519	\$156,929	
Depreciation	\$43,040	Plant in Service	13%	87%	
			\$5,388	\$37,652	
TOTAL ALLOCATED EXPENSES	\$294,488		\$99,907	\$194,581	
Percentage of Allocation			34%	66%	

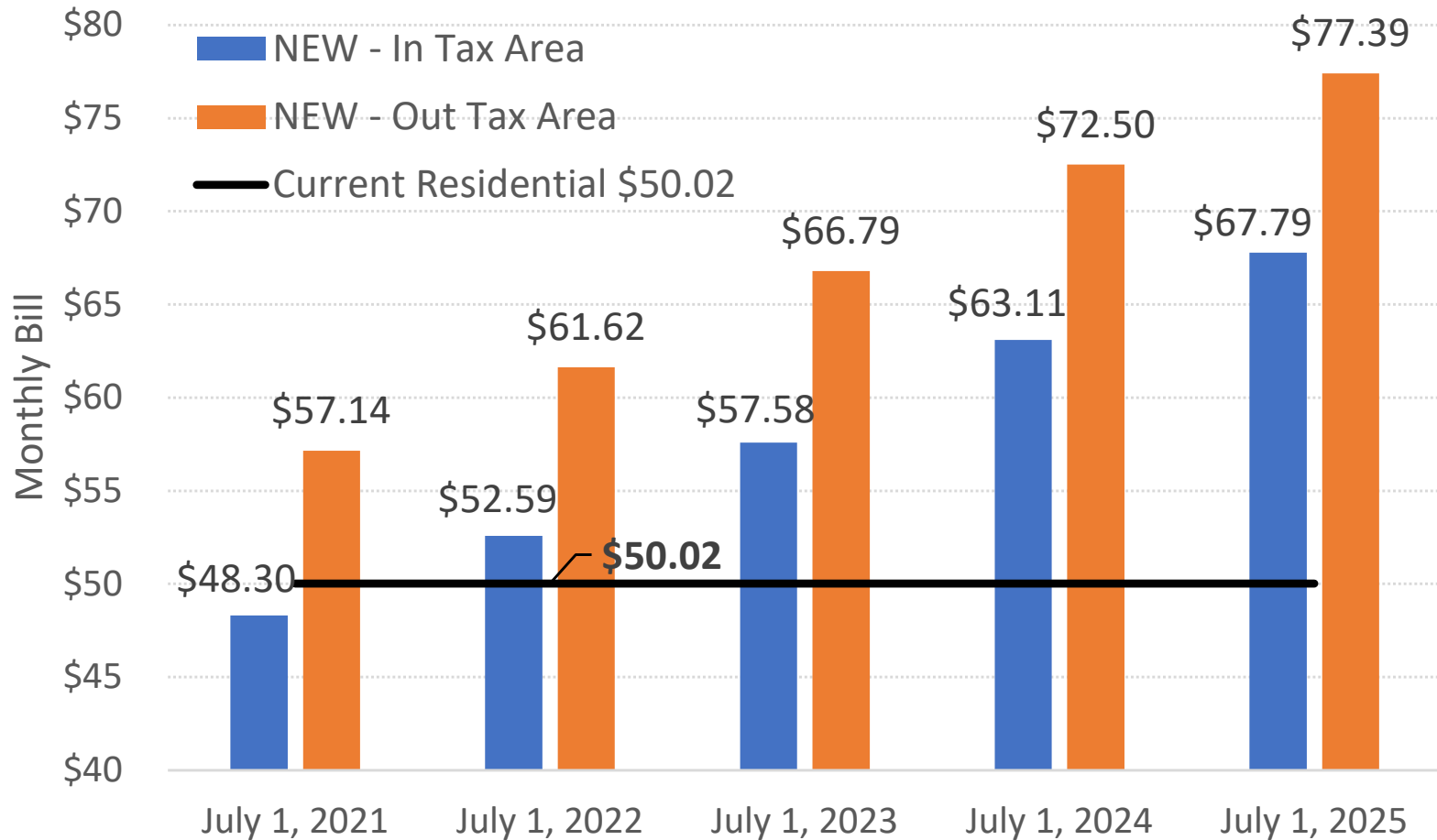
Change Customer Categories

Current Categories	Proposed Categories
Residential	Residential
Dual Residential	Dual Residential
	Bank
Restaurant	Restaurant
	Grocery
	Laundromat & Car Wash
Commercial	----
	Light Industrial
Light Commercial	Commercial 1 Unit
Commercial x2	Commercial 2 Units
Commercial x3	Commercial 3 Units
Commercial x7	----
School	Schools (LUSD Elem. & High)

WASTEWATER

Residential Bill Impacts

Residential 5-Year Wastewater Monthly Bills



Wastewater Comparison Bills

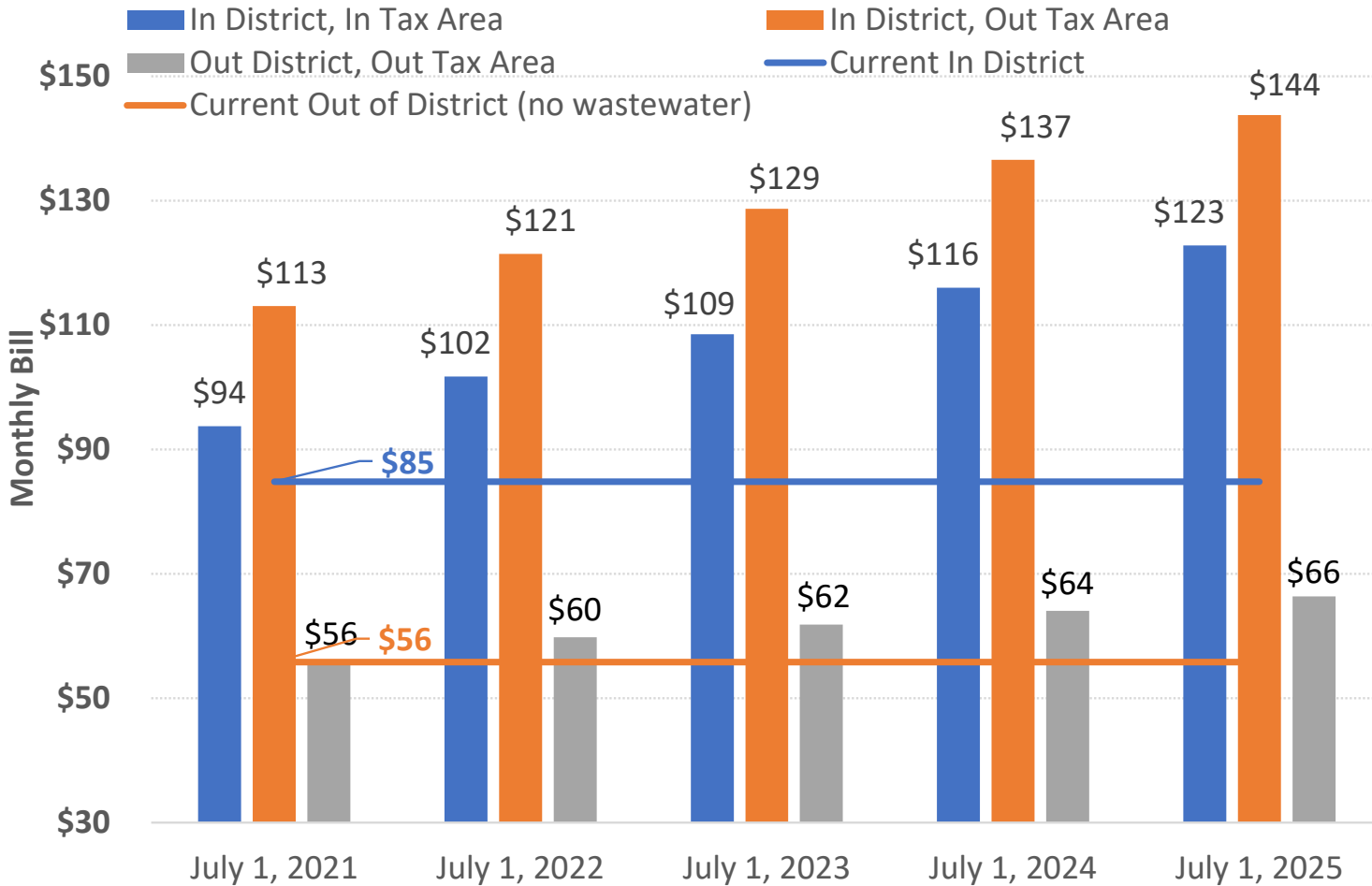


COMBINED BILL IMPACTS

Residential, Commercial, School District

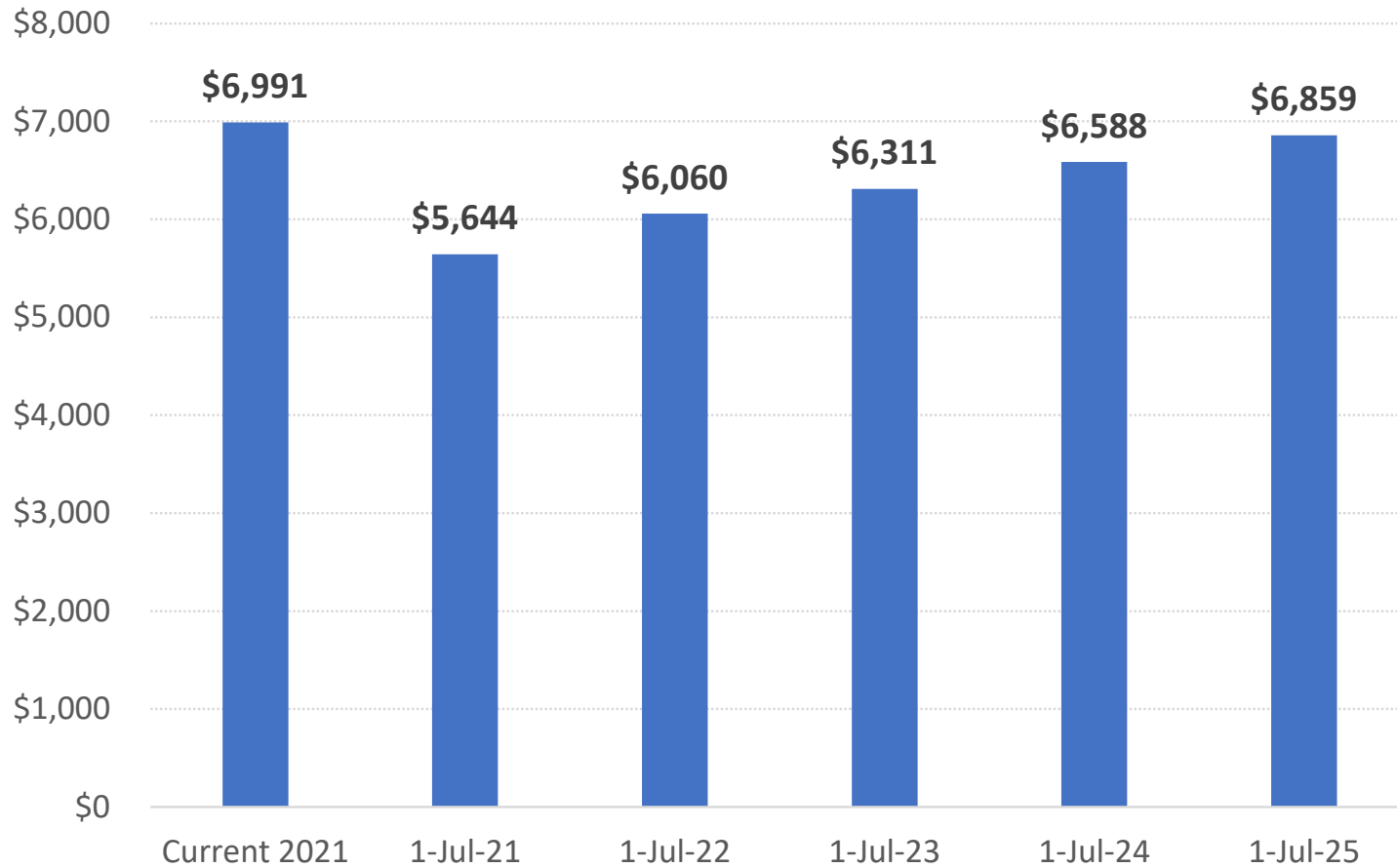
Residential Combined Bills @ 12 HCF

Combined LCWD Bill with Water Bill at 12 HCF



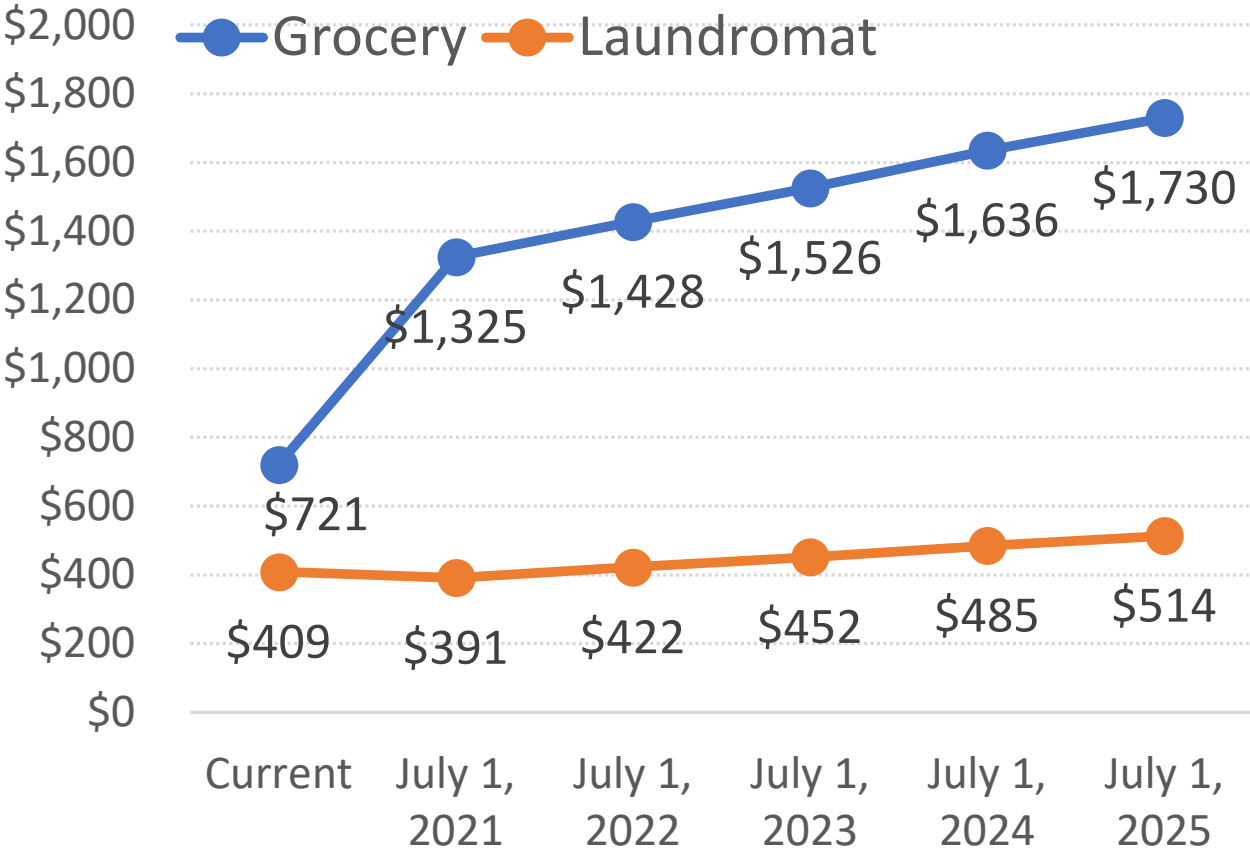
LUSD Combined Average Monthly Bills

LUSD Average Monthly Bill

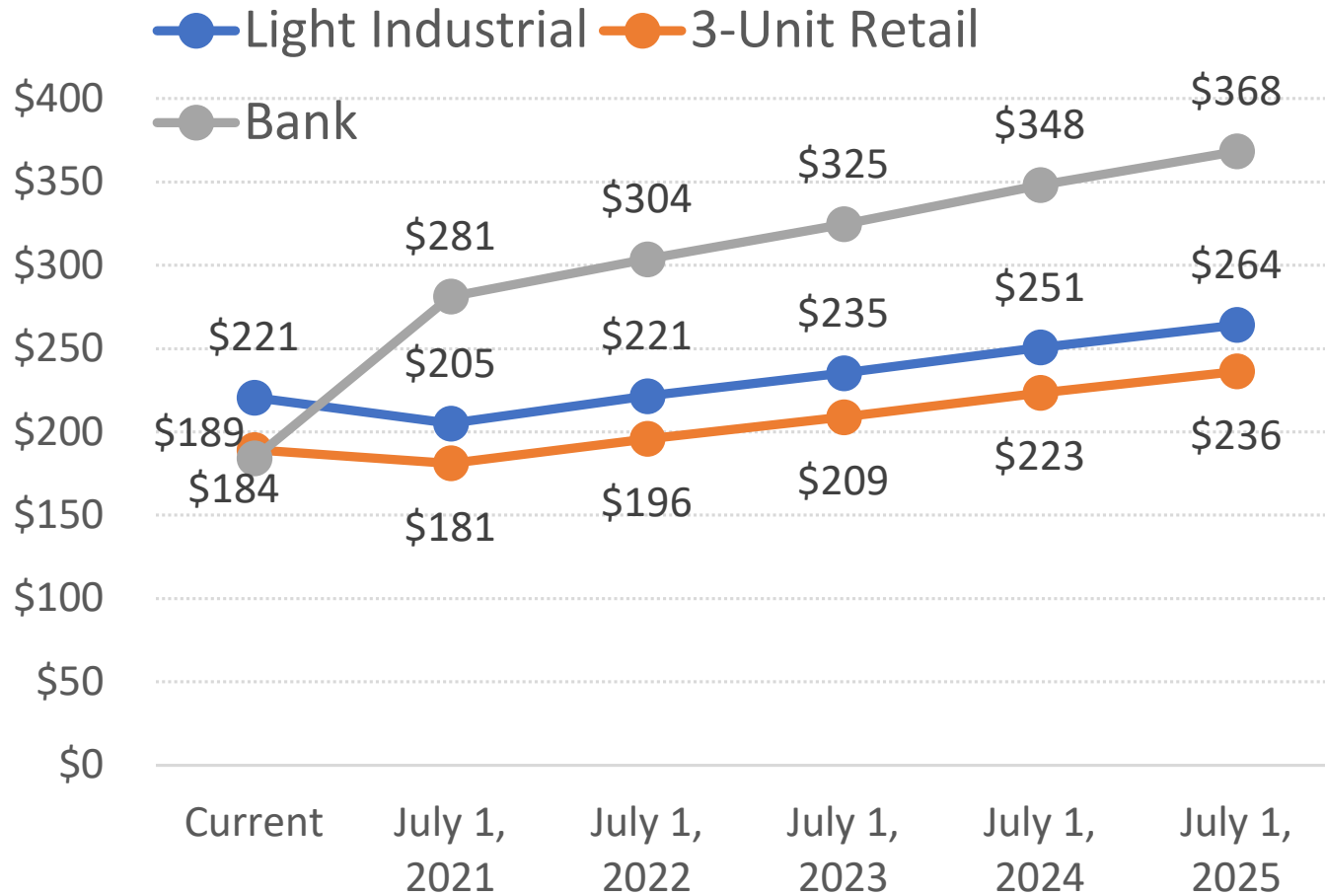


Commercial: Grocery & Laundromat

Average Monthly Bills



Commercial: Light Industrial, Bank & 3-Unit Complex Average Monthly Bills



Commercial: Barber & Restaurant

Average Monthly Bills

