

# Draft Rate Study Update



**City of Morro Bay  
Citizens Finance Committee  
April 18, 2017**

# Presentation Overview



- **Today's Goals**
- **Community Project Goals**
- **Project Background**
- **Project Status**
- **WRF Program Overview**
- **Recommended Project**
- **Preliminary Rate Study Findings**
- **Q&A**

# Presentation Overview



- Receive the update on the Draft Rate Study
- Ask questions
- Provide input regarding project financing alternatives and rate implementation options

# WRF Project Community Goals



- **Produce Tertiary Disinfected Wastewater**
  - *WRF designed accordingly*
- **Produce Reclaimed Wastewater Cost-Effectively**
  - *Master Reclamation Plan addresses this*
  - *Including reclamation as early as possible reduces long-term costs*
- **Allow for Onsite Composting**
  - *Onsite composting is not recommended, regional facility will be more cost-effective*

# WRF Project Community Goals



- **Design for Energy Recovery**
  - *Considered in the FMP*
- **Design to Treat for Contaminants of Emerging Concern**
  - *Included in FMP treatment evaluation*
- **Allow for other Municipal Uses (at WRF)**
  - *Site planning in FMP allows for this possibility*

# WRF Project Community Goals



- **Ensure Compatibility with Neighboring Land Uses**
  - *Considered in siting study*
  - *FMP utilized for siting and architecture*
  - *EIR will analyze further*
- **Operational within 5 years**
  - *Project on schedule for WRF operation in 2021*
  - *Potential to construct recycled water project concurrently*

# WRF Project Background



- **Jan 2013:** CCC denial of CDP for WWTP Upgrade
- **Dec 2013:** Site Options Report 17 sites narrowed to 7; Council direction to compare the best sites (in both Morro and Chorro Valley)
- **May 2014:** Report recommends Morro Valley, but Chorro Valley also suitable; Council direction to compare WRF in MV to regional facility at CMC
- **Dec 2014:** Report determines CMC facility not desirable (very high cost; logistical challenges); Council focus remains on Morro Valley
- **April 2015:** CSD decides to pursue separate project

# WRF Project Background



- **Feb 2016:** Neighborhood concerns in Morro Valley lead to additional site analysis
- **May 2016:** Chorro Valley site (South Bay Boulevard) determined to be most achievable in 5-year timeframe when balancing cost and other logistical issues
- **June 2016:** City Council selects South Bay Boulevard site for detailed studies, FMP site planning, and EIR analysis

# Project Schedule – 2016



Key Milestone	Scheduled Date	Actual Date
City Council Selects Site for Study (South Bay Blvd.)	June 2016	June 2016
Technical Studies (biology, cultural, geotech, survey work)	August 2016	August 2016
EIR Scoping Meeting	August 2016	August 2016
MOU with Property Owner	October 2016	October 2016

# Project Schedule – 2016-17



Key Milestone	Scheduled Date	Actual Date
Draft Facility Master Plan	December 2016	November 2016
Draft Master Water Reclamation Plan	March 2017	March 2017
Draft EIR Released	August 2017	On Schedule
Final EIR Certified	Fall 2017	On Schedule

# Project Schedule – 2018-21



Key Milestone	Scheduled Date	Actual Date
Award Contract for WRF Project	May 2018	On Schedule
Begin Project Design	August 2018	On Schedule
Project Construction Begins	June 2019	On Schedule
Completion of WRF Project Construction	May 2021	On Schedule

# WRF Program Overview



## *What we know now ...*

- We can build a WRF at South Bay Blvd site that meets the Community Project Goals
- “Total WRF Project” by June 2021 is possible
  - *Recycled water 2 years ahead of schedule*
- Groundwater injection & extraction appears feasible

# WRF Program Overview



## *What we know now ...*

- **Total WRF Project** can provide recycled water for groundwater injection to supplement the City's **water supply** and provide **water independence**
- **Advantages of Accelerating Recycled Water Component**
  - *Potentially eligible for more grant money*
  - *Long-term construction cost savings*
  - *Potential reduction in State Water Use*

# WRF Program Overview



## *What we know now ...*

- Estimated Cost without recycled water: \$124M
- Estimated Total Cost with recycled water: \$153M - \$168M

# Recycled Water Project Alternatives

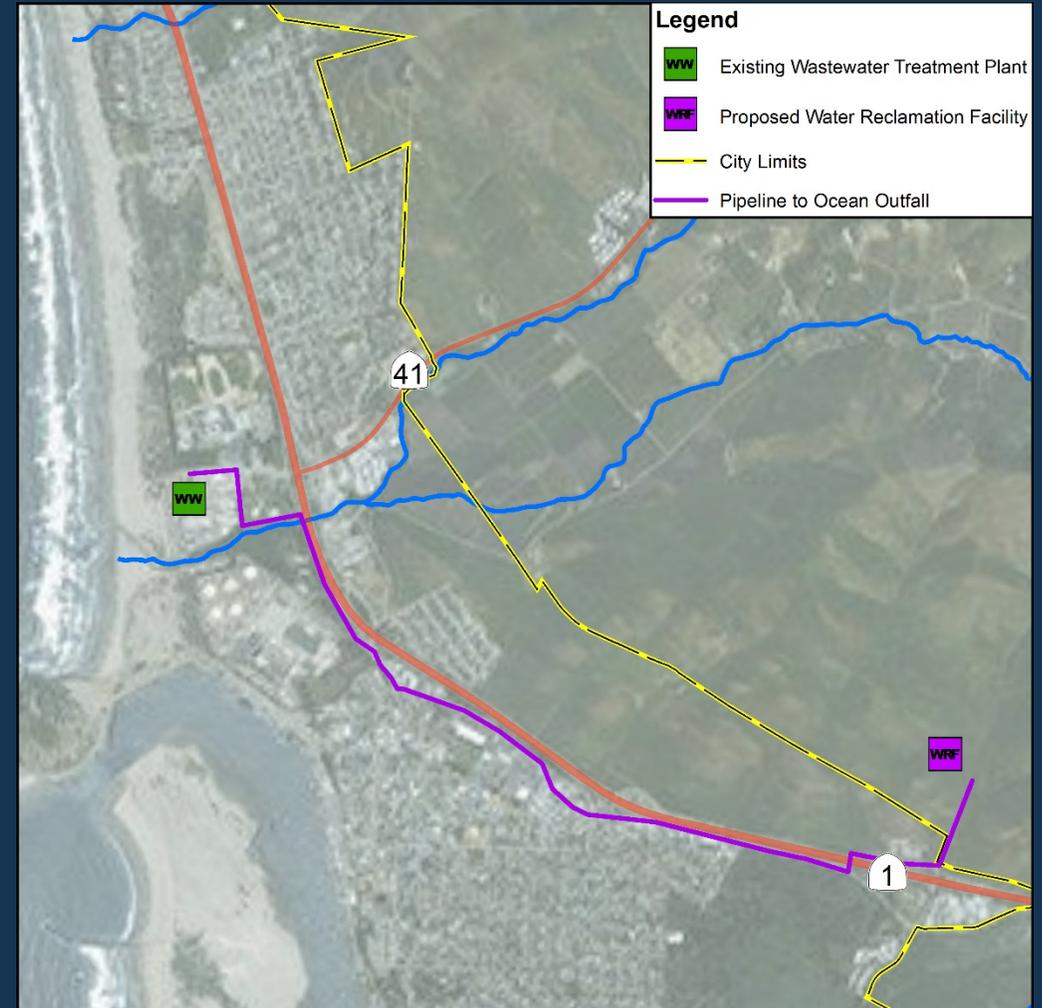


- Alternative 0: No Recycled Water Project
- Alternative 1: Urban Reuse
- Alternative 2: Agricultural Exchange
- Alternative 3/4: Indirect Potable Reuse

# No Recycled Water Project

- Discharge effluent through existing ocean outfall
- Secondary disinfected will meet requirements for ocean discharge
- Does not meet Community Goal for tertiary treatment
- No potential water supply benefit

Project Component	Cost Opinion
WRF Capital Costs	\$104.2M
Recycled Water Project Capital Cost	\$0
Subtotal Program Cost	\$104.2M
Construction Contingency	\$19.3M
<b>Total Program Cost Opinion</b>	<b>\$124M</b>

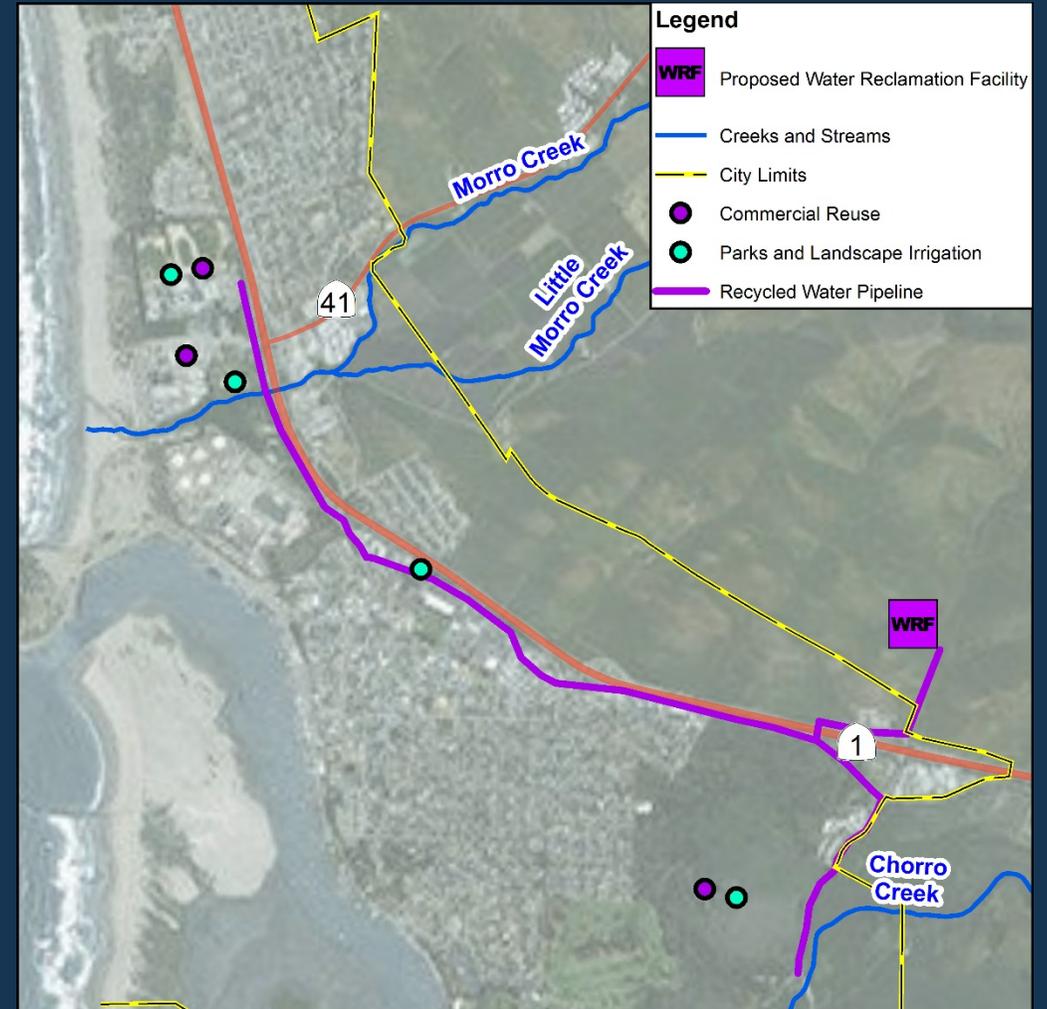


Note: Construction contingency is 25% of construction cost subtotal

# Urban Reuse

- Recycled water to urban irrigation and industrial users
- Additional treatment for salts removal required
- Potential water supply benefit: 45 AFY

Project Component	Cost Opinion
WRF Capital Costs	\$117.3M
Recycled Water Project Capital Cost	\$11.6M
Subtotal Program Cost	\$128.9M
Construction Contingency	\$24.1M
<b>Total Program Cost Opinion</b>	<b>\$153M</b>

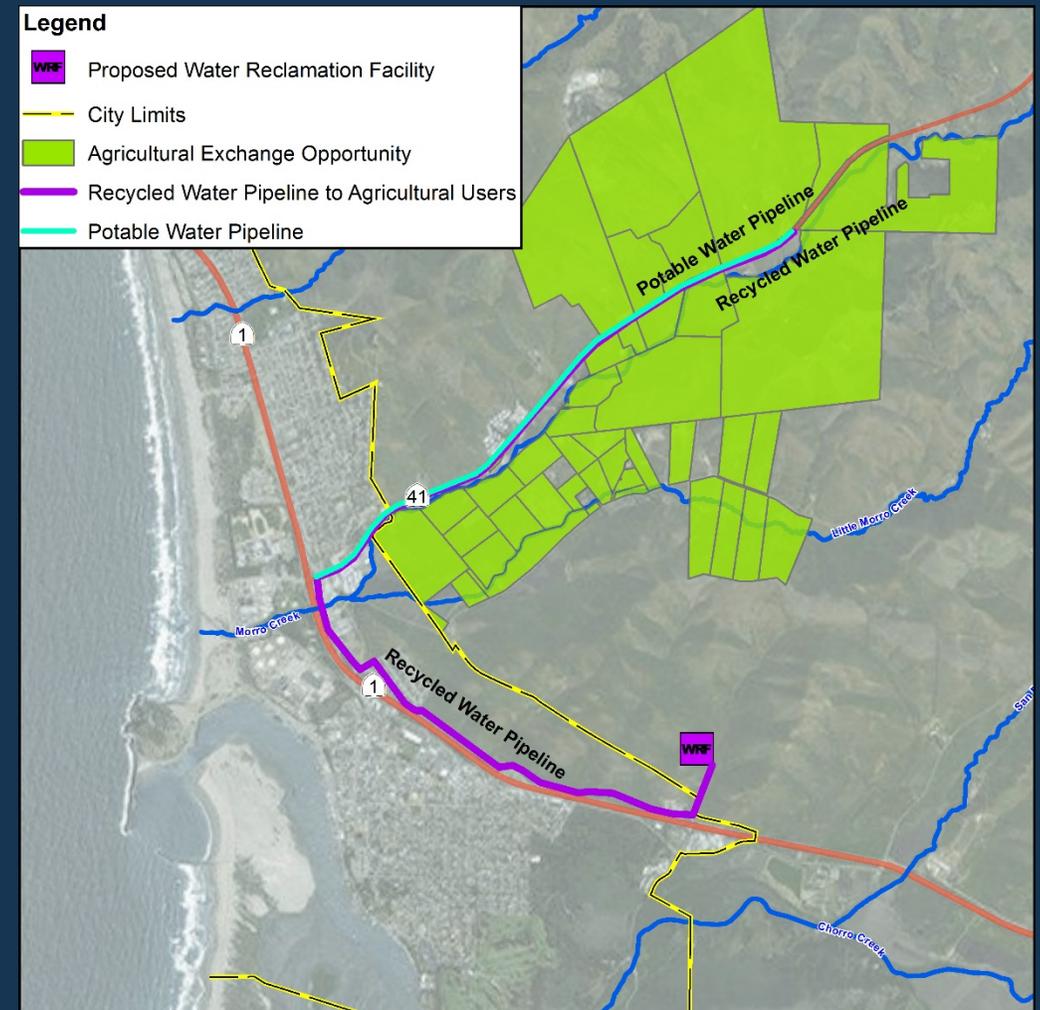


Note: Construction contingency is 25% of construction cost subtotal

# Agricultural Exchange

- Exchange recycled water with agricultural growers for groundwater (0.5 return ratio)
- Additional treatment for salts removal required
- Potential water supply benefit: 442 AFY

Project Component	Cost Opinion
WRF Capital Costs	\$117.3M
Recycled Water Project Capital Cost	\$23.9M
Subtotal Program Cost	\$141.2M
Construction Contingency	\$26.4M
<b>Total Program Cost Opinion</b>	<b>\$168M</b>

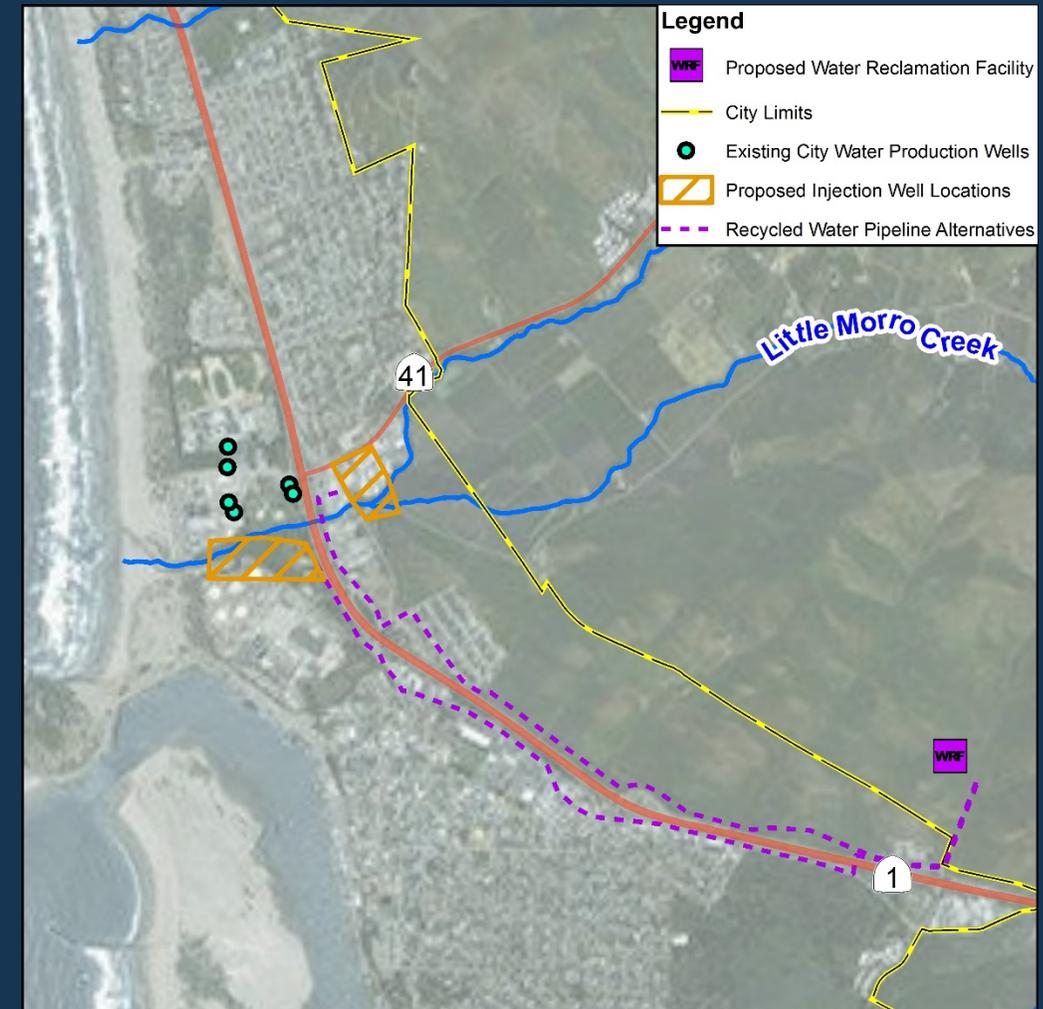


Note: Construction contingency is 25% of construction cost subtotal

# Indirect Potable Reuse

- Inject groundwater into the lower Morro Valley aquifer and recover at existing City wells
- Full advanced treatment (RO and advanced oxidation) required
- Potential water supply benefit: 943-1,119 AFY

Project Component	Cost Opinion
WRF Capital Costs	\$117.3M
Recycled Water Project Capital Cost	\$23.4M
Subtotal Program Cost	\$140.7M
Construction Contingency	\$26.3M
<b>Total Program Cost Opinion</b>	<b>\$167M</b>



Note: Construction contingency is 25% of construction cost subtotal

# Program Cost Opinions



	No Recycled Water Project	Urban Reuse	Agricultural Exchange	Indirect Potable Reuse
Capital Cost Opinion Subtotal	\$104.2M	\$128.9M	\$141.2M	\$140.7M
Construction Contingency	\$19.3M	\$24.1M	\$26.4M	\$26.3M
<b>Total Program Cost Opinion</b>	<b>\$124M</b>	<b>\$153M</b>	<b>\$168M</b>	<b>\$167M</b>

Note: Construction contingency is 25% of construction cost subtotal

# Consider Annual Costs



	No Recycled Water Project	Urban Reuse	Agricultural Exchange	Indirect Potable Reuse
Annualized Program Cost <sup>(1)</sup>	\$6.3M	\$7.8M	\$8.5M	\$8.5M
Estimated Annual O&M	\$1.4M	\$1.8M	\$2.0M	\$2.3M
Estimated Annual Water Cost <sup>(2)</sup>	\$2.6M	\$2.5M	\$1.7M	\$1.6M
<b>Estimated Total Program Annual Cost</b>	<b>\$10.3M</b>	<b>\$12.1M</b>	<b>\$12.2M</b>	<b>\$12.4M</b>

Notes: (1) SRF financing assumed with a 30 year loan and 3% interest rate

(2) Water cost assumptions: Demand= 1200 AFY, SWP = \$2200/AF, Groundwater = \$1000/AF, Desal = \$1600/AF

# MWRP Conclusions & Recommendations



- Recommended Project – Indirect Potable Reuse (Alt 3 and 4)
  - Best fulfills the Council adopted community project goals producing reclaimed water
  - Highest and most reliable potential water supply benefit (900 – 1100 AFY, near the City’s current water demand)
  - City could significantly reduce or eliminate reliance on imported water

# MWRP Conclusions & Recommendations



- Least expensive alternative is No Recycled Water Project (Alternative 0), followed by Urban Reuse (Alternative 1)
- Alternative 0 provides no water supply benefit and doesn't meet the community project goals.
- Alternative 1 provides the least (45.4 AFY) potential water supply benefit.

# Sewer Rate Background



- Sewer utility is a financially self-supporting enterprise
- Rates are the main source of revenue
- Rate impacts of new WRF will depend on:
  - a) Project alternative & cost - \$124M to \$167M (current \$)
  - b) Financing sources (SRF/WIFIA Loans vs. Bonds)
- Funding the new WRF will be a major financial challenge for residential & commercial customers (population 10,700)

# Prior Rate Study

- Prior rate study completed in 2014/15
- City adopted 5 years of gradual rate increases
  - 2 years of increases already implemented, 3 years left
- Previously-adopted sewer rates assumed:
  - a) \$74.7 million new WRF project cost (no recycling)
  - b) 25% capital & operating cost-sharing with Cayucos SD
  - c) Low-rate SRF financing
- Additional rate increases needed

# Draft Sewer Rate Study Update



- BWA developed updated financial & rate projections
- Based on 2016/17 Budget & slightly-conservative assumptions
- Assumes end of Cayucos 25% cost sharing for existing WWTP starting after 2018/19
  - Most of shared costs for wastewater treatment are fixed costs
- Developed projections under a range of WRF scenarios
  - min and max project cost scenarios, and
  - with low-rate SRF/WIFIA loans vs standard bond financing

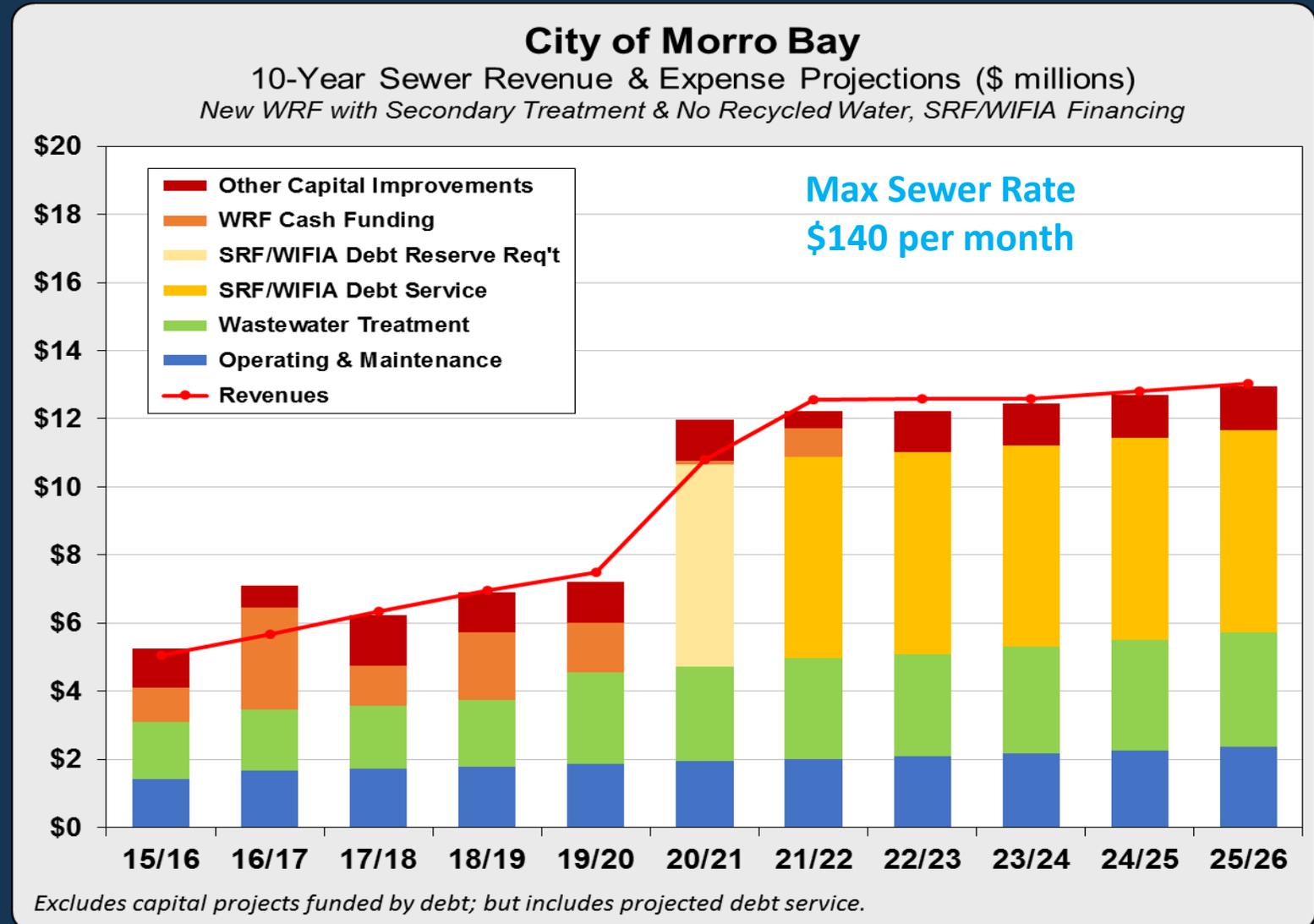
# Range of Project Costs

	New WRF Secondary Treatment No Recycling	New WRF Advanced Treatment With Recycling
<b>Project Cost (Current \$)</b>	<b>\$123,600,000</b>	<b>\$167,000,000</b>
<b>Operating Costs (Current \$)</b>		
Secondary Treatment	2,400,000	2,400,000
Advanced Treatment	<u>0</u>	<u>600,000</u>
Total Annual Costs	2,400,000	3,000,000
<b>Project Cost (Escalated \$)</b>	<b>\$135,839,000</b>	<b>\$183,974,000</b>
<b>Operating Costs (Escalated \$)</b>		
Secondary Treatment	2,782,000	2,782,000
Advanced Treatment	<u>0</u>	<u>696,000</u>
Total Annual Costs	2,782,000	3,478,000



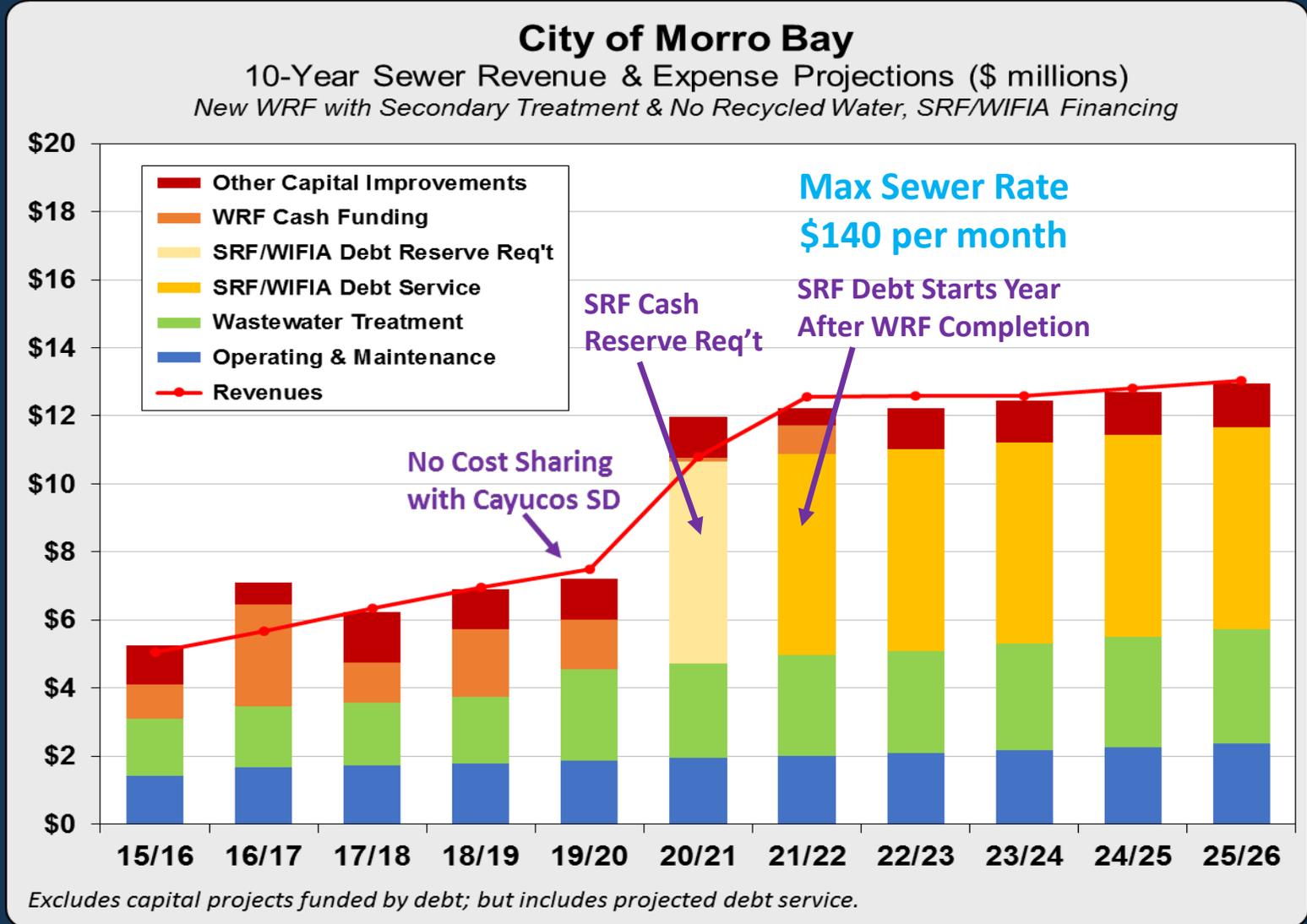
# Financial Projections A

**SCENARIO A**  
**New WRF**  
**Secondary Treatment**  
**No Recycling**  
**SRF/WIFIA Financing**



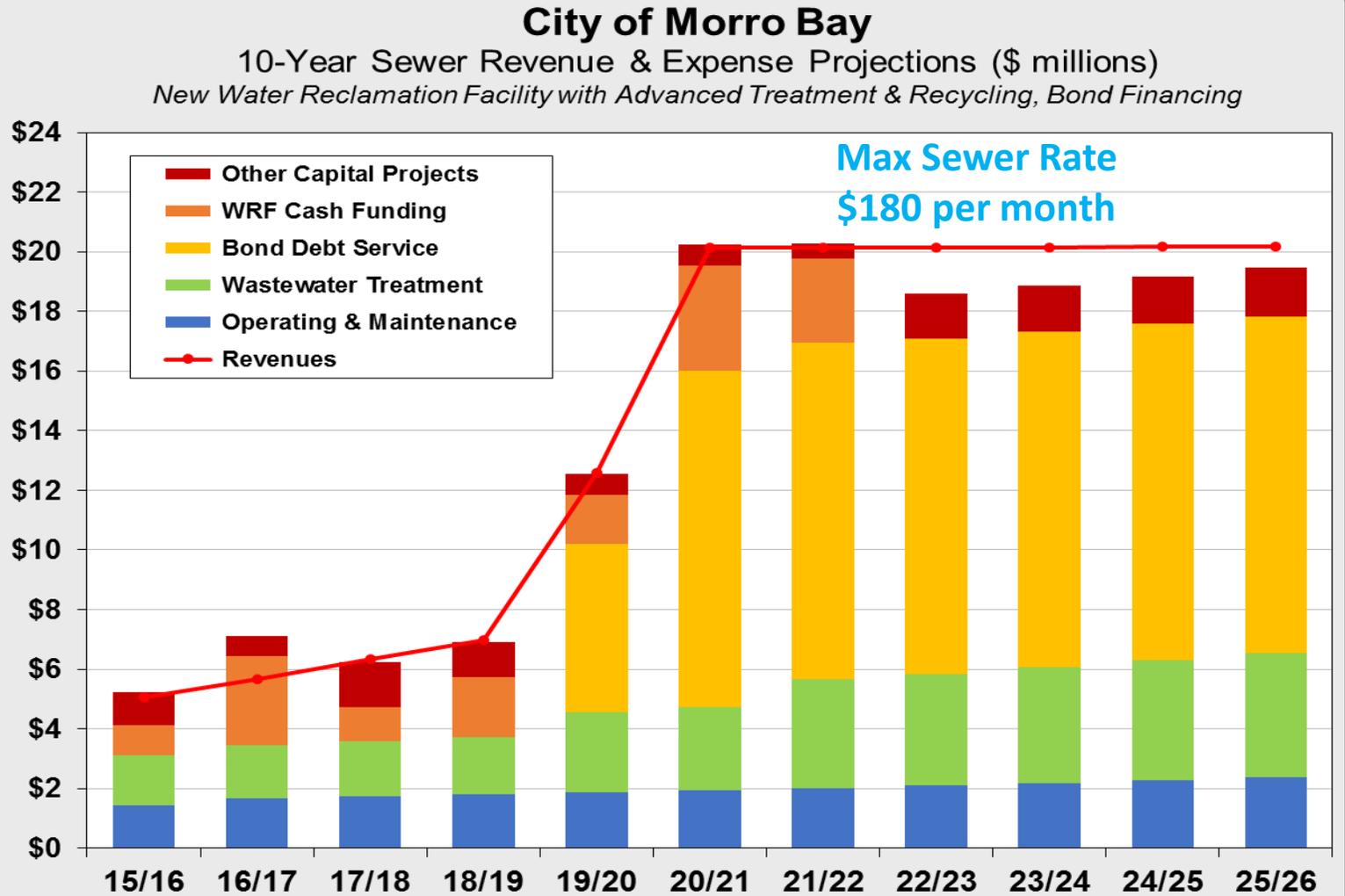
# Financial Projections A

**SCENARIO A**  
**New WRF**  
**Secondary Treatment**  
**No Recycling**  
**SRF/WIFIA Financing**



# Financial Projections A2

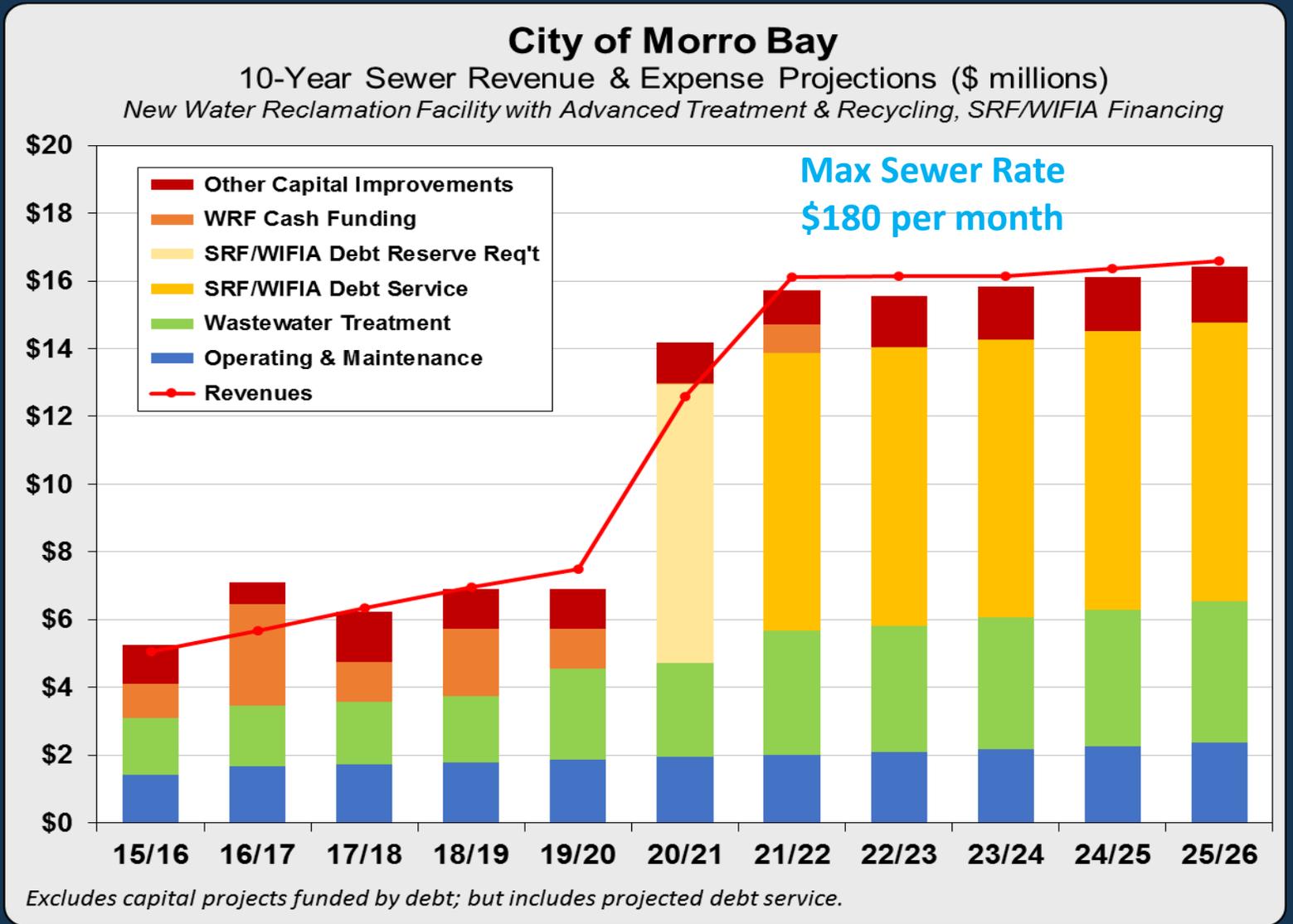
**SCENARIO A2**  
**New WRF**  
**Secondary Treatment**  
**No Recycling**  
**Bond Financing**



*Excludes capital projects funded by debt; but includes projected debt service.*

# Financial Projections B

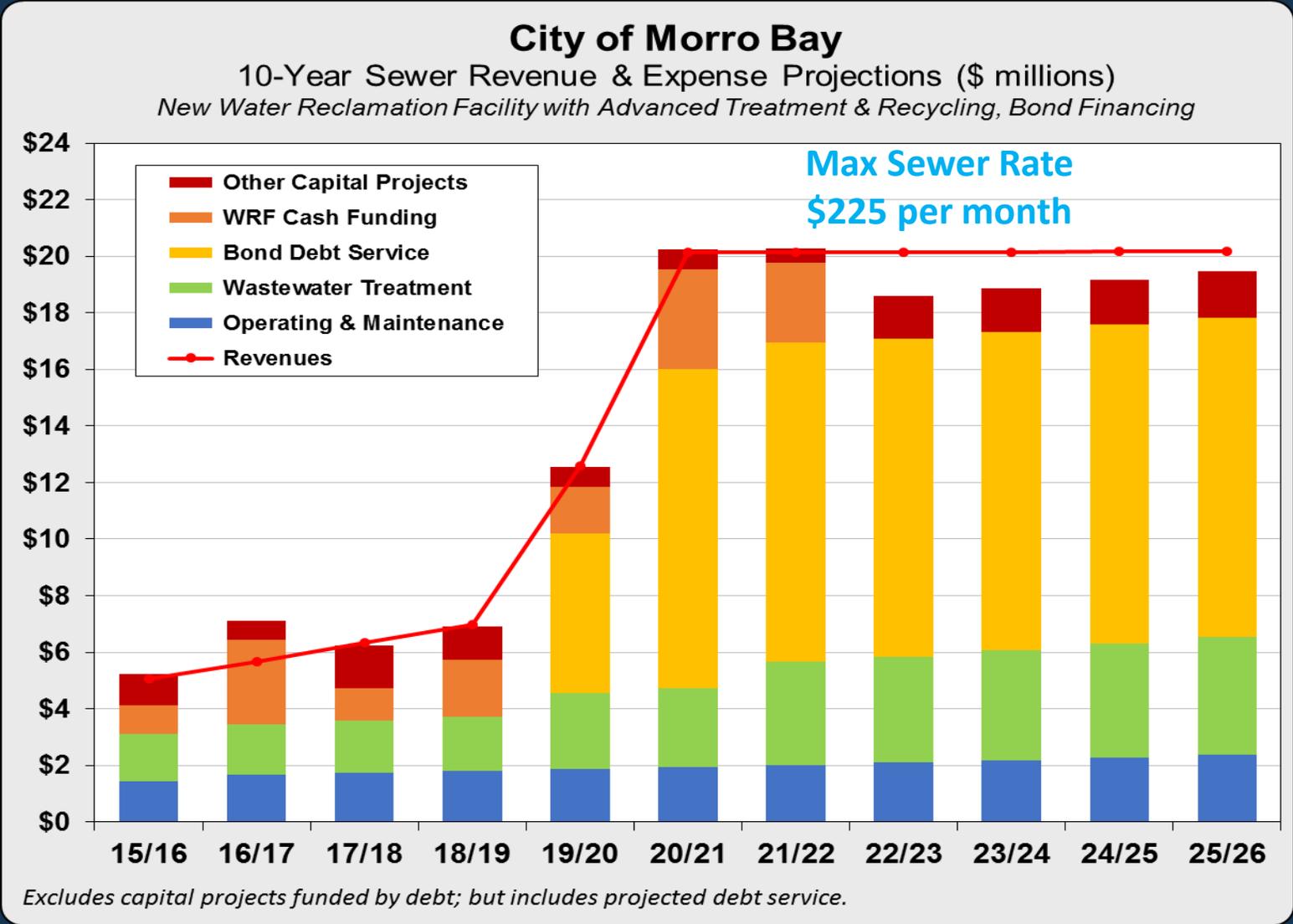
**SCENARIO B**  
**New WRF**  
**Advanced Treatment**  
**With Recycling**  
**SRF/WIFIA Financing**



# Financial Projections B2



**SCENARIO B**  
**New WRF**  
**Advanced Treatment**  
**With Recycling**  
**Bond Financing**



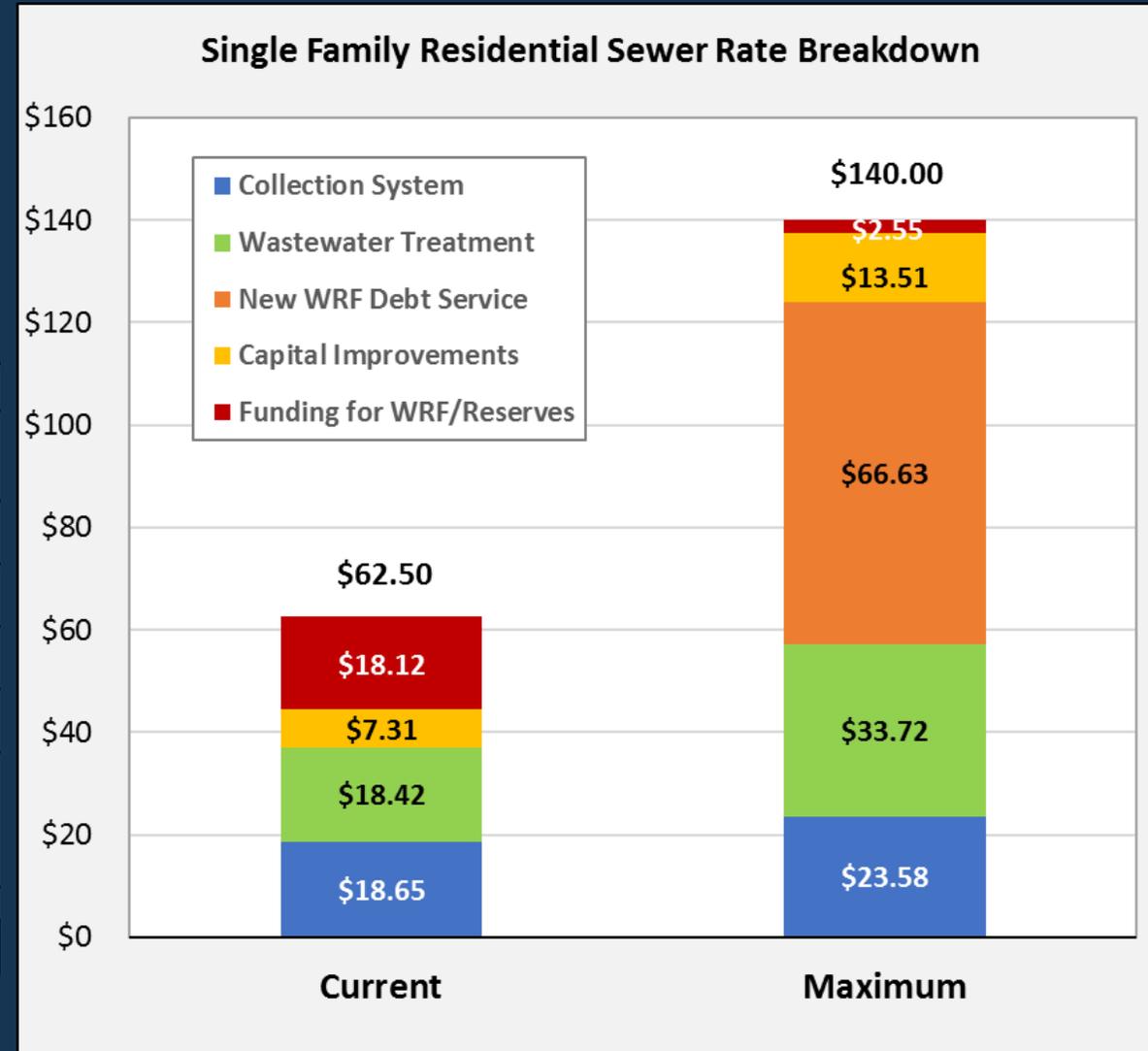
# Sewer Rate Components



## A) New WRF with Secondary Treatment & No Recycling SRF/WIFIA Financing

	2016/17	2022/23
	Current	First full year of new WRF operation
Sewer Collection System O&M	\$18.65	\$23.58
Wastewater Treatment O&M*	18.42	33.72
SRF/WIFIA Debt Service	0.00	66.63
Sewer Capital Improvements/Equipment	7.31	13.51
Funding Generated for New WRF/Reserves	<u>18.12</u>	<u>2.55</u>
<b>Total</b>	<b>62.50</b>	<b>140.00</b>

\* Current year wastewater treatment O&M is net of 25% cost-sharing by Cayucos SD



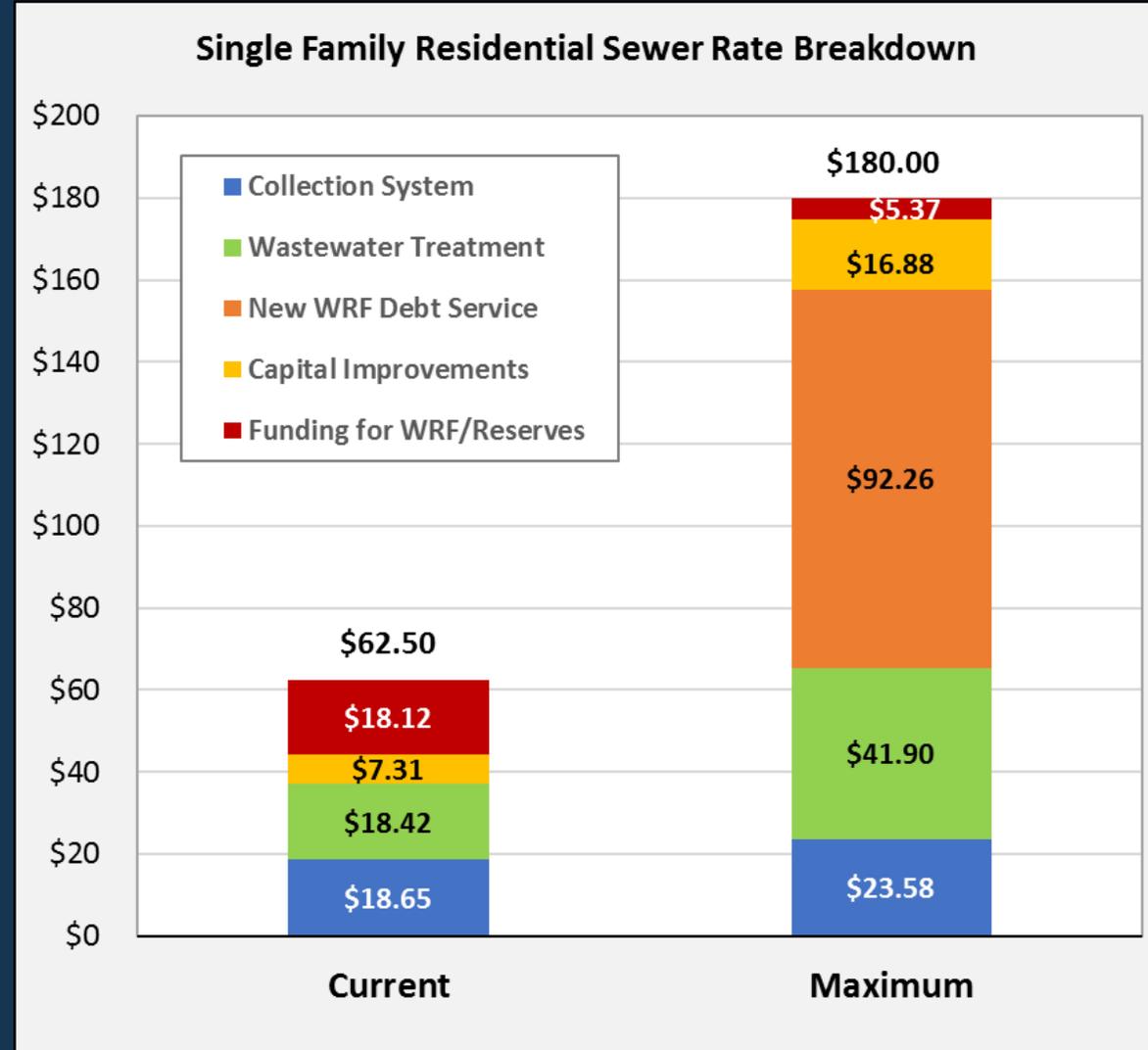
# Sewer Rate Components



## B) New WRF with Advanced Treatment & Recycling SRF/WIFIA Financing

	2016/17	2022/23
	Current	First full year of new WRF operation
Sewer Collection System O&M	\$18.65	\$23.58
Wastewater Treatment O&M*	18.42	41.90
SRF/WIFIA Debt Service	0.00	92.26
Sewer Capital Improvements/Equipment	7.31	16.88
Funding Generated for New WRF/Reserves	<u>18.12</u>	<u>5.37</u>
<b>Total</b>	<b>62.50</b>	<b>180.00</b>

\* Current year wastewater treatment O&M is net of 25% cost-sharing by Cayucos SD



# Sewer Rate Implementation



- Rates need to be adopted before financing can be obtained
- City can adopt a maximum rate
- Rates to be re-evaluated in future years
- City will only increase rates as needed to meet sewer enterprise revenue requirements

# Options & Outstanding Issues

- Timing of future rate increases
  - Can defer implementation of future rate increases until after previously-adopted rates have been fully phased in
  - Option: Start phasing in higher rates sooner
    - Advantage of Quicker Phase-In Toward Max Rate: Generates more cash funding for project, reduces debt financing & annual debt service, results in lower future rates
    - Disadvantage: Results in higher rate increases over next few years

# Options & Outstanding Issues



- Bill recovery: City currently bills customers monthly
- Option: Can recover all or portion of sewer bills on prop tax rolls
  - Change in payment responsibility from tenants to property owners
  - County on Teeter Plan (100% payment regardless of delinquencies)
  - Cash flow consideration: tax payments to City would only occur twice per year
  - Potential need to maintain higher level of fund reserves
  - City would need to go through a noticing & public hearing process (similar to Prop 218) to authorize sewer bill collection via property tax rolls
  - Could be done concurrently with Prop 218 rate increase process...or in future

# Options & Outstanding Issues



- Debt structuring options
  - Financial projections assume level annual debt service
  - WIFIA may allow for debt deferment for up to 5 years
  - Bonds can be structured with lower payments in early years
    - Advantage: Allows a more gradual phase-in of rate increases
    - Disadvantage: Results in higher debt service & higher rates in longer term
- Outstanding issue: Costs for recycled water component may need to be fully or partially recovered by water rates

# Strategies for Cost Containment



- City pursuing grants (WaterSmart)
- City pursuing subsidized, low-cost financing (SRF/WIFIA)
- Value engineering through design & design-build process
- Design-build process yields expedited process & lower costs
- City will re-evaluate finances each year and only implement rates as needed

# Next Steps



- April 19 Public Works Advisory Board
- April 25 City Council considers draft Rate Study
- May 2 WRF Citizens Advisory Committee
- May 9 City Council authorizes Noticing for Prop 218
- May 12 Mail Prop 218 Notices, begin 45-day waiting period
- June 27 Prop 218 Public Hearing

# Questions and Comments