City of Norman

2022 Water and Wastewater Cost of Service Study

December 20, 2022

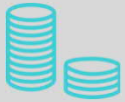
RAFTELIS

Norman's rates and fees must:

How we'll get there

Fund Operations

Fund Capital Projects



Maintain Reserves and DSC

Fund Growth

Ensure Cost Recovery

Financial Plan

Cost of Service

Rate Design

Connection fees

Rate study process

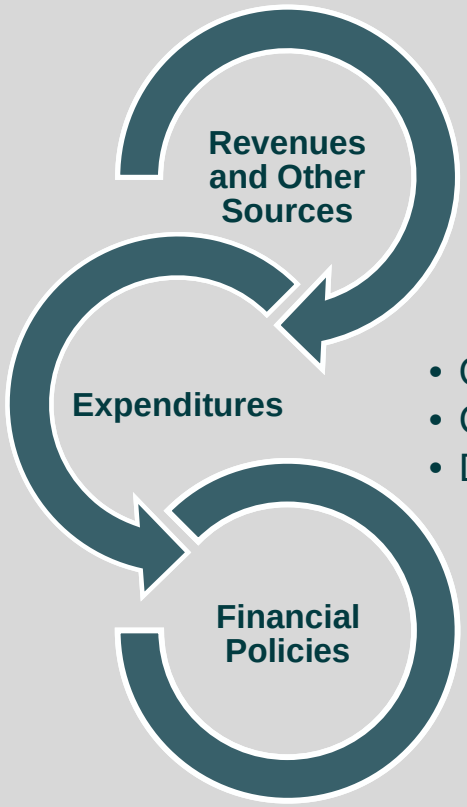
1. **Financial Plan**  → How much money do we need?
2. **Cost of Service**  → Is everyone paying their fair share?
3. **Rate Design** 

→ How can our rates help ensure fairness?

Financial Plan

The financial planning process

What is the revenue required to meet expenditures?



- Rate revenues
- Other operating
- Loan proceeds

- Operating expenses
- Capital projects
- Debt service

- Reserve levels
- Coverage ratios

Multi-Year Financial Plan

Wastewater Utility

Wastewater utility financial plan assumptions

Financial metrics	• Operating: 8% of O&M • Capital reserve: 1-year depreciation expense • Debt service coverage: 1.25x debt service required; 1.4x desired
Financial planning scenarios	• Assumes 1.2% growth in accounts • Assumes flat AWC volumes
Capital funding	• Initial plan to Cash-finance all capital projects • Consider Bond financing
	• Scenarios are still under review and results presented today are subject to change

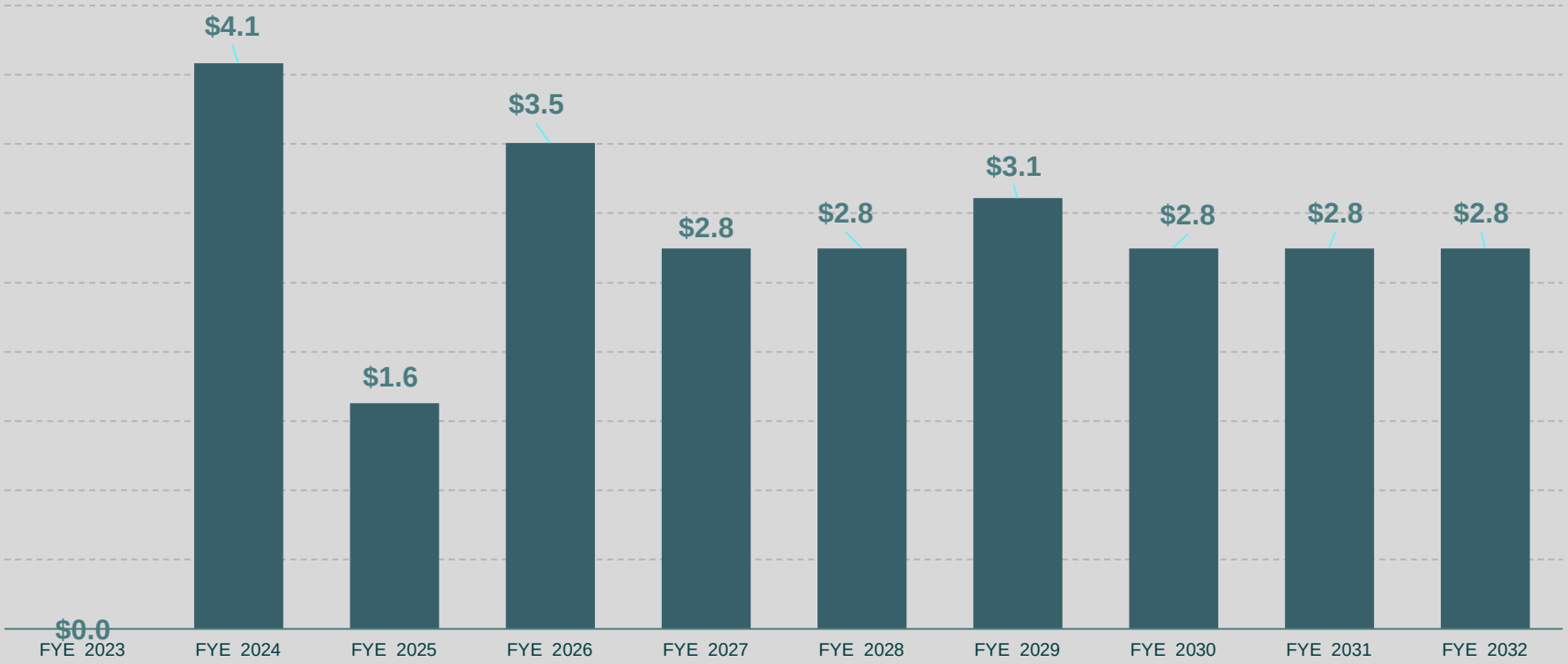
Preliminary sewer financial plan findings
Current state

- **Annual revenue slightly lower than annual O&M, capital and debt expenses**

- **Near-term: Funding capital with rate revenues**

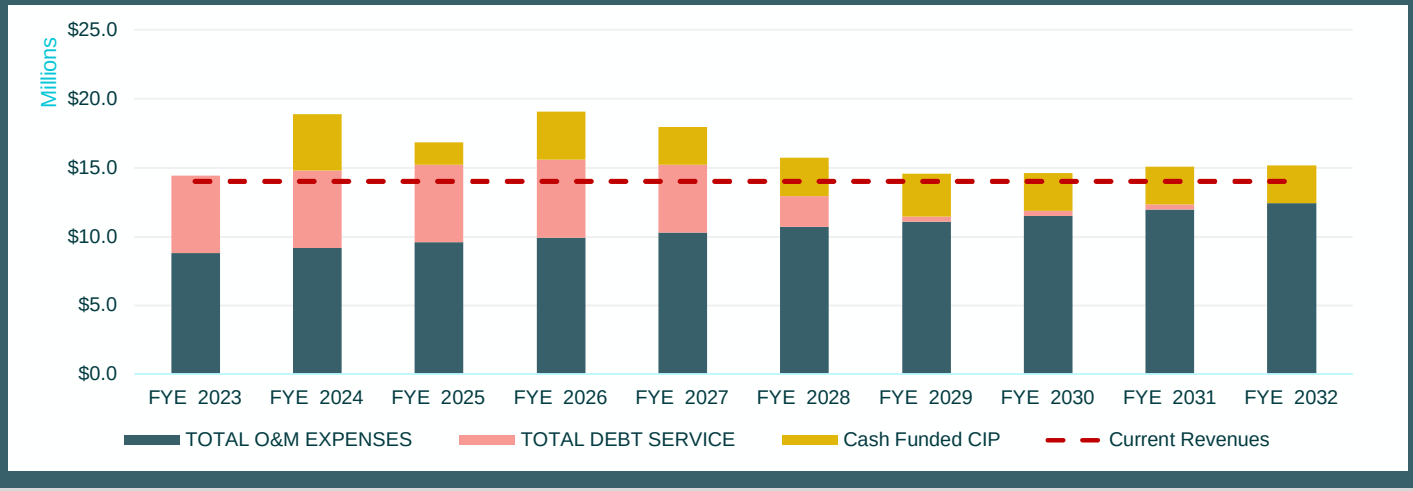
- **Longer-term: existing debt maturity will free up financial capacity**

10-year WRF capital improvement program $26.1 million

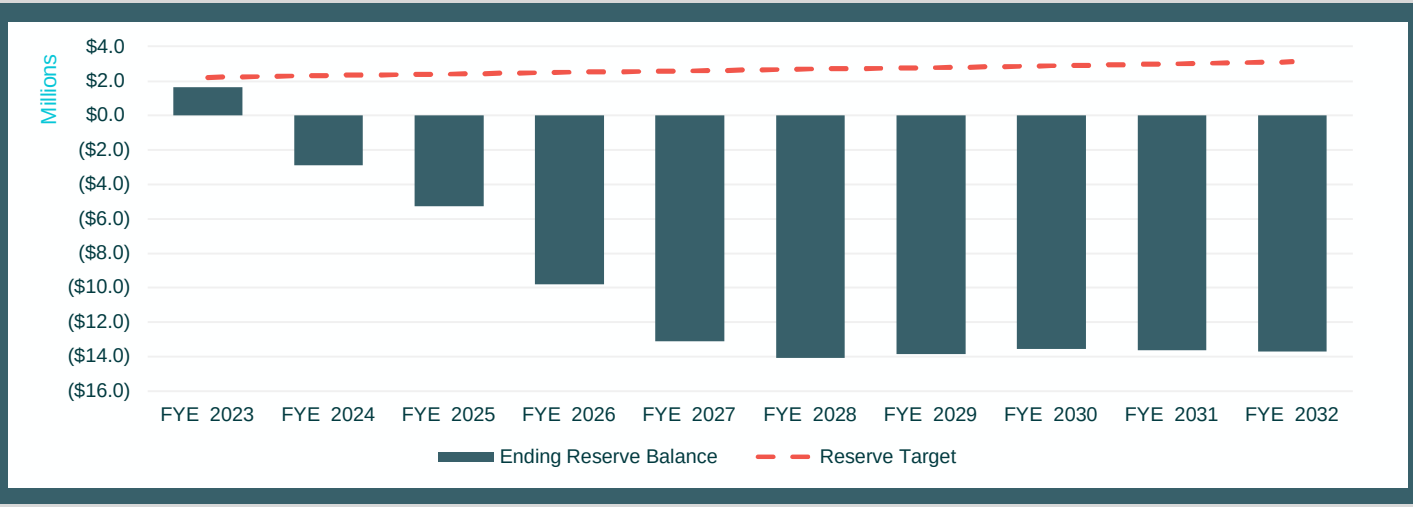


Wastewater utility – current state

Revenues and Expenditures

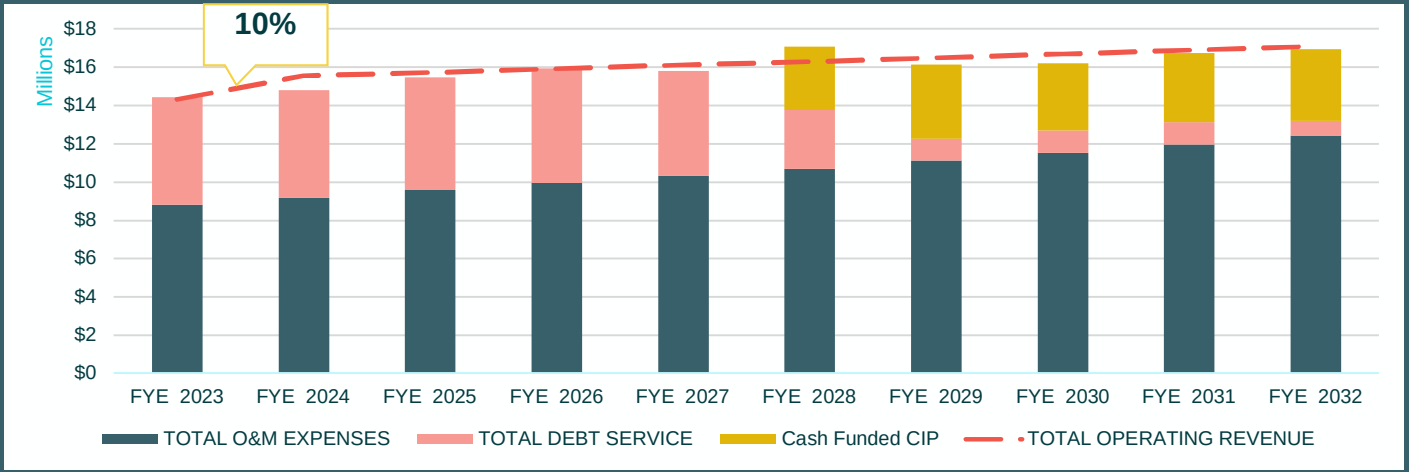


Ending Balance and Target Reserves

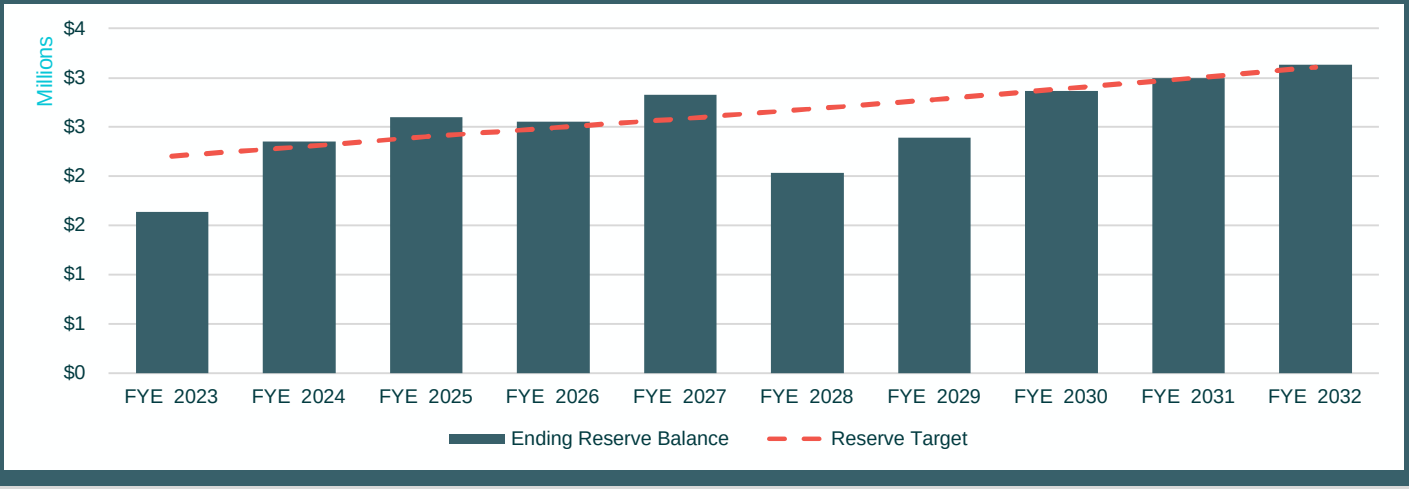


Wastewater utility – target state

Revenues and Expenditures



Ending Balance and Target Reserves

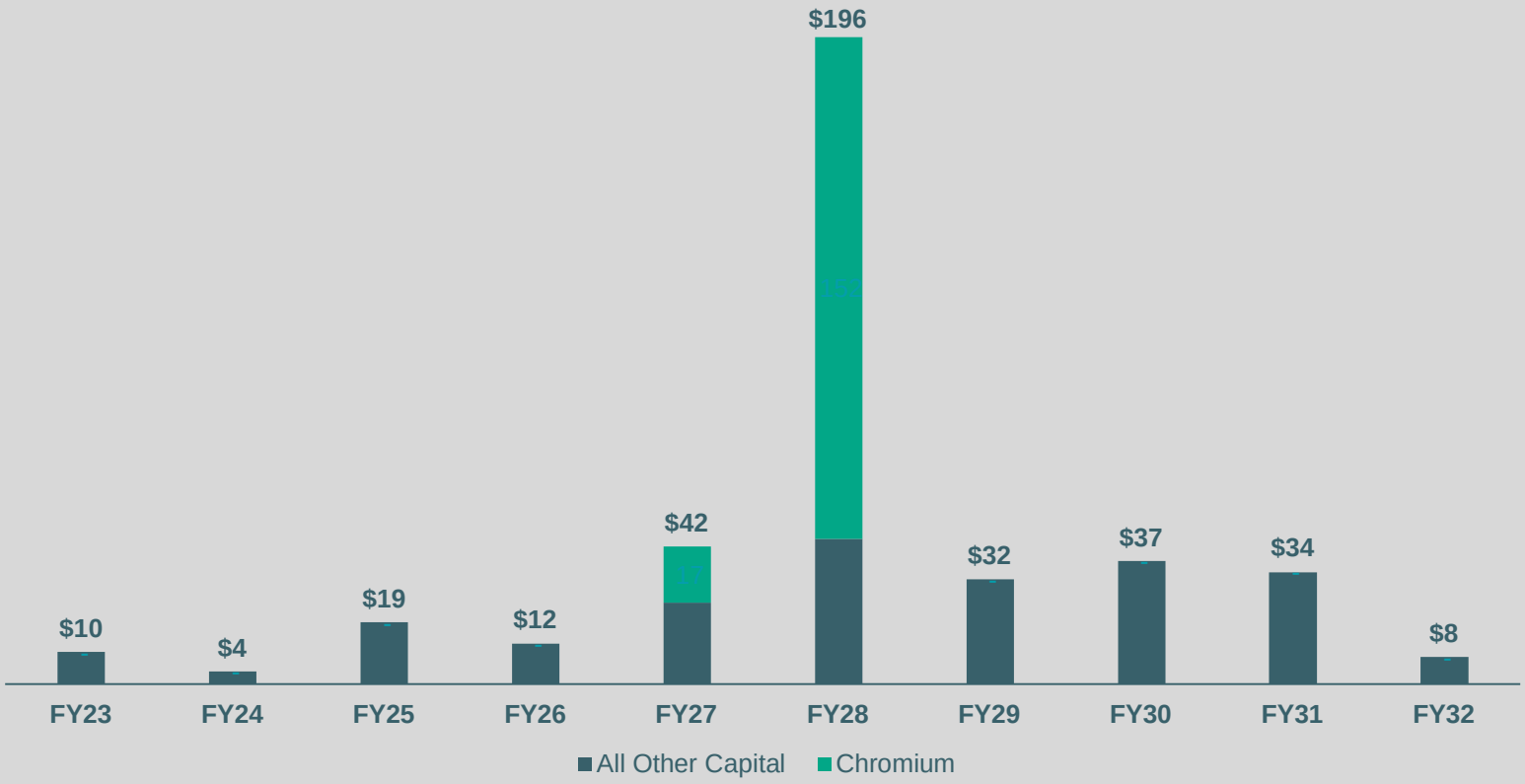


Water Utility

Water utility financial plan assumptions

Financial metrics	• Operating: 8% of O&M • Capital reserve: 1-year depreciation expense • Debt service coverage: 1.25x debt service required; 1.4x desired
Capital funding	• Cash-finance all non-growth related capital projects • Bond finance growth-related projects • Connection fee revenue funds growth-related projects • Current connection fee is $1,500 per ¾” water meter
Financial planning scenarios	• No growth • Purchase OKC water • 10 Wells • Augmentation with $1,500 per 3/4” meter connection fee • Augmentation with $3,100 per ¾” meter connection fee1
	• Scenarios are still under review and result presented today are subject to change

10-year water capital improvement program $394.5 million

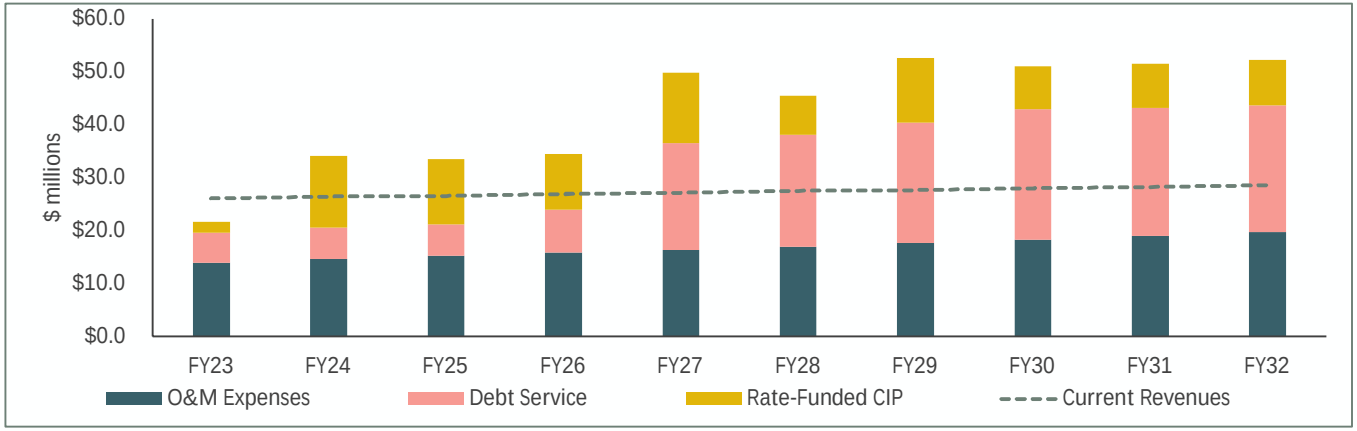


Preliminary water financial plan findings
Current state

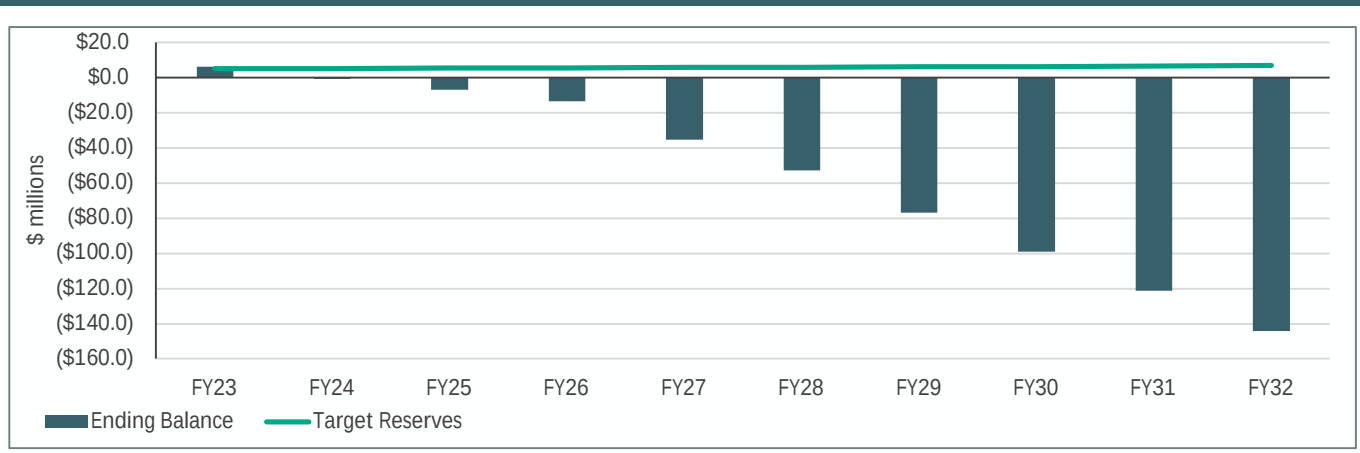
- Annual revenue does not meet annual expenditures
- Does not meet annual debt service coverage requirements
- Does not target operating and capital reserves

Water utility – current state

Revenues and Expenditures



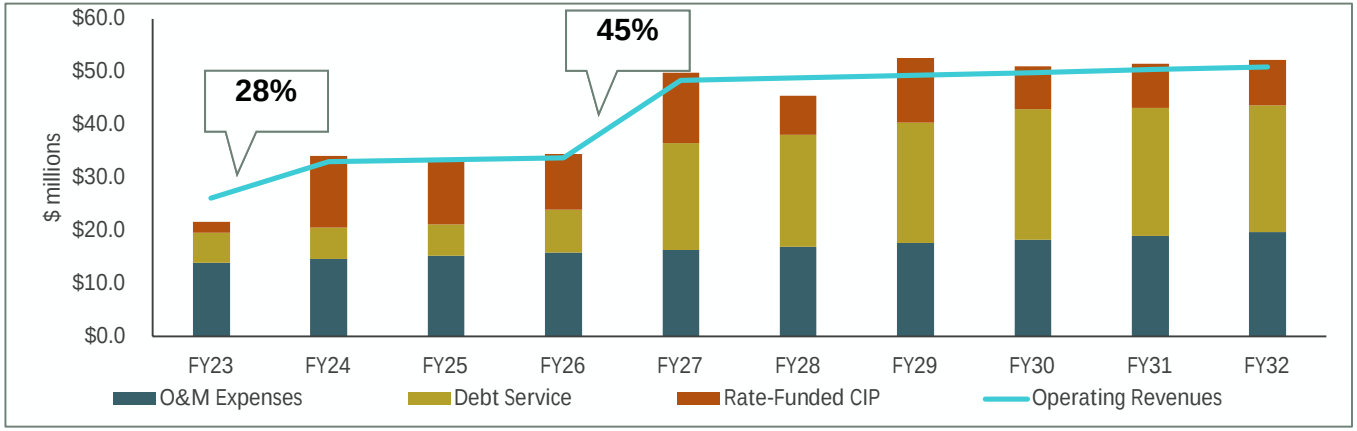
Ending Balance and Target Reserves



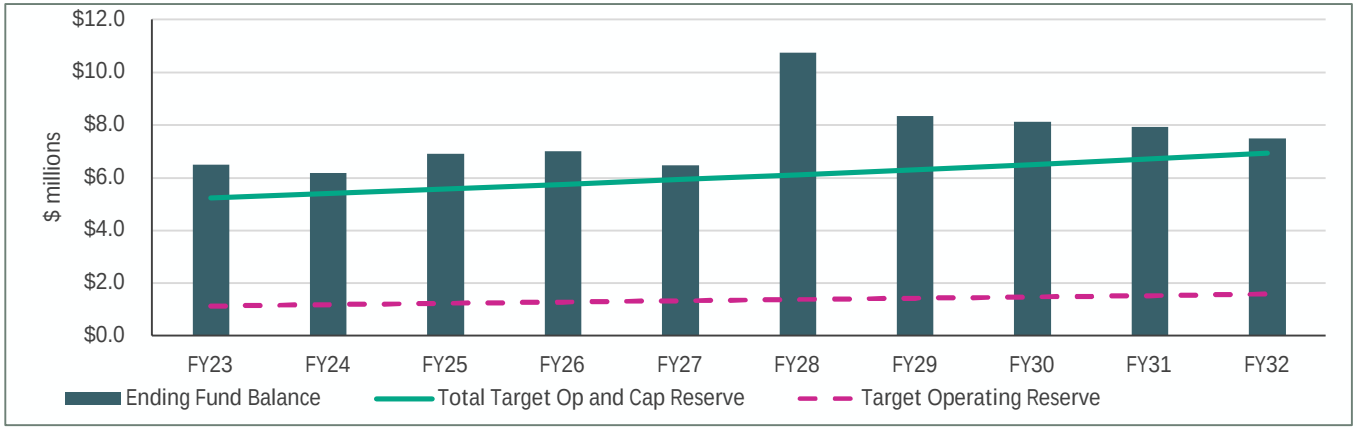
Scenario 4 target state – Augmentation

Example

Revenues and Expenditures



Ending Balance and Target Reserves



Water utility scenario summary

Scenario*	Revenue Adjustments FY24	Revenue Adjustments FY27	Total Connection Fee Revenue *$ millions*	Total Rate Revenue *$ millions*
1: No Growth	28.5%	28.5%	$0.0	$370.5
2: OKC	32.5%	32.5%	$8.5	$391.8
3: 10 Wells	29.0%	28.0%	$8.5	$368.2
4: Augmentation	28.0%	45.0%	$8.5	$402.2
5: Augumentation w/$3,180 connection fee	25.0%	45.0%	$17.3	$392.7

**Scenarios 1 - 4 assume a connection fee of $1,500 per 3/4" meter*

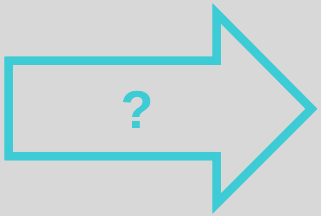
- Biggest influences on revenue adjustments
  - Timing of project
  - Project cost and duration
  - Financing methods (cash, debt, and/or connection fees)

Cost of Service

Step 2: Cost of Service Analysis

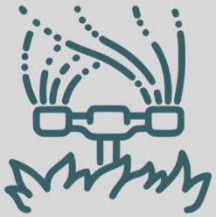
Is everyone paying their proportionate share?

Revenue Requirement



Residential

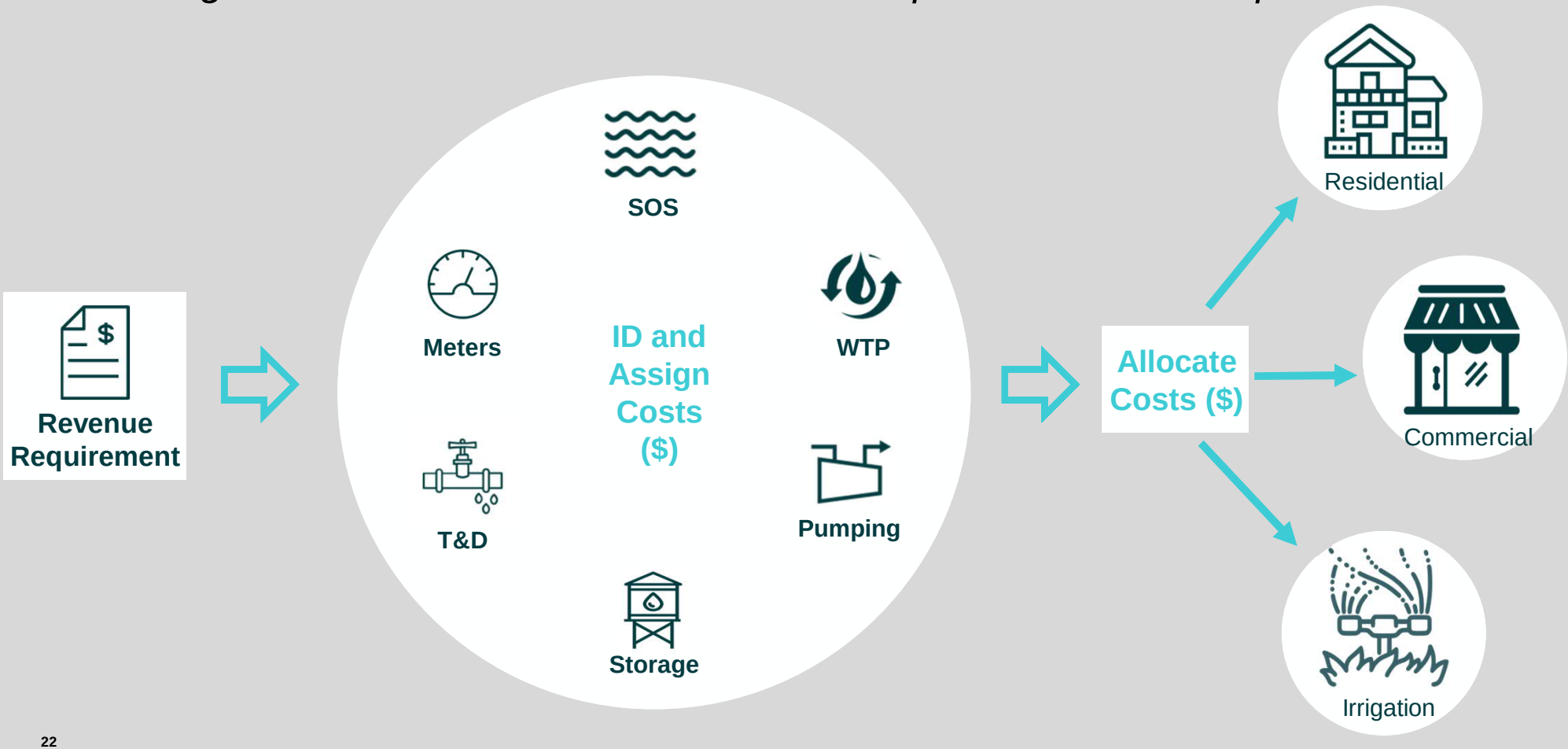
Commercial



Irrigation

Step 2: Cost of Service Analysis

Assign costs to customers based on their specific demand requirements?



Rate Design

Step 3: Incorporating community values in rate design

Pricing objectives

- **Revenue stability**
- **Cost recovery between classes**
- **Cost recovery within a class**
- **Cost recovery between existing and new customers**
- **Efficient water use pricing signal**
- **Demand management**
- **Essential use pricing**
- **Citizen vote approval**
- **Customer impact**
- **Ease of administration/ implementation**

Moving forward

January	• Finalize water and wastewater cash flow scenarios
Jan - Feb	• Complete cost of service analysis to equitable assign costs to customer classes
February	• Evaluate rate design alternatives
February	• Meeting with City Council to present findings

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Thank you!

Contact:

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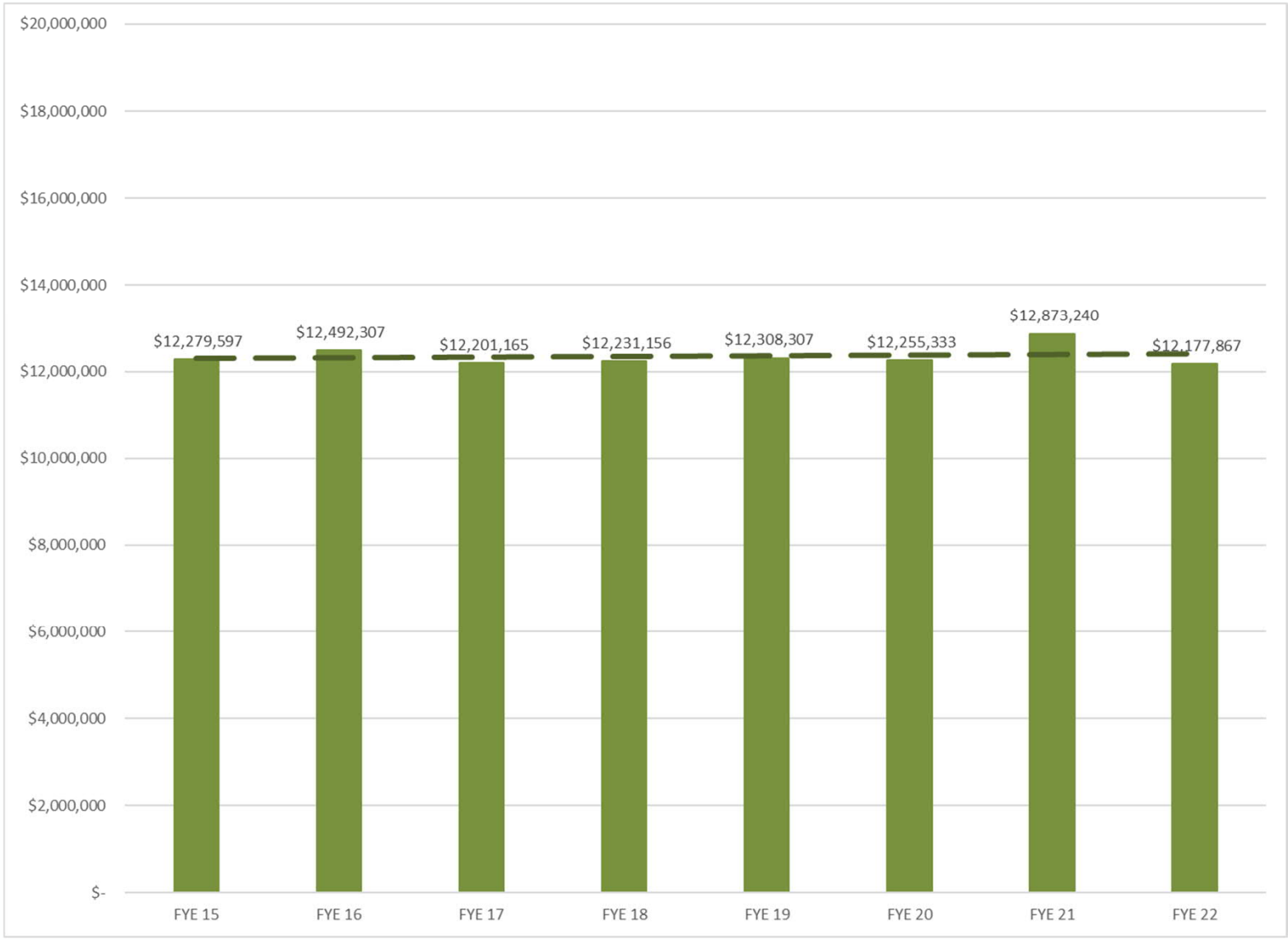
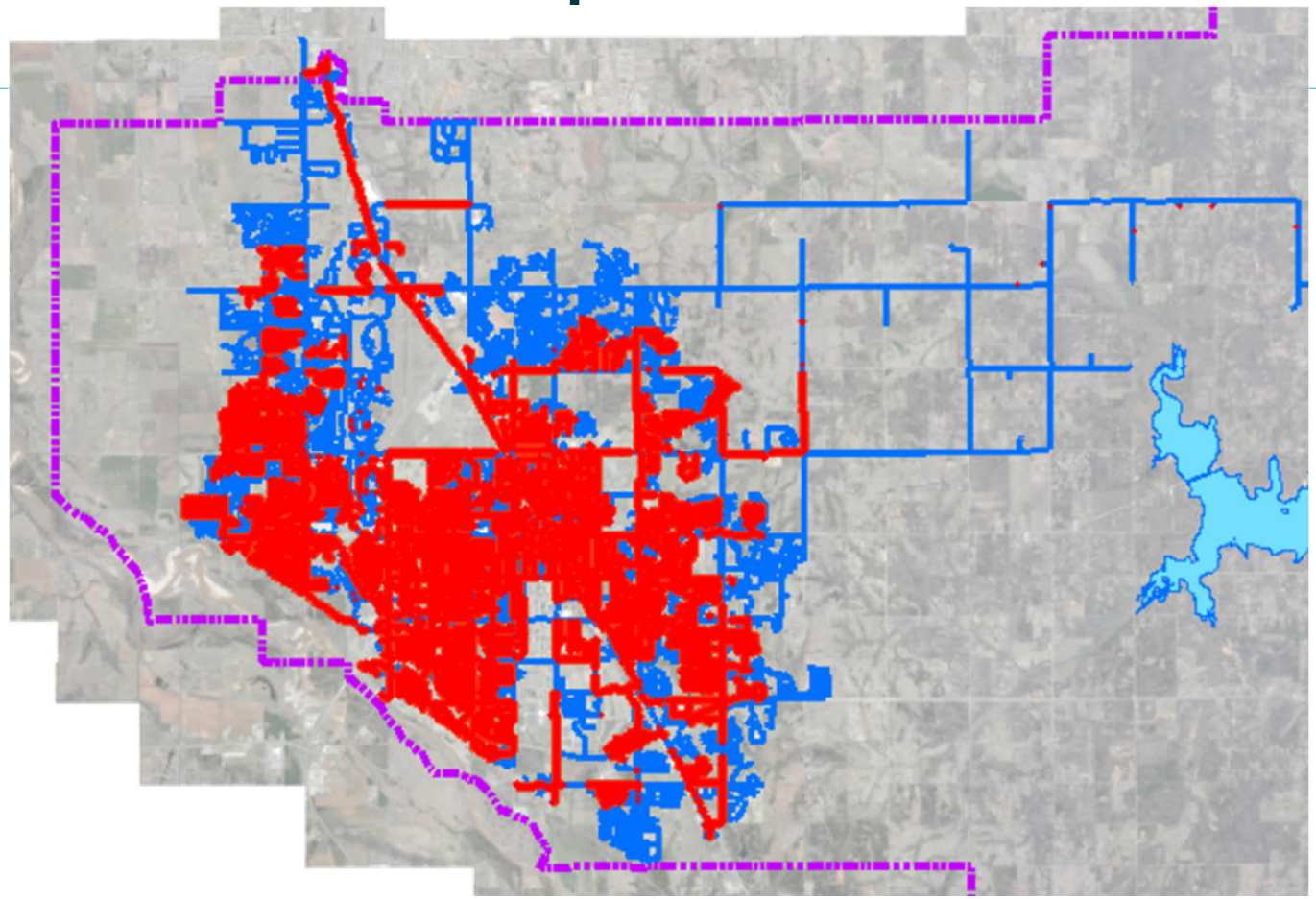
WRF Revenue


$20,000,000
$18,000,000
$16,000,000
$14,000,000
$12,000,000
$10,000,000
$8,000,000
$6,000,000
$4,000,000
$2,000,000
$-
$12,279,597
$12,492,307
$12,201,165
$12,231,156
$12,308,307
$12,255,333
$12,873,240
$12,177,867
FYE 15
FYE 16
FYE 17
FYE 18
FYE 19
FYE 20
FYE 21
FYE 22

Water Line Replacement



Toward Tomorrow

Spring 2022 Proposition

Total Water System

640 miles

Metal Lines

300 miles

Replacement Cost per Mile

$1.05M

~~$750,000~~

Water Fund and Revenue Sources (031)

- Initial/One-Time Charges
  - Meter Installation Fee ← Administratively Updated as Needed – Not Part of COS
  - Connection Fee ← Updated as Part of 2021 Fee Evaluation – Not Part of COS
- Ongoing Charges
  - Base Fee
  - Volumetric Charge (Increasing Block) ← Main Focus of COS
  - Capital Improvement Charge
- Other Miscellaneous Revenues
  (Flush Meters, Grants, Cell Contracts, Etc.) ← Not Part of COS

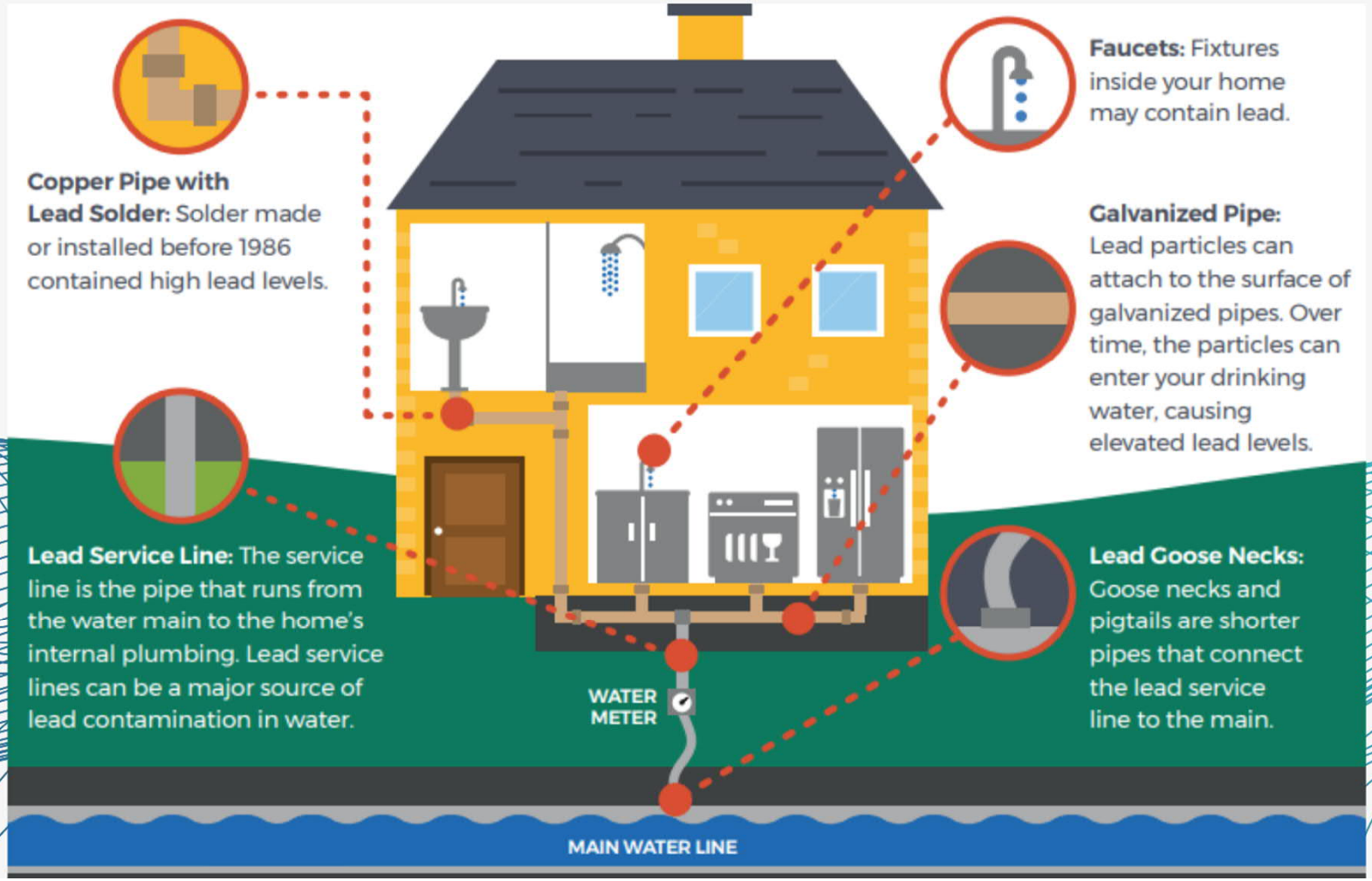
Wastewater Funds and Revenue Sources

- Water Reclamatation Fund (032)
  - Initial/One-Time Charges
    - Connection Fee ← Updated as Part of 2021 Fee Evaluation – Not Part of COS
  - Ongoing Charges
    - Base Fee
    - Volumetric Charge
    - Capital Improvement Charge

    ← Main Focus of COS
    - Lift Station Fees (as appropriate) ← Service Area Specific Updated for Inflation– Not Part of COS
- Sewer Maintenance Fund (321) – Fixed Monthly Charge ← Not Part of COS
- Sewer New Development Fund (322) – Excise Tax ← Updated as Part of 2021 Fee Evaluation – Not Part of COS

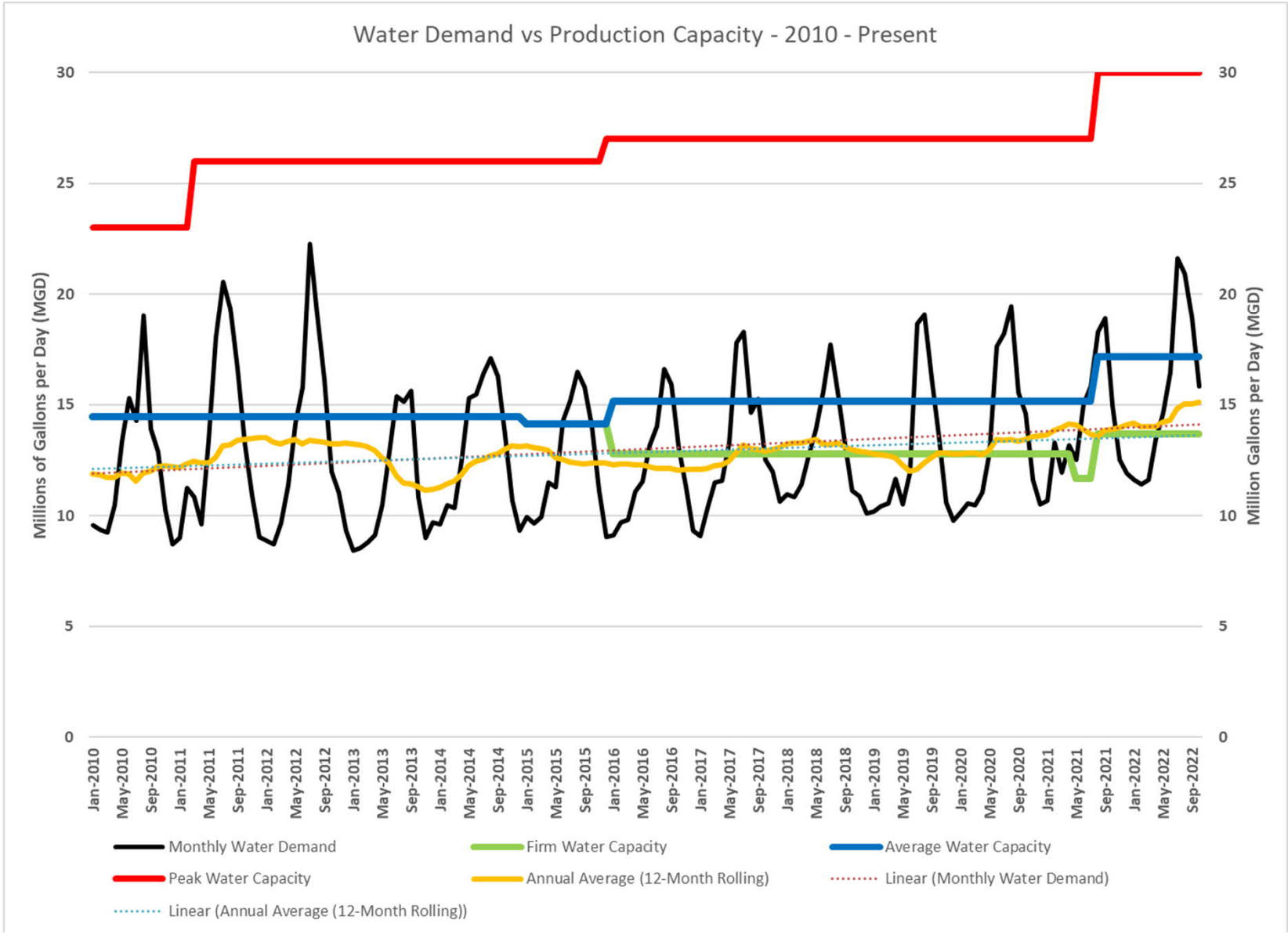
Sources of Lead in Drinking Water

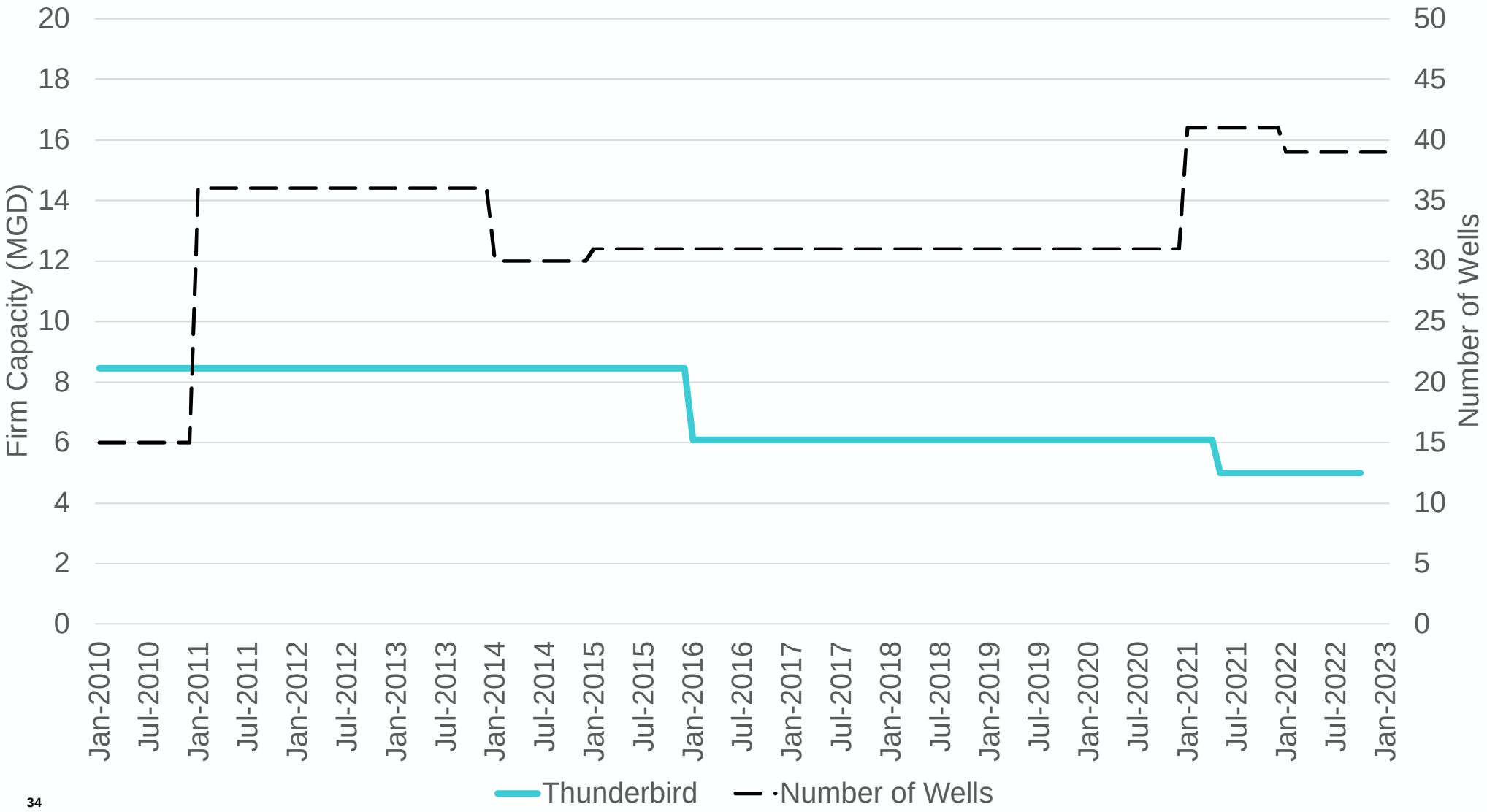
OKLAHOMA Environmental Quality



Groundwater Treatment Plant

Water Usage


Water Demand vs Production Capacity - 2010 - Present
Millions of Gallons per Day (MGD)
Million Gallons per Day (MGD)
0
5
10
15
20
25
30
Jan-2010
May-2010
Sep-2010
Jan-2011
May-2011
Sep-2011
Jan-2012
May-2012
Sep-2012
Jan-2013
May-2013
Sep-2013
Jan-2014
May-2014
Sep-2014
Jan-2015
May-2015
Sep-2015
Jan-2016
May-2016
Sep-2016
Jan-2017
May-2017
Sep-2017
Jan-2018
May-2018
Sep-2018
Jan-2019
May-2019
Sep-2019
Jan-2020
May-2020
Sep-2020
Jan-2021
May-2021
Sep-2021
Jan-2022
May-2022
Sep-2022
Monthly Water Demand
Firm Water Capacity
Average Water Capacity
Peak Water Capacity
Annual Average (12-Month Rolling)
Linear (Monthly Water Demand)
Linear (Annual Average (12-Month Rolling))


20
18
16
14
12
10
8
6
4
2
0
Firm Capacity (MGD)
50
45
40
35
30
25
20
15
10
5
0
Number of Wells
Jan-2010
Jul-2010
Jan-2011
Jul-2011
Jan-2012
Jul-2012
Jan-2013
Jul-2013
Jan-2014
Jul-2014
Jan-2015
Jul-2015
Jan-2016
Jul-2016
Jan-2017
Jul-2017
Jan-2018
Jul-2018
Jan-2019
Jul-2019
Jan-2020
Jul-2020
Jan-2021
Jul-2021
Jan-2022
Jul-2022
Jan-2023
Thunderbird
Number of Wells